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COLONEL GEORGE M. RUSSELL, Cavalry, Editor

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Organized November 9, 1885

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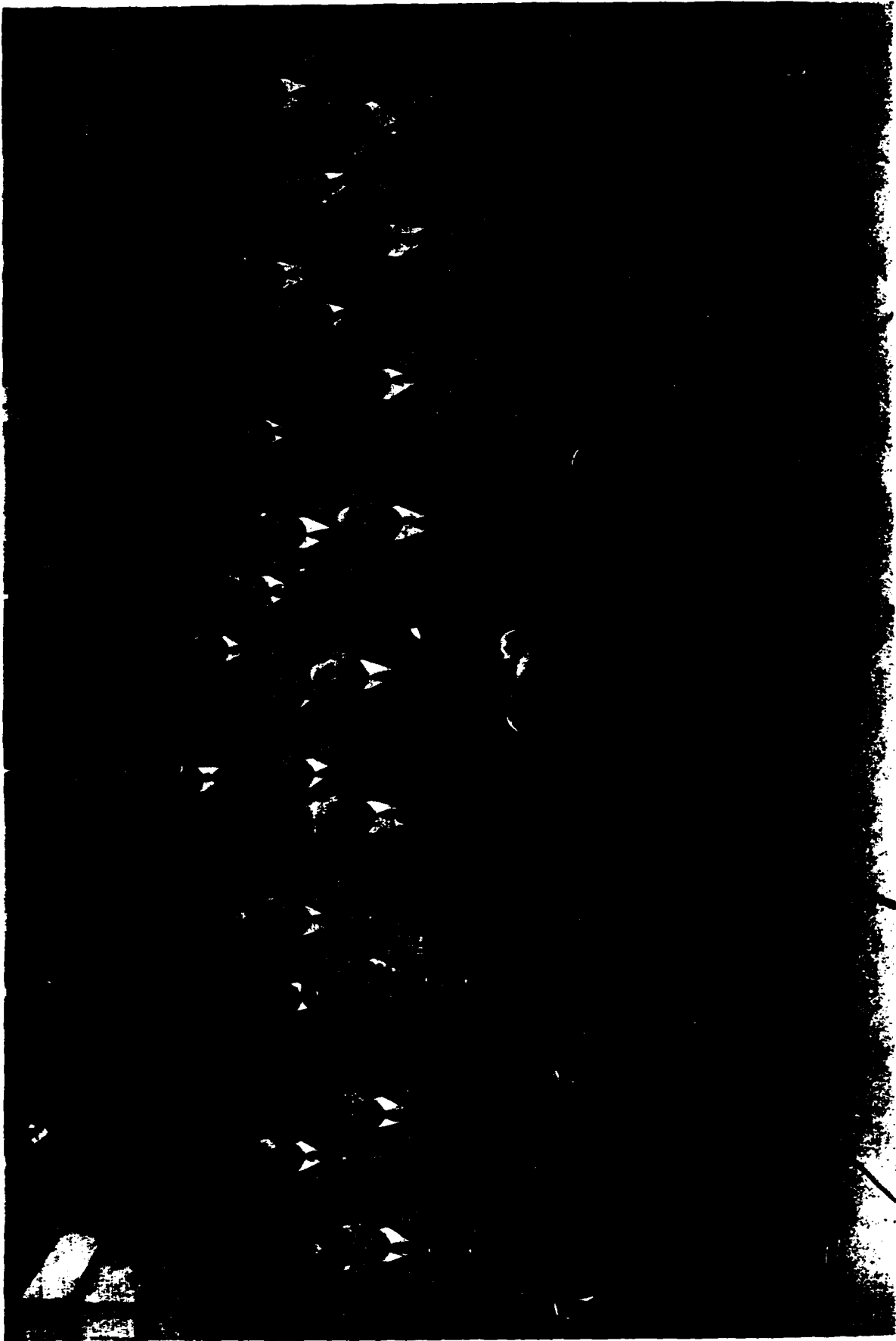
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# The Modern Pentathlon, Xth Olympiad

By Major Charles R. Johnson, Cavalry, Head Coach and Team Manager

THE Modern Pentathlon, an event of Swedish investigation, is to my mind the most gruelling test in Olympic competition. Its five sports, riding, fencing, pistol shooting, swimming, and running, are all diametrically opposed to one another and, by inference, work against one another. Let me specify. A high type fencer must have a huge amount of nervous energy—the ability to key up and let down repeatedly throughout the long day of bouts. To be a good pistol shot, however, the competitor should be reasonably stolid. How then is the usual man to be expected to show high proficiency in both sports? Again, any running coach will lift both hands in horror at the mere idea of having one of his men even enter the swimming tank, and we all know what disastrous effect running will have on the long, supple swimming muscles. Once more, riding flattens that large flexor muscle along the back of the thigh; running rounds it out. So it can easily be seen that the good Pentathlon candidate must be extremely versatile as well as enduring.

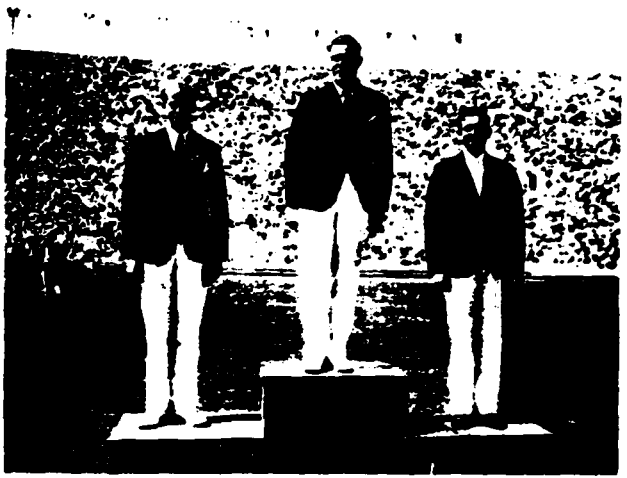
Our team held its tryouts at and near West Point through the six days beginning May 9th, 1932, and reached Los Angeles on July 20th, having spent the intervening time at The Cavalry School at Fort Riley, Kansas. We moved into comfortable quarters in the Olympic Village. This settlement, like all other installations of the Los Angeles organizing committee, was perfect. High up on the crests of the Baldwin Hills, it overlooked Los Angeles in all directions. Always there was a pleasant cool breeze. Small portable cottages, each one having two rooms and a shower, accommodated four athletes apiece. At frequent intervals were interspaced special bath houses with steam rooms and rubbing tables. Here we had placed at our disposal our own trainer, Mr. Frank Zanazzi, from the University of San Francisco, and most valuable he was to us. He it was who had to insure that the hard ride of the first day would have lost its effect by the time that we had to run. He fully accomplished his purpose. Convenient to the American cottages we found the United States mess hall. Each foreign nation, in its area, had its own mess hall, where its own national dishes were served by native cooks. Strict and firm guardians at the village gates insured absolute privacy for the athletes. Hollywood's stars in person appeared nightly at our open-air theatre. Busses made frequent trips between the village and the various practice fields, and nothing was left undone so far as our comfort was concerned.

On the first of August team managers met for the purpose of drawing places for the starting order in all the events, and immediately thereafter all concerned, including twenty-five contestants, embussed

for the course over which the mounted phase was to take place next day. It was our privilege to inspect the course one day before the event. I was rather amused to see several of the contestants wearing boots and expected to see the three-mile walk in such foot-gear bear bitter fruit for them in the fatiguing events that were to follow on the succeeding days. I was not wrong.

We found that the course, so far as the American team was concerned, was ideal, in that it eliminated all elements of luck. For about a mile it was up and down, into and out of *arroyos*, with most of the jumps on the slope and with fairly good footing in between. The last two miles, however, were through such heavy sand as to predicate a very skillful handling of the tired animal over the last few jumps. In the true sense of the word there were no broad jumps, though several of the fourteen obstacles were ditched to some extent. All closely approached the maximum allowed height of three feet eight and, thanks to the excellent work of Colonel Barry and Lieutenant Barrett, were so sturdily built as to be well nigh impossible of destruction. Any horse that got over would jump big.

As loss of the course meant elimination for the event, we were naturally very much interested in the way the course was marked. This we found to be perfect. On each jump and at each turn in the course were two flags, one red and one white, between which the contestant had to pass, keeping the red on his right. Not only were the flags big; they were also held broadside to by cross sticks so that, no matter how the breeze might blow, they would be visible to the rider



WINNERS ON VICTORY STAND  
 Left to right: Lieut. Lindman (Sweden), No. 2; Ensign Oxenstierna (Sweden), No. 1; Lieut. Mayo, (U. S. A.), No. 3.



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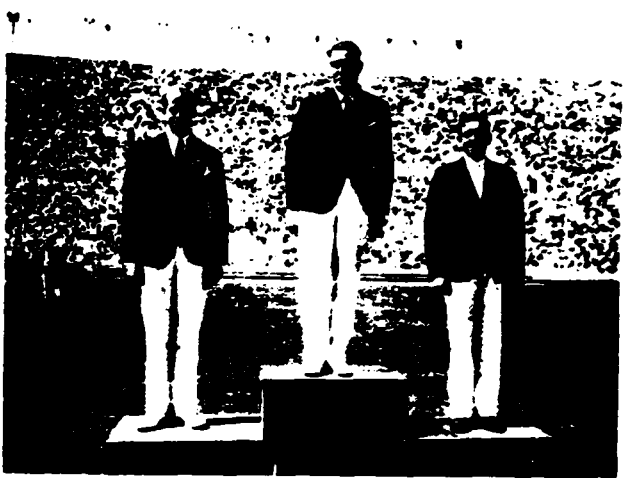
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Left to right: Lieut. Lindman (Sweden), No. 2; Ensign Oxenstierna (Sweden), No. 1; Lieut. Mayo, (U. S. A.), No. 3.

on the course. As a further help, there were many intermediate flags of bright yellow stuff, which served as guides for the convenience of the rider. He might pass them either to the right or to the left, as he wished. Start and finish were through large archways that had, marked in huge letters, the words Start and Finish. There could be no mistakes here, we thought; yet, as a matter of fact, three foreigners actually did lose the course.

The jumps, in order, were as follows:

1. Brush pile
2. Post and rail
3. Vertical posts set in ground and touching each other
4. Bank and ditch
5. Watering trough
6. Post and rail
7. Vertical posts
8. Ditch with leaning fence
9. Plank fence
10. Aiken fence
11. Farm gate
12. Worm fence
13. Farm wagon
14. Railway gate, in and out.

As we went around the course we were informed that each horse in the pool from which we were to draw had jumped each jump in the series several times.

Next day, the second of August, found us assembled at the start by eight thirty. At eight forty Captain Morales Mendoza of Mexico stepped on the scales with his saddle in his arms, and the Pentathlon had started. One hundred and sixty-five pounds was the necessary weight. Morales then drew from a hat a number and was given the horse tagged with that same number. He had fifteen minutes in which to adjust his equipment and to try out the horse but in so doing he could not ride beyond the starting point. Sharp at nine he started. Thereafter, a new man started each five minutes.



Official Photo

Obstacle Number 23, Cross Country Course (Lieut. Petnehazy, Hungary, Modern Pentathlon).

The scoring would seem, on the surface to be complicated. Briefly, penalties were assessed as follows:

- For a refusal or runout .....three points.
- For second ditto at same jump .....six points.
- For third ditto at same jump .....fifty points.
- (And the man could ride on.)
- For fall on both horse and rider .....five points.
- (Not to count except within 25 meters of jump.)
- For fall of rider alone .....ten points.
- (Within 25 meters of jump.)
- For each two seconds slower than 10:51 4/5 for the entire course .....one point.
- For loss of course .....disqualification.

All men who finished with a perfect score were to be arranged in the order of their speed.

Here is what happened. Nine men had clean performances, and of these the fastest was Lindman, of Sweden, at 8:07.4, and the slowest was Pagnini, of Italy, in 9:38, which was well under the time limit. Three men lost the course and were therefore all tied for twenty-fourth place. Captain Anguiano de la Fuente, of Mexico, was so badly injured as to have to be withdrawn.

Our men stood as follows:

Lt. Richard W. Mayo, Field Artillery, second, time 8:10.2; Lt. Brookner W. Brady, Infantry, fifth, time 8:50.6; Lt. Clayton J. Mansfield, Cavalry, thirteenth, time 9:09.4. Mansfield's horse went down with him twice, giving him thereby a penalty of ten and placing him, regardless of his fast time, below the slowest man to go clean.)

The close of the first day left me feeling rather happy. Riding was the one event in which luck could have played a large part. A good rider could conceivably have drawn a poor horse and, relatively speaking, have placed much lower than he deserved. Conversely, and still worse, some weak rider who should normally rank at the bottom could have drawn a superb mount, thereby winning the event. Yet none of these things had affected us. Two of our men placed very high and the other reasonably so. Brady had lost fourth place by only one and two-tenths seconds. Moreover, all the men who beat us in the riding, we realized, deserved the high rating that they got. There had been no flukes. So far, so good!

On the third of August we fenced. It was a long and tiring session, for all men (and there were still twenty-four in the running) were grouped into one round robin, and that meant twenty-three bouts per man or a total of two hundred and seventy-six in the course of the day. Hard on the judges, at least. As to the latter, the fencing teams of the various nations furnished the officials. We ran three strips continually and had four judges and a director on each strip. I thought that the officiating was excellent. Of course there were bound to be some decisions that caused comment—that always happens with the very best possible officials, but in this case all the contestants agreed that the breaks evened up in the long run about as well as was possible.

We finished at dusk and did not fence off the several ties that occurred. Instead, we halved the points. The weapon was the duelling sword, with one-touch bouts. For the first time in the history of the event,



Official Photo

The Contestants—Modern Pentathlon, Xth Olympiad.

double touches were scored as half a victory for each contestant, instead of a defeat for each. I didn't like this; it penalized the good, decisive type of fencer, and rated the mediocre man higher than he deserved, but after all *c'était la guerre*.

Thofelt of Sweden, who had won the Pentathlon in 1928, won the fencing. We had more or less foreseen this. He took sixteen victories, three doubles and four misses. He was so far down in the riding, however, that that didn't bother us much, but Lindman of Sweden had for second in the fencing, and that was alarming. It was Lindman, you know, who won the Pentathlon in 1924. Mayo tied for fourth, and Mansfield tied for seventh, with Brady taking twelfth. Down as far as Mansfield, the consolidated score for the two days was as follows:

	Ride	Fence	Total
1. Lindman, Sweden	1	2.5	3.5
2. Mayo, United States	2	4.5	6.5
3. Simonetti, Italy	3	6	14
4. Duranthon, France	7	7.5	14.5
5. Thofelt, Sweden	15	1	16
6. Pacini, Italy	14	2.5	16.5
7. Brady, United States	5	12	17
8. Oxenstierna, Sweden	4	14	18
9. Miersch, Germany	10	10	20
10. Mansfield, United States	13	7.5	20.5

Note the very close grouping of the above men in the total penalties. This was most unprecedented and gave us an index of how closely we might expect the final result to be figured. It was *most unusual*.

With the third day's event I hoped that we would jump into first place, for I knew that Mayo was infallible with the pistol. Three or four days before the Pentathlon started, he had shot a possible, and I looked for him to come close to repeating, or at least hang up a world's and Olympic record. Actually, he got the record with a score of 197. Moreover, I felt that Lindman would miss the target, for we know that in the Swedish national tryouts he had done just that. Again I was right: Lindman made nineteen very good hits and one miss.

For the shooting, the men fire upon a full sized man's figure at twenty-five meters. The target has a series of concentric ellipses, centered on the belt buckle, but these rings are barely visible to the firers. Targets swing into vision for three seconds and dis-

appear for ten. At the instant that the target appears each time, the pistol must be pointing into the ground near the firer's feet, with the pistol butt resting on the thigh. Thus, the competitor must raise the weapon, find the target and squeeze his shot off in three seconds. He fires twenty shots. Now, the odd feature of the scoring is that any man who hits the target twenty times, regardless of the value of his hits, will beat any man who makes a miss. In this way, twenty little *hits* would beat nineteen *hits* and a miss. So you see just how far a miss could throw Lindman down on the scale. The alarming feature of it all, however, was that Mansfield, too, made a miss, and Brady yanked two of them. So Lindman's taking nineteenth place helped Mayo considerably, but Mansfield took 16th and Brady 20th. The consolidation, in part, now reads:

	Ride	Fence	Shoot	Total
1. Mayo, United States	2	4.5	1	7.5
2. Simonetti, Italy	3	6	3	17
3. Oxenstierna, Sweden	4	14	2	20
4. Lindman, Sweden	1	2.5	19	22.5
11. Mansfield, United States	13	7.5	216	36.5
13. Brady, United States	5	12	20	37

Oxenstierna now looked extremely dangerous to us. We knew that he could run extremely well and swim even better. We also knew that Dick Mayo was weak in swimming and not very dangerous in running. The 1928 Games, on the other hand, had shown us that Simonetti's running, even allowing for great improvement, was no threat. If, in the running and swimming combined, Mayo lost thirteen points to Oxenstierna, we were out. "Hold 'em, Army!"

The swimming event was held in the big fifty meter pool of the Swimming Stadium on the fifth of August. Drawings gave us a man in each of three heats, of which, all together, there were four. I use the word *heat* with some reservation, for each man's time was taken and when he had swum his one heat he was through for the day. Men swam in lanes separated by cork lines.

Brady, as we had expected, won his heat handily in 5:37.9. Mayo took a fifth in his with a 5:17.4. This was a great improvement over what he had done in the 1928 Games, where swimming had been his greatest weakness. Mansfield drew the stiff heat of



Official Photo

The American Team, Left to Right:—Johnson, Coach; Mansfield; Mayo; Brady.

the day and took fourth in it at 4:54, and when all was said and done we read the figures of the men that interested us most. They had swum as follows:

1. Thofelt
2. Pagnini, Italy
3. Brady
5. Oxenstierna
6. Mansfield
9. Lindman
14. Mayo

So Mayo had already dropped nine of his precious thirteen points to Oxenstierna. He could lose only three more. Our consolidation now read:

	Ride	Fence	Shoot	Swim	Total
1. Mayo, United States	2	4.5	1	14	21.5
2. Oxenstierna, Sweden	4	14	2	5	25
3. Thofelt, Sweden	15	1	9	1	26
4. Lindman, Sweden	1	2.5	19	9	31.5
7. Brady, United States	5	12	20	3	40
9. Mansfield, United States	13	7.5	16	6	42.5

We knew that, except for Thofelt, the Swedes could run well. We knew that running was our weakest link. We knew too much. And that night we wished we knew what the course would be on the next day.

The next day, we found out. When we saw it at first, it looked sweet enough, as far as our eyes could follow the well placed markers as they led out along the fairway of the Sunset Golf Course. What lay beyond, none knew, but we surmised that the going would be fine. The finish was right next the start.

With all stop watches zeroed, the first man set off down the fairway and in less than a minute he had dropped out of sight. Thereafter, at one minute intervals, runner followed runner. Now, in our training, we had been doing the two and one-half miles in well under fifteen minutes, so at fourteen I began looking to see the first man heave in sight. He was de Sousa, of Portugal, about whose running I knew nothing. We waited and waited. Then, at about eighteen, de Sousa showed up with someone in Swedish colors coming up on him fast. It was Thofelt, who had started one minute later than de Sousa. From Amsterdam in 1928 we knew Thofelt's running to be average, and a look at my watch let me know that the course was terrific, for he had been out for more than seventeen minutes and four seconds. Both Brady and Mansfield were by now well on their way, and Mayo was at the start. A few seconds after Mayo had started, Brady came in with an elapsed time of 17:33.6. Mansfield's time was 17:41.4. Meanwhile one of the earlier foreigners to finish had sufficiently regained his breath to talk and he came over to me. "Captain," he said, "such a hill! Such hills! Me, I went up one of them on all fours." At that, I looked up to clock Mayo in at 17:37.2. One minute and twelve seconds slower than Ensign Oxenstierna. Our hopes for first place were definitely pulverized.

It must have been fully an hour that we waited in the loggia of the golf club for the results to be compiled. Then we found that the Swedes, with their usual thoroughness, had taken first, second and fourth for the whole event, leaving Mayo in third. Brady got eleventh and Mansfield thirteenth. It was over.

Here is the final and official tale:

	Ride	Fence	Shoot	Swim	Run	Total
1. Oxenstierna, Sweden	4	14	2	5	7	32
2. Lindman, Sweden	1	2.5	19	9	4	35.5
3. Mayo, U. S.	2	4.5	1	14	17	38.5
4. Thofelt, Sweden	15	1	9	1	13	39
5. Remer, Germany	12	10	4	13	8	47
6. Miersch, Germany	10	10	5	17	6	48
7. Somfai, Hungary	20	4.5	6	12	10	52.5
8. Legard, Gt. Brit.	6	15	10	18	1	53*
9. Simonetti, Italy	5	6	3	15	21	53*
10. Duranthon, France	7	7.5	18	19	3	54.5
11. Brady, U. S.	5	12	20	3	16	56
12. Pagnini, Italy	9	13	21	2	11.5	56.5
13. Mansfield, U. S.	13	7.5	16	6	18	60.5
14. Barlow, Gt. Brit.	3	22	14	7	15	61
15. McDougall, Gt. Brit.	24	20	12	4	2	62
16. Van Rijn, Holland	19	16	13	10	5	63**
17. Naude, Germany	15	10	15	11	9	63**
18. Benko, Hungary	11	15	11	16	11.5	64.5
19. Petnehazy, Hungary	16	20	7	5	14	65
20. Pacini, Italy	14	2.5	23	23	22	64.5
21. Casanova, Mexico	24	20	5	24	19	95
22. de Sousa Portugal	21	23	17	21	20	102
23. de Heredia, Portugal	22	17	24	20	23	106
24. Morales, Mexico	17	24	22	22	24	109

\*Legard wins over Simonetti by virtue of one first place.  
\*\*Van Rijn's tie with Naude decided by running, which takes precedence over other sports.

There are several points worthy of comment in the above table. Notice first how closely the competitors are grouped. Notice then how consistently competitors of the same nation generally group themselves. Two Swedes, two Germans, two Hungarians, two Englishmen, two Portuguese, and finally two Americans very near each other. The two Britons are separated by one point; so are the Germans; the two Hungarians by half a point only. As a further index of consistency, see how all three Germans tied for tenth place in fencing. It seems almost uncanny.

Sweden showed what can be done with well-picked personnel trained over a long period. All three members of their team are now champions. Lieutenant Lindman has now competed in three Olympics: 1924, 1928 and 1932. He is the 1924 world's champion. Lieutenant Thofelt has competed twice, in 1928 and 1932, and is the 1928 world's champion. Ensign Oxenstierna is a newcomer for world's supremacy.

I have never seen a more gracious, courageous congregation of true sportsmen than were the contestants in the Modern Pentathlon. They were all the flower of their respective nations, and if we ever meet them again, whether it be in our travels, in Sport, or in the vicissitudes of Military Service, we all feel that we have twenty-two true and dependable friends.

As to the three men that I have had under me for the long grind of training, I have nothing for them but praise. They gave their all. That they swam in Los Angeles some thirty seconds slower than at West Point in the tryouts might indicate that they were brought along too fast; they are certainly not to blame. Had they been held back more in the later days of their training, the story might have been otherwise.

Thanks and praise are due the other American candidates, who gave their energy to the cause. They were, so to speak, the fleet behind the fleet—they furnished the competition that pushed the others forward and up. They gave freely their pound of flesh, and



Oxenstierna, (Sweden).

Lindman, (Sweden).

Mayo, (United States).

Official Photos.

willingly. If it is ever your privilege to meet them, remember them for their spirit and for their high ability to punish themselves. Let me name them. Lt. H. G. Wilde; Lt. A. S. Newman; Lt. T. J. Sands; Lt. D. F. Meyer; Lt. J. A. Berry; Lt. F. R. Weber; Mr. C. B. Smith; Lt. E. M. Rick; Mr. F. H. Merrick; Lt. H. J. John; Lt. G. W. Lermond; Lt. M. I. Carter.

In a correspondingly large way our thanks are due to our coaches. Warrant Officer John Dimond, West Point's so successful fencing coach, unstintingly gave his time, his leisure time, to the team, and at considerable expense to himself accompanied us to Los Angeles. Mr. Nill, West Point's swimming coach, similarly devoted much of his time. Mr. Novak, at West Point, lent us his advice in running, while in New York. Mr. John Kelly was unsparing in his efforts to improve the running. Colonel West and his assistants in the Department of Horsemastership at the Cavalry School proved their worth by our standing in riding.

As long as there were four contestants per nation, the Swedes always took the first four places. Then in 1928, when the number was cut to three, they took first, second and fourth. This time they did the same. I believe that unless we adopt their methods they will take the first three places in 1936. Their steps, which are simple, seem to be as follows:

1. To create national interest in the Pentathlon. This they do by having yearly national championships.
2. To train candidates continually. Potential candidates are stationed together near Stockholm. This is permanent.

3. To pick their competitors from a prescribed type. They are all large, spare men, very rugged. I consider, however, that our men fell within this class.

4. To attach a great amount of importance to previous experience. Lindman three times, Thofelt twice, Oxenstierna is the replacement, so to speak. Enough said.

Corresponding with the four steps above outlined, we should adopt the following:

1. Hold a yearly trial each year except, possibly, the Olympic year. This could easily be accomplished at West Point, where facilities exist and where there is a world of raw material. On the Olympic year there need be no trial so far as concerns the selected representatives, but other men might try out merely for the experience.

2. Train potential candidates continually for at least two years prior to the Games.

3. Pick all men from a rugged type. The ideal candidate should range from five feet eleven up, and should weigh from 175 to 190 when worked down.

4. Designate at least two men from previous Olympics on each succeeding team. Mayo, Brady and Mansfield would be sure to place high, probably one, two, three, and so would Newman, 1928, provided his shooting could be improved. There should, however, be some new blood, and I would like to see two of the above four men be teamed up with a mature man at least twenty-eight years old. A boy lacks the experience that years of fencing and riding give. None of the Swedes were boys.



# The Horse in the 1932 Olympiad

By Captain Lara P. Good, U. S. A., Retired

**CEREMONIE OLYMPIQUE PROTOCOLAIRE** (Olympic Victory Ceremony). Three Day Equestrian Event, Team Competition, *Champion Olympique*—United States.

As the above announcement rang out in the Olympic Stadium in Los Angeles on August 14—the last day of the Olympic Games, and just preceding the closing ceremony—100,000 spectators arose, faced the peristyle and remained motionless while the Stars and Stripes were raised on the central standard above the score board and our National Anthem was played, thus paying tribute and homage to the first United States team ever declared a winner in any Olympic Equestrian Event.

The winner was our Three Day Team. But the Three Day Event was not the only one in which points were added by our Equestrian Teams to swell the grand total score of the United States.

May we say in answer to the many opinions that may have formed in the minds of a great many followers of the Equestrian sports who were unable to attend the Games, as evidenced by certain letters and comments which we have received following announcement of the awards, that the score board does not reflect the full story nor give the full credit and all the glory to which the American team is truly entitled, as can be testified to by those thousands of spectators who actually witnessed the various performances.

In writing this report of the games, we apologize if we appear too unsportsmanlike in disagreeing with the judges, inasmuch as much more can be said of the events than the mere announcement of the results on the score board. We feel that it might be much more interesting to our readers who have already read the published scores if we should go a bit further into detail and give an account of the performances as they appeared to us and perhaps add a bit of the equestrian gossip that went the rounds of the side lines.

To prevent any misunderstanding, particularly on the part of our foreign competitors, that may result from reading this article, may we state that we were not connected in any official capacity with the conduct of the games and that the comment made in this article is not to be considered as having been authorized, reviewed or sanctioned by any of the judges or officials?

What actually happened officially we are not in a position to say but in this account we expect to set forth our own ideas regardless of how they differ from the judges' award.

The number of countries competing in the Equestrian Events was greatly reduced in comparison with that of former years. The United States and Sweden

were the only countries entering full teams in all three of the events. Mexico had entries in each event but not a full team except in the *Prix des Nations*. France entered only the *Dressage*; Holland only the Three Day; while Japan entered both the Three Day and the *Prix des Nations*. On account of the reduced number of entries, the morning and afternoon performances originally scheduled for the *Dressage* and the Schooling or Training phase of the Three Day Event, were combined and fully completed during the forenoon of the first two days which were set aside for that competition.

The setting was ideal. No more perfect spot could have been selected anywhere in the world than in front of the grand stand on the main polo field of the Riviera Country Club, midway between the heart of Los Angeles and the beach shore of the blue Pacific. The weather was clear—a bit cloudy—just enough to ward off the too warm rays of an August sun; just right for comfort and sports clothes, which were much in evidence—just "usual" California weather.

A crowd of more than 10,000 was present at the opening day for the *Dressage* competition. The number dropped off somewhat on the following day for the Schooling Event of the Three Day competition. It is too difficult to give any estimate as to the number that witnessed the second day or the endurance phase of the Three Day competition. The number has been variously estimated from 25,000 to 100,000—it was free, that is, no admission charge. The polo grounds were filled early—all roads to the Riviera were closed at 7.30 A. M.—to witness the start of the steeple chase. Many thousands of others were assembled in groups here and there at cross roads near jumps along the cross country course and at the finish line.

Inside the Riviera the first two days there was a brilliant, colorful crowd composed of social leaders and persons prominent in the business world as well as in motion pictures, watching with great interest every move of the horses and their riders. On the whole these crowds were real sportsmen and sports-women, lovers of horses and equestrian sports.

A bit of military touch was added to the show by the presence of dozens of Army Officers principally from the United States who filled a role of judges, officials, aides, photographers, and observers. Throughout this group in olive drab were mingled the light and dark blue uniforms of Sweden, the dark blue and white of Holland, the dark blue and olive drab of France and the olive green, trimmed in red, of Japan.

Lots of gold braid, replete with decorations, was present. Seated in the front row and perhaps the most interested American spectators, were Major Gen-

eral Guy V. Henry, Chief of Cavalry, who has kept a close personal check on the training progress of the American team, and Lt. Colonel Charles L. Scott, former Chief of the Remount Service and officer in charge of the team for the past ten months. Entrusted with the responsibility of making a good showing for the United States, they closely watched the accounting of their stewardship.

The crowd was well behaved under control of Captain F. W. Koester of the U. S. Army, official announcer at the microphone. All spectators were requested to refrain from any applause or demonstration of any kind from the time the horse and rider entered the arena until the rider saluted at the close of his performance. The crowd was permitted, however, to express their emotions in one long and continued applause which accompanied the departure of each contestant. Airplanes respected the request of the Committee and remained away from the Riviera arena. Even the hot dog and the peanut boys maintained silence while each contestant was in the ring, coming to life again while the judges were reconciling and agreeing on the scores.

There were three judges in the *Dressage* Event: Lt. Colonel Sloan Doak of the United States, Count Bonde, equerry to the King of Sweden, and General Lafont of France, Commandant of Saumur. Mexico was the only competitor that did not have a representation on the jury which made the awards, and as the spectator laughingly remarked, "Maybe that was why the Mexican competitor was rated last."

In this connection we offer the suggestion that the jury on the next Olympic Equestrian Sports be composed of at least five, six or seven members; that possibly the low and the high scores of judges be eliminated—this will prevent the score from being influenced by national partiality or prejudice—and further that the representative from each country not be permitted to score his own team. We would have said that the judges be absolutely impartial and from countries that have no competing teams, but while this would be theoretically sound it is not practical, inasmuch as those countries having Equestrian Teams have also those better qualified to judge Equestrian Events.

## The Dressage

Each team was assigned by lot the order of its appearance, and each team Captain in turn assigned the order to members of his team. Contrary to courtesy rules of "After you, my dear sir," the American team drew first place, and Technical Sergeant Alvin H. Moore, Engineer Corps Captain Cav. Res., led off as number one on *Water Pat*.

Not enough credit has been given Captain Moore for his performance—the natural inclination to nervousness or stage fright on an occasion of a first competitive exhibition of its kind in America might have been with him, but if so, no one was able to detect it. An excellent horseman, with a soldierly manner riding even better than he knew how to ride—glued to the saddle—he put up a wonderful performance. The only criticism that can be offered against Captain

Moore was this his performance was a bit too mechanical and lacked brilliance.

Conformation and appearance of the horse are not supposed to count, but they always do to a certain degree, regardless of what may be said to the contrary. Judges are only human, and human beings are inclined to look with more favor upon those things that are more pleasing. We do not wish it construed that *Water Pat* was an ungainly looking mount. Quite the contrary, he is a sleek-looking dapple black but he lacks certain smoothness in symmetry and conforma-



Upper: Captain Tuttle on "Olympic." Middle: Captain Kitts on "American Lady." Lower: Captain Moore on "Water Pat."

tion that appeals to the eye of experienced horsemen. Moore is entitled to a lot of credit for the results he has accomplished with *Water Pat* in eight months.

The second contestant was Lieut. Gustaf Adolph Boltenstern of Sweden riding *Ingo*, a 12-year-old German bred bay gelding. There was no question from the performance put up by this Swedish rider to what school of Equitation he belonged. This was true of the other Swedish riders, but to a less pronounced degree. Contrary to the French School of the use of the aids without a perceptible effort on the part of the rider, which method was followed by both the French and the American teams to such an extent that it was only by the closest of observation by experienced horsemen that the rider could be seen applying any aids at all in the direction and control of his mount, one did not need to be an experienced horseman to note when and how Lieut. Boltenstern applied the aids—he was following his German schoolmasters. Compared with the delicate touch of the French and American contestants, one might almost say he manhandled his horse.

His horse did most of the movements, yes, but with tremendous effort on the part of himself and his rider. His half turn to the right and left on his haunches, supposed to be at a walk, was not smooth and relaxed. Forcefully he picked his horse up, wheeled him on his haunches and set him down again in the opposite direction. A strong application of the aids kept his horse in a tension at the bit the entire time he was in the ring, instead of quiet and relaxed.

His horse was a magnificent animal, as were the other mounts of his team. They were as heavy in bodies as their riders were in hands. All were aged horses, at least 12 years old and naturally fully developed, more like artillery or light draft animals than horses of saddle type.

Lieut. Boltenstern was given eighth place by the judges, or next to the last in the awards, and unquestionably deserved no higher consideration.

The third contestant was Lieut. G. G. Jaramillo of Mexico, riding *El Pavo*. He was awarded the last place in competition and probably deserved no higher than that. The *Dressage* event was something even newer for Mexico than it was for the United States. *El Pavo*, a beautiful 8-year old bay gelding, had been in training for this event but a few months, as compared with many years of training of the mounts of the French and Swedish contestants.

Gossip also tells us that in the translation of the requirements of the course from French into English and from English into Mexican, a mistake was made which was found out by Lieut. Jaramillo only the day before and which necessitated his immediate revision and memorizing the course all over again. If so, not enough credit has been given to this Mexican contestant, who was his country's only entry in this event.

The application of aids of our Mexican contestant followed more on the line of the German school as exemplified by the Swedish team; however, considering the limited amount of training and certain handi-

caps, he did remarkably well. His horse was green and lacked much of the refinement of the performance as shown by the two previous contestants. He had no elevation at the *passage* or attempted *piaffer*.

The fourth contestant was Captain André Jousseume of France on *Sorelta*, a dainty, brilliant 8-year-old brown thoroughbred mare. *Sorelta* put up an excellent performance in so far as many of the intricate movements were concerned, but it was apparently her first time before company. She was nervous, high strung, restless, more interested in the crowd and the excitement than in careful attention to her movements. Regardless of this, however, she had flashes of brilliance due to her color, manner of going, and white markings that were not in evidence by any other horse in the competition, including *Taine*. A few bad breaks particularly at changing of leads, however, lowered her score.

Captain Jousseume was awarded fifth place by the judges, but we are inclined for the reasons stated above to move him down to seventh place behind all members of the American team.

The next contestant was Captain Isaac L. Kitts of United States on *American Lady* who was at her best. Captain Kitts gave her a beautiful ride and deserves much credit, but in her entire performance there was just that certain something lacking which is hard to describe,—perhaps we have never particularly cared for this mare, whose canter is inclined toward a singlefoot and whose change of leads is a bit choppy—entitling her to no higher award than fourth or fifth place. She performed exceptionally well at the extended trot and the *passage*. The judges' award was sixth.

Lieut. Bystrom of Sweden followed on *Gulliver*, a Swedish bred chestnut gelding. Bystrom put up a much better performance than his preceding team mate. His horse had considerable more brilliance and started out exceedingly well but grew nervous and erratic toward the end of the course. The judges awarded him fourth place. Perhaps we have a certain prejudice against severity of control at the bit and the theory of forceful and pronounced application of aids; anyway, for this reason we would have placed him below the two preceding contestants.

The seventh contestant was Commandant Marion of France on *Linon*, a small 12-year-old chestnut Anglo-Arab French bred gelding. He put up a wonderful performance, unquestionably one of the best. The only criticism we have to offer was that his performance was a bit too mechanical and lacked a certain amount of brilliance that was evidenced by his two team mates. Riding with a loose rein and aids so delicately applied, his horse showed his advanced stage of schooling. He was awarded second place and he unquestionably deserved a high award.

*Linon*, it will be remembered, was awarded second place in the Olympics in 1928, so he has been in training for this event a great many years.

The last contestant for the United States was Captain Hiram E. Tuttle on *Olympic*, an 8-year-old bay French bred thoroughbred gelding. Truly it was *Olym-*

pic's off day. He was clearly not up to his usual form. This can probably be accounted for by the fact that only two weeks before the contest *Olympic* went lame following a nail prick in one foot while being shod. He was laid up for probably a week and, in order to get him in shape, Captain Tuttle worked him very hard for a few days just preceding the event. Also, while being unloaded from a truck shortly before the event, *Olympic* jumped off the loading platform on to solid concrete which gave him a considerable shock.

He went thru his entire performance like clock-work and with deliberation and precision that meant business but he appeared tired and worn, eager for rest to which he was entitled.

The schooling arena was arranged somewhat differently from that to which the American team was accustomed. In addition to the small 10-inch plank boundary, a special fence was provided at each corner. For the first few minutes in the arena *Olympic* was much more interested in the strange fence corners than he was in his own performance. At the third one he shied slightly—at the very point where he was to break over from a collected trot to an extended one—and he committed the only error in his entire performance by breaking into a canter for two strides, which probably cost him second place.

A tip to future training would be to accustom mounts to all kinds of arenas.

Having seen *Olympic* perform at a preview exhibition just a month previous in the San Diego stadium, at which time we were inclined to feel that he put up as good a performance point for point as *Taine*'s Olympic exhibition, he disappointed us quite a bit, but it was excusable.

Captain Tuttle was awarded third place, to which we feel he was unquestionably entitled. As a matter of fact, considering it all in all, we are a bit inclined to tie him with Commandant Marion for second place. In this connection, we noted with considerable interest that *Olympic* was the only horse that executed the true pirouette, not excepting *Taine*, pride of "Tricolor."

The next contestant was Captain Bertil Sandstrom of Sweden, who put up a highly creditable performance on *Kresta*, a German bred mare, but the adverse criticism of his team mates might also be offered him, but to a somewhat lesser degree. However, we noted that haunches led forehand on the two-track and swung too wide on the serpentine at the false gallop. That he and his rider were not together was proven by squeaking leather-boots against the saddle—which could be heard throughout the arena.

After several hours of discussion the judges and officials rendered a decision stating that Captain Sandstrom would not be classified, inferring that there was a question over his adherence to the exacting rules of the event. Had Captain Sandstrom not been ruled ineligible for rating, we would have given him no better than fourth, fifth or sixth place. His beautiful chestnut mare with blaze face and white feet displayed brilliance particularly at the *passage*



"Taine," the Wonder Horse of France, Commandant Lesage up. Winner of Individual Dressage.

and two-track and some of the other movements, which always helps in any competition.

Number ten, and last on the morning program concluding the *Dressage* event, was Commandant X. Lesage of France on the great French thoroughbred black gelding, *Taine*, wonder horse of Europe. (*Taine* won in the International Horse Show at Geneva in 1931.) There was no question following Commandant Lesage's performance as to who was entitled to first award. Combining grace and skill with a flash of brilliance due to his black color and white markings, waving mane and manner of going, he went thru every movement with the skill and grace of a ballroom dancer with which he has been reputed. He was particularly brilliant and smooth at the *passage* and the *piaffer* with much elevation in these movements. Change of leads and two-track were accurate and as near perfect as might be expected except perhaps for a bit too much inclination of the shoulders of his rider. The only weakness in his entire performance was the *pirouette*, in the execution of which we have seen better (both by *Olympic* and *Si Murray*).

The judges' awards are as follows: Our own classification is shown in parenthesis.

Official Award	(Our)	Nation	Rider	Horse
1st	(1st)	France	Commandant Lesage	<i>Taine</i>
2nd	(2nd)	France	Commandant Marion	<i>Linon</i>
3rd	(2nd)	U. S.	Capt. Tuttle	<i>Olympic</i>
4th	(6th)	Sweden	Lieut. Bystrom	<i>Gulliver</i>
5th	(7th)	France	Capt. Jousseume	<i>Sorelta</i>
6th	(4th)	U. S.	Capt. Kitts	<i>American Lady</i>
7th	(5th)	U. S.	Capt. Moore	<i>Water Pat</i>
8th	(8th)	Sweden	Lieut. Boltenstern	<i>Ingo</i>
9th	(9th)	Mexico	Lieut. Jaramillo	<i>El Pavo</i>
Not classified		Sweden	Capt. Sandstrom	<i>Kresta</i>

In the team competition France was given first award, Sweden second, United States third. How the judges could disqualify one member of Sweden's team for individual competition and not disqualify the team is only a matter that apparently could have been done by compromise and arbitration—or perhaps a disarmament conference. In the team competition we would have reversed the order, giving United



"Si Murray," owned and trained by Captain H. E. Tuttle as a Dressage Mount.

States second and Sweden third. But we might repeat the words of Will Rogers while at the microphone broadcasting a LaCrosse game. "Let's not treat 'em too rough, they're our guests, you know."

Given four more years and an opportunity in the meantime for continuing their training, the American Dressage team is a factor that must be reckoned with in future Olympic contests. Our taste for this event has been favorable, and our appetites are now whetted for more. In Captain Tuttle we could find no better instructor for Dressage training. Calm, quiet, of even temperament, he has the patience of Job in schooling his mounts and in imparting instruction.

Incidentally he has in his reserve mount *Si Murray* (by *Bunting* out of *Scrub Lady*) a greater horse than *Olympic*, a beautiful chestnut, streaked with roan, a classic head, with blazed face and white feet. *Si Murray* at five years we believe shows more brilliance than *Taine* or *Sorella* probably combined. He no doubt would have made a better performer than *Olympic* under the conditions but at his age he lacks, as yet, absolute dependability at all times. Give him four more years and with continued training, we could make a prediction but we prefer to wait and see.

Horses have as peculiar personalities as people: for example, *Olympic* is at his top form on a quiet work-out, away from crowds, while with *Si Murray* the bigger the crowd, the better—he was exhibited in the stadium one afternoon during the Games and amid the din of applause he showed no excitement or nervousness—in fact, he just loved it. The United States had another reserve mount in the little bay half saddle bred mare *Troubles* which showed tremendous possibility early in training. However, we doubt if, under the conditions, she would have put up a better performance than *Water Pat* or *American Lady*.

It is unfortunate that our Dressage team has had to dissolve at the conclusion of this training. Let us hope that at some early future date these three will be ordered together again to continue the good work.

#### THE THREE DAY EVENT

##### First Day, The Training Test

The Three Day Event started on Thursday morning with the Training Test. Similar to the conduct of the

preceding day's Dressage—Thursday's performance was held in the same arena—each team drew lots and the team captains assigned the order of the appearance of each member. The competing Nations in this event were Japan, Holland, Mexico, United States, and Sweden, and contestants appeared in that order. Mexico did not have a full team, yet two contestants appeared for individual competition.

For the benefit of the uninitiated, the Training test consists of a series of approximately fifty different movements, the value of each movement being awarded a certain number of points on which the competitor might be graded or penalized, depending upon his performance.

First in order of appearance was Lt. Colonel S. Kido of Japan on the Australian-bred bay gelding *Kyu Gun*, which combination we could rate with no better than just a fair performance. The rider had a poor seat and poor legs, hands much too high—perhaps we are not familiar with the Japanese seat as it may be taught, but in this event—anyway, this contestant was certainly outclassed on seat and performance by his own team mates.

Lieut. Schummelketel of Holland followed on *Duiveltje* and put up a fair performance—much better than the previous contestant. *Duiveltje*, one of Holland's greatest horses, is a mahogany bay with four white feet. He has plenty of fire and substance. We like him every bit as well as *Marccoir*, although he does lack a bit of finish in comparison.

Next was Capt. Barriguete of Mexico who did his best but not well enough as far as actual execution of some of the movements is concerned. He excelled his team mate on some things but unfortunately got off the course—the only one to alter the routine—and it took too many interpreters too long to stop him and set him right again. This was somewhat embarrassing to our guest contestant, perhaps, but it added to the entertainment of the spectators to see American Officials talk their best Swedish, French and Spanish, French talk English and Mexican and the Swedish and Dutch Officials the language of the others. However, accompanied by a lot of arm-waving, our good friend, Tupper Cole, (Captain\* U. S. Army) set him right. However, his score was reduced to the point of disqualifying him from further competition.

The fourth entry was Lieut. Earl F. Thomson of the United States on *Jenny Camp*. Of those who had appeared so far, Thomson put up by far the best performance. His movements were easy and graceful; however, there was just an occasional slight hesitancy in transition from one movement to the other. *Jenny Camp* is not of show ring type. She appears to better advantage on cross country than in the schooling arena: she is very deceiving,—does not appear to have much substance, except on closer observation.

Following Lieut. Thomson was Capt. Hallberg of Sweden on *Marokan*, who put up a very creditable exhibition but fell under the mark set by Thomson a great many points.

Capt. T. Nara of Japan started the next relay of

\*Since promoted to Major.

competitors and exhibited splendid horsemanship; however, he was handicapped by his mount, *Sonshin*, which appeared green in a schooling arena.

Lieut. Van Lennep of Holland followed on *Henk* and can be credited with an average performance, excelling his preceding team mate but still falling under the performance of Hallberg.

Mexico's last competitor was Capt. Perez Allende on *El Torero*, a good looking chestnut mount—breeding unknown but thoroughbred we would judge from appearance—which was too high strung and fiery for a rider, probably more accustomed to applying whip and spur than patience. On several occasions at the track *El Torero* stopped to kick, the spur being roughly applied. On one occasion he kicked over the boards and jumped out of the arena.

Next came the second member of the American team, Capt. E. Y. Argo on *Honolulu Tamboy* whom we can credit with an almost perfect performance. It was most a toss-up, we feel, as to which one of two mounts, Capt. Argo would ride in the Three Day Event. Of the two, *Honolulu Tamboy* and *Directrix*, both beautiful chestnut mares—*Honolulu Tamboy* is a bit roan—were inclined to think that for the Three Day Event *Directrix* would have been the better. However, we believe *Honolulu Tamboy* does show a bit more flash and natural schooling ability than *Directrix*.

Argo was followed by Lieut. Clarence Von Rosen of Sweden on *Sunny de Maid*, a beautiful chestnut mare with almost perfect manners and lots of steeple chase ability. His seat might have been much improved, however, and we do not feel that he gave quite as good a performance as Lieut. Thomson.

The third relay of competitors started off with Capt. M. Yamamoto of Japan on *Kingo* who displayed excellent horsemanship and bettered by far the performance of his other team mates.

Lieut. Pahlud de Mortanges followed on *Marccoir*, the wonder horse of Holland. De Mortanges won the individual competition in the last Olympics and showed the remarkable horsemanship that it takes to enter such high class competition. His horse executed the various movements somewhat mechanically, more as though he was executing them from memory than from the application of aids from the rider. Though, thus, his movements appeared a bit stiff and stilted, still we could give him at least fourth or fifth place. The judges awarded him third.

Major H. D. Chamberlin completed the performance of our American team on *Pleasant Smiles*—a great horse and a great rider. Only one flare-up that lasted but an instant kept his performance from being perfect. Two years ago *Pleasant Smiles* was on the race track at Havana, his fourth racing season. Who said "once a race horse never any good for anything else?" Perhaps so with many horsemen but not so in the hands of a Chamberlin or a Tuttle. Calm, relaxed, with a hand like velvet, we have seen excitable run-aways melt like putty under Chamberlin's touch. We thought his hands were a trifle high in one or two instances in his performances, but who are we to criticize one of the world's greatest horsemen? There

was no question as to Chamberlin's deserving first place.

Lieut. Francke of Sweden completed the morning performance on *Frulodin* but failed, in our opinion, to put up as good as a performance as his team mate, Von Rosen, or particularly Thomson, although the judges gave him a higher award. Francke's performance lacked that sharp transition from one movement to another at the points designated. It was too gradual, beginning before the arrival at the designated point and continuing beyond. The horse and rider, however, were much more relaxed than either combination of the same team.

Here is how they finished the first day. We have a little less—but similar—criticism of the judges; who by the way were Colonel Doak of the United States, Count Bonde of Sweden and Major Labouchere of Holland. However, we would have tied Thomson with de Mortanges and Von Rosen for third place; with all others in the order named.

Order	Points	Nation	Rider	Horse	Breeding if known
1st	100.0	U. S.	Major Chamberlin	<i>Pleasant Smiles</i>	T. B.
2nd	97.5	U. S.	Capt. Argo	<i>Honolulu Tamboy</i>	T. B.
3rd	95.0	Holland	Lieut. de Mortanges	<i>Marccoir</i>	T. B.
4th	92.5	Sweden	Lieut. Von Rosen	<i>Sunny de Maid</i>	T. B.
5th	90.0	Sweden	Lieut. Francke	<i>Frulodin</i>	U. S. B.
6th	87.5	U. S.	Lieut. Thomson	<i>Jenny Camp</i>	U. S. B.
7th	85.0	Sweden	Capt. Hallberg	<i>Marokan</i>	T. B.
8th	82.5	Holland	Lieut. Van Lennep	<i>Henk</i>	T. B.
9th	80.0	Holland	Lieut. Schummelketel	<i>Duiveltje</i>	T. B.
10th	77.5	Japan	Capt. Yamamoto	<i>Kingo</i>	T. B.
11th	75.0	Japan	Capt. Nara	<i>Sonshin</i>	T. B.
12th	72.5	Japan	Lieut. Kido	<i>Kyu Gun</i>	T. B.
13th	70.0	Mexico	Capt. Allende	<i>El Torero</i>	T. B.
14th	67.5	Mexico	Capt. Barriguete	<i>Marokan</i>	T. B.

In the team competition for the Training Test the United States was far and away above our competitors, taking first, second and sixth places with an average score of 973.33. Sweden was second, taking fourth, fifth and seventh places averaging 904.33; Holland



Major H. D. Chamberlin.

World Wide Photo



followed in third place, taking third, eighth and ninth places with a score of 856.6; Japan fourth with tenth, eleventh, and twelfth and a score of 712.17.

#### Second Day. The Endurance Test.

On the second day of the Three Day Event was held the Endurance Test, and it was just that—an endurance test that, only a few of the élite (both horses and riders) could survive.

The course covered 22½ miles of roads and paths, rough country; a steeple chase course over 15 jumps and 2½ miles and a still tougher cross-country course with thirty-five jumps within an elapsed time limit of 2 hours, 5 min., and 6 sec. Riders who completed the steeple chase course within the required time of 6 min., 40 sec., were allowed 1 min. rest. Then they started on a 9-3-8 miles cross-country road race—on which they were allowed 1 hour, 20 minutes, 30 seconds—at the end of which was the starting point of the 5 miles cross-country run over rolling hills, gullies and 35 assorted jumps, each at least 3 ft. 10 in. high and of variable width.

For the five miles cross-country the riders were allowed only 17 minutes, 45 seconds and there was a penalty of 17½ points for each five seconds longer than the prescribed time. As a final test, the riders were to speed over a flat course of 1¼ miles to the finish line within a set time limit of six minutes flat.

No more exhausting contest has ever been prescribed by either Olympic or International rules, and the winner of the Endurance Test might well be looked upon as a "Champion of Champions" in military equitation.

There were only thirteen contestants; three from each of Japan, Holland, United States and Sweden, and one from Mexico. (Captain Barriguet of Mexico, it will be remembered, was eliminated on his first day's performance.)

Following the order of their performance on the previous day, Colonel Kido of Japan led off on *Kyu Gun*. His mount fretting and covered with lather acted badly on the first jump. It may be said that on most of his performance *Kyu Gun* jumped not with the assistance of his rider, but in spite of him. He put everything he had into each jump and cleared it with room to spare. Kido was far behind his mount on all three of the jumps we observed. There was scarcely any leg contact, his hands were much too high, and he used his reins as an aid to the security of his seat. We were not at all surprised that his great little mount was too tired to make the last of the fifty jumps; he refused three times and was eliminated at the last obstacle. A horse of lesser breeding would have quit long before.

His rider—a lover of horses they say ("first to reach the stable and last to leave")—we would say was a bit misguiding or he would have used less whip and spurs. *Kyu Gun* will probably carry large spur scars to his grave, but this is also true of some of the other Japanese and Mexican mounts.

Next was Lieutenant Schummelketel of Holland on *Duiveltje*, who was the first one to negotiate the entire course without a fall. We suspect he got most of his

penalties on time because Thomson was pushing him closely at the end. But Schummelketel was playing safe, and we do not believe crowded his mount at any point in the course. (You will recall we said we liked *Duiveltje* on the first day's performance.)

Next followed Lieutenant Thomson of the United States on *Jenny Camp*. *Jenny Camp* is a fifteen-sixteenths thoroughbred (one-sixteenth saddle bred) bay mare, six years old, by the Remount stallion *Gordon Russell*.

Future contestants can take a tip from "Tommy" and profit by his levelheadedness throughout the entire course. Following the rules of the Events, no contestant was permitted to see the course which he was to cover on the Endurance Test until the afternoon preceding the Event, when it was officially shown to him. Failure to observe the instructions and land marks of the course may lead to disqualification and our friend, "Tommy", making certain that he would not miss anything and that he would not have to spend a part of the next day looking, walked over the course twice. From careful observation he knew exactly what he had to do the next day. Riding watch in hand, he kept an accurate check on his time, alternately walking and trotting his horse up the steepest slopes and through the loose sand.

His performance was not spectacular in itself, with a great display of flash and brilliance that might be seen in a show ring or in a circus for the purpose of attracting attention, but instead he estimated the situation, knew his mission and endeavored to carry it out in the least possible time and with the least amount of energy expended on the part of his mount. We are not certain as to his time, but his unimpressive looking splendid little bay mare at the finish line seemed fresh enough to start all over again. He was truly the outstanding favorite in the results of the second day.

Captain Hallberg of the Swedish Hussars followed on *Marokan*. He had a dirty fall in the fifth steeple chase jump. His bridle caught on the brush and was jerked off, and he lost nearly a minute putting it back on again, but he remained in the running and made good time for the finish of the course.

Captain Taro Nara of Japan eliminated himself as well as his team on the steeple chase course when *Sonshin* marked up three refusals on the water jump. The third refusal his rider went over it alone.

Lieutenant Van Lennep of Holland took a bath in the water jump when *Henk* stumbled, so it was not all perspiration when he reached the finish line dripping wet. It took more than water and mud on his uniform to mar his pride as he weighed in.

Captain Perez Allende, Mexico's only entrant in the Endurance Test, was eliminated on the steeple chase course when *El Torero* refused the second hurdle, a broad jump of brush and ditch. His mount, with all speed and no control, ran away at this point knocking his rider to the ground as he went under a low hanging tree. Allende was unconscious for several minutes and, although not seriously injured, was unable to continue.

Captain E. Y. Argo of the United States rode a good race on *Honolulu Tomboy* and got one disobedience at the third jump on the steeple chase course. "Eddie" was riding under a big handicap—a dislocated collar bone which was broken early in March and injured again ten days before the Games. He was game all the way through and, although he would not admit it, the lines on his face intimated the pain and the strain he was undergoing. He was ready to drop and he had few words for anyone as he weighed in.

Lieutenant Von Rosen of Sweden had a nasty spill at the thirteenth obstacle in the steeple chase course and went down in a cloud of dust. He lost several precious seconds but, being not superstitious—perhaps thirteen is a lucky number in Swedish—climbed on again and rode the beautiful little mare *Sunnyside Maid* to a spectacular finish.

Captain M. Yamamoto on *Kingo* rode a great race for Japan, negotiating the entire course without a fall and vying with Thomson and Schummelketel for like honors. He was glued to his saddle, and there was most perfect coordination with his mount, except that he noticed he drifted behind on two of the three jumps observed. Japan has a right to be proud of Yamamoto, for he deserves much credit for his performance.

Lieutenant de Mortanges on *Marcroix* also had a nasty one on the twenty-eighth hurdle—the same one in which Chamberlin lost his dignity—but he remounted and came on through with a high score for Holland. He started the day a high favorite with his big Dutch horse, which stands nearly seventeen hands, and he was the center of attraction. However, he came in second in the awards—seventeen points behind Thomson—nearly collapsing with exhaustion at the finish. Mrs. de Mortanges met her husband at the finish line and began personal supervision of the horse's care and treatment, to which he responded nicely after a couple of hours. (*Marcroix* is a French bred horse raised in Holland, was the Olympiad winner in 1925 and had been in training for this Event for nine years.)

Our last American entry was Major Chamberlin on *Pleasant Smiles*. Chamberlin did not appear to be up to his usual form and piled up on the twenty-eighth cross country jump as he took a general look around to make sure he did not get off his course, forgetting for the moment that his tired horse had a mean obstacle to take. We believe this fall could be partially credited to the rider, who suffered a badly wrenched shoulder while his mount cut his left leg and pulled a tendon. Chamberlin remounted and came on through to the finish. He had lost his cap somewhere along the course and perhaps a bit of dignity, but his horsemanship was still there when he weighed in.

Unfortunately we were unable to follow him the entire course. We are inclined to think that, had he pulled his mount down to a trot on some of the steeper slopes for a short breathing spell before some of the difficult jumps on the cross country, both he and his mount would have come through in better shape. Without question Chamberlin has proven himself one

of the world's greatest horsemen, but, as we have stated, we are inclined to feel that his usual form was a bit off and that Thomson had him bested the second day.

*Fridolin*, thirteen-year-old war horse, Lieutenant Francke of Sweden up, was so exhausted coming up a long slope midway on the five-mile strip that he crashed head first into the twenty-first jump. After a moment's breathing spell while getting out of the ditch, he had recovered sufficiently to clear the jump on his second attempt and continued on down the course but he lacked the energy to lift himself over the last four hurdles which eliminated himself and his team. Lieutenant Francke led his mount to the finish line, where the old horse was barely able to stand alone.

Only nine of the thirteen finished the course. Here is the standing at the end of the second day.

Award	Nation	Rider	Score	Horse
1st	United States	Lieut. Thomson	157.5	<i>Jenny Camp</i>
2nd	Holland	Lt. de Mortanges	155.5	<i>Marcroix</i>
3rd	Sweden	Lieut. Von Rosen	152.1	<i>Sunnyside Maid</i>
4th	United States	Major Chamberlin	144.5	<i>Pleasant Smiles</i>
5th	Sweden	Capt. Hallberg	141.9	<i>Marokan</i>
6th	Holland	Lt. Schummelketel	137.5	<i>Duiveltje</i>
7th	Japan	Capt. Yamamoto	136.5	<i>Kingo</i>
8th	United States	Capt. Argo	124.0	<i>Honolulu Tomboy</i>
9th	Holland	Lieut. Van Lennep	107.5	<i>Henk</i>

TEAM SCORES			
	First Day		Second Day
United States	973.36	United States	21.00
Holland	576.5	Holland	31.44
Total First Two Days			
United States	427.03		
Holland	491.33		

Note: Japan and Sweden eliminated from Team Competition on the second day.

#### The Third Day—The Jumping Test

Someone has said of the Three Day Event, "The first day they test a horse's memory, the second day his heart, and the third day his legs—that is, if he has any left."

More attention was given each of these horses in the twenty-four hours between the finish of the Endurance Test and the beginning of the Jumping Test than probably some of them will ever get again in their entire lifetime. The question of individual or team elimination from further competition depended entirely upon the condition of the mounts on the third day and how they came round or responded to their short rest following the gruelling grind of the second day.

As we have said before, some of them were near total exhaustion when the second day was over. This included *Marcroix* upon which Holland was hanging great hopes of winning this event. The worry of our own team as to mounts was *Pleasant Smiles*, which, in addition to a bad cut, appeared to have pulled a tendon. As to riders, neither Chamberlin nor Argo were hardly in shape to challenge Finland to a cross-country foot race. De Mortanges and Van Lennep of Holland and Hallberg of Sweden had had bad spills. Fortunately every one responded to skilled treatment and at two o'clock Saturday afternoon, tired and sore, perhaps, they were still willing and eager to do or die trying to do honor to their team and country.

Competition which had started the first day with fourteen contestants had now been reduced to nine. Only Holland and the United States had a full team still in the competition. Sweden had only two contestants, and Japan only one contestant left.

The Third Day Jumping Test was held in the Olympic Stadium, which was slightly better than half filled. The true followers of the horse who had witnessed the preceding performances were all present and were scattered through the audience of the fifty or sixty thousand spectators. Unfortunately the greater part of this audience, as well as those present on the following day, hoped and expected to see a circus or a Wild West rodeo performance. At no time could it be said that they were under the control of the announcer at the microphone. Time and time again they were requested—perhaps a dozen different times while each contestant was performing—to withhold their applause and remain quiet lest they distract the attention of the contestant and his mount, but without success. Regardless of whether a jump was cleared or the rider thrown from his horse into an obstacle, the crowd invariably broke out with laughter and applause. Most refusals were given unsportsmanlike reception. In fairness to the crowd, however, may it be said that they just didn't know any better, perhaps because this is an automobile age. We were much amused at the remarks of a couple that sat a few rows behind us. When one of the contestants came in, his horse showing considerable animation, the man turned to his wife and said, "Look, dear, that horse has a lot of pep" and she replied, "Well, why shouldn't he have a lot of pep, he only has to do this once every four years!"

The contestants entered in the same order as on previous days. Lieut. Schummelketel of Holland led off on *Duiveltje*. He had one refusal and one knockdown and landed in the water with his hind feet. The judges chalked him up with 58 points penalty.

Lieut. Thomson, hero of the previous day, rode in on *Jenny Camp* and rode out again a few minutes later with 60 points in penalties; for why, we do not know. The little bay mare didn't refuse or hesitate on a single jump; she had only one knockdown and landed with two hind feet in the water but with a lot less splash—if that had anything to do with it—than *Duiveltje*. There might have been some other fault, but if so we failed to see it, and his performance, which lacked a hair's breadth of being clean, netted him 60 points in penalties as compared with his previous competitor who got only 58 points penalty for what we considered a much poorer performance.\*

Next came Capt. Hallberg of Sweden on *Marokan* who knocked down three rails on one jump and hit another. For this, he was given a total of 40 in penalties.

Next came Lieut. Van Lennep of Holland on *Henk*, who was on the verge of elimination when forcefully dismounted at one point in his ride. Elimination of

Van Lennep meant elimination for Holland if he failed to finish. He got back on *Henk*, which was very nervous by this time, having already knocked down a couple of jumps and refused another, and concluded his performance. The judges gave him 114 points penalty, the lowest score for the day.

*Honolulu Tomboy* came in next. Capt. Argo up, and completed the course in great shape, barely touching a leaf on any of the jumps. Argo had the only clean performance in the afternoon; but the judges apparently not wishing to give anyone that honor charged him with seventy-five hundredths of one point penalty. Why that penalty, we do not know unless it be that "Eddie" was riding with his shoulder still strapped up.

Lieut. Von Rosen with Sweden's *Sunnyside Maid* landed in the water and knocked down two bars, giving him a total penalty of 42.75.

Next was Capt. Yamamoto of Japan on *Kingo*, who gave a great exhibition of horsemanship, arousing much excitement in the Japanese section of the stadium and winning a lot of applause from the entire audience in general. His penalties were 40.25.

Next came the pride of Holland, the famous *Marocroix* with De Mortanges up. He showed complete recovery from the day before but got one knockdown on one jump and his feet wet on another. The judges gave him 40 points penalty.

The last contestant of the afternoon was Major Chamberlin on *Pleasant Smiles*, who appeared little worse for the wear of the second day. The judges gave him a 60-point penalty when he knocked down the oxer and the rail on the last jump, but he came through, and, as he rode out of the stadium, the crowd burst into thunders of applause because it meant that the American team had won the competition.

From the following score it will be seen that there was less than five points difference in the first three scores, De Mortanges getting 1813.9, Thomson 1811, and Von Rosen 1809.4. Much can be said regarding who might be entitled to the first award. We are inclined to give it to Thomson, in view of the fact that we believe his 60-point penalty was much too high—had he been given even three points lower penalty on the Jumping Test, he would have been declared the winner. No doubt the judges saw something we didn't, but we dare say the discussion in equestrian circles as to the two performances of Thomson and De Mortanges will continue until the next Olympic Games.

INDIVIDUAL COMPETITION				
Place	2nd Day Penalties	Total 3-Day Score	Rider	Horse
1st	40	1813.9	Lt. de Mortanges	<i>Marocroix</i>
2nd	60	1811	Lt. Thomson	<i>Jenny Camp</i>
3rd	42.75	1809.4	Lt. Von Rosen	<i>Sunnyside Maid</i>
4th	60	1808	Maj. Chamberlin	<i>Pleasant Smiles</i>
5th	40	1807	Capt. Hallberg	<i>Marokan</i>
6th	58	1814.5	Lt. Schummelketel	<i>Duiveltje</i>
7th	40.25	1809	Capt. Yamamoto	<i>Kingo</i>
8th	107.5	1841	Capt. Argo	<i>Honolulu Tomboy</i>
9th	114.25	1861	Lt. Van Lennep	<i>Henk</i>

TEAM COMPETITION		
Award	Nation	Score
1st	United States	7649
2nd	Holland	4884

Note: Japan and Sweden disqualified from further competition at the end of second day.

\*As these above figures may not include all fractional point penalties, the official score may vary slightly.

\*Editor's Note. Score sheet shows foot in water, Jump No. 4: knockdown, No. 6: foot in water, No. 8: 20 each; total, 60. Lieutenant Schummelketel knocked down Jump No. 1: foot in water, Jump No. 8: 20 each; refusal, Jump No. 4, 15; total, 55, plus 3 points time penalty; total, 58.

The obstacles included in the Three Day Jumping Test consisted of an Oxer, a Hitchcock, two Stone Walls, a Barn Yard, two 3-Rails, Water Jump, a Liver-pool, Hedge, Brush, and an In-and-out. The *Prix des Nations* was over a similar course with a few additional jumps added and with the obstacles raised and extended.

#### Prix des Nations

The last day of the Olympics dawned bright and clear. It seemed that every sportsman and sportsman in Southern California, as well as many visitors from points farther away, were in Los Angeles to witness the closing ceremony and particularly the final jumping performance, the *Prix des Nations*.

The stadium filled early as the crowd gathered. The contestants were officially permitted to come in dismounted and look over the jumps for the first time in order that they might get the lay of the course and estimate the situation. It is truly a wonderful sight to see over 100,000 people (the stadium holds 105,000) and was practically filled, eagerly awaiting the final event. As on the previous day, except much more so, true lovers of the horse were in the minority.

The first on the program was a parade of the equestrian teams of France, Sweden, Japan, Holland, Mexico, and the United States, followed by the American horses which had been ridden by the contestants in the pentathlon events.

Following the parade of the horses the French *Dressage* Team re-entered the stadium, and Commandant Lesage gave a great exhibition on *Taire* before an approving audience, most of whom did not know why for what it was all about, but that, however, was the least of their worries and did not dampen their enthusiasm one bit. The awards were then made to the winners of the *Dressage*, and the Three Day Events, both individual and team.

By way of explanation of the ceremony of awards, may we say that the three winning contestants, whether individual or team, lined up facing the official section of the stadium on the south for the official presentation of the medals (gold, silver and bronze). Immediately after the presentation of the medals the contestants executed a left turn, facing the peristyle at the east end of the stadium on which were erected three flagstaves—one large one in the center flanked by the two smaller ones on each side. With the crowd standing while the National Anthem of the victor was being played, the colors of the winning Nation were run up on the center flagstaff, smaller colors of the second and third winners on the right and left respectively.

As you will note from the table of awards, a large tri-color waved from the center, while our own Stars and Stripes were flown from the left during the awards of both the team and individual *Dressage*. A smaller tri-color waved from the right for the individual *Dressage*, but this was replaced by the Yellow and Blue of Sweden in announcement of the team awards.

In the individual awards of the Three Day Event the Red, White and Blue of Holland occupied the center staff, the Stars and Stripes on the right, and

the flag of Sweden on the left. In the awards for the Three Day team competition the Stars and Stripes floated from the center, the colors of Holland from the right, while the left staff was unoccupied inasmuch as all other teams had been disqualified.

Following these awards the Swedish *Dressage* Team reentered the stadium for an exhibition of high school movements. Mounted on their large horses, in their colorful uniforms replete with gold braid and decorations, their exhibition won the thundering applause of the audience which seemed to appreciate it much more than they did the exhibition Commandant Lesage gave on *Taire*. The reason for this difference in appreciation we believe was that the Swedish Team was more on the nature of a circus performance. As they executed the different movements their mounts showed much flash and brilliance, accompanied by severity of control at the bit and a flash of the spur. The audience could see the rider forcing his mount to execute the various movements, while in the case of *Taire* the application of the aids was so delicate that the horse appeared to the uninitiated to be going through all of the movements from memory.

Next came the great Event which we were all awaiting, the *Prix des Nations*, and immediately the jumping arena was cleared of everyone except the officials and a few attendants.

To really appreciate the height and expanse of these jumps, it was necessary that one make a personal examination. The course required at least sixteen jumps, having a minimum height of 1 meter 30 and a maximum of 1 meter 60, with at least two of the obstacles that height. The water jump was 4 meters, which plus the hedge made a jump of better than 5 meters in expanse. Unquestionably it was the stiffest jumping course ever seen in America and reputed to be much more difficult than the course for this Event in previous Olympics. No wings or approaches to the jumps were permitted. The length of the course was 1,050 meters; the required speed was 400 meters per minute at the gallop. Overtime was penalized at the rate of one-fourth of a point per second, while no credit was allowed for a faster rate. Equipment was optional, but the required weight was 75 kilos.

In this event Mexico, United States, Japan, and Sweden entered full teams. Captain Andres Bocanegra of Mexico led off on *El Lis*. He had three refusals and was eliminated on the fourth jump—an in-and-out—in over a four-foot fence and out over a wide ditch and a higher post and rail. His mount was very nervous and very much excited, caused to a great degree probably by the action of the audience over which the announcer at the microphone had absolutely no control. As on the previous day, before and after every jump he requested the audience to refrain from applause until completion of the course, but the audience absolutely disregarded this request, greeting clean jumps, refusals or falls alike. In this connection, however, this contestant was not given any more of a handicap than the others, who were shown no better consideration. It seemed that the entire audience was out to enjoy itself at the expense of the actors.

Next was Lieutenant John Wofford of the United States on *Babe Warham*, a half-bred gelding (half coach). This performance showed up both Lieutenant Wofford and his mount to much disadvantage. The horse was apparently afraid of the course and the audience, but the rider was willing and three falls resulted at different jumps when the horse and rider crashed into them or refused. At the "dry Liverpool" the first effort was not enough, and the rider was unhorsed and lost a lot of time in getting his fallen mount off the jump and onto his feet again. The judges let him complete the course, apparently not knowing whether to count a fall as a refusal, but a later announcement stated his disqualification, which of course eliminated his team in the team competition. Lieutenant Wofford is a much better horseman than some of the spectators may have judged from his Olympic performance in the stadium. He got some bad breaks.

Major Yasushi Imamura of Japan followed on his English bred gelding, *Honey Boy*. *Honey Boy* is a beautiful chestnut gelding with white markings, standing sixteen one or better and has lots of strength in haunches and loin, but either he or his rider lacked the courage or "devil-may-care" willingness to take the course without first looking it over and they were eliminated on three refusals before the half-way mark was reached.

Lieutenant Clarence Von Rosen, Jr., of Sweden followed on the magnificent half-bred bay gelding *Empire* and set a mark for the following contestants to shoot at. It was the first complete performance and, although he got a 16-point penalty mark, he deserved the hand the crowd gave him on leaving the stadium.

Major Carlos H. Mejia of Mexico had a nice little mount of unknown breeding in *Kangaro* but had his three refusals on the second and third jumps, and we did not get the chance we wanted to see his mount in action over the whole course.

Captain William Bradford of the United States rode *Joe Aleshire*, that famous half saddle-bred gelding. Blazed-faced, carrying a high head, brilliant in action, he took off for each jump as though he were never coming down. Real jumper that he was, we wondered what a jumper he would have made if he had not been handicapped by his saddle-bred blood. (What Thoroughbred lover has not thought that at some time or other?) However, he finished behind Von Rosen of Sweden with a 24-point penalty. Did he have a run-out on the water jump? We do not remember for sure, things were happening so thick and fast, but we believe he did. Captain Bradford we believe is unquestionably one of the world's best jump riders.

We were a bit disappointed when Major Shigetomo Yoshida of Japan withdrew *Falaise*, the brown English bred mare, the pride of their jumping team, at the last moment. We have admired this mount ever since her arrival in Southern California and looked forward to seeing her in action in competition with the world's best. An accident a few days before, however, prevented her from being ready for the grand final event. Major Yoshida also has the reputation of being one of Japan's best jump riders.

Lieutenant Arne Francke of Sweden was next on *Urfe*, half-brother to *Marcroix*, the Three Day wonder horse of Holland. A real steeple chase horse and the only full Thoroughbred on their team, he was a bit erratic, high strung and excitable (Was it altogether the horse, or was it the rider, or perhaps a bit of both?); anyway, he was also eliminated about half way through the course.

Captain Ortiz of Mexico on *Pinello* followed the example of his team mates and was eliminated with one fall and three refusals on the second brush jump.

We awaited with interest the next entry, Major Harry D. Chamberlin of the United States. On the program, as his mount appeared the name of that old warrior of International Horse Show fame but of humble origin, *Tanbark*. In reserve we knew the American Team had the magnificent little gray mare, *Show Girl* owned by Captain Koester of the United States (who, by the way, was the official announcer for the Equestrian Events), and that it was a toss-up as to which three of the four mounts would be finally entered in the competition. Captain Koester was just finishing announcing the next competitor would be Major Chamberlin on *Tanbark* when through the entrance tunnel there came a flash of gray. This little thoroughbred mare *Show Girl* has been aptly described as a "galloping machine," because of her smoothness of movement and the tremendous driving power behind her. Just inside the entrance she had her full stride and what a performance!—more like a gray bird than a quadruped she sailed over the jumps. Major Chamberlin gave her a beautiful ride—we have seen him ride better, however (we must remember he was suffering from an injury received two days before)—but apparently pulled her up a bit just before she took off for the five-meter-wide hedge and water jump with the result that she landed short. A splash of water was the only fault we noted in the entire course—there might have been others, the judges should know—and Major Chamberlin was credited with a 12-point penalty\*—the smallest so far in the competition. Even Captain Koester at the microphone, we suspect, was so excited that he forgot to announce the correction as to the name of the mount, and at least 90,000 of the 100,000 people that witnessed the performance, still give the credit to old *Tanbark*. Chamberlin and his mount got by far the greatest applause of any single Olympic contestant that ever entered or left the stadium, and it was truly deserved.

Lieutenant Takeichi Nishi of Japan entered the stadium on *Cranus*—the Japanese section gave him a hand. He had a good horse, yes, we conceded that point, but we expected him to follow his other team mates resulting in early disqualification. He had different ideas, however. He lacked the form of Chamberlin or Bradford, and his mount was hardly comparable to *Show Girl* in brilliance, but jump he could and jump he did, completing the course without delay and with only an 8-point penalty, beating Chamber-

\*Editor's Note. Score card shows knock-down, Jump No. 5: in water, No. 6: in water, No. 18: total, 12.

lin's score by four points, Von Rosen's by eight, and Bradford's by sixteen. And did our 5,000 Japanese spectators go wild?

The final contestant was Captain Ernst Hallberg of the Swedish Hussars on that beautiful half-bred gelding *Kornett*. The fifth to complete the entire course, he was awarded a 50.5-penalty, the lowest score.

The summary of the awards follow:

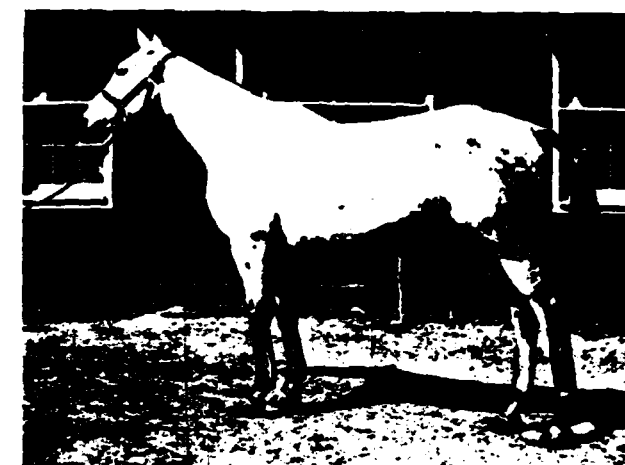
8-point penalty	Lieut. Nishi	Japan	<i>Cranus</i>
12-point penalty	Maj. Chamberlin	U. S. A.	<i>Show Girl</i>
16-point penalty	Lieut. Von Rosen	Sweden	<i>Empire</i>
24-point penalty	Capt. Bradford	U. S. A.	<i>Joe Aleshire</i>
50.5-point penalty	Capt. Hallberg	Sweden	<i>Kornett</i>

Having followed the training of the American Team for the last eight months, we wonder if their score could have been altered if the assignment or the selection of mounts had been different. We would like to have seen the famous *Tanbark* and *Ugly* which won the International Horse Show last November with perfect performances in action with the members of that team, Chamberlin and Raguse up, respectively. And we would like to have seen Bradford on *Show Girl* (we took some slow motion pictures of Bradford on *Show Girl* jumping 5' 10" less than two weeks before).

But no matter what a man has done, to win he must be better than his competitors on the day of competition. After all there is a bit of luck as well as good horsemanship in any contest of this kind. Just a slip of the turf, a broken or not too measured stride, may disqualify not only one contestant but his whole team.

Let us give the credit that belongs not only to the members of the Team finally selected to represent the United States, but also to the members of the entire squad that have been in training for the past eight months. Winning a place on the American Olympic Team was probably actually harder than the Olympic Games competition, strenuous as that may seem to be. All members of the squad, from the beginning until the final selection was made the last week in July, had to keep on their toes and in perfect physical trim at all times. It was not a case of one afternoon's performance to decide who would become a member of the Team, but also a question of their ability as all-round horsemen. Then, too, the question of mounts probably had a bit to do with determining the final selection, since some mounts responded to training better under the guidance of certain riders than others. And some of the mounts in training, because of accidents or other unfortunate contingencies, were eliminated.

There may have been some on the squad who were not selected who would have actually put up as good or better performances than those that were selected—we do not know and we never shall know. The same is true of the horses—we shall never know that, either.



"Show Girl"—Thoroughbred 8 year old mare on the picket line. One of the grand contenders in the Prix des Nations event in the Olympics.

They have all worked hard and unselfishly that the United States should be represented only by the best men and the best mounts. There may have been some regrets, but if so they have not been expressed.

Those who have received awards have already been honored. To those who did not win out and to those who were not given a chance to compete in the Games, we can best express our sentiments in the homely terms of the colored groom to his mount following an unsuccessful performance. "Yo didn' win nothin', but we loves yo' jest the same."

NOTE: The personnel of the entire American Equestrian Squad which have been in training for the last eight months for the Olympic Events were:

Lt. Col. C. L. Scott, Cav. . . . . Officer in Charge  
Major H. D. Chamberlin, Cav. . . . Charge of Training  
Capt. James E. Noonan, V.C. . . . . Veterinarian

Major A. P. Thayer, Cavalry  
Captain J. T. Cole, Cavalry  
Captain H. E. Tuttle, Q. M. C.  
Captain W. B. Bradford, Cavalry  
Captain F. W. Koester, Cavalry  
Captain I. L. Kitts, F. A.  
Captain E. Y. Argo, F. A.  
Lieut. LeR. J. Stewart, F. A.  
Lieut. J. W. Wofford, Cavalry  
Lieut. C. W. A. Raguse, Cavalry  
Lieut. P. C. Hains, III, Cavalry  
Lieut. E. F. Thomson, Cavalry  
Lieut. R. W. Curtis, Cavalry  
Tech. Sgt. A. H. Moore, Eng. Corps  
Captain, Cavalry Reserve



## Efficiency Reports

By Lieutenant Colonel Bernard Lentz, Infantry

**A**N efficiency report is a yard stick intended to measure, what?

For an answer to this question I quote from General von Seeckt's *Thoughts of a Soldier*: "Man is the most difficult, the most recalcitrant and the most grateful, the most faithful and the most treacherous of all materials and the soldier, like all rulers, works first and foremost with men".

If it is correct to assume that an efficiency report is a yard stick with which to measure man and General von Seeckt's description of man is reasonable then we see at once that we have quite a job on our hands.

To me the difficulty appears something like an attempt to produce a single yard stick with which to measure gasoline for the motor car, coal in the bin, hay in the mow, alcohol in beer, and then some.

When we try to measure man, in the sense under discussion, we are attempting to measure genius, talent, industry, et cetera, all residing more or less in a single human being. Joseph Hergesheimer, the well known novelist in his recent biography on General Sheridan says: "Genius is a term possible to recognize but not to describe. It does not reside in the capacity for taking pains. Genius has an elaborate and often commonplace patience and industry of its own; its essence, its spirit is far different."

If genius, as Mr. Hergesheimer says, cannot even be described, how much more difficult is it to measure genius accurately. And what holds for genius is also true, in my opinion, for many other attributes which the human being does or does not possess.

I have purposely dwelt somewhat on the difficulties of the problem for this is of first importance if we expect to arrive at any reasonably satisfactory solution.

John Dewey, American philosopher, says: "We generally begin with some vague anticipation of a conclusion and then look around for principles and data which will substantiate it." My mind, in spite of attempts to muster, first of all the facts bearing on the subject, is working along the lines suggested by Dewey so I might as well at once state my conclusion—there is no accurate solution—and then give some "principles and data", for thinking so.

Let us discuss some of the terms which are used in rating the human being:

We shall begin with, "tact." This is a perfectly good word but how often its real meaning is misconstrued when applied to the human being!

From time to time, while reading the stories of famous military leaders, I have amused myself by giving them hypothetical ratings in, "tact". This same thing can be done for other qualifications. The chances are, the average rater, would have given Napoleon not much on "tact" and his worthy opponent, Well-

ington, still less. Mr. Hergesheimer in his biography mentioned above tells an incident about General Sheridan that illustrates the point. When Sheridan joined the army in Virginia he was placed under Meade. Meade continued to issue instructions to the commanders of cavalry divisions without letting Sheridan know, though Sheridan was in command of the cavalry. After considerable confusion had been caused, Sheridan told Meade if he insisted on giving the cavalry instructions without consulting, or even notifying him, Meade himself could command it. He (Sheridan) would not give another order. Sheridan added that if given a chance he could whip Stuart. Meade at once reported the interview to Grant repeating also Sheridan's remark about whipping Stuart. "Did he say so", Grant commented, "then let him go out and do it". Sheridan soon had his orders and we all know what he did to Stuart.

What rating would Meade probably have given Sheridan in "tact" after Sheridan had told him to command the cavalry himself? And aren't we compelled to recognize in this incident, the genius of Grant, genius which cannot be described or measured but which is there nevertheless; genius which, in the light of events, outweighed all the faults that have been ascribed to Grant.

It seems to me that "tact" in the sense that it is frequently interpreted operates to defeat the quality of "force"—the faculty of carrying out with energy and resolution that which on examination is believed reasonable, right, or duty.

In a similar way "activity" may be opposed to "intelligence" for have not all of us seen officers engaging in tremendous simulated activity unduly supervising, and perhaps annoying and harassing perfectly competent subordinates when the intelligent thing to have done would have been to let the subordinates alone.

Activity can be most pernicious, so in any rating scheme if "activity" is mentioned at all, there should be a blank space for describing the pernicious kind of activity as well as the good kind.

The story of the lieutenant, in the front line in France where the bullets were flying, is appropriate in this connection. This lieutenant off the battle-field and in posts, camps and stations, had had such consistent activity displayed over him in everything that he was called upon to do that from sheer habit when a special situation came up, in the front line where the bullets flew, he went to the 'phone and asked his superior what to do and the reply, over the 'phone, from rear to front, was—"use your own judgment". If we are going to teach officers to use their own judgment on the battle-field we must begin in posts, camps and stations and not postpone it until officers are learn-

ing grand tactics in our higher schools. In other words we must eliminate pernicious activity on the part of supervising officers who may be working for a high "activity" rating while they are forgetting that there are also such words as "intelligence" and "judgment and common sense".

There is a danger that people who know that they are going to be rated on a multitude of items, may retain all those items in the back of their heads; items which are at once transferred to the front of their minds when the rating officer comes around. Like boys reciting "trustworthy, loyal, helpful, friendly, courteous, etc." there will flash through their minds activity, military bearing, tact, intelligence, force, leadership and what not. This is likely to cause them to forget their job. The means for measuring efficiency may crowd the thing to be measured.—efficiency—out of the picture. It is much like the old trustworthy employee in a big factory who was told by the manager: "Jones I hear you don't think much of our new efficiency system." And Jones replied, "Well, sir you know there must be some one around here to see that the work gets done". Like too many cooks spoiling the broth, too many terms spoil any rating scheme.

It has sometimes been difficult for me—and others have told me the same thing—to write a brief general estimate of an officer in my own words.

One friend of mine had a rather practical solution to this item. He searched through a necrology pamphlet and made up a number of citations for the good officers to be reported upon. Similarly he made up some negative citations (the speech of Sergeant Buzfuz denouncing Mr. Pickwick in *Bardwell vs. Pickwick* might be used as source material). All these, positive and negative, citations he numbered. Then all he had to do was to indicate the number and the sergeant-major would enter same under the brief general estimate.

Sometimes efficiency reports have to be rendered on officers when the reporting officer knows little or nothing about the officer reported on, and this is liable to make one feel like the new British Consul who was sent to the interior of Africa and who presently had to render a long report on the natives in his district. When he came to the item "Manners and Customs", he filled in the blank: "Manners—None; Customs—Nasty". It seems to me that the more we go into multiplicity of detail in trying to rate the human being the more we get involved in obscurity and contradiction. If this is true then the principle of simplicity, an important principle of war, could also be used to great advantage in any rating scheme for human beings.

Let us stop to consider for a moment the various situations under which efficiency reports are rendered.

In these days when many are called upon to preach soldiering over long periods of time and perhaps not so many are practicing soldiering over shorter periods, how is it possible to establish a worth-while comparison? A prominent minister once told me that a good preacher, preaches better than he practices and if this

should be true in the army it is bound to show up on efficiency reports.

Then we have heard of the reporting officer who won't rate any officer under him higher than he himself is rated. Such a rater is doing something that is not intended but is, after all, rather human. It supports General Von Seeckt's observations on "man".

If we are going to consider all the varying situations under which reports are rendered I think we should again conclude that our job is a difficult one.

At this point, I am going to inject some thoughts which I have gleaned from a number of sources and which I believe have a bearing on the matter at hand.

Dr. Dewey says: "No one can foresee all consequences because no one can be aware of all the conditions that enter into their production. Every person builds better or worse than he knows. Good fortune or the favorable cooperation of environment is still necessary. Even with his best thought, a man's proposed course of action may be defeated. But in as far as his act is truly a manifestation of intelligent choice, he learns something. One may learn quite as much or even more from a failure than from a success. He finds out at least a little as to what was the matter with his prior choice. He can choose better and do better next time. Luck or fortune not foreseeable is always involved. But at least such a person forms the habit of choosing and acting with conscious regard to the run of affairs. And what is more, such a man becomes able to turn frustration and failure to account in his further choices and purposes. Everything insofar serves his purpose to be an intelligent human being."

The just quoted, rather philosophical thought means, without in any way compromising with discipline or other soldierly attributes, that it would be well to be indulgent when it comes to mistakes. The Duke of Wellington had the idea.

Mr. Philip Guedalla in a recent biography of Wellington quotes the Duke as saying in 1809: "If I am to be hanged for it, I cannot accuse a man who I believe has meant well. Although my errors, and those of others also are visited heavily upon me, that is not the way in which any, much less a British Army can be commanded."

These being the Duke's sentiments no wonder he could say after he had conquered the French in the Peninsula and Napoleon was about to proceed to Elba: "I could have done anything with that army."

Ludwig tells us that before his first encounter at Mollwitz, Frederick the Great had fled and did not appear again until sixteen hours later when all was over and won. And Frederick became one of history's greatest captains. So it seems to me that we may well bear in mind the idea of tolerance towards honest mistakes when dealing with efficiency.

An efficiency report should mean something after it has been rendered. The officer's efficiency report with other documents that form a part of the report should be the sole record to which we turn in judging the man. This means that special reports from schools indicating whether or not an officer is fitted to go to

other schools, are out of place and when schooling is coupled with general staff eligibility we run into special difficulties for we thereby decidedly limit the value of efficiency reports.

Unless our efficiency report is the sole repository of all merits and demerits how can we, for example, strike a just balance between earning a distinguished service cross in the thick of battle and barring the same officer from further education when further schooling alone leads to a place on a special eligibility list?

More than ten years ago, I pointed out in some articles, the flaws in any scheme that uses what in labor parlance is called the closed shop principle, for eligibility for anything. What about the morale of many hundreds of very capable officers who on account of conditions that may exist, will never get to the schools? Would it not be better to leave the door open for the "self-made" eligible school or no school?

In this connection, the law exempts the Chief of Staff from the provision that to become eligible for the General Staff, officers must go through the schools.

Is it not significant that since the law was passed none of the five chiefs of staffs have been through any of the schools through which the Chief of Staff's assistants must go before they can be eligible? If the "self-made" man is good enough to be Chief of Staff

it seems to me "self-made" assistants should also be acceptable.

I am all in favor of our schools, and expressed myself that way in a recent article in the JOURNAL, but I repeat that general staff eligibility should be divorced from our schools. The efficiency report will not be the worthy document that it should be until we make it the one and only report to which we turn whether we are trying to determine Class "B", or are considering a fine detail, even one to the General Staff.

I stated one conclusion early in this discussion, to the effect that our problem is one of great difficulty and cannot be solved accurately as long as man is man. This being the case the simpler we make our yardstick the more we are likely to arrive at something that is practical even though it does not measure everything through the alphabet from Activity to Zeal.

That the efficiency report is absolutely essential needs no discussion but it will attain full importance and value only when it becomes the sole debit and credit sheet for the man reported on. This means the elimination of special reports and special eligibilities.

And the final thought is that a reasonable solution for this complex problem calls for the employment of that well known but often overlooked, principle of war—Simplicity.

## The Gibson Oat Crusher

Reprint from the Nov.-Dec. issue of "The Horse," 810 18th St., N.W., Washington, D. C.

**H**ORSEMEN who have studied the food best adapted to the need of their horses, have found that the Gibson Oat Crusher is aiding them in filling the bill. In a recent announcement put out by the Gibson Oat Crusher Company they list prominent Racing Stables, Thoroughbred Breeders and Breeding Farms, Private Owners, Riding and Country Clubs, Polo Stables, Agricultural Colleges and Army and National Guard contingents which have found this oat crusher to be most desirable.

According to statistics gathered by this company, whole oats mean only 80 per cent mastication; 20 per cent waste of feed; 20 per cent waste of time and money paid for feed; danger of inflamed and weakened digestive organs and danger of colic.

Through the use of the crusher there is acquired 100 per cent mastication; complete and thorough digestion; 15 per cent to 20 per cent less oats required; 15 per cent to 20 per cent saving on feed bills; healthy strong horses, always in the best of condition.

Private and government tests have shown that when feeding whole oats about 20 per cent passes unopened through the animals' digestive systems. The chemical process of digestion starts in the mouth with the mixing of the feed with the saliva. If the outer shell of the oat is not broken by mastication with the saliva, later

on the gastric juices cannot reach the nutritious kernel and decompose it so that it may be properly assimilated. Digestion becomes slow and sluggish. The delay means decay and fermentation which causes gases, frequently resulting in colic.

Through the use of this oat crusher, properly crushed oats have the shells that nature provides for the protection of the meat, broken open and the inside kernel is exposed. The shuck or skin is not separated from the meat and the identity of the oat remains unchanged. It is fed dry.

No matter how voracious the horse is, or in what condition the teeth may be in, 100 per cent mastication is assured. The saliva and gastric juices can get in full contact with all the nutritious parts of the oats. There is no strain on the digestive organs and these, as well as the eliminative organs, are kept continually in a perfect, healthy condition.

The Gibson Crusher is fitted with a positive cleaning device for removing all foreign material such as sand, glass, tacks, nails, pebbles, weed seeds, dust and dirt.

Printed matter issued by the Gibson people supplies a fund of valuable and interesting information and their publications are worthy of preservation by the horse owner.

## Bacterial Warfare

### The Use of Biologic Agents in Warfare

By Major Leon A. Fox, Medical Corps

**B**ACTERIAL warfare is one of the recent scare-heads that we are being served by the pseudo-scientists who contribute to the flaming pages of Sunday annexes syndicated over the nation's press. This question of bacterial warfare has been brought forward from time to time since the World War. The use of the organisms that cause communicable diseases as an instrument of warfare was considered by the Conference on the Limitation of Armaments held in Washington in 1922. An international commission consisting of Professor Pfeiffer (Breslau), Hackett (Pasteur Institute), Madsen (Copenhagen) and Cannon (Harvard) appointed at the time, reported to the League of Nations essentially as follows:

- The effects of bacterial injury cannot be limited or localized.
- Modern water purification methods protect against the organisms of typhoid and cholera.
- Plague is a disease that would be as dangerous for the force using the organisms as for the attacked.
- The danger from typhus has been exaggerated.
- Modern sanitary methods are effective in controlling communicable diseases.

Following this pronouncement by these eminent scientists, the question of bacterial warfare suffered a lapse of interest; but during the past year, as an incident of the preparation for the Geneva Convention, there has been a marked revival of interest in this supposed bugbear, bacterial warfare. Possibly this is only a part of the effort of professional pacifists to add all the imaginary frightfulness they can picture to the known real horrors of war.

The space and thought that have been given to this question by feature writers have not been without effect, and many people now believe that bacterial warfare represents a real threat and problem for future generations. Many are now associating chemical warfare and bacterial warfare with the result that in the resolution of adjournment, voted by the General Commission of the Disarmament Conference on July 23, 1932 at Geneva, we find chemical, bacteriological and incendiary warfare grouped for consideration. The mere fact that this great body of peace workers considers bacterial warfare seriously enough to prohibit its use justifies military men in considering this agency of warfare. We know how little treaties protect, so we should study the question to see if the use of biologic weapons is a real problem for the military minds of the future.

Under biologies we include all those organisms that

may invade the body of man or animal to produce disease, so while we use the term bacterial warfare we do not limit this paper to a consideration of bacterial diseases. We will also consider the filterable viruses, protozoa, and other pathogenic forms as well as their toxic products.

With the powers of the world in session at Geneva discussing the future of warfare, and with some of the great nations of the world recommending the complete abolition of chemical warfare, it may appear strange to have one consider biologic warfare. I believe all will agree that while it is a mistake to live in the past it is equally undesirable to ignore the lessons of the past in prognosticating regarding the future. It is therefore well, before we consider the possible use of biologies in warfare, to discuss briefly the question. Will the nations of the world abandon the use of chemicals as an instrument of warfare?

Every advance in thought or design meets reaction and antagonism from the minds of the previous generation. It does not take some radical departure from the accepted views of the day such as marked the revolutionary concept of Copernicus or Darwin to start all "as is" conservatives on a tirade of opposition with the usual tenor of their remarks as follows: "It is against the law of nature." "It is against religion." "It conflicts with all known law." "Even if true, it does not fit into the existing order of things." A man of middle age today may remember the old mossback who refused to ride on the train of the 19th century. In fact the train and street car had not completely overcome all the pooh poohs of the backward ignoramus until they were involved in a fight for their very existence with a newer means of transportation—the motor. The motor vehicle had just had time to have a proper road net constructed when this engine, becoming "air-minded," needs no roads. Have they been generally accepted? Certainly; however, remarks such as, "If God wished man to fly he would have given him wings," were made in the pulpits of this country during the present century.

It takes more than the harpings of the minds of yesterday to scotch the wheels of progress. It may startle many to talk of world progress in connection with implements of warfare. However, it is not believed that any fair-minded individual can deny the place in world advancement that is due to the spirit of conquest. The peaceful shepherd, content to watch his flocks, has added little to the world's knowledge. The trader and warrior have discovered and spread knowledge. Trader and warrior are almost inseparably associated throughout history, and slowly as they may

have progressed, they usually lead the thought of the day. The spirit of adventure and discovery has always marched with the warrior. The discoveries of the warrior are not limited to implements of war; however, these are the factors we wish to consider. In this field again we meet the same antagonism at every advance that the fighting man has made, an antagonism that has affected all minds of the "as is" type, including conservative and reactionary individuals. Every advance, every discovery of a new weapon by the fighting man, has had to overcome two groups of opponents:

1. The fixed and established military group who are always sure the new weapon "won't work," "Is not as good as older weapons," "Not practical," etc.

2. The pacifist group—the shepherd group that considers each new weapon more terrible than the former and cries out against it.

Primitive man in his combats certainly had no weapons. Are there any today that believe that this early creature did not fight over "food and females?" It may be added that all combat ultimately resolves itself in the final analysis to a strife for one of these basic biologic requirements—nourishment or sex. Fighting over gods was a later development; and these fights over gods were over a personal God, a God of the land or tribe, a God to favor their own special country, a benevolent God who would make their country a more bountiful place to live.

In the early combats man could only bite and claw and choke an adversary. This was the day of brute strength. Cleverness had relatively little value. The first man to use a weapon was the man with the best mind of his day. The first weapon used must have been very simple and elementary—possibly a hard object held in the hand with which he brained his opponent. This weapon possibly did not create much comment. This was not an age of comment; however, the descendants of the type that could not learn to use this weapon are not numerous. Has this weapon been abandoned? Certainly not; it is an excellent weapon, and no good weapon has ever been discarded. Its use today is very limited due to discovery of other weapons of greater range and effectiveness.

Development of weapons has always been for the purpose of using intelligence to overcome mere physical force.

The factor of range, killing an opponent before he can close with you, is a most important factor when the man of intelligence must meet superior physical force or number.

Probably the first weapon to provide range was a club, possibly a sharp stick, the forerunner of the iron tipped spear. The club may have had a stone head attached. These weapons not only advanced the clever man over the mere strong man; they aided man in his fight with the man-eating animals of the time. However, if we can make deductions from the early cave records of the men of this period, advance was slow because the intelligence was of such low order that they were slow to understand and accept these new weapons.

The race improved because the thinker, the successful warrior lived and won the females and left descendants, the slow and reactionary type did not live to reproduce. With every advance in weapons man is giving evidence of a desire to overcome brute strength by means of a weapon with range and effectiveness.

We can picture the introduction of the early propelled instruments, such as the arrow, causing a storm of opposition. Some youngster designed some form of propelling instrument for a sharp stick and possibly suffered the jeers of the snagged tooth elders as he shot the sticks into inanimate targets, and only received the reward of complete recognition when he shot a sharp stick through the belly of an old pack leader to take over a band of cowed females. The progeny of this genius were of a higher order of mentality and possibly soon learned the value of organization, with the result that a tribe of arrow users developed.

This seemed like the final advance, and who can doubt their ability to inflict their will on the men of the time?

The fact that the conquered men, possibly of superior physical development, considered the weapon a cruel and brutal implement that God had not endowed man with did not cause it to fall into disuse. The only thing that caused this weapon to fall into disuse and finally be practically abandoned was the development of such protection as caused the implement to cease to be effective or because other instruments were designed of greater range and effectiveness. These factors are the only things that have ever caused a weapon used successfully to be abandoned.

The outcry against the use of chemicals seems to people of this day to be quite a serious factor, and some wonder if their use will be curtailed by this influence. The following factors should be considered before we make a decision:

- a. No effective weapon once introduced has ever been abandoned until it was displaced by a more effective weapon or protection developed that rendered the instrument useless.

- b. The hue and cry that attended the introduction of chemicals is not unusual on the introduction of a new weapon. The early use of gunpowder produced a reaction in every respect similar to the cry of the present day pacifist against gas.

Will the use of chemicals in warfare be abandoned? Probably not. Will the use of chemicals be curtailed? Certainly; just as certain as the race progresses, just as certain as new and more effective weapons are designed—not before this advance is made.

Will the next advance in warfare see the use of biologics? Will the next agent used be the living organisms, bacterial warfare, the scourge of armies from the most ancient times—the communicable diseases?

The question of biologic warfare will be considered in more detail because here again we run into the most elaborate and fanciful statements.

A review of military history will reveal the great influence that disease has played in past wars. Results have been decisively influenced in many campaigns by epidemics of communicable disease. In some campaigns communicable diseases have caused such tremendous losses and such great numbers of non-effectives that the combat has reached a stalemate. However, in certain instances, for unknown reasons, there has been a great difference in the degree to which combatants have reacted to the epidemic conditions. In a few cases we are able to understand why the communicable diseases appeared to have greater invasive power toward one of the armies; in other instances we do not understand clearly why there was a difference in the degree of involvement of the forces.

Volumes have been written on the epidemic diseases that have attacked the military forces. We will not attempt to review this extensive literature, but the doctor, especially the epidemiologist, knows that the student of history who only reads of tactics and strategy, the victories and defeats of a campaign, without familiarity with the medical history of the war, is likely to give some commander credit for success or failure that all too often has been caused by some epidemic of communicable disease. This is not meant to depreciate military success, for the great general is often a great sanitarian, and even Alexander may owe a part of his success to his Doctor—Philosopher—Teacher, Aristotle's advice to "Boil his water and bury his dung."

We must remember that we can march through the pages of military history all the way to the Twentieth Century before we come to a campaign where the missiles of the enemy produce more casualties than epidemic disease. In most of the ancient campaigns of any duration some one of the great military plagues did more to decimate the military forces than all the man-made munitions. I say one advisedly, although often many infections raged and famine and scurvy accompanied the communicable diseases.

What was the nature of these ancient pests? Were they diseases of that age now no longer known? No—the military pests that existed then are still with us. The Big Six of all time (war times) are:

1. The Enteric fevers, typhoid and the paratyphoids.
2. The Dysenteries.
3. Cholera.
4. Typhus.
5. The Plague, Bubonic plague, the Black Death.
6. Smallpox.

Do not consider for a moment that the above diseases had any monopoly on the right to destroy armies. It is probable that at times influenza and the epidemic pneumonias took such heavy toll that but little fuel was left to be consumed by the Big Six. Again, under conditions where malaria is endemic, this disease is second to none in the production of non-effectives in military ranks. In fact measles and epidemic meningitis may well be added to the list of military scourges.

This paper is not for the purpose of considering the epidemic conditions of the armies of the past, but it is realized that many individuals will naturally consider that if these infectious agents were able to produce such frightful outbreaks of disease by the simple process of chance infection under natural conditions, then in the hands of man, as a military weapon, they may well prove even more destructive. They may fail to consider the fact that the same measures that are now so efficacious against the chance infections occurring in nature may prove of equal value in combating the same agency of destruction when used by man.

We have presented biologic warfare in all its horrors; now let us analyze the problem in detail. What agents can be used to produce death and disease? How can these agents be introduced into the bodies of the enemy? We will discuss these questions in the order stated.

The biologic agents available for warfare are:

1. The communicable diseases.
2. Other infective processes (such as wound infections).
3. Toxic products of bacteria.

The communicable diseases are well known. They are the so-called transmissible diseases that produce epidemics. They are caused by a living contagion and are spread from man to man or animal to man by various channels of transmission. All of the Big Six and the other diseases mentioned above belong to this group.

The second group, the other infective processes that are available, include such infective materials as the agents that infect wounds, gas gangrene, tetanus, anthrax and other wound contaminations that are infectious but not communicable.

The last group of dangerous agents are the toxic products of bacterial growth. We will mention but a single terror-inspiring example—Botulinus toxin. A portion of this toxin almost inconceivably small, when introduced into the body by any channel, is lethal. We will give details later.

No one will question the effectiveness of all of these agents in producing casualties when introduced into the bodies of unprotected and non-immunized individuals. The important question then is "How"? How are these agents to be introduced into the bodies of the enemy to produce casualties?

Any consideration of the deliberate use of pathogenic organisms as a means of warfare will have to consider the question of how to produce a destructive epidemic in the forces of an opponent and at the same time protect one's own forces from invasion by the virulent organisms in question. Certainly at the present time we know of no disease-producing microorganisms that will respect uniform or insignia, and the use of bacteria in warfare for the destruction of opposing forces will have to be predicated upon the successful prior immunization or the complete isolation of the forces employing the disease-producing organisms through some system of quarantine.

Any intelligent discussion of bacterial warfare must certainly give detailed consideration to the question of



how the living contagion is to be introduced into the individuals that are to be infected. We can well begin this investigation by a study of the channels of infection. The communicable diseases may be classified on the basis of their "Routes of Transmission." By this is meant the path that the living contagion follows when it leaves the body of the sick man or animal, or in some cases the carrier, to enter the body of the susceptible host to produce disease. On this basis we may classify the communicable diseases into intestinal diseases, respiratory diseases, direct contact diseases and insect-transmitted diseases.

The intestinal diseases are produced when some small portion, usually a microscopic portion, of the material from the intestinal canal of the sick man with its living micro-organism, is introduced into the alimentary canal of the susceptible individual. Typhoid, cholera, and dysentery are well known examples of this type of disease.

The respiratory diseases, sometimes known as "sputa borne" or even "air borne" diseases, are the communicable diseases spread by the transmission of living micro-organisms from the respiratory tract of the sick to the respiratory tract of the invaded. This group of diseases is of tremendous importance and embraces such conditions as the common cold, influenza, pneumonia, diphtheria, epidemic meningitis, smallpox, and possibly of special importance for war purposes, the pneumonic form of bubonic plague.

The group of diseases that we refer to as "insect-transmitted" are those where the invasion of the new host is effected by the bites of insects which have previously fed on an individual—man or animal—infected with the disease in question. A period of incubation on the part of the insect between feedings on sick and feedings on individuals to be infected is necessary in certain instances; with other diseases such interval is not required. Examples of insect-transmitted diseases that require an interval for the development of the contagion within the body of the insect after feeding on the infected individual are malaria and yellow fever, both transmitted by mosquitoes.

Bubonic plague, a disease of rats that is transmitted to man by the bite of the rat flea, does not require an incubation period for the rat flea to develop infectiveness.

The venereal diseases are direct contact diseases. They are of profound military importance and have proved decisive factors in certain past wars; notably influencing the European campaigns of the 15th and 16th centuries. The deliberate use, however, of this means of injury is fraught with difficulties when we plan a method of securing personnel to effect the necessary exposure. The soldier's danger from the venereal diseases will not come from the open avowed wartime enemy who loves him least, but from the money loving or uniform worshipping ladies who profess to love him most. Therefore, while these diseases may at times exceed all other causes of military non-effectiveness, we can dismiss them without further discussion while we are considering bacterial warfare.

It follows, then, that the communicable diseases that

constitute an epidemic or pandemic threat to the military forces are the intestinal, respiratory and insect transmitted diseases.

#### The Intestinal Diseases

Mankind is all too familiar with the terrible epidemics of typhoid, cholera, dysentery, and the diarrheal conditions that have destroyed military forces in the past. However, it is highly questionable if this group of diseases will ever in the future cause any such terrible catastrophes for the reason that the epidemiology of these infections is so thoroughly understood, that modern sanitary methods and immunization processes have rendered comparatively innocuous these hazards of earlier armies.

The deliberate use in warfare of these agents, however, we shall consider. While occasional small outbreaks of these diseases may be due to food infections, real epidemics of this group of diseases are only traceable to infected water and milk supplies, or to such a complete sanitary breakdown that general fecal contamination of food supplies occurs. The possibility of contaminating a milk supply presents practically insurmountable difficulties, although it is theoretically possible that spies might use such a means to discommodate and harass civil populations. It, of course, has no practical application to the military forces themselves.

Contamination of water supplies of civilian communities by means of infection of large reservoirs and storage basins where the water is held awaiting consumption, is a possibility. Contamination, to be effective, would have to be subsequent to treatment by the modern water purification plant consisting of filtration and chlorination, or of course it would be valueless; but this is within the range of possibilities, and it is possible that future wars will reveal that spies will make an effort to contaminate municipal water supplies.

The use of the intestinal group of diseases against forces in the field would probably prove entirely ineffective because modern water purification methods and the close supervision of the water supply that is accepted as a necessary incident of military service will absolutely preclude the successful employment of this means of combat.

In considering the intestinal group it may be well to stress the fact that the reason modern armies, and for that matter all civilized communities, do not have serious epidemics of these diseases is not because the infective agents that cause these diseases are not present or available, but because modern sanitation protects the personnel.

Let us take a typical example, typhoid fever. The incidence of typhoid in our civil population has been greatly reduced during the present century. Let no one think, however, that this is due to any scarcity of the typhoid bacillus, and it must also be remembered that the civil population has not had any general immunization such as helps to protect the Army. Typhoid has not retreated to the outskirts of civilization; it is all about us. Every state, yes every county in the union, is infected. Typhoid carriers in the United

states possibly number 100,000 and are generally without supervision. The reason we only have about 5,000 deaths per year in the U. S. A. instead of about 100,000 deaths from typhoid fever is because the great mass of our people now use water that has been rendered safe by filtration and chlorination. They consume milk that has been pasteurized and other foods that have been protected.

The same statement may be made concerning the low incidence of the dysenteries in our country. The infection is present, but epidemics do not occur because our sanitary measures are effective. We need not fear infection from without with this group of diseases; we are already grossly contaminated.

The die-hards will say that cholera is not so easily handled and is not at present a problem in America. Granted. We do not have cholera in the States; but our Army and our people do live in the presence of cholera without having epidemics of the disease. The Philippine Islands, where our Army maintains an effective fighting force entirely free from this terrible scourge, has a carrier incidence of the vibrio that causes cholera that is always high.

The intestinal group of diseases will certainly not prove destructive against any civilized nation that cares to pay the price of the protection that modern sanitary methods provide.

#### The Respiratory Diseases

In leaving the intestinal group of diseases we proceed from the problem that represents the greatest triumph in preventive medicine to the group of diseases that baffles the best efforts of all health workers.

In the control of the intestinal diseases we have so much to be proud of. In preventing the respiratory diseases we have accomplished so little. This is stated with a full knowledge of the wonderful results that have been obtained with smallpox vaccination, and the immunization to diphtheria by the use of toxin products, as well as with a full realization of the fact that we are on the threshold of equally great accomplishments in controlling scarlet fever.

It should be noted that these great accomplishments are not sanitary triumphs such as glorify our work with the intestinal group of diseases, but immunization processes. Not being able to prevent the infection reaching mankind, we take advantage of the fact that familiarity with the organism, while not breeding contempt, does produce immunity. Therefore we use the only method that appears to offer any great protection against the respiratory diseases in nature, namely, immunization. It must be admitted that health workers can accomplish practically nothing in the way of protecting peoples from infection with the great host of respiratory invaders, and such protection as we have is due to either the natural or artificial exposure to these organisms.

In this group of diseases we find a number of maladies that are serious enough to be effective war weapons if ways of using them can be devised. However, before proceeding we should call attention to the fact that in this group are also a large number of diseases that are not suited for military purposes.

For instance, smallpox, while a very serious epidemic disease, must be dismissed immediately. All military forces are immunized to this dreadful scourge, and we can therefore dismiss it from further consideration.

Many of the diseases of childhood, while constituting a military problem at time of mobilizing rural recruits, are not suitable for military purposes for the reason that the factor of age susceptibility plays so much importance when we consider the entire group that comprises our population. As an example we may mention diphtheria. While in childhood a very high percentage of the population is susceptible to this disease, the great majority of these same individuals develop considerable natural immunity to the organism that causes diphtheria without further interference than the normal aging. Therefore, while we see epidemics of diphtheria in schools and orphanages, we do not encounter serious outbreaks involving large numbers of any adult population. This disease is cited only as an example wherein the factor of age susceptibility is important; there are a number of diseases that show this phenomenon and would therefore be unsuited as offensive military weapons.

Certain conditions such as influenza, pneumonia, and the common cold, do not show a marked tendency to limit their injury to any one age group and would be efficacious if they could be used against military personnel. Mankind is as helpless today as at any period in history in the control of these diseases; also they are very serious conditions that produce great numbers of non-effectives, and in the instance of the epidemic pneumonia they result in a tremendous mortality.

Before we surrender to the individuals who threaten such frightful havoc with this group, we may well ask how are they going to start an epidemic of influenza, pneumonia or the common cold. If they answer that they will introduce the germs that cause these diseases we can well laugh at them. The process is not so simple. The factors that make respiratory epidemics are not so elementary. They include not only the infection of the individual, but the question of the resistance of the infected animal. The organisms that cause these diseases are all about us. They are always with us. Epidemics mean more than simply infection; they mean the rapid transfer from individual to individual of these infective agents. They mean a lapse in the immunity of the invaded, and possibly something else.

I do not know of a bacteriologist or an epidemiologist who can tell you how to start a respiratory epidemic unless the stage is especially set. I know many who are certain that whenever you place a large group of individuals, man or beast, under poor hygienic conditions, with over-crowding, poor ventilation, and exposure to unfavorable climatic conditions, or other factors that decrease resistance, respiratory outbreaks will occur in spite of any precautions that can be taken, and that if large numbers of highly susceptible individuals (rural populations) are present the outbreak can be expected to assume epidemic proportions.

It is also worthy of note that when epidemic conditions prevail certain organisms may possibly have greater invasive power, for then apparently populations that were not so susceptible or readily invaded may be attacked when they previously escaped injury. It will be noted that as in the case of the intestinal diseases, so with the respiratory diseases it is not a simple case of introducing infection that constitutes a menace. The organisms that produce most of these diseases are always with us, and epidemics mean more than infection. While we cannot understand exactly how epidemics start, and we question the ability of a military agency to deliberately produce an epidemic of one of these diseases, we feel certain that if bacterial warfare is ever contemplated they will not think of using the respiratory group of invaders for the reason that quarantine, isolation, and all other methods to control diseases such as influenza, are practically valueless. The torch once set off might destroy friend and foe alike, and would therefore prove of no value as a military weapon.

The two diseases in this group that are most frequently mentioned are influenza and epidemic meningitis (cerebrospinal fever), possibly because of their importance during the World War. All that has been stated above applies with especial force to influenza, where in addition to the fact that no one knows how to control this disease, we must add that we are not even positive about the actual organism that causes the condition. Epidemic meningitis, on the other hand, is a very definite, specific disease due to a very well known organism. We must admit at the outset that this is a very serious disease, and that it often assumes epidemic proportions in military organizations. However, if we stop to consider the nature of the organism and the epidemiology we see how entirely unsuited epidemic meningitis is for use as a military weapon. The organism, the micrococcus of Weichselbaum, is so delicate that even on the most favorable culture media it rapidly dies when exposed for even a few hours to temperatures much below that of blood heat. This disease is spread by carriers, and the organism must be introduced almost directly from the nasal pharynx of the carrier to the respiratory mucous membrane of the individual invaded or it will be destroyed by the unfavorable temperature conditions while en route.

Those individuals who think this disease may be used for military purposes will answer that carriers in the form of prisoners, etc., would be introduced into the opposing forces. To those who know anything about epidemic meningitis this suggestion is ridiculous. Any military aggregation of any great size already has so many carriers present (anywhere from 2 to 30%) that the introduction of a few more or less is of no moment. Epidemics of meningitis only occur when over-crowding is associated with conditions that lower the general resistance as exposure, unfavorable climatic conditions, and fatigue. Meningitis is, and probably always will be, a military problem; but the individual's friends and associates, not the enemy, are the great problem with this disease.

We will not take up in detail all of the various respiratory diseases. The tabulation would prove tiresome, for the story would always be not so much a question of the great danger of the introduction of the infective agent, but the creation of epidemic conditions, a soil in which the organism could produce an epidemic, over-crowding and lessened resistance.

#### The Insect-transmitted Diseases

These diseases will probably most certainly influence wars of the future as they have in the past. An invasion of such a country as Mexico, at the present time, would constitute more of a sanitary than a military problem. With malaria, dengue, and possibly even yellow fever along the seaboards, and typhus endemic in the plateau district, our main problems would be sanitary. Bubonic plague might also be encountered here as well as in any other place. This disease—bubonic plague—is the disease entity that many consider best suited for military purposes. To begin with, it is a frightfully serious malady—a decimating disease that has most profoundly influenced warfare in the past. It is possible that the rise of the Mohammedan world was due to a great extent to the fact that Europe was in the throes of the greatest scourge mankind has known, the plague, at the time that Mohammed's followers were ready to organize and extend the influence of the crescent until the horns were about to encircle the Mediterranean. Certainly these Arabian tribesmen had never shown any signs of military greatness or valor prior to this period, and it is probable that their religious ardor would have met with small success against the well organized nations of the time if these nations had not been practically exsanguinated by the "Black Death".

The use of bubonic plague today against a field force, when the forces are actually in contact, is unthinkable for the simple reason that the epidemic could not be controlled. Infected personnel captured would provide the spark to set off possible outbreaks of pneumonic plague in the ranks of the captors. Infected rats would also visit and spread the condition. An advance over terrain infected with plague-bearing rats would be dangerous. Therefore, except as a last desperate, despairing hope of a rapidly retreating army, the use of plague by forces in the field is not to be considered.

The use of plague to harass civil populations presents less difficulty than the use of the organisms against a field force. Those who think that plague will be used as an offensive weapon consider that civil communities may be infected by introducing plague infected rats. Of course this is easier to state than to accomplish, but it may be possible for airplanes flying low to drop recently infected rats. At least this is the statement that the individuals make who consider the use of this weapon feasible. Even with so terrible a pandemic disease as plague, however, there is a great deal more to the question of epidemics than mere infection. For instance, to cite an example, one that Gill so forcibly states, "Not half a dozen cases of plague occurred amongst Europeans (including British troops) stationed in the Punjab during the year 1924,

when about 500,000, or one-fortieth of the indigenous population suffered from the disease."\* If these intelligent people were able to avoid the infection when residing in an environment that was literally infiltrated with the infection, it certainly should be possible to control bubonic plague in a population such as we have.

For that matter, the question of plague is not a condition that takes us to the outskirts of civilization. Our own Pacific Seaboard became infected in 1900, and following the San Francisco earthquake the infection extended and is now more or less endemic as a rodent disease involving not only rats but ground squirrels. Here again it is not a question of can we control the infection; we are controlling it, and have not had an outbreak of human plague of sufficient size to designate as an epidemic.

The other insect-transmitted disease that is most frequently assigned a place of importance as an agent suited for warfare is typhus. This disease is certainly terrible enough to satisfy even those individuals who are anxious to preach the gospel of frightfulness. The military and civil populations that have been destroyed by typhus bear witness to how effective this agent of destruction can be. However, again we have a condition that is easily controlled. Complete solution of the problem of endemic typhus is not yet in print, although it is probable that the work of such men as Dyer, Maxey, and Zinsser will soon offer a complete explanation of how this scourge simmers along during the inter-epidemic periods. Epidemic typhus is thoroughly understood. The epidemiology is so simple that it can be embraced in the name of the transmitting insect, the body louse. The control of epidemic typhus is the simple question of the control of louse infestation. Of course quarantine will help to prevent the introduction of the infection, but quarantine is futile if the Army is allowed to become lousy. The lousy Army may become the victim of typhus, even in America, without the introduction of infection from extraneous sources. The weight of opinion in the best epidemiological minds is that, as Maxey suggested, endemic typhus is probably carried over between epidemics in a rodent reservoir. Endemic cases occasionally occur when transmitted to man by an insect, and when the infection is passed from man to man by the body louse, with the resulting enhancement of virulence, epidemics may be expected to result.

The difficulty of starting an epidemic of malaria, yellow fever, or trypanosomiasis (sleeping sickness) appears to be obvious, for no one has suggested the use of these agents. Those who understand the epidemiology of these diseases know they are not suited for war purposes even though they realize the problem they present to military forces in endemic areas.

This completes consideration of the communicable diseases. We have discussed in some detail practically all except the direct contact group. The only diseases

of this group of great military importance are venereal, and we have given our reasons for dismissing this group from consideration.

#### The Infective Processes

Certain disease processes that affect the tissues are caused by living organisms and are therefore designated as infective, even though they are not considered communicable in the sense that they tend to be transmitted from man to man. These disease processes include such infections as tetanus, gas gangrene, anthrax, and the ordinary pyogenic (pus formers) invaders. The agents that produce these infections have all been mentioned as possible war weapons, and it must be admitted that so far as the first three are concerned, with some scientific judgment on the part of their sponsors.

The agents that cause tetanus, gas gangrene and anthrax are not delicate organisms such as the relatively short lived, easily destroyed pathogens that cause most of the communicable diseases. They are very resistant, spore forming organisms, generally capable of a prolonged period of viability without loss of virulence, even when separated from the animal tissues. It is not surprising, therefore, to find one of this group (anthrax) selected as the infectious agent best suited for military purposes by a science student preparing an undergraduate thesis on "Bacteriologic Warfare".\*\*

The selection of anthrax does credit to his training; in fact the entire study shows more intelligent thought than any article that has come to the attention of the writer. His description of the characteristics of the proposed bacterial invader are worth quoting:

"What shall we say are the requirements for a perfect military pathogen? It attacks preferably both man and animals. It must be quick acting, highly virulent, and capable of causing disease in small quantities. It must be highly resistant, capable of surviving outside the body under the most adverse conditions, and even resisting partial cooking or a careless attempt at sterilization (a spore former). The causative organism should be able to force its entrance through all the avenues of infection: respiratory tract, alimentary tract, and breaks in the skin. The disease should not be too actively contagious, and it must be very well understood—for pathogens should never be used without contemplating the possibility of their getting out of control. Finally, and perhaps most importantly, it should be possible to obtain large quantities of the pathogen in virulent strain and spore form with the least possible manipulation and delay."

After this excellent description of the perfect hypothetical agent, he selects anthrax as the agent best suited to meet the requirements of a bacterial weapon. I cannot agree with Pentler that "Anthrax satisfies the requirements almost perfectly"; but I believe all bacteriologists will agree that he has selected the agent that most nearly meets the requirements he has so well outlined.

These spore forming invaders are a real problem. Tetanus and gas gangrene are pathogenic processes that have always been associated with gunshot wounds

\*Gill, C. A.—*The Genesis of Epidemics*, Bailliere, Tindall & Cox, London, 1925.  
\*\**Some Thoughts on Bacteriologic Warfare*, C. F. Pentler, Mass. Institute of Technology: Department of Biology and Public Health.



and are therefore of special interest to the military surgeon. They do not produce epidemic diseases, however, and they are not communicable. They have to have a portal of entry made for them, a wound, and while the use of these organisms to contaminate battlefields might cause an increase in the number of cases of tetanus and gas gangrene, they would not increase the number of casualties. They would only complicate the treatment of those already disabled. It might be added that we have an entirely satisfactory serologic prophylactic agent for tetanus, and that as a result of the surgical advances of the last fifty years, gas gangrene is less frequent than in the pre-bacteriologic days.

We cannot dismiss anthrax so readily; however, it is worthy of note that although anthrax is almost a world wide disease nevertheless anthrax infection of gunshot wounds is practically unknown. If gross contamination of battlefields with the organism of anthrax is effected it is granted that cases of anthrax infection of wounds will occur, and possibly some few cases of infection in individuals who have not been wounded; but when we consider that human epidemic anthrax is unknown during the bacteriologic era, I question if we need fear greater danger from this organism than contamination of wounds.

It will be noted that up to this point we have not discussed the technical difficulties that a military force would have in contaminating a hostile force. The difficulties in the case of the communicable diseases are so obvious that they need not be mentioned. The epidemiologic factors make the communicable diseases unsuited for offensive military use. The causative organisms are all either short lived when separated from the living tissues or else readily destroyed by ordinary routine sanitary precautions.

We cannot make this statement concerning the highly resistant infections such as tetanus, gas gangrene and anthrax. These agents are admittedly the most dangerous; but it must be remembered that to be dangerous they must be alive, and that many technical difficulties present themselves when living agents are to be used that are not present when missiles and chemicals are used. Shells can be used to project missiles and chemicals on to an enemy many miles distant; but bacteria cannot be used in this way. No living organism will withstand the temperature generated by an exploding artillery shell. Airplanes may contaminate terrain, but their effect would be quite local and probably less dangerous and less certain than high explosives used in the same way.

It is not maintained that bacterial contamination is impossible. A retreating enemy may hurriedly contaminate the terrain that is to be evacuated. However, it is believed that the use of living organisms in offensive warfare presents technical difficulties that are not generally considered. The contamination that spies and other individuals could effect, using the only really effective agents we have mentioned—the highly resistant, spore forming organisms that are so dangerous to wounds—would prove too local to be of any value whatsoever.

#### Toxic Products

The forms of bacterial warfare include not only the possible distribution of living organisms in the force of an enemy, but the possible use of toxic products derived from bacteria. Certain of our bacterial toxins are the most deadly poisons known. The toxin of the bacillus botulinus is so powerful that instances have been recorded where toxins have been produced so toxic that .005 milligram would kill a 250 gram guinea pig. This material, botulinus toxin, is poison for man. It is possibly the most toxic agent known, and will produce the lethal effect in any way that the material is introduced into the animal. If consumed with food, injected into the tissues, or even dropped on to the mucous membrane or conjunctiva, it is equally deadly.

This must be the material referred to when we read such dramatic statements as the following: "An airplane can carry sufficient toxins to destroy an entire city". Such statements have an element of truth in them. In fact they are conservative. An airplane could carry enough of the botulinus toxin to destroy every living man in the world if administration of the toxin was as simple a process as production and transportation.

There were over 100 billion bullets manufactured during the World War—enough to kill the entire world population 50 times; but a few of us are still alive. It is easy to calculate the lethal (fatal) dose of a toxic agent; but do not think it is so easy to figure on the casualty producing power of a military weapon.

The hostile aviator will not be received with a welcome, nor can he expect to land at an air field near any large city and find the entire population lined up ready to accept the carefully measured lethal dose of botulinus toxin.

The release of tremendous quantities of botulinus toxin over a large city may produce human casualties; however, the extent of the damage might be only the wholesale destruction of rodents, sparrows, and possibly numerous cats and dogs—not such a serious loss in time of war. It is difficult to evaluate properly the possible effects of the bacterial toxins. Certainly such statements as an airplane destroying an entire city with toxins is ridiculous; but they may have a value comparable to chemical agents, with this great disadvantage, however, bacterial toxins are readily destroyed by heat; therefore, like bacteria, they are unsuited for use in shells.

#### Animal Diseases

The use of living organisms to produce disease in live stock, such as horses and mules needed for transportation of Army equipment and supplies, has been mentioned as a possible form of bacterial warfare. It is believed that the difficulties here are quite similar to those mentioned for diseases attacking man, with this great advantage to the defense that the veterinary officer will have in controlling epidemics. The veterinary officer can destroy any animal or group that he considers a menace to the health of the animals in

the Army. The Medical Officer cannot take such steps to control epidemics that threaten human populations.

If we expand the term bacterial warfare to embrace such phases of biologic warfare as will include the agricultural pests, then, an additional factor to consider is the fact that spies and possibly hostile aviators might inoculate growing crops with such pests as the boll weevil, the corn borer, the Mediterranean fruit fly, and like destructive agents. These agents in most instances, however, take so long to invade sufficient terrain to be effective in destroying crops that their value in actually overcoming the resistance of a foe is questionable. They take several years to advance over a large area, and might prove an economic problem years after the war has been completed; therefore, they violate one of the fundamental ideas in warfare, since they would interfere with the ability of the conquered nation to pay the victors for the beating they had received.

#### Conclusions

It is believed that it has been shown that the development of implements of warfare represents an evolution based on the gradual application of the improving mind of man. The one factor of importance in this development has been effectiveness. It has been a question of the good mind versus the strong back; of the thinker versus the lifter. It is believed that the future of warfare will be based on the same principles. It is therefore apparent that the question of whether chemical munitions will be used or not, and whether bacterial warfare will be used or not, will depend on their practicability rather than on the sentimental reactions of pacifists.

I consider that it is highly questionable if biologic agents are suited for warfare. Certainly at the present time practically insurmountable technical difficulties prevent the use of biologic agents as effective weapons of warfare.

## National Convention of the Reserve Officers' Association

PLANS are maturing rapidly for the National Convention of the Reserve Officers Association of the United States, to be held in Chicago, June 3rd to 7th inclusive. This Convention will be preceded by the Convention of the Illinois Department of the R.O.A. to be held June 1st and 2nd.

These Conventions coincide with the opening of the Chicago Century of Progress Exposition. Delegates and visitors will have an opportunity to witness the tremendous development and progress made in the Century which mark the growth of Chicago from a trading post to one of the world's dominant cities. They will see an exposition that is indeed modern in its architecture, as in the type of exhibits.

A program for the Conventions is being developed which will be of interest to all Reserve Officers, as well as the other components of the Army.

Cook County Chapter of the R. O. A., of which Col. Gilbert Fitz-Patrick, Med.-Res. is president, will be host to both the National Organization and the Illinois State Department.

Under the direction of Lt. Col. W. R. Matheny, Sig.-Res., Chief of Staff, the following officers are taking care of the many varied details of preparing for these meetings:

Assistants to C. of S. Capt. H. J. Beggins, Inf.-Res.; Lt. C. F. Bernico, Cav.-Res.; Finance Section, Col. Gilbert Fitz-Patrick, Med.-Res.; Finance Officer, Capt. Charles Z. Meyer, Fin.-Res.; G-1 Delegates, Maj. F. N. Wildish, Eng.-Res.; G-2A Contact, Lt. Col. L. L. Falk, FA-Res.; Capt. Graham Aldis, Inf.-Res.; G-2B Publicity, Maj. Benj. Getzoff, Inf.-Res.; 1st Lt. H. A. Twedt, Inf.-Res.; G-2C Transportation, Lt. Col. Wm. G. Ann, Eng.-Res.; G-3A Program, Maj. F. L. Starbuck, FA-Res.; G-3B Military Demonstration, Col.

Edw. N. Wentworth, FA-Res.; Capt. E. J. Teberg, Eng.-Res.; G-3C Competition, Lt. Col. Calvin Goddard, Ord.-Res.; Capt. Seth Wiard, Ord.-Res.; Lt. J. C. Wilimovsky, Jr., Inf.-I. N. G.; G-4 Hotel Accommodations, Lt. Col. Neil R. Markle, QM-Res.; Maj. Anatol Gollos, Aux.-Res.; Capt. Edward D. Flynn, Inf.-Res.; Capt. K. L. Van Sickle, QM-Res.; Lt. G. E. Soderholm, QM-Res.; Surgeon, Lt. Col. George T. Jordan, Med.-Res.

Attractive hotel and railroad rates will be available for all those desiring to attend the Convention. Inquiries may be addressed to Headquarters of the Convention Staff, 53 West Jackson Blvd., Chicago.



Lieut. R. W. Mayo, F. A., U. S., Cross Country Phase, Modern Pentathlon Event, Xth Olympiad, Los Angeles, Calif., Aug. 2, 1932

## NOTES FROM THE CHIEF OF CAVALRY

### Leadership Test for Small Cavalry Units, 1932

THE Cavalry Leadership Test for Small Cavalry Units, held at Fort Oglethorpe, Georgia, from November 2 to 11, 1932, completed the annual program for such tests for 1932.

In the July-August issue, the CAVALRY JOURNAL published an article which included a brief history of this competition and a description of that part of the test held by the 11th Cavalry at the Presidio of Monterey, California, in June, 1932.

At Fort Oglethorpe the competition between platoons in the 6th Cavalry was won by a platoon from Troop A. First Lieutenant William J. Bradley. This platoon made high score, and has been awarded the trophy and prizes which reward success in this event.

The competition was keen and the results close. At no time during the test could the winner have been predicted. The final results showed but four points difference between the highest and lowest platoons. All competitors, as the close score gives evidence, displayed a high state of training.

As in the 11th Cavalry the test consisted of two phases—an individual phase and a leadership phase.

A flagged course over varied terrain was covered by each contestant. Thirty minutes was allowed for each enlisted man. Platoon leaders were required to run the same course in twenty-five minutes. Pistol targets and saberheads were encountered en route. The course led the contestants over natural and artificial obstacles. Targets, saberheads, obstacles and time were carefully watched by course judges. No contestant carried a watch; pace depended upon judgment of gait. Platoon leaders immediately upon completing the mounted course began the dismounted course, for which fifteen minutes was allowed.

At 6:00 p. m. on the day the individual test was completed the platoon leader received a warning order which, in addition to stating a general situation, contained instructions to be prepared to take the field for two days' duty with his platoon on a reconnaissance mission.

At 6:30 a. m. the following morning the platoon leader of the platoon due to depart received a march order, extracts of which follow:

"Reports indicate an early movement of the Atlanta Red Force to the north. The Red Cavalry Regiment at Rome has completed its concentration.

"The Platoon, Troop A, 6th Cavalry, will proceed on reconnaissance at 7:00 a. m., today, moving on Catoosa Target Range via the route Rock Springs-Peavine Church-Wood Station-Nick-a-jack Gap-Tunnel Hill to ascertain enemy activities along the above route.

"Enemy detachments will be reported. Identifications will be obtained. All settlements en route

will be reconnoitered. Special reconnaissance of railroad facilities at Tunnel Hill will be made.

"Authority is granted to impress transportation when needed.

"Authority is granted to live off the country.

"Receipts will be given for all supplies obtained."

Under these orders the platoon proceeded to carry out the requirements of the Leadership Phase of the test.

During the resulting march an enemy platoon of two squads was encountered under circumstances which required a decision—to attack or avoid combat and whether to attack mounted or dismounted. Surprise was possible.

In case a mounted attack was made it was so arranged that an enemy wounded prisoner would be captured, thus furnishing identification directed by the order.

Disposition of the prisoner required another decision.

Reconnaissance of Tunnel Hill was carefully scored—security measures adopted on entering and leaving, amount and value of information secured, search of postoffice and telegraph office, etc.

Upon arrival at Catoosa the situation and time indicated a halt for the night. Umpires in the role of civilian inhabitants furnished needed supplies, upon requisition, and news of Red Cavalry movements.

Platoons were scored on manner of going into camp, security measures, camp site selected, care of animals and men. Special umpires inspected the dispositions when made and during the night.

The following morning each platoon encountered a combat situation which called for dismounted action against an enemy force indicated by combat targets. Ball ammunition was used. Enemy fire was simulated by umpires using blank ammunition. The time taken to go into action, the nature of the action, the orders and acts of the platoon leader, sight settings, target designation and understanding of the same, and finally the results attained were all carefully scored.

As the platoon advanced to occupy the position held by the enemy upon the cessation of enemy fire, it again came under enemy fire from a flank. Action in this case was checked as before and the platoon proceeded on the mission given.

Later in the morning an enemy plane made two attacks on the platoon, an armored car was encountered firing first from a concealed position and later attacking the platoon, and finally after all these stirring incidents the platoon arrived back at the post where the animals were inspected and the mission completed.

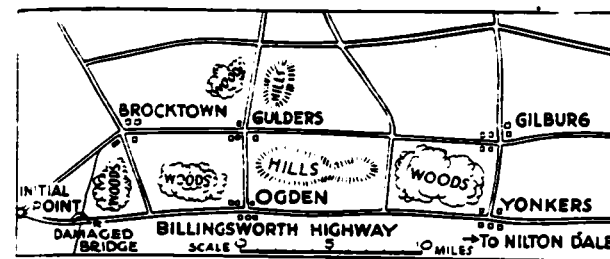
Once again, as in previous years, the value of this test has been demonstrated and once again the whole Cavalry arm is grateful to that good and enthusiastic "Friend of the Cavalry," who by his generosity and interest makes these annual competitions possible.

Jan.-Feb., 1933

Notes from the Chief of Cavalry

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### What Would You Do in a Situation Like This?



COLONEL WINDGUAGE of the 25th Cavalry cleared his throat and looked around at his assembled officers. The colonel was about to give a command, a thing he felt he did rather well. Sonorous he began with the inevitable preamble, "Gentlemen, you know the situation."

The situation which the gentlemen were presumed to know was as follows:

The 25th Cavalry was ordered to make a flank march of some 40 miles to a new theater of operations. It would involve a movement beyond support of friendly troops with the command exposed to hostile threats on its left flank throughout the march.

The regiment will march at 5:00 A. M. by way of the Billingsworth Highway on Miltondale in order to secure that place pending the arrival of the 1st Division. Rate of march: 6 miles per hour."

Following instructions for the advance guard, the order continued:

"Troop A, Captain Rifling, with one platoon and one 37 mm gun squad of the Machine Gun Troop will constitute the left flank guard and will march generally by way of Brocktown—Gulderson—Gilburg—Miltondale."

The colonel continued through the usual sequence of a march order and concluded:

"Messages to the head of the main body."

At 11:20 A. M., Captain Rifling was a very busy man. His flank guard had just initiated a delaying action at Gilburg against about a squadron of hostile cavalry, the first enemy encountered. Captain Rifling was thinking out loud.

"Eleven-twenty. The regiment is marching at six miles per hour. That means it is approaching Yonkers. It is about four miles from here to Yonkers. Certainly in four miles I can delay the Red Squadron a sufficient time to insure the regiment passing Yonkers in safety."

Having satisfied himself that his work was tactically sound and that his mission was being accomplished, Captain Rifling took a few seconds to give himself what he considered to be well-earned praise.

"Rifling, my boy," he addressed himself in his thoughts, "there can't be any less than a citation in this for you. Right on the job with the old flank guard at the right time and the right place. And very pretty work it was the way you operated your reconnaissance to discover this Red Squadron. I dare say any other captain in the regiment would have missed it."

Captain Rifling and all the members of his troop who were not captured were given decent burial by the Reds that night. The Court of Inquiry which met to place the responsibility for the disastrous results of the flank march of the 25th Cavalry had difficulty in securing all the testimony it wished as Colonel Windguage had also been killed and most of his staff were in a Red prison camp. However, the court did establish that Captain Rifling's troop was annihilated by a superior Red force between Gilburg and Yonkers while acting as left flank guard for the regiment. The regiment had marched from its initial point at 5:00 A. M. at six miles per hour. At 5:30 A. M. it was delayed 45 minutes by a bridge which had been damaged that morning, presumably by a Red sympathizer. Thereafter, its march was hampered by barricades erected by hostile inhabitants to such an extent that it did not reach Ogden until 11:15. While passing through Ogden, the regiment was surprised by a hostile cavalry regiment which struck the left flank of the 25th, completely routing it. Apparently, the Red cavalry had marched south through Gulderson after the flank guard had passed that point.

Colonel Windguage, who had always led an upright life, adjusted the folds of his long white robe, gave his newly acquired wings an experimental flap, adjusted his halo, and resumed an argument that had been going on for some time.

"I tell you, Rifling, it was your fault. I detailed your troop as flank guard, didn't I? And if a flank guard doesn't protect the flank, whose fault is it?"

Captain Rifling warmed to the argument, and putting his harp to one side, replied:

"You said you were going to march at six miles per hour, didn't you? Was it my fault you didn't? No, Colonel, you can't pass the buck to me. I was protecting your flank at the place you gave me to understand it would be at that time. If you didn't march as fast as you said, it's your fault and that's that!"

At this point, a small, solemn-looking spirit joined the conversation. He wore a cocked hat under his halo and his forelock fell over his brow. His harp was considerably tarnished as though he had had it many years. Both Colonel Windguage and Captain Rifling were impressed by his resemblance to Napoleon.

"May I suggest," said the newcomer, "that you will each have to bear your part of the blame. Your plan for the flank march of your regiment was sound. Colonel Windguage, so far as it went, and your conduct of the flank guard, Captain, had only errors of omission. Were I in the place of either of you at the beginning of the march, I would have obviated the day's disaster by attending to one little detail you both overlooked."

Colonel Windguage and Captain Rifling spoke together:

"WHAT WOULD YOU DO?"

(For Solution Turn to Next Page)

### The Solution

"Gentlemen," answered the stranger, "a marching force threatened in flank protects itself by a flank guard. The flank guard operates by interposing itself, or a part of itself, between the enemy and the main body it seeks to protect. Now, such interposition presumes knowledge of two things, first of the location of the enemy threats, and second, of the location of the main body. The first is determined by reconnaissance, either by the flank guard or by friendly troops.

"The second is simply a matter of liaison. It is so simple and obvious it is frequently overlooked. Colonel, you should have prescribed some system of liaison between your main body and the flank guard before you sent it out. Captain, you should not have started on your flank guard mission until liaison arrangements had been made. Any simple method of informing each other of your locations would have sufficed; and exchange of messages at stated points, signals, cross-country cars, any of them would do."

"I believe you are right," said Colonel Windguage. "you speak as one who knows. Pray, where did you get your experience?"

"I've done a bit of fighting in my time," observed the stranger, thrusting his right hand into the folds of his robe over his chest, and striking an attitude, "and I've had over a hundred years to think over the few mistakes I ever made." (Department of Tactics. The Cavalry School.)

### Goodrich Trophy Training Test, 1932

THE Chief of Cavalry announces that the Machine Gun Troop, 5th Cavalry, Fort Clark, Texas, commanded by First Lieutenant John K. Sells, is the winner of the 1932 Goodrich Trophy Training Test. The second, third and fourth places were won by:

Machine Gun Troop, 11th Cavalry, Presidio of Monterey, California, commanded by First Lieutenant Harry C. Mewshaw;

Machine Gun Troop, 2nd Cavalry, Fort Riley, Kansas, commanded by Captain Lathan H. Collins;

Machine Gun Troop, 3rd Cavalry, Fort Myer, Virginia, commanded by Captain Callie H. Palmer.

The trophy was donated by Lieutenant Colonel Louis E. Goodrich, O. R. C., to the Cavalry arm for annual presentation to the troop of Cavalry demonstrating the highest efficiency rating, as shown by a field test under simulated war conditions. This test involved a march in the presence of the enemy, an overnight camp in enemy country, and a combat situation in which ball ammunition was used against an enemy represented by field targets.

The tests this year were confined to machine gun troops which heretofore have had no opportunity to compete in tests of this nature. The other machine gun troops competing were: 1st Cavalry, Captain Harold B. Gibson; 4th Cavalry, Captain Leo L. Gockler; 6th Cavalry, 1st Lieut. Henry I. Hodes; 7th Cavalry, Captain Leo B. Conner; 8th Cavalry, Captain Fenton S. Jacobs; 12th Cavalry, Captain Darrow Menoher; 13th Cavalry, Captain Ernest A. Williams.

The Goodrich Trophy Training Test held in 1932 afforded an excellent opportunity for gauging the results of training of Cavalry machine-gun troops and for making a fairly comprehensive survey of their all-around efficiency. Some of the results are of such importance as to demand frank comment. The test embraced three phases,—(a) March; (b) Bivouac and Outpost; (c) Combat. In general, the results of the tests in the first two phases were excellent, if not superior. In the combat phase, however, some of the results of firing were not satisfactory.

The ability of Cavalry machine guns to go into and out of action with great speed is thoroughly established. Annual target reports indicate, also, that our gunners are well trained in the mechanics of fire; but the Goodrich Trophy Training Test and other reports received by the Chief of Cavalry clearly demonstrated that efficiency in firing under field conditions is lacking. Undoubtedly this is, at least in part, due to the elimination of all but 1,000-inch firing from the machine gun marksmanship course. However, a certain amount of ammunition is made available annually for combat exercises and the fullest advantage should be taken of this allowance to insure efficiency in firing on field targets.

Among the comments made on the last Goodrich Trophy Training Test, received from regimental commanders, was one to the effect that a line of skirmishers is one of the poorest targets for machine-gun fire and that, therefore, some other type of target should have been designated for these tests. While it is true that a line of skirmishers is a poor target for machine-gun frontal fire, it must be remembered that this is the type of target machine guns will be called upon to engage most frequently, and gunners should be given the training that will insure ability to deliver effective fire thereon. Column targets and ideal positions from which to enfilade line targets will be the exception, not the rule.

Another comment was to the effect that tracer ammunition should have been allowed. The use of this type of ammunition was necessarily prohibited in order to eliminate the possibility of grass fires. The danger in some localities of such fires spreading to privately owned land was known to this office. It was, of course, realized that some troops would conduct their combat phases on terrain favorable to the visibility of impact of bullets, while others would not enjoy this advantage; but this could not be obviated. However, it is believed that proper training in the estimation of distances would have minimized this difference. In recent years this important phase of training has too often been neglected.

It is hoped that regimental commanders will give careful personal attention to the training in combat efficiency of their machine-gun units, both heavy and light, and by proper tests insure that efficiency is obtained. These weapons have given to our Cavalry tremendous potential firepower which should not be lost through lack of proper training of machine gun personnel.

## Professional Notes and Discussion

### The Browning Light Machine Gun

By 1st Lt. Clark L. Ruffner, 5th Cavalry

THIS article is written with a view to comparing notes with other officers of the cavalry service as to the following features of the B. L. M. G.: namely, its tactical employment, organization of units, mobility (in and out of pack), antiaircraft feature, present mount, accuracy, ammunition supply and, in general, its place in the cavalry. No definite assertions can be made by the author of this article, as he feels that his qualifications along these lines are more or less limited. It is felt, however, that only by a frank discussion of these subjects, with a liberal exchange of ideas, shall we of the cavalry finally handle this gun with its maximum effectiveness. In an endeavor to do this I feel free to ask those that are interested in this subject, to read this article, criticize freely and, in turn, add to our too meager knowledge of this weapon by expressing their findings along these various lines. We are assuming in this article that the present organization of the Rifle Troop remains the same in that it contains an automatic weapon platoon.

We were given the B. L. M. G. in the cavalry to take the place of the Browning Machine Rifle. Tactically, in organizations in which we have served, the B. M. Rifles accompanied the firing line, attached to each platoon, the Platoon Leader in turn attaching the machine rifles to squads. This resulted, generally speaking, in two of the squads of each rifle platoon having an automatic fire weapon. Certainly this is needed. Small units in advancing, when forced to overcome enemy strong points containing automatic fire, are sorely in need of such a weapon themselves. Where no field of fire could be obtained from a prone position, the gunner having this machine rifle could fire accurately from a sitting position or, if necessary, from a standing position, if able to brace the rifle against a tree or to rest it in a fork of a tree, the manner in which the rifle was used not interfering with such a maneuver. Seldom, if ever, were all the Machine Rifles of a squadron grouped at one place, with the possible exception of a combined attack or delaying action. In fire and movement, the Machine Rifle was highly mobile, and, at the same time, nearly all available cover could be taken advantage of by the gunner, due to the ease with which the gun could be handled. The majority of jams were easily reduced and broken parts few. The ability to sustain its fire was good. Dispersion was great when it was fired automatically, but it was extremely accurate when fired semi-automatically yet rapidly. In brief, we did have an accurately firing, highly mobile, automatic weapon, tactically used by being placed right in the firing line of our platoon.

Given to us, to take its place, we have the light air-cooled Browning Machine-gun. We must now treat of

its tactical employment, accuracy and mobility. As to its tactical employment, we have received very little in the way of instructions and must, of necessity, base our findings on what we have actually done ourselves and seen done.

We have organized the gun platoons two different ways. One squadron combines the two Machine Gun platoons under one squadron officer and calls this organization the Squadron Machine Gun Troop. This organization has been the Squadron Commander's weapon in most instances, and a very valuable one. We have, at times, had the guns report to their troops in various types of action, but this is the exception rather than the rule—quite obviously, or they would not be organized into a separate Squadron Troop for tactical purposes. Administratively they are, of course, assigned to their organizations. This makes a cumbersome arrangement and a shifting of responsibility which lessens efficiency.

The other squadron has left the Machine Gun Platoons with their respective troops, so here we have the tactical employment similar to that with the machine rifle.

However, in both cases, we have at times lost all our guns to the Squadron, Regimental and Brigade Commanders in a dismounted attack. This gives a powerful firing unit to these commanders. But this does not help the troops and platoons farthest from this concentration of automatic fire. Certainly these units need automatic fire in their lines in this tactical situation.

Take the case where we do leave the light machine guns in the platoons to replace the machine rifle. From the nature of the gun and the mount, the normal position of the gunner is prone. Here we have a limited field of fire. The gun is mobile, but, when it is hot, fire and movement are somewhat difficult if the gunner is going to take full advantage of cover. Jams are somewhat more frequent. Reducing them in most cases is comparatively easy. Dispersion is very little with the guns mounted on the new Bliss C1 tripod. Accuracy excellent. Sustained fire good. In brief, here, too, we have an accurate, mobile automatic weapon, which tactically should at all times be handled the same as the machine rifle.

Here then, we say, both guns are excellent automatic fire weapons, and the one with the greater fire power and less dispersion when automatically fired has replaced the other. But, for the purpose for which we had the Browning Machine Rifle, the Light Machine Gun is not as satisfactory, even if it is employed tactically the same, which it more often is not, the reasons being its limited field of fire and its much less dismounted mobility in fire and movement.



If the Cavalry must increase its fire power, to keep abreast of the other branches of the service, and at the same time lose none of its mobility and if this can be done in no other way than by adopting the light machine gun instead of more heavy machine guns, then we suggest the following:

**Plan One:** Put a higher tripod on the gun to reduce its present blindness, organize these guns into regular independent Squadron Troops and give the line troops back their Machine Rifles.

**Plan Two:** If this reduces our mobility, then give each trooper an automatic rifle of some type best suited for this purpose and organize all the light machine guns separately.

**Plan Three:** Adopt the light machine gun in place of the Machine Rifle and put a tripod on it that does not reduce its field of fire to its present state and then, except for combined attack or delaying action, attach the guns to the rifle platoons.

Plan two is considered best.

In pack we find our light machine guns excellently taken care of under most conditions. The gun is balanced in pack by ammunition. With the additional ammunition pack horse per squad we shall be able to keep this load balanced, by taking ammunition from the extra horse as we shoot up our balancing load on the gun pack, and filling gun pack ammunition boxes. When all ammunition is expended, we shall have to balance the gun load by filling our boxes with rocks.

A word as to the antiaircraft feature. We find this subject written about, and talked about, constantly. In campaign, with the problem of ammunition supply practically always critical, especially with the Cavalry, which so soon finds itself a considerable distance from its base, why waste any ammunition firing at hostile aircraft, even if we did have an excellent antiaircraft mount? The percentage of hits per rounds fired per five seconds is very small, even with a trained crew, this having been shown by tests recently conducted at the Cavalry School, the report of which was published from the Office of The Chief of Cavalry. Then, in turn, of the actual number of hits on the plane, the percentage of fatal hits on our plane is so small that the number of planes shot down from the ground is not worth the ammunition expended. If we ourselves disperse rapidly, reducing the aircraft's percentage of hits and save our ammunition for ground troops, we shall in the long run, save ourselves worry as to our ammunition supply. This is a worry which we are so prone to overlook on our maneuvers. In addition to this, well-trained crews for antiaircraft firing are at a premium, due to the lack of the required facilities for such training, namely, planes towing sleeve targets at which we can fire.

Summing up we may say that, generally speaking, except on very favorable terrain, the Browning Light Machine Gun is primarily a defensive weapon, and that we have substituted it for the Browning Machine Rifle, which is well adapted to offensive action.

## Notes from the Cavalry Board

### Use of Colt "Ace" Pistols in Marksmanship Instruction

ON March 17, 1932, the Cavalry Board placed in test five Colt "ACE" pistols, caliber .22-45. This was in continuation of a project which has been before the Board since January, 1920, to ascertain the practicability of using the caliber .22-45 pistol for instruction in pistol marksmanship. In investigation of the possibilities of this weapon the Board has conducted tests prior to this one in 1920, 1923, 1926, and 1927 but, aside from definitely fixing the fact that the pistol, properly functioning, would be a valuable asset, has been able to proceed no further, due to lack of a pistol which could be depended upon to function using caliber .22 long rifle ammunition.

In outward appearance, the Colt "Ace" is similar to the automatic pistol, caliber .45, Model 1911, as modified, except that it is equipped with a wide front sight blade and an adjustable square notched target type rear sight. It is chambered for caliber .22 long rifle ammunition.

The pistols were tested over a period of nine months by three troops of Cavalry in gallery and instruction

practice prior to firing the caliber .45 pistol courses during the regular target season and were given a functioning test by the Board.

All troop commanders were unanimous in stating that the use of the Colt "Ace" pistol was a valuable aid in pistol marksmanship instruction, both mounted and dismounted. One troop qualified one hundred per cent both mounted and dismounted this year (1932) by the use of this pistol, the percentage of qualification in 1931 being: mounted, 83.05; and dismounted, 85.71. Another troop raised its average hits, mounted, 4.5 points.

The Board, as a result of the tests above indicated, believes that the use of the Colt "Ace" pistol in pistol marksmanship instruction will raise the percentage of qualification in an organization and the average per individual, and that its use is an economical move in view of the difference in cost of caliber .22 long rifle and caliber .45 ammunition. However, specially selected lots of .22 long rifle ammunition should be used to obtain the most satisfactory functioning.

It has been recommended that these pistols be issued to Cavalry troops on a basis of four per troop with two extra magazines per pistol.

## CURRENT TOPICS

THE Contract for publishing the Official Souvenir Program of the Roosevelt-Garner Inauguration, Saturday, March 4, 1933, has been awarded to Ransdell Incorporated, Publishers, of this city.

The Program will not carry any advertising but will be entirely devoted to events of the Inauguration hour by hour, including the ceremonies at the Capitol, the line of parade, chronologically listing the various units, and the Inaugural Ball. It will be profusely illustrated by approximately forty half-tones and pen and ink sketches, designed to portray the historic events published, among which are "The Passing of March 4th," by J. Fred Essary, *Baltimore Sun*; "The Story of Inaugural Balls," by David Rankin Barbee, *Washington Post*; "The Story of Inaugural Parades," by Ernest G. Walker, *Historian*; "Former Mistresses of the White House," by Miss Eleanor Connolly, of American Red Cross; "Washington's Historic Landmarks," by George Rothwell Brown, *Washington Herald*; "Sketches of Roosevelt and Garner," by Charles Michelson, Publicity Director, Democratic National Committee; "Sketches of Mrs. Roosevelt and Mrs. Garner," by J. R. Hildebrand, Associate Editor, *National Geographic Magazine*; and other nationally known authors.

A further brief description of the Program shows it will contain a picture of the Roosevelt family of four generations, pictures of the past thirty-one Presidents of the United States, as well as airplane views of the National Capital and a map of the metropolitan area as a guide to visitors. It will contain 64 pages, 5 1/2 inches by 11 inches in size, bound in a beautiful three-color effect (Red, white and blue) cover and will retail for 35 cents.

The inside back page of the Program will be for the autograph of any Senator, Congressman, Governor, or any other dignitary that the respective purchaser may desire.

Through special arrangements of the Inaugural Committee, this will be the only Program published and it is designed to cover all events of the day, including the Inaugural Ball.

All net profits the General Inaugural Committee realizes from the sale of this Program, as well as the Inaugural Ball receipts, will be donated to charity.

The Inaugural Committee solicits the cooperation of the executive secretaries of associations, fraternal organizations, clubs and societies everywhere to secure group subscriptions for their respective memberships in advance of the Inauguration.

Further, since the Program will be of unusual historical interest and may well be used as a reference work for years to come, plans have been completed for publishing a Special De Luxe Souvenir Inaugural Edition. This Edition will be strictly limited to copies reserved in advance and each copy so re-

served to be numbered in order of the subscriptions with the name of each subscriber imprinted in gold on the lower right hand corner of the front cover. The Special De Luxe Souvenir Edition will be handsomely bound in a blue flexible binding and inscribed by the Chairman of the Inaugural Committee; namely, Rear Admiral Cary T. Grayson. It will retail for \$2.00 net, postage paid.

Mail orders will be filled promptly and the Program will be sent to any address in the United States or Canada, postage free.

All communications should be addressed to Rear Admiral Cary T. Grayson, Chairman, Inaugural Committee, Washington, D. C.

### Minutes of the Annual Meeting of the United States Cavalry Association

Washington, D. C., January 30, 1933.

The meeting was held at the Army and Navy Club, Washington, D. C., this date, being called to order at 8:10 p. m. by the senior member of the Executive Council, in the absence of the President and of the Vice-President. Thirty-three members of the Association were present in person, and four hundred and sixty-four were represented by proxy.

In the absence of objections, the reading of the minutes of the last meeting was dispensed with.

The annual report of the Secretary-Treasurer-Editor was read as follows:

Washington, D. C., January 30, 1933.

To: The United States Cavalry Association Gentlemen:

There is submitted herewith, as required by the Constitution, the financial statement for the year ending December 31, 1932, and the report of the activities of the Association for the same period.

### Financial Statement of the U. S. Cavalry Association

For the Year Ending December 31, 1932

#### Cash Statement

Account	Receipts	Expenditures
Balance, January 1, 1932	\$ 1,309.93	
Book Department	7,560.19	\$ 5,350.32
Dues and Cavalry Journal	3,758.72	3,214.00
Interest	702.50	125.00
Saddle Department	104.20	59.85
Salaries		1,510.00
Postage, Stationery, Incidentals	37.90	419.09
Rent	395.00	1,065.00
Telephone	79.35	172.26
Telegraph		6.05
Trophies	959.33	1,091.49
Insurance		17.96
Balance, December 31, 1932		1,534.16
<b>TOTAL:</b>	<b>\$14,996.02</b>	<b>\$14,996.02</b>

Assets (Exclusive of Securities)	
Cash in Bank, December 31, 1932	\$ 1,534.16
Stock on hand, books	512.38
Office Equipment and Supplies	225.80
Accounts Receivable:	
Book Department	2,256.68
Dues and Cavalry Journal	1,866.50
Saddle Department	55.00
Rent	30.00
Telephone	15.22
Small Cash	11.12
<b>TOTAL</b>	<b>\$ 6,506.86</b>
Liabilities	
Bills Payable (Ledger Accounts)	\$ 250.75
Due Customers on Unfilled Orders:	
Book Department	20.00
Saddle Department	55.00
Telephone	30.44
Stationery	8.25
Western Union Telegraph Co.	1.39
Infantry Journal	1,353.81
Printing, Nov.-Dec. 1932 issue	515.35
National Service Publishing Co. (miscellaneous)	15.53
Net Value (exclusive of securities), Dec. 31, 1932	4,226.34
<b>TOTAL</b>	<b>\$ 6,506.86</b>
Net Value (exclusive of securities), Dec. 31, 1931	\$ 5,378.14
Net Value (exclusive of securities), Dec. 31, 1932	4,226.34
<b>Decrease in Value during 1932</b>	<b>\$ 1,151.80</b>

Washington, D. C., January 28, 1933

We, the undersigned, appointed by the President of the United States Cavalry Association, to audit the accounts of the Treasurer of said Association, for the year ending December 31, 1932, do hereby certify that we have examined the books of account, vouchers, and the foregoing statement, covering said fiscal year, and that the same are correct and true to the best of our knowledge and belief.

Robert E. Carmody  
Major, Cavalry

John J. Bohn  
Major, Cavalry

John W. Weeks  
Captain, Cavalry

#### Securities

The following securities are owned by the U. S. Cavalry Association:

	Market Value	Dividends
2 Southern California Edison Co.	\$ 2,105.00	\$ 100.00
2 Baltimore & Ohio Railway Co.	1,120.00	80.00
2 Rio Grande Western Railway Co.	750.00	80.00
2 Kentucky Utilities Co.	1,440.00	100.00
1 North Carolina Gas Co.	40.00	
1 Foltis-Fischer Co.	130.00	32.50
2 Consolidated Gas Utilities Co.	525.00	65.00
1 Professional Arts Bldg., Atlantic City	50.00	60.00
2 Theatre Realty Co., Easton, Pa.	100.00	
1 Atlantic Gas Co., Philadelphia	100.00	60.00
	<b>\$ 6,360.00</b>	<b>\$ 577.50</b>

Of the above, the following companies have been, or are being, reorganized:

North Carolina Gas Company (paid no dividends in 1932)

Foltis-Fischer Company (paid one semi-annual dividend in 1932)

Consolidated Gas Utilities Company (paid one semi-annual dividend in 1932)

Theatre Realty Company paid no dividends in 1932)

No dividends are to be expected from any of the four companies in 1933.

The depreciation in many of the bonds held by the Association would indicate the desirability of having the greater part, or possibly all, of the reserve funds invested in government bonds or deposited in savings banks. I recommend that such conversion of the reserve funds be made whenever a favorable market makes such conversion practicable.

#### Association Dues

At a meeting of the Executive Council, June 1, 1932, the Secretary-Treasurer was directed to increase the dues for membership in the Cavalry Association and the annual subscription rate in the CAVALRY JOURNAL to non-members from \$2.50 to \$3.00. This action was taken after a report by the Secretary-Treasurer that he estimated that the Cavalry Association was running behind at the rate of about \$700 per annum. It was believed that an increase in income of \$900 (150 subscribers at fifty cents increased subscription) would cover the deficit.

For subscriptions paid since the increased rate went into effect (July 1, 1932), the gain is only \$150.50, whereas \$49.38 has been counted in the assets on this basis, a total of \$229.88. From these figures, it will be seen that only a small proportion of the \$900 to be expected ultimately each year from this source of income has already been realized or can be counted as assets.

#### Net Value (Exclusive of Securities)

The decrease in net value (exclusive of securities) which amounts to \$1151.80, and which is greater than was estimated on June 1, 1933, as probable, will be analyzed and made the subject of a report to the Executive Council at an early date, this with a view to taking remedial steps over and above those already taken, if such are indicated by the survey.

#### Membership and Subscriptions

The following is an analysis of the Association's membership and subscriptions:

Regular Cavalry Officers	520
National Guard Cavalry Officers	225
Reserve Cavalry Officers	333
Other Active Members	133
Associate Members and Subscribers	329
<b>TOTAL PAID:</b>	<b>1543</b>
Honorary Members	3
Life Members	2
Exchanges	72

**TOTAL:** 1920

Geo. M. Russell  
Colonel, Cavalry  
Secretary-Treasurer

(Concluded on Page 64)

## BOOK REVIEWS

THE PERSONAL MEMOIRS OF JOFFRE. Field Marshal of the French Army. Translated by Colonel T. Bentley Mott. D.S.M. 2 vols. Harper & Brothers. \$6.00.

The two volumes of The Personal Memoirs of Joffre are divided into four parts: Part I, the phase of planning for war and the period of strained relations prior to the opening of hostilities; Part II, the war movement to include The Race to the Sea; Part III, the stabilization period to include 1915; Part IV, the Allied Offensive of 1916. Part IV also includes a very interesting account of Joffre's visit to the United States as a member of the French Mission in 1917, his statement of the conferences with President Wilson and Secretary Baker and at the War Department and the Army War College make history. How he approached the problem of whether the American aid could be men or armies, shows the broad field of facts surveyed before arriving at his conclusions. The major factor that influenced his decision was the belief that no great nation would allow its citizens to fight under a foreign flag.

Joffre's own words express concisely the basis of his actions while in the United States. He says: "Prove to the Americans that, having entered the war during a tactical phase, which, sooner or later, was likely to be decisive, they would be called upon to play a role commensurate with their strength. If they were to do this successfully, they must create an army from the ground up, our experience being at their disposal for laying down the outlines of its organization. They must transport the units of this army to France as soon as they were ready and continue there the training of officers and men, using French officers to assist them. Then, as soon as possible, they must have assigned to this army, which would be under the command of an American General, a part of the front which would grow in extent as the American forces sent to France increased in numbers."

Specific recommendations made by Joffre were: send a division as soon as possible so that the American Flag would be represented in France; choose a commander for his aptitude for command and not on account of seniority; send this commander and a staff to France at once to make preliminary arrangements for the arrival of the American forces.

Part I gives a comprehensive idea of the French method of making war plans, of how these plans became an expression of both the military and the government and the difficulties encountered in arriving at this accomplishment.

Up to the time that Joffre became Chief of the General Staff, July 28, 1911, the war plans of France had been defensive in character. Her fortresses were constructed with this idea in view and her training doctrine conformed. How Joffre changed the French

Army into one indoctrinated with the offensive is very instructive and well worth careful study.

During this same period the war plans were radically revised to fit the offensive contemplated. The smoothness with which the concentration was made and the flexibility demonstrated by the major changes made during the concentration, point out clearly the advisability of a careful study of the first part of this publication.

The detailed arrangements made between the general staffs of France and of England in connection with the use of the British troops in France and the agreements made with Russia as set forth in these books make definite additions to the history of these incidents.

Joffre answers the question so often asked: Why were the French not prepared for the German movement into their country through Belgium? France wanted to impress Belgium with the fact she did not contemplate making that nation's territory a battle-field and therefore rigorously kept from their war plans, and especially from their concentrations, any indications that might give a contrary idea. This attitude would not only prevent Belgium from leaning toward Germany but would increase the probability of England's joining with France.

A more tangible fact bearing upon this question was that the prewar information that the French General Staff had on the forces available to Germany caused that Staff to conclude that the German front line, for offensive purposes, could not extend farther than from the Swiss border to include Luxemburg. This conclusion was based on the number of German Active Corps and the belief that the German Reserve Corps were secondary troops and could not be used initially in the front line in an offensive.

Joffre was fully aware of the entry of the Germans into Belgium in the vicinity of Liège and also that the German troops extended from Holland to Switzerland. His reaction to this was that the center and southern flank must be weak. This condition fitted in with the offensive plans of the French; therefore Joffre launched his attacks in eastern France. It was not until August 24th that Joffre definitely knew that the German Reserve Corps were being employed in the front line of active operations. The extraordinary extension of the German forces was explained and the power of the German swing through Belgium was then fully realized. However, it was too late to meet the German manœuvre. Joffre during the Battle of Verdun prayed that he might have prevision. It might be commented in passing that such a quality would have stood him in good stead at this time. Lanrezac, the Commander of the French Fifth Army, evidently did have prevision, for he told Joffre on the 14th of August that he feared

the Germans would make a wide out-flanking movement north of the Meuse.

Part II, the greater part of which is taken up with the Battle of the Marne, is a most valuable contribution to military history and the art of war. Of the Battle of the Marne Joffre makes this statement: "The courage and tenacity of our men being granted, it was the French system of command which triumphed." In arriving at this conclusion he comprehensively discusses the difference between the French and German control by high command. The French believed the control of the superior commander of extended battle lines like that in France must be strong and yet flexible enough to allow him to take advantage of a possible turn of fortune, whereas the German system of command depended mainly upon the cooperation of the Army Commanders after the operation has once been launched.

It was the French superior Commander's control over the entire front of his armies that allowed Joffre to take advantage of the unfavorable situation of the Germans that existed when Von Kluck moved east of Paris. This same command control allowed Joffre to concentrate the Sixth Army north of Paris to be utilized in the scheme of maneuver decided upon by him on August 25th, about twelve days before the launching of the Battle of the Marne. This scheme of maneuver was to make a decisive attack against the west flank of the German north wing in conjunction with a frontal attack against that wing while holding on the eastern wing of the French line. Was the German situation on September 5th the stroke of luck that made Joffre a Field Marshal of France? The answer might be found in what Balck says of luck in military operations. It is this: "Luck comes to him who deserves it, to him who is prepared to take advantage of opportunities."

We learn in reading these Memoirs that the French Army that won the Battle of the Marne was a different Army from the one that was defeated in the Battles of the Frontier. Battle experience had completed Joffre's efforts to change the French Armies from defensive to offensive troops. The discussion of the tactical changes made in the short period of less than a month are well worth the study of all officers, for Joffre touches on all arms of the service.

Joffre stills the idea that the British retreat from Mons was responsible for the retirement of the French Army, and that he and Sir John French could not cooperate; on the contrary their associations were most cordial and bordered upon affection.

In Part III, on stabilized warfare, Joffre discusses the new problem in attack and defense that this class of operations presented and covers such matters as organization, command, training, and materiel.

But the most interesting development of stabilization was that it turned the eyes of the Allies toward theatres other than the Western Front. These Memoirs are one of the most important contributions to history that will assist the student who is trying to determine whether or not the Allied operations at the

Dardanelles, in Serbia, Mesopotamia and Egypt delayed the end of the war!

England's attitude toward these exterior theaters is always interesting and Joffre speaks of this at different times during the narrative. Of the vacillation of the British government he says: "At one time, London maintained that it appeared essential to leave sufficient forces in England to guard against a possible invasion by Germany. At another, Lord Kitchener wished to retain a number of divisions at his disposal in order to insure the defense of Egypt or carry on the Dardanelles Campaign. Again it was a question of combating in high British circles a train of ideas which had for their origin the tradition that Great Britain has always brought her weight to bear in a coalition more by reason of her gold than her fleet and army."

The introduction of outside theatres emphasized the necessity of close cooperation between the Allies. This brought into existence the Allied Conferences at Chantilly. The first was held in December, 1915, when the coordinated offensives which included the Battle of the Somme, the Brussiloff Russian Offensive and the Italian attacks in the Isonzo in 1916 were decided upon. These conferences were a step toward unity of command, and of this Joffre says: "I have good reasons to believe that my role in co-ordinating the action of the Allied forces—a role I was enabled to exercise thanks solely to the consent of the Commanders-in-Chief of the coalition—is not generally known."

Part IV is mainly taken up in discussing the Battles of Verdun and the Somme. Joffre considered that a victory on the Somme in 1916 would deal a decisive blow to the Germans, and by showing his efforts to make it so in spite of the German attack at Verdun, this part of his Memoirs is a picture of a hard fight against great odds.

A German offensive on the Western Front in 1916 was evidently not foreseen by Joffre. His first intimation of the Verdun attack came, strangely enough, from the French Minister to Denmark on January 19th and the information was confirmed by the Minister to Switzerland. The first definite facts bearing on this operation were derived from deserters on the 6th and 7th of February. On the 14th of February there came into the possession of the French the order of the German Crown Prince that was to be read to the troops before the attack.

The tactical surprise of Verdun was the violence with which the attack opened. Reserves had to be rushed to the battle the first day. The British, on the second day agreed to release all French troops on their front. Joffre, in despair, saw his general reserve he desired to use for the Somme attack gradually dwindle, and before the Germans were stopped thirty-nine French divisions had been put into the Verdun Battle.

The immediate effect of the Battle of Verdun was to place the burden of the Somme offensive upon the British, as the tired and depleted French forces could do no more than assist. Another effect was that it seriously lowered the morale of the French troops.

The severity of the battles during 1916 can be realized more fully when we contemplate that the losses from them were: British, 500,000—French, 490,000.

Before the relief of Joffre as Commander-in-Chief another Conference of the Allies was held at Chantilly, and the operations for 1917 were decided upon. The main offensive was to be again in the Somme Region and to begin during the first two weeks of February. Joffre's relief changed these plans. Of the change he says: "The result was to bring about an inevitable delay in the Allied attacks fixed for the Spring of 1917. Instead of starting operations in January, the Franco-British offensive began in April. The retreat which Hindenburg was thus given the time to make at his leisure resulted in our offensive merely beating the air. I repeat what I have already said, that, if we had had the firmness to renew and modify the battle which the winter had interrupted, the Germans would have been crushed. They themselves recognized it by making a retreat which constituted an avowal more convincing than any words. The unavailing attempts to make peace which they set forth in December, 1916, are added proof that they were fully conscious of the disaster facing them. The man who saved them have a heavy responsibility to bear in the face of History."

The two volumes are not merely a statement of the military part played by Joffre in The World War but they have an added value that makes them of interest to every citizen. That added value is set forth in the portrayal of the relations between the French government and the military during the war.

A few citations will serve to stimulate interest in this part of the Memoirs. At one place Joffre states: "We could not permit the incessant criticism of the conduct of operations made by self-appointed strategists. If because of the war it was the duty of the mobilized soldier to sacrifice his life, why should not the citizen in the interior sacrifice for a while his right to talk?" In 1916 a committee of thirty members of Parliament was organized and charged with the duty of controlling the front. A similar committee was charged with controlling the rear. Members of the government were continually visiting the front, and such men as Clemenceau stated to the British high command that the morale and effectiveness of the French were low. Can you imagine the effect of such actions on the French soldier?

Another very interesting part of the content of these books relates to the relief and reclassification of officers. Joffre between the day the army was mobilized to September 6, 1914, practically a period of one month, had removed two army commanders, nine corps commanders (out of a total of twenty-one), twenty-three generals commanding active divisions (out of thirty-seven), and ten generals commanding reserve divisions (out of twenty-five).

The government issued such drastic instructions as the following from the Minister of War to General Joffre: "The government demands that any general officer who does not perform his duty with requisite

firmness shall be brought before a general court-martial and shot within twenty-four hours." Again from the Minister of War: "You have sent back to me Generals B and G . . . You want to win; to do so, use the most rapid, brutal, energetic and decisive methods. In any case do not send back to the interior of the country men who will spit out their venom against you and me; put them under lock and key while they are awaiting to be tried . . ." At another time the Minister of War says: " . . . I repeat my formal request, that you place in the highest positions only those men who are young, energetic, and decided to win at any price; eliminate the old fossils without pity."

Joffre, however, did not carry out these drastic instructions to the letter. In fact he states that it was through his intervention with the government that Foch was retained in service after he had reached the age for retirement.

Many lessons can be learned of the relations between the commander and staff and also of the use of liaison officers by a careful reading of these Memoirs. These lessons will be brought home most forcibly because, through the style of his writing Joffre practically places you on the battle-field with him.

These volumes are of great value to students and instructors at The Army War College, The Command and General Staff School and Special Service Schools, and also to officers both on duty with and a part of the National Guard and Organized Reserves. They are made particularly so because of the full index that is a part of them. To officers of all grades and arms they will serve as most valuable reference books throughout their service. The principles of the art of war as set forth will be well worth the reflections you may put upon them.

ROBERT M'C. BECK, JR.,  
Colonel, Cavalry.

NOTE: The reviewer recommends the following map to aid the reader, No. 80, The Century Atlas.

The Spanish-American War and its Results, by Captain José Antonio Medel, Cavalry, Cuban Army, Aide-de-Camp to the Secretary of War and Navy of the Republic of Cuba; published in Spanish in 1931; translated into English by the author 1932.

This is an interesting 109-page abstract of our troubles in Cuba in 1898, which bears evidence of considerable research, and it is gratifying to note the author's evident desire to be fair to all parties engaged in this conflict.

Some few criticisms might be made, the first being that on page 11 he tells us that Lieutenant Rowan was sent to Cuba "with instructions and final orders for the Cuban insurgents, soon after the declaration of war . . ." The author evidently had not read Colonel Rowan's little 32-page account entitled "How I carried the Message to Garcia," from which we get first-hand information that Rowan was directed to "carry a message to Garcia, who was somewhere in the eastern part of Cuba, and secure from him information of a military character. It was in the nature



of a series of inquiries from the President." It will thus be seen that we were far from having progressed with a plan of campaign and in no condition to send "instructions and final orders" to the Cuban insurgents.

The author dwells on the well-known fact that neither Spain nor the United States were prepared for war.

Secretary Alger in his Annual Report of 1898 stated that we had war material only sufficient to equip our little Regular Army of 25,000 men (though eventually 275,000 were raised). The condition of many regiments was like that of the 2nd Georgia, whose Colonel wittily remarked that he was ready for war save that his regiment had no uniforms nor guns!

Add to this the chaotic condition at Tampa, well described (pp. 29-30) and the fact that most of our volunteer troops had black powder and blue woolen uniforms, and it will be seen that we were far from being adequately prepared.

However, the net result proved the Spaniards to be in even a worse condition than ourselves, due probably to a lack of ability on the part of their General Officers, for in the immediate vicinity of Santiago they certainly had forces sufficient to make mincemeat of Shafter's 16,000 men, had they been properly used. Neither could our plan of attack there be said to have been 100% perfect, or El Caney would have been masked, rather than attacked.

From the author's account there were probably more Cubans present than have generally been accredited to them. From those who came under the writer's observation (boys of 14 alongside men of 60), they seemed to be robbing the cradle and the grave to fill their ranks. We cannot allow the statement on p. 53, that "the American trenches were all dug by the Cuban troops of Colonel González Clavell" to go undisputed. They may have begun many of those subsequently completed by Wheeler's dismounted cavalry, but the greater part of the labor which made them really effective field fortifications was done by American troops.

The work is accompanied by five excellent sketch maps but has no index.

We leave the Naval Operations to be criticized by someone more competent to do so.

Taken as a whole, the little pamphlet is well worth reading by one interested in the Santiago Campaign, of which it presents a fair picture.

W. C. B.

**Editor's Note.** The book is dedicated to Lieutenant General Calixto García Iniguez, the García to whom Andrew S. Rowan carried the message, and begins with a short history of his revolutionary efforts, which began in 1872. He appears to have been a very staunch warrior, indeed. Of the measures taken by García to prevent the concentration of Spanish troops, the author says:

"There have been a good many criticisms made of the Spanish tactics in not reinforcing Santiago. The several Military Attachés in this war made unfavorable comments about it in their official reports, thinking it a fault of the Spanish high command, and the

Americans comment on it in the same fashion. The Spaniards offer as excuse the lack of food and the wretched condition of the roads. We ourselves thought the same for a while but, through the research made to write this lecture, we hit on the real cause of this seeming Spanish failure. Now, the Spaniards made no tactical nor strategical mistake; they ordered the garrisons of Auras, Sagua de Tánamo and Mayarí to evacuate these towns and to close on Holguín, to effect a junction with Gen. Agustín Luque, who was at that city with 10,000 men. Also, they gave orders to Col. Escario to march from Manzanillo on Santiago and that General Luque, once all of his contingent was united, should march towards Santiago, so that these three heavy columns should enter the city about the same time, bringing reinforcements numbering more than 25,000 men. This would have given the Spaniards great numerical superiority and, doubtless, a victory over the Americans and Cubans.

"All this vast military operation was destroyed by the military genius of Major General Calixto García. General García placed General Luis de Feria before Holguín to hold General Luque, and, in case this general broke through and tried to escape to Camagüey, General García placed a division of Cubans at Tunas under General Lope Recio to stop him. General Luque did not leave Holguín, because he met the constant opposition of Feria, who made him go back, and, besides, because the reinforcements he expected from Mayarí and Sagua arrived in a sorry condition after a severe fight with the Cubans under General Luis Martí, who beat them badly and captured their two Krupp guns. General Pareja did not leave Guantánamo, because, every time he tried to do so, he was repulsed by the Cubans under General Pedro A. Pérez, stationed there by García for that purpose. The only column that reached Santiago was Colonel Escario's, and that because it was 4,000 strong and simply ran over the 1,000 Cubans under General Ríos, who did all they could to stop them and could not. This brave Spanish column was harassed and attacked continuously on its way, during which it fought no fewer than 40 combats and heavy skirmishes with the Cubans under Generals Estrada, Mariano Lora and Colonels Montalvo and Carlos M. Poey. The column had to be reorganized twice and leave behind all its dead, wounded and baggage, arriving at Santiago with less than 3,000 effective strength. Escario's column was not exterminated, owing to General Shafter's negative to General García's petition to be allowed to send General Rabí on the 27th with 2,000 Cubans to attack it on its way to Santiago.

"The above explains the real reason why the Spaniards could not reinforce Santiago and try to break the American-Cuban circle around the City. It was not on account of faulty Spanish strategy, as the foreign commentators are prone to believe; it was not on account of bad roads and the scarcity of food, as the Spanish reports indicate. The Spaniards did not reinforce Santiago de Cuba, because the Cubans did not let them."

## SPORTS

### The International Horse Shows

By Major J. Tupper Cole, 9th Cavalry

THIS year's Army Horse Show Team started with two rather serious handicaps, the more important being the loss of Major Chamberlin and Captain Bradford, men who have been the backbone of the team for years and whose long list of victories in the highest competition is evidence of their value. Of lesser importance, but still to be reckoned with, was the long and necessary rest given the horses between the Olympic Games and the Boston show.

Upon arrival in Boston three horses were out, *Clysmic*, *Dick Waring* and *Joe Aleshire*. The remainder were in fine shape and jumped with courage from the heavy going in the ring.

The outstanding performance of this show went to the reliable jumper, *Ugly*, ably ridden by Lieut. C. W. A. Raguse. The military stake shown over a rather hard course, with the footing still miserably heavy, resulted in a tie between the Irish horse *Shannon Power* and *Ugly*. The jump-off resulted in a second clear round for the United States and the blue ribbon. This was proved expensive, however, as *Ugly* was used in the team class the following night. After a clean performance by *Tan Bark*, *Ugly* committed three faults which put the United States in third place, the French and Irish being tied with one knock-down each. No one realized what hard work the old horse had done the night before, and though he seemed to try hard and got a very smooth ride by Lieut. Raguse, he had lost his bounce.

With a ten-day rest before the New York Show, all the horses were in fine shape, except *Dick Waring*. This horse never did come back to jump during the circuit.

In this show the most coveted class of all is the "International Team Competition" with the "International Military Individual Championship" trophy a close second. Everything was consequently subordinated to winning one or both of these classes. The good horses were saved from many classes so that we might have fresh, bouncy horses to send out on "International Night." *Tan Bark*, Lieut. Thomson; *Ugly*, Lieut. Raguse; and *Joe Aleshire*, Major Cole, were finally chosen. Ireland was supposed to win. They had been jumping beautifully but all on their top horses. They showed the wear and tear of too many classes with a total score of twenty-four faults. France proved the strongest competition and entered the ring first, scoring two knock-downs, both charged to a normally reliable horse, *Acis*. Ireland and Canada put themselves out of the running by scoring an unusually high number of faults for this class of competition. The United States, last to jump, had France to beat. *Tan Bark* led off, scoring our only fault at the last fence.

*Ugly* then jumped a clean round, thanks to a perfect ride by Lieut. Raguse. On the first fence of the 4'6" "triple in and out" *Ugly* stood back at least ten feet from the jump. He was going too slow, or seemingly so, to carry over. He seemed to be in the air seconds and spent most of them scrambling. Had his rider disrupted his balance in the slightest degree, *Ugly* would undoubtedly have scored a knock-down with very little chance of recovery for the remaining fences of the in-and-out. This, the finest piece of riding seen at the Garden, left the decision of the class up to *Joe Aleshire*. *Joe* was in top form and turned in a clear round with inches to spare at each fence, which ended the suspense.

On the following and final night the same three horses were used for the individual championship, all three having clean rounds with two other horses, one French and one Irish, tied for first place. Lieut. Thomson got a brilliant second clear round on *Tan Bark* after both the French and Irish horse had committed one fault each. *Ugly* then jumped, scoring a fault and finally *Joe Aleshire* duplicated this performance. *Tan Bark* won, with *César*, ridden by Lt. Cavaillé of France, winning the reserve, time deciding the four-cornered tie.

That night the team shipped to Canada to start showing in Toronto the following night. Unfortunately the second most important class was scheduled for the first night. The train was very late, the horses getting to their stalls about 6:30 in the evening after having been aboard the train for twenty hours. It was considered advisable to scratch all entries from the International Military Stake and also from one of the three open classes for which we were eligible. Throughout the show the horses jumped splendidly, winning two big military classes and having at least one horse high in the awards of all classes.

Lieut. Willems of the Field Artillery made one of the most brilliant rides of the show to win the "Military Touch and Out" on *Clysmic*. Two perfect rounds with a foot to spare on each fence!

Of the four military teams present, France had the most brilliant horses. Light, keen horses, Anglo-Arab or clean bred, they jumped with tremendous energy and boldness. The horses of Ireland and the United States were a pretty even lot. The Canadians were greatly handicapped by the injury of three of their best horses and deserve great credit for being able to turn out a team for International competition from a single regiment of Cavalry.

The future of the United States Team is fairly bright. Our best horses should last several years more with care. Our riders are gaining in experience, and best of all riders and horses are being developed at the Cavalry and Artillery Schools that should make adequate replacements in years to come.

# The Foreign Military Press

Reviewed by Major Alexander L. P. Johnson, Infantry

MEXICO—*Revista del Ejercito y de la Marina*—June, 1932.

"The Infantry of the United States," by Captain Cammas.

In a series of articles of which this is the first instalment, the author undertakes to acquaint his countrymen with the military system of the United States and more particularly with the organization, training, personnel and materiel of the United States Infantry. The article is well written, and discloses a thorough knowledge of the subject. It is an interesting and highly informative discussion, and it will unquestionably go a long way in spreading a better understanding of the American Army and its background among our comrades-in-arms south of the Rio Bravo del Norte.

URUGUAY—*Revista Militar y Naval*—May-June, 1932.  
"Cavalry in South America," by Major Jose M. Silveira.

The vast expanse of land, long frontiers, scarcity of the total lack of good roads the author writes, will ever make for dependence upon the horse and mule. Large cavalry units will remain indispensable for reconnaissance and security before and during battle. In pursuit or in retreat, the role of cavalry will remain equally important. The difficulty of keeping up the normal flow of supplies will in the author's opinion, frequently necessitate the employment of the cavalry in small bodies not exceeding a regiment.

Mounted manoeuvre, combination of fire and movement, exploitation of surprise will continue to be the normal tactical action of the cavalry. Success will be decisive in proportion to the rapidity and care in the execution of its mission. Cavalry, in the author's opinion, must depend far more upon these, than upon its fire power in contrast with World War experience. This, in South America, the author states, is largely due to poor road conditions and the difficulty in maintaining the supply of ammunition.

AUSTRIA — *Militärwissenschaftliche Mitteilungen* — July-August, 1932.

"Planning of an Attack," by Lieut. Col. Dr. Lothar Rendulic.

In planning an attack, the author writes, it is of decisive importance whether the action is to be a meeting engagement or an attack against a defended position. The method of procedure will necessarily differ in each situation. He notes the difficulties encountered by the Austro-Hungarian Army in the first year of the World War on the Russian front. The Russians were masters in the rapid preparation of a defense. Al-

though the Austro-Hungarian Commanders were quite frequently aware of the enemy's plan to defend, they failed to rearrange their plans of attack based upon an anticipated meeting engagement to conform to the changed situation. Naturally these attacks usually failed, and where success crowned the effort, it always proved to be very costly. In the author's opinion, it will ordinarily be necessary to modify the plan of an attack even in course of a meeting engagement should hostile resistance stiffen. He believes that modern weapons will materially increase the time factor in the development of a meeting engagement over what it was during the World War. This added time, he believes, will enable the enemy to bring up reinforcements and to organize his defence.

The advanced elements of a column on the march will contact with the enemy's security and covering detachments while the main body still continues in route column at a considerable distance from the hostile position. The column commander must so conduct the march that it will favor rapid development and deployment of his command. His mission and the nature of the terrain will materially influence the formation adopted during the march, while information concerning the enemy and his probable intentions is still lacking. The author believes, that the commander should be able to decide upon his plan of action for a meeting engagement even though he may not possess detailed information concerning the enemy. In the author's opinion, it is essential that the basic elements of his plan of action be indicated in his orders for the development of the command, otherwise the commander may run the risk of losing the initiative.

As a rule, the development of the command will precede the actual attack. Seldom will there be an opportunity to launch an attack directly from the route column. In general, an attack cannot be initiated until the artillery is ready to render support. It follows, that in order to launch an attack directly from the route column, an early forward displacement of a considerable portion of the artillery becomes imperative. Batteries will have to go into suitable firing positions under the protection of the advance guard in order to be ready to support the attack at the earliest moment. War experience shows that the actual time required by the artillery to prepare for action has generally been underestimated. Whenever the disposition of the command during the advance is unfavorable for an attack, or when the information concerning the enemy is inadequate for the making of proper dispositions, then the development of the command in suitable assembly areas is indispensable. This, however, requires time and will seriously delay the commitment to action of the main body of a command. It is, therefore, important, the author holds, that the advance guard be suf-

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ficiently strong to sustain its action independently for the amount of time required.

The attack against an enemy occupying a defensive position requires altogether different planning. First, it is necessary to drive in hostile covering and security detachments and to occupy the hostile outpost area. This is, of course, the mission of the advance guard which, for this reason, must be strong in artillery. In situations of this type it is invariably necessary to develop the command preparatory to an attack. The author holds that the most advanced portions of the assembly areas should be within the zone held by the advance guard. As a rule, hostile fire will demand that these positions be occupied under cover of darkness, or artificial blinding of hostile observation. Normally there should be sufficient time available to permit a thorough understanding of the plan of action by all subordinate commanders, and a thorough coordination of all arms.

FRANCE—*La Revue d'Infanterie*—November, 1932.  
"The Russian Cavalry," by Commander Loustannau-Lacau.

The largest body of cavalry in the world today is that maintained by Soviet Russia. It comprises 13 cavalry divisions and eight independent cavalry brigades. Practically this entire force is stationed along the Polish and Roumanian frontiers.

The military authorities of Soviet Russia differentiate between tactical or divisional cavalry and strategic or army cavalry. Each infantry division includes a reconnaissance detachment armed with carbines and the "Dzegaroff" machine-rifle weighing about 15 pounds. Lances were discarded by all Russian cavalry units in 1927.

The separate cavalry brigades consist of three regiments each. Six of the cavalry divisions contain three brigades of two regiments each, and seven consist of two brigades of three regiments each. The regiments consist of headquarters, a communications platoon, four rifle troops of four platoons each, and one machine gun troop of four platoons with four Maxim guns each. In addition, the cavalry division includes two battalions of horse artillery of four to six batteries each, an artillery headquarters, communications troop, pioneer troop and chemical warfare platoon. It is planned to add to each cavalry division one regiment of horse artillery, one mechanized regiment of infantry and one of tanks.

Nine divisions of cavalry and one of the independent brigades are constituted into four cavalry corps, three of which are stationed along the western frontier, and one in the Caucasus. Each cavalry corps is provided with heavy artillery.

Cavalry regulations date from 1929. They are thoroughly modern, but like all Russian regulations, they are schematic and crush initiative. Dismounted action seems to be gaining in favor. The author believes, that these large masses of cavalry, if properly led should possess great possibilities especially in the early stages of a war. It remains, however, to be seen, the author adds, whether Soviet Russia developed com-

petent leaders and general staffs to lead them and to control them in action.

GERMANY—*Deutsche Wehr*—October 28, 1932.  
"Japanese Thoughts of Seapower," by G.

Since the military assumed control of Japanese politics, the author writes, a craving for action and national expansion seems to have overcome the entire populace. The occupation of Manchuria has become the focal point of the political aspirations of the masses. The author believes that Manchuria is to Japan, what the Rhineland is to France and Iraq to Great Britain. Japan looks upon Manchuria not only as an important source of raw materials, but as an equally important market for her products. In his opinion, the Japanese desire to secure a trade monopoly in that troubled province will inevitably bring the island empire into conflict with the United States and Europe.

The risk of a protracted struggle with the awakening masses of China, the danger of a conflict with the United States and the League of Nations do not, in the author's opinion, deter the Japanese in the least. They took that chance at a favorable opportunity and they are fully prepared to defend their action against any challenge. The author believes that in view of the present internal situation in Russia, action against the Japanese must inevitably come from overseas, meaning thereby the United States. The Washington Naval Disarmament Conference in 1922, he states, fully appreciated the possibilities of a Pacific war, but at that time the consensus of opinion held that the means then available did not promise success to the aggressor, either Japan or the United States. The fact that more recently the United States decided to leave the Atlantic fleet in the Pacific, justifying that action by reasons of economy, has, the author states, produced a strong reaction in Japan. He quotes the well known Japanese naval expert and writer, Seitoku Ito (*Daily Telegraph*, September 13) as follows:

"The Japanese submarine fleet is today the most powerful and the most effective in the world—British and American submarines have an incomparably lower military value. The best American submarines can at best be compared only with Japan's poorest. Their radius of action, notwithstanding the Hawaiian base, is hardly sufficient to reach Japanese waters. They have essentially but a defensive value. In marked contrast, Hawaii is within the radius of action of all Japanese submarines, while the best of them may operate against San Francisco and even Panama—Japan has 30 submarines of 1150-1955 tons, most of them being capable of a speed of 19 knots. In addition, Japan has 40 (the list shows 45) smaller submarines with a radius of action of 7000 nautical miles. The 1700 ton destroyers, with a speed capacity of 35 knots, carry six 13 cm guns in twin-turrets in addition to nine torpedo tubes. They are the most powerful of their kind afloat, excepting the Italian and French flotilla leaders. The 13 cm guns were especially designed for the physical stature of the Japanese—it has a range of 16,000 meters and can fire 10 rounds per minute. Cruisers mount the same type gun; the newest ones as



many as fifteen of them. Japan has 33 cruisers including those still under construction. They are of the 8500 ton class and have a speed of 33 knots."

In conclusion, the author mentions the rumors though officially denied, that the Japanese Government recently purchased the Portuguese colony of Timor. 700 miles off the Australian coast. As a consequence of this acquisition, the Commonwealth of Australia now proposes to fortify the Port Darwin area.

GREAT BRITAIN—*The Royal Engineers Journal*—June, 1932.

"This Tank Business—In Fact and Fancy," by Colonel M. N. MacLeod, D. S. O., M. C.

It is natural that new arms and armaments should arouse ardent enthusiasm and acquire staunch supporters. It was ever thus, notwithstanding the fact that in the crucial tests they usually have fallen short of expectations. With this thought in mind, the author undertakes to disprove some of the claims advanced by tank enthusiasts in favor of this important contribution to world armaments by the late war. He seeks to show, that in most cases success was really attributable to effective and improved methods of artillery fire, and that was, in the final analysis, the result of the highly efficient work of the Field Service Battalion. R. E., which made possible the rapid and accurate computation of firing data, and the elimination of the customary tell-tale ranging fire of batteries. Quoting General Fuller's statement to the effect that "on November 20th, at the battle of Cambrai, tradition received such a blow between the eyes, that even the most pessimistic asserted that the tank had at last come into its own" (*The Reformation of War*, by Col. J. F. C. Fuller, p. 115), the author retorts that "the novel feature about that remarkable attack was not that it was led by 350 tanks, but that a new method of handling the artillery was tried out for the first time." The author points out that the tank, as is well known, had actually delivered its first blow to tradition at the battle of the Somme in September, 1916, but had made so little impression that Earl Haig recommended work on them be discontinued. Citing other historic examples, the author points out that at Arras the tanks failed to arrive, but the Canadians, nevertheless, took Vimy Ridge almost at a rush. At Bullecourt, with the terrain favorable to tanks, they failed. At Messines, 76 tanks participated in the successful attack, yet the author quotes General Fuller to the effect that "Messines was in no sense a tank battle." Tanks were a complete failure at Ypres. On the other hand, a few days after the successful British attack at Cambrai, on November 20, 1917, the Germans, without tank support counterattacked with almost as much success as the British. These, and other similar incidents of the World War lead the author to the conclusion that "whatever opinions may be held on the performances of 'General Tank' the value of the system of bombardment initiated at Cambrai is not in doubt. The mere fact that it was repeated with success on every subsequent offensive establishes its value beyond peradventure of doubt."

HUNGARY—*Magyar Katonai Szemle*—November, 1932. "The Modern Infantry Company," by First Lieutenant Stephen Milassin.

The rifle company being the smallest tactical unit which may be given a separate mission makes it necessary, the author believes, that it possess the necessary means to carry out successfully the assigned task. The fact that in all phases of an action, the infantry company is actually reinforced by machine guns and other heavy infantry weapons indicates the desirability of assigning to each rifle company an organic machine gun platoon. Close cooperation between riflemen and machine gunners is essential to success. In the author's opinion, normal peace time training hardly offers adequate opportunity for developing teamwork between these combat elements. The situation would materially change, the author states, if rifle companies were provided with organic machine gun elements. It would tend to emphasize their interdependence and correspondingly help to correlate their combat training.

The author rejects as untenable the argument against such a plan that the presence of pack animals would considerably impede the mobility of the infantry company, or that machine guns would complicate the ammunition supply. He advocates an infantry company which, in his opinion, would possess the necessary fire power and shock-ability to meet all requirements of modern warfare. He visualizes a company of two rifle platoons and one machine gun platoon. The author recommends omission of platoon headquarters, which by its size would, in his opinion, actually handicap the platoon leader and would tend to disclose to the enemy his location. The rifle platoon proposed by the author consists of three combat groups or squads of fourteen men each. These squads are: the rifle squad, the automatic rifle squad and the hand grenade squad. The automatic rifle squad includes one sniper and one rifle grenadier, while the rifle squad would have two of each. In the author's opinion, the automatic rifle squad will supply the fire power, the hand grenade squad is to provide the movement. The rifle squad being capable of both, should, in the author's opinion, properly constitute the platoon support, and be used as the situation requires.

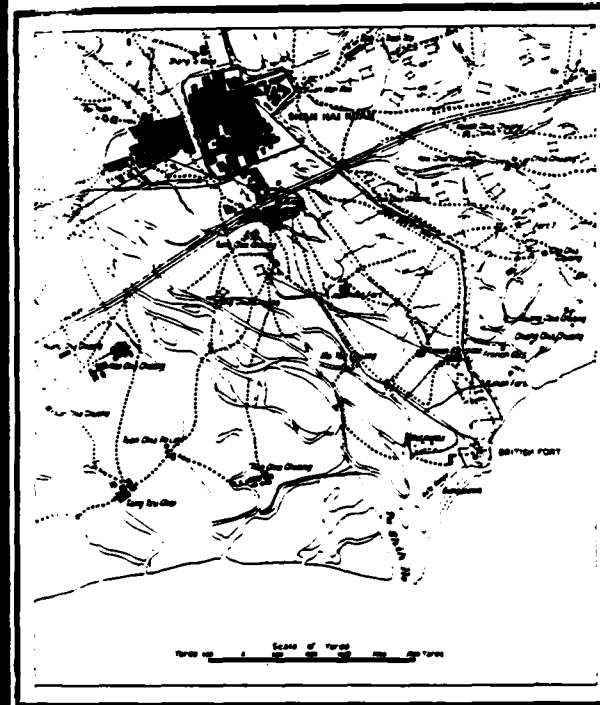
INDIA—*The Journal of the United Service Institution of India*—July, 1932.

"Shan Hai Kuan," by Major E. W. N. Wade, M. C., the East Yorkshire Regiment.

"Shan Hai Kuan", the author writes, "is the seaside resort to which the Tientsin garrison moves for the summer." The name of that delightful place literally means "between mountains and sea." Situated at the extreme eastern corner of Chih-Li, four miles from the Manchurian frontier, it stands on the Peking-Mukden railway. Shan Hai Kuan is a walled city with its eastern face forming part of the Great Wall of China. Strategically, Shan Hai Kuan blocks the Mandarin road and the railway from Peking and Tientsin to Mukden. Tactically, the walls and the series of ridges lying astride the main line of communications, form an exceptionally strong zone of

defense against an enemy advancing either from east or west. The main mountain range, which more or less parallels the road and the railway, assists materially in the defense of the plain. With one flank resting on the sea, and the other secured in the mountains, the Shan Hai Kuan position is the key to the defense of the bottle-neck entrance to Manchuria against any attack from the west along the railway.

The British garrison of Tientsin utilizes this interesting terrain for its field training. The British camp is situated in close proximity of the city and includes the old Chinese Fort No. 1. Italian, French and Japanese troops occupy similar Chinese forts along the western side of the wall.



"The Next War Medal," by B. Arless.

The post-war fashion of multiplication or decorations arouses the author's ire. He notes, "a man may wear a brave array starting with a couple of decorations, and running through four or five war medals, via the coronation medal, to the Ruritanian Order of St. Bibulus with Palms without ever having braved any danger." This situation, he writes, induced a Commandant of the Staff College to propose that all young officers (on receiving their first commission be given about half a dozen artistic medals, and that for every four or five years of satisfactory behavior they should be permitted to discard one until "with high rank they would attain the quiet dignity of unadorned chests." The author is not, however, opposed to medals altogether. He merely advocates a return to the old ideals in this respect, that a medal is and should be an acknowledgment of danger encountered or risk accepted. The author believes that the World War practice of giving a medal to everyone who happened

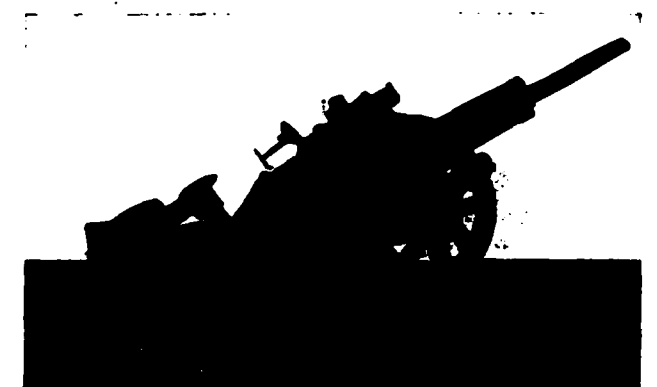


Fig. 1

to be in a theatre of war, should be discontinued. He believes, that the value of a medal as a morale raiser would be enhanced if it really meant something to the wearer and to those who saw him wear it.

PORTUGAL—*Revista de Artilharia*—September, 1942. "Antiaircraft Materiel," by Lieutenant Campos Andrada.

The author describes three anti-aircraft weapons produced by the Swedish firm "Bofors". The first of these is a tractor-drawn anti-aircraft gun, calibre 75 mm (Fig 1 and 2), and two anti-aircraft machine guns of 40 mm (Fig 3) and 25 mm calibre, respectively.

The 75 mm gun fires a projectile weighing 6.5 kg. The weight of shell, cartridge case and powder charge complete is 10.3 kg. The initial velocity of this ammunition is 750 m/sec. The maximum vertical range is 9,400 meters, and the maximum horizontal range about 14,500 meters. Total weight of gun and limber in route order is 3,500 kg. The gun can fire 25 rounds per minute. Drawn by tractor, the gun can travel at a rate of 25 km per hour. Two minutes are required to put the gun from route order into battery and vice versa.

The cal. 40 mm machine gun can fire 100 rounds per minute with an initial velocity of 900 m/sec. The cal. 25 mm machine gun fires 150 rounds per minute,



Fig. 2

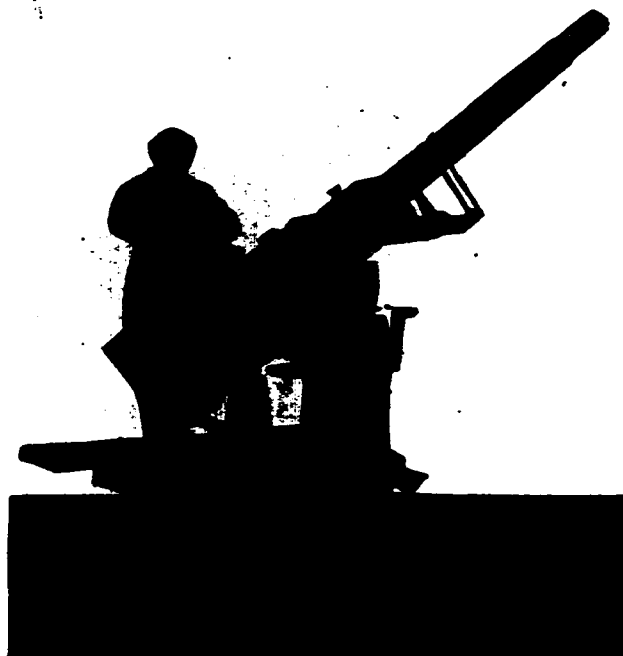


Fig. 3

and has an initial muzzle velocity identical with that of the larger model. Weight of the 40 mm cartridge complete is 2.035 kg, while the cal. 25 mm ammunition weighs 0.65 kg. The maximum range of the former is 5000 meters, of the latter 3000 meters. The vertical field of fire extends from  $-15^{\circ}$  to  $+85^{\circ}$  and  $-10^{\circ}$  to  $+85^{\circ}$ , respectively. Both guns have an all-around horizontal field of fire.

SPAIN—*Revista de Estudios Militares*—May, 1932. "German and French Infantry," by Lieutenant Colonel Juan Beigbeder, G. S.

The author, who had the opportunity of serving both with French and the German armies, presents an interesting comparison of the infantry arms of these, pointing out the essential differences in organization and tactical employment of the basic tactical units. The French Infantry platoon, the author states, normally consists of three squads, each with a light machine gun. The squad consists of a sergeant and eleven men. Its tactics are simple. The squad advances its machine gun as far as possible and sustains its fire without interruption. In order to triumph, infantry must push its weapons as close to the enemy as possible in order to bring about his annihilation. The light machine gun is the vital factor of the squad. The whole squad depends upon it; therefore, it must be kept in action as long as there is a single man left to operate it. For this reason losses among ammunition carriers are replaced from among the riflemen. Surplus personnel is, for the same reason, used to carry ammunition rather than to reinforce or to make up casualties among riflemen. Only five members of the squad are armed with the rifle, one of these being equipped for rifle-grenades. This, however, does not make of them individual cogs in the fighting

machine. On the contrary, their sole mission is to protect the machine gun, and they employ rifle fire only when the machine gun goes out of action. French regulations deny initiative to riflemen. They are not even trained for individual combat. The stereotyped organization and absolute prohibition of manoeuvre with any part of the squad vastly simplify the squad leader's mission. The French lieutenant has only three subordinates to deal with. Since he invariably will be near one of his squads, he will in reality have to give his orders to the other two only. This simplicity of organization enables the platoon leader to keep his command well in hand, to control its action and to direct its fire. All in all, the French platoon is led today more or less as it was in 1914.

In marked contrast, the Germans have created a combat unit that is well adapted to the different forms of modern action. Their regulations prescribe but few rules of execution. The German platoon contains a varying number of squads; 2 or 3 rifle squads and 2 or 3 light machine gun squads. The idea, that the attack consists of two factors, fire and movement, brought about a complete separation of fire power and shock action. The two factors are represented in the German organization by different squads:

1. The light machine gun squad consisting of a gunner and ammunition carriers, two riflemen, one equipped with telescopic sights; total strength: 1 N. C. O. and 7 men.

2. The rifle squad consisting of 1 N. C. O. and 7 men all armed with the rifle.

These two squads compose the German combat team. According to the German point of view, the object of fire is to permit the attacker to close in with the enemy and to enable him to secure the decision in a hand-to-hand fight. This requires the development of an intensely aggressive spirit and initiative in every soldier, hence it imposes the necessity of careful selection of personnel, exaltation of individual combat and above all thorough training. While the French insist upon uninterrupted fire action, the Germans seek to preserve intact the striking power of their combat team. For this reason, whenever the platoon consists of less than four squads, the two riflemen are taken from the machine gun squads and used to reinforce the rifle squads.

The Germans do not centralize the command of the platoon as do the French. On the contrary, they allow a great deal of freedom of action to the squad leaders. The Germans, in marked contrast to French practice, attach great importance to manoeuvre. The squad leaders must solve their own tactical problems and carry out their respective missions in mutual cooperation. In keeping with this concept, special situations permit the formation of special "combat groups", small columns consisting of rifle squad, light machine gun squad and attached heavy infantry weapons. As soon as the special mission is accomplished, this "combat group" dissolves and its elements revert to their normal status and function. Thus, in reality, the author writes, the German companies and platoon are essentially administrative and not tactical units.

Their elasticity permits ready regrouping as the constantly varying situation may demand.

The author notes the following objections to the German plan:

1. Difficulty of control in platoons of five or six squads. This, the author holds, requires exceptional leadership on the part of the platoon commander.

2. It requires exceptionally fine, well trained squad leaders. Without such the German regulations cannot be applied.

3. Creation of temporary "combat groups" for special missions, and leaving complete freedom of action and initiative to its leaders, in the author's opinion, is the weakest point of the German system, or rather its most difficult aspect. Without selected troops, squad leaders, and exceptional junior officers, the author thinks, it will surely invite defeat. In his opinion, it is wholly inconceivable of application in the case of raw levies suddenly called to the colors for active service receiving but a rudimentary training.

The author believes, that the French plan is based upon a simple and clear concept. It facilitates training under all circumstances, and this is of paramount importance when only a limited time is available to prepare recruits for field service.

—July 1932.

"The Soviet Army", by Major Jose Ungria, G. S. The "Red Army" came into existence by decree of the Soviet authorities issued on January 25, 1918. At first based upon the principle of voluntary service, the results proved so far from satisfactory, that the system of universal and compulsory service was reintroduced in Russia two months later. Soviet authorities justify this reversion to the former system, which is diametrically opposed to the pre-revolutionary creed and propaganda of the communists, on the ground of necessary defense of the proletarian institutions against counter-revolution. After the elimination of counter-revolutionary activities, the Red Army, which at first numbered four million men, was gradually reduced to 562,000 effectives. This is the actual strength of the Soviet Army today according to figures submitted to the Disarmament Conference through the League of Nations. Since these figures do not include territorial militia, specialist organizations, training cadres or reserves, it is estimated that the number of Soviet citizens actually under arms is not less than one million.

The Soviet military system is a combination of a standing army and territorial militia. The latter consists of two categories: permanent units consisting of instructors and nuclei of specialists, and mobile units assembled only for periods of instruction.

The annual contingent of recruits numbers about 1,200,000 of whom 260,000 are allotted to the standing army, 200,000 go to the territorial militia, 3 to 400,000 are rejected for various causes of disability, while the remainder receive military instruction outside of the ranks. Service becomes obligatory at the age of 21, and covers a period of two to three years. Pre-military training is obligatory between 19 and

21. The completion of a nine months' course of pre-military training is required of those who desire to become subaltern commanders in the Soviet Army.

Special formations include the Frontier Guards, about 28,150 men; the G. P. U. or political police of about 17,240 men, and Prison Guards of about 13,200 men. The Soviet Air Force had at the end of 1931 a total of 2000 airplanes with an expected increment of 1000 planes of all types for 1932.

The general organization, command, and administration of the Soviet Army conform largely to that of other armies. The peculiarity of the situation, in the author's opinion, rests in the fact that while Soviet propaganda the world over is directed against the principle of universal and obligatory military service, there is no indication whatever that the Soviet authorities contemplate modification, far less abandonment, of that system within the U. S. S. R. On the contrary, the active training period in Soviet Russia actually exceeds that of Italy, Turkey, Yugoslavia and Czechoslovakia, being actually the double of that in France, Belgium and Spain. While the Swiss militiamen are released from their military obligation at the age of 45, having completed a total of seven months of active training, the Soviet militiamen, though released at 40, must actually complete 13 months of active training.

Training, though it conforms to the practice of other armies, is actually far more intensive. From May to October all active divisions undergo a strenuous program of field training. Gas masks are frequently used in connection with these exercises and marches. Large scale manoeuvres were held in 1931 in the vicinity of Moscow, Leningrad, Minsk and Baku with the participation of about 100,000 troops. During the same year extensive motorization has been effected. Training continues with undiminished intensity throughout the winter at the regular home stations of units. Combat exercises and marches involving the use of skis receive particular attention at this time. Instruction is suspended only while the temperature registers 30 degrees below zero.

#### General Military Information

RUSSIA—*Krasnaya Svezda (Red Star)*, the organ of the Soviet Army (No. 141) calls attention to the interesting fact, that the five Succession States of the former Austro-Hungarian Monarchy (Austria, Hungary, Roumania, Yugoslavia and Czechoslovakia) actually spend 60% more on national defense than did the old dual empire. The total active military establishment of these countries amounts to 628,000 effectives compared to 400,000 in the Monarchy. The present budget of these countries amounts to 50 million pounds sterling as compared to 15 million spent by Austria-Hungary. The total population of the Monarchy was 55 million compared to 60 million of the Succession States. In addition, the article points out that Poland has a military establishment of 256,000 men. Bulgaria, Greece and Albania spend annually about 8 million pounds sterling for national defense. (*Militar-Wochenblatt*, August 25, 1932)

# Organization Activities

## Third Cavalry (Less 1st Squadron)

Fort Myer, Virginia

The Fort Myer Horse Show Team, limited to two officers and three horses by injuries and lack of funds, went to New York the middle of November to the National Horse Show. The team performed most creditably in the face of the strongest competition in years. The well known *Squire*, ridden by Capt. G. I. Smith, won his first leg on the Charles L. Scott Challenge Cup and took second in the Scurry, while *Flash*, ridden by the same officer, stood second in the Triple Bar.

A recent visitor to the Post was Mr. Cameron Forbes, former Governor General of the Philippines and Ambassador to Japan, who gave a short talk on polo to the officers of the post. Mr. Forbes' talk was interesting and instructive, as he is quite noted as an author and player, having written the famous "As to Polo," while serving in Manila at the same time as Colonel Harry N. Cootes, who was Aide de Camp to Mr. Forbes when the latter was Governor General of the Philippines.

The series of Exhibition Rides presented annually at Fort Myer by the Third Cavalry and First Battalion, Sixteenth Field Artillery, began on January thirteenth. This first performance of the year was given in honor of Major General Frank R. McCoy, recently returned from Manchuria as a member of the Lytton Commission and just assigned to command the First Cavalry Division. Owing to the current mourning the very popular receptions after these Rides have been cancelled for the time being, but judging from the demand for tickets just as many people in official life as usual will enjoy the Exhibitions this year.

## Sixth Cavalry

Fort Oglethorpe, Georgia

A Regimental competition to determine the Champions of the Regiment was held during the week of January 23rd to 30th. The following were awarded medals:

Horsemanship, Cpl. Roy L. Davis, Troop F.  
Pistol Marksmanship (mounted), Sgt. William F. Akers, Troop F.

Pistol Marksmanship (dismounted), Sgt. Oscar F. Howard, Troop F.

Sabre, 1st Sgt. Chester A. Clark, Hdqts. Tr.  
Rifle, Cpl. George D. Simpson, Troop A.

On December 23rd, Lt. Colonel Walton Goodwin, temporarily in command, formally presented to 1st Lt. William J. Bradley, the trophy won by him and his platoon Troop A in the Leadership Test for Small Units.

On December 6th, the seventy-first anniversary of the Sixth Cavalry was celebrated, due to the fact

that the Regiment was absent on maneuvers at Ft. Benning, Georgia on May 4th, which is the regular organization day. The Regiment was formed in the morning, and all officers and men joining since the last organization day were presented to the standards. Colonel Gordon Johnston read a brief history of the Regiment. The ceremony was followed by athletic games and competitions between organizations. A special dinner was prepared in each Troop and the Regimental Commander and his Staff visited each mess hall, at which time a brief resume of the activities of the organization during the year was given by the Regimental Commander.

Moving Pictures were taken of the regimental activities during the latter part of January: these pictures will soon be released.

The Regiment is at the present time preparing for the maneuver to be held at Ft. Benning during April.

Troop A entertained the membership of the American Veterans, newly organized at Chattanooga, Tennessee.

A Regimental problem was held on February 2nd. The entire Regiment turned out to one of the most successful and instructive maneuvers ever held by the organization.

The Officers of the Regiment are busily engaged in taking the Leavenworth correspondence courses.

## National Guard Cavalry Officers

Not Assigned to Brigades, Regiments or Separate Squadrons

ALABAMA STATE STAFF  
Major Charles C. McCall  
ALABAMA: HEADQUARTERS TROOP, 23RD CAVALRY DIVISION  
Captain Thomas W. Smith  
1st Lieut. Erwin McD. Carnes  
2nd Lieut. William A. Holley  
COLORADO STATE STAFF  
Captain Charles M. White  
CONNECTICUT STATE STAFF  
Lieutenant Colonel George R. Sturges  
IDAHO STATE STAFF  
Major Norman B. Adkison  
IOWA STATE STAFF  
Major Knud Bobers  
KENTUCKY STATE STAFF  
Major Carl D. Norman  
NEW MEXICO STATE STAFF  
Major Harry S. Bowman  
NEW YORK: CHIEF OF STAFF, 27TH DIVISION  
Colonel William R. Wright  
OHIO STATE STAFF  
Major Samuel Richmond  
Captain Robert K. Kerr  
PENNSYLVANIA: AIDE SECTION, HEADQUARTERS, 28TH DIVISION  
1st Lieut. Moderwell K. Salen  
RHODE ISLAND STATE STAFF  
Major Vernon R. Wixon  
WASHINGTON: HEADQUARTERS TROOP, 24TH CAVALRY DIVISION  
Captain Charles W. Goodwin  
1st Lieut. Walter E. Hallen  
2nd Lieut. Ensley M. Llewellyn  
WISCONSIN: HEADQUARTERS, 32ND DIVISION  
Lieutenant Colonel Ray S. Owen  
Lieutenant Colonel Clarence J. Wesley  
WYOMING STATE STAFF  
Major Gregory S. Powell  
Captain Loren C. Bishop  
Captain Andrew W. Willis

Jan.-Feb., 1933

Organization Activities

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## 51st Cavalry Brigade

Brooklyn, N. Y.

Brigadier General N. H. Egleston, Commanding  
Colonel Arthur Poillon, Unit Instructor  
Major John B. Cummings, Executive Officer  
Captain William P. Browne, Adjutant  
Captain Carroll B. Kopf, Plans and Training Officer  
Captain Frank J. Riley, Supply Officer  
1st Lieut. Herbert S. Duncombe, Jr., Aide  
2nd Lieut. John G. Browne, Aide  
H-headquarters Troop, 51st Cavalry Brigade  
Major William H. Morris 2nd Lieut. Carleton C. Keyes

HEADQUARTERS  
51st CAVALRY BRIGADE  
1579 Bedford Avenue,  
Brooklyn, N. Y.

JANUARY 19, 1933.

With deep regret announcement is made herewith of the death on January 19, 1933 of our beloved Brigade Commander, Brigadier General Mortimer Drake Bryant. In a reorganization of the Cavalry forces of New York State in 1922, General Bryant became the commanding general of the 51st Cavalry Brigade, in which capacity he served until his death. His inspiring leadership, pleasing personality and character played an outstanding part in the development of the Cavalry of this state during the past ten years, and in losing every officer and man has lost a true friend. General Bryant enlisted in Troop "C," N. Y. N. G. before declaration of the war with Spain and saw service in Porto Rico with the Troop during this war. Since he served continuously in the Cavalry of New York State, commanding the 2nd Squadron, 1st Cavalry, during the Mexican Border Service, General Bryant's World War record is described by the following Citation extract from Special Order of Commanding General, 27th Div. A. E. F.:  
Colonel Mortimer D. Bryant—Commanding 107th Infantry: For exceptional courage and qualities of leadership in battle, frequently demonstrated while serving as a major, commanding the 106th Machine Gun Battalion, and for a time, as Adjutant, Divisional Machine Gun Officer, during the active operations of the Division in Belgium and France, and as a leader for exceptional ability as a regimental commander in command of the 107th Infantry.  
For his notable services in the World War during which he was wounded, he was awarded the United States Distinguished Service Medal, the Belgian Croix de Guerre (with palm), and the New York State Distinguished Service Cross.  
This order will be read to all units at the first appropriate formation.

BY COMMAND OF COLONEL HOWLETT,  
JOHN B. CUMINGS,  
Major, Cavalry, N. Y. N. G.,  
Executive Officer.

OFFICIAL:  
W. P. BROWNE,  
Captain, Cavalry, N. Y. N. G.,  
Adjutant.

At the request of his family, dignified simplicity marked the funeral of Brigadier General Mortimer D. Bryant. He was buried on January 21, 1933 at Woodlawn Cemetery, following the services in St. James' Lutheran Church, New York City. For several hours before the funeral his body lay in state in the Church, attended by a guard of honor composed of sergeants of the 101st Cavalry. The attendance of friends of General Bryant's, in both military and civil life, taxed the capacity of the Church. Complete officer personnel of the Headquarters Troop of the 51st Cavalry Brigade and 101st Cavalry attended the funeral in uniform, in a body. Colonel Kenneth C. Townson, 121st Cavalry, Commander of the up-state regiment of the brigade, also attended with his staff. The funeral was attended by Major General William N. Haskell, Commander of the New York National Guard, accompanied by his full staff. Those also in attendance were Colonel Nicholas E. Engel, president of the 107th Veterans, Brigadier General John J. Phelan of the 93rd Infantry Brigade, Colonel Edward McLeer, former chief of staff, 27th Division, Congressman J. Mayhew Wainwright, Colonel Ralph

C. Tobin, 107th Infantry and Brig. General John J. Byrne of the Coast Artillery.

The only military touches were a salute from Troop F, 101st Cavalry in formation as the funeral cortege passed the Squadron A Armory at Madison Avenue and 94th Street on the way to Woodlawn Cemetery and the customary volleys and sounding of Taps at the grave.

## Military History of Brig. Gen. N. H. Egleston

Enlisted Troop I, Squadron A, N. Y. Cavalry February 18, 1907 and served continuously, being promoted thru various grades, until he was commissioned Captain, 105th Machine Gun Battalion in 1915, with which organization he went to France. He was transferred to 106th Infantry as Commanding Officer of 3rd Battalion on October 28, 1915. On November 9, 1915 he was commissioned as Major and assigned to command the 3rd Battalion, 106th Infantry. He was then transferred to 106th Machine Gun Battalion with which organization he returned home to the United States as Commanding Officer.

Engagements: British Defensive-East Poperinghe Line and Scherpenberg, Belgium, Dickbush Sector, Belgium; Ypres-Lys Offensive—Vierstraat Ridge; Somme Offensive, Hindenburg Line operations, Selle River Operations.

Commissioned Major Cavalry and assigned to command Squadron A Cavalry, N. Y. N. G. on July 9, 1919 and served as its commanding officer under its redesignation as 51st Machine Gun Squadron, then 2nd Squadron, 101st Cavalry until Nov. 26, 1932, when he was commissioned Lieutenant Colonel, N. Y. N. G. His resignation was accepted and he was honorably discharged December 13, 1932.

He was commissioned Brigadier General and assigned to command the 51st Cavalry Brigade on February 1, 1933.

For meritorious services in the World War he was awarded the following decorations: Silver Star with Oak leaf cluster, Purple Heart, Conspicuous Service Medal (New York State), Distinguished Service Medal (State of New Jersey).

## 101st Cavalry, N. Y. N. G.

New York City

Colonel James R. Howlett, Commanding  
Colonel Arthur Poillon, Unit Instructor  
Captain Guy D. Thompson, Unit Instructor  
Lieutenant Colonel Lawrence Beattie  
Captain Harry T. Wood  
Captain Leo W. Mortenson  
Captain Edward C. Phillips  
1st Lieut. John P. P. Wallace

Hq. Troop  
Captain Walter R. Lee  
1st Lieut. Jules K. French, Jr.  
2nd Lieut. Josiah N. Macy  
2nd Lieut. Jack R. Arnold  
M. G. Troop  
Captain Victor E. Feuerherd  
1st Lieut. Mercer W. Sweeney  
2nd Lieut. Floyd E. Conroy  
Hq., 1st Squadron  
Major Walter E. Young  
1st Lieut. William Young, Jr.  
Troop A  
Captain Reginald H. Brayley  
1st Lieut. John Fraser  
2nd Lieut. Ralph H. Bunting  
Troop B  
Captain Frank De Bevoise  
1st Lieut. Howard S. Rowan  
2nd Lieut. Mark M. McDonnell  
Hq., 2nd Squad.  
1st Lieut. William C. Robertson  
Troop E  
Captain Frederic C. Thomas  
Troop F  
Captain Ernest P. Lull  
1st Lieut. George C. Comstock, Jr.  
2nd Lieut. Robert F. Kohler  
Hq., 3rd Squad.  
Major Frederick A. Victor  
1st Lieut. Edward A. Hill  
Troop J  
Captain Gilbert E. Ackerman  
1st Lieut. Milton Kornblum  
2nd Lieut. Charles A. Tuck  
Troop K  
Captain Henry R. Drowne, Jr.  
1st Lieut. Richard F. Lamarche  
2nd Lieut. Herbert Martin

## Organization Activities

### Third Cavalry (Less 1st Squadron)

Fort Myer, Virginia

The Fort Myer Horse Show Team, limited to two officers and three horses by injuries and lack of funds, went to New York the middle of November to the National Horse Show. The team performed most creditably in the face of the strongest competition in years. The well known *Squire*, ridden by Capt. G. I. Smith, won his first leg on the Charles L. Scott Challenge Cup and took second in the Scurry, while *Flash*, ridden by the same officer, stood second in the Triple Bar.

A recent visitor to the Post was Mr. Cameron Forbes, former Governor General of the Philippines and Ambassador to Japan, who gave a short talk on polo to the officers of the post. Mr. Forbes' talk was interesting and instructive, as he is quite noted as an author and player, having written the famous "As to Polo," while serving in Manila at the same time as Colonel Harry N. Cootes, who was Aide de Camp to Mr. Forbes when the latter was Governor General of the Philippines.

The series of Exhibition Rides presented annually at Fort Myer by the Third Cavalry and First Battalion, Sixteenth Field Artillery, began on January thirteenth. This first performance of the year was given in honor of Major General Frank R. McCoy, recently returned from Manchuria as a member of the Lytton Commission and just assigned to command the First Cavalry Division. Owing to the current mourning the very popular receptions after these Rides have been cancelled for the time being, but judging from the demand for tickets just as many people in official life as usual will enjoy the Exhibitions this year.

### Sixth Cavalry

Fort Oglethorpe, Georgia

A Regimental competition to determine the Champions of the Regiment was held during the week of January 23rd to 30th. The following were awarded medals:

Horsemanship, Cpl. Roy L. Davis, Troop F.  
Pistol Marksman (mounted), Sgt. William F. Akers, Troop F.

Pistol Marksman (dismounted), Sgt. Oscar F. Howard, Troop F.

Sabre, 1st Sgt. Chester A. Clark, Hdqts. Tr.  
Rifle, Cpl. George D. Simpson, Troop A.

On December 23rd, Lt. Colonel Walton Goodwin, temporarily in command, formally presented to 1st Lt. William J. Bradley, the trophy won by him and his platoon Troop A in the Leadership Test for Small Units.

On December 6th, the seventy-first anniversary of the Sixth Cavalry was celebrated, due to the fact

that the Regiment was absent on maneuvers at Ft. Benning, Georgia on May 4th, which is the regular organization day. The Regiment was formed in the morning, and all officers and men joining since the last organization day were presented to the standards. Colonel Gordon Johnston read a brief history of the Regiment. The ceremony was followed by athletic games and competitions between organizations. A special dinner was prepared in each Troop and the Regimental Commander and his Staff visited each mess hall, at which time a brief resume of the activities of the organization during the year was given by the Regimental Commander.

Moving Pictures were taken of the regimental activities during the latter part of January: these pictures will soon be released.

The Regiment is at the present time preparing for the maneuver to be held at Ft. Benning during April.

Troop A entertained the membership of the American Veterans, newly organized at Chattanooga, Tennessee.

A Regimental problem was held on February 2nd. The entire Regiment turned out to one of the most successful and instructive maneuvers ever held by the organization.

The Officers of the Regiment are busily engaged in taking the Leavenworth correspondence courses.

### National Guard Cavalry Officers

#### Not Assigned to Brigades, Regiments or Separate Squadrons

ALABAMA STATE STAFF  
Major Charlie C. McCall  
ALABAMA: HEADQUARTERS TROOP, 23RD CAVALRY DIVISION  
Captain Thomas W. Smith  
1st Lieut. Erwin McD. Carnes  
2nd Lieut. William A. Holley  
COLORADO STATE STAFF  
Captain Charles M. White  
CONNECTICUT STATE STAFF  
Lieutenant Colonel George R. Sturges  
IDAHO STATE STAFF  
Major Norman B. Adkison  
IOWA STATE STAFF  
Major Knud Boberg  
KENTUCKY STATE STAFF  
Major Carl D. Norman  
NEW MEXICO STATE STAFF  
Major Harry S. Bowman  
NEW YORK: CHIEF OF STAFF, 27TH DIVISION  
Colonel William R. Wright  
OHIO STATE STAFF  
Major Samuel Richmond  
Captain Robert K. Kerr  
PENNSYLVANIA: AIDE SECTION, HEADQUARTERS, 28TH DIVISION  
1st Lieut. Moderwell K. Salen  
RHODE ISLAND STATE STAFF  
Major Vernon R. Wilson  
WASHINGTON: HEADQUARTERS TROOP, 24TH CAVALRY DIVISION  
Captain Charles W. Goodwin  
1st Lieut. Walter E. Hallen  
2nd Lieut. Ensley M. Llewellyn  
WISCONSIN: HEADQUARTERS, 32ND DIVISION  
Lieutenant Colonel Ray S. Owen  
Lieutenant Colonel Clarence J. Wesley  
WYOMING STATE STAFF  
Major Gregory S. Powell  
Captain Loren C. Bishop  
Captain Andrew W. Willis

Jan.-Feb., 1933

Organization Activities

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### 51st Cavalry Brigade

Brooklyn, N. Y.

Brigadier General N. H. Egleston, Commanding  
Colonel Arthur Poillon, Unit Instructor  
Major John B. Cumings, Executive Officer  
Captain William P. Browne, Adjutant  
Captain Carol B. Kopf, Plans and Training Officer  
1st Lieut. Frank J. Riley, Supply Officer  
1st Lieut. Herbert S. Duncombe, Jr., Aide  
2nd Lieut. John G. Browne, Aide  
Headquarters Troop, 51st Cavalry Brigade  
Captain William H. Morris, 2nd Lieut. Carleton C. Keyes

HEADQUARTERS  
51st CAVALRY BRIGADE  
1575 Bedford Avenue,  
Brooklyn, N. Y.

JANUARY 19, 1933

GENERAL ORDER  
No. 1  
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JOHN B. CUMINGS,  
Major, Cavalry, N. Y. N. G.,  
Executive Officer.

OFFICIAL:  
W. P. BROWNE,  
Captain, Cavalry, N. Y. N. G.,  
Adjutant.

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### Military History of Brig. Gen. N. H. Egleston

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New York City

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Colonel Arthur Poillon, Unit Instructor  
Captain Guy D. Thompson, Unit Instructor  
Lieutenant Colonel Lawrence Beattie  
Captain Harry T. Wood  
Captain Leo W. Mortenson  
Captain Edward C. Phillips  
1st Lieut. John P. P. Wallace

Hq. Troop  
Captain Walter R. Lee  
1st Lieut. Jules K. French, Jr.  
2nd Lieut. Josiah N. Macy  
2nd Lieut. Jack R. Arnold  
Troop A  
Captain Victor E. Feuerherd  
1st Lieut. Mercer W. Sweeney  
2nd Lieut. Floyd E. Conroy  
Hq., 1st Squadron  
Major Walter E. Young  
1st Lieut. William Young, Jr.  
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1st Lieut. John Fraser  
2nd Lieut. Ralph H. Bunting  
Troop B  
Captain Frank De Bevoise  
1st Lieut. Howard S. Rowan  
2nd Lieut. Mark M. McDonnell  
Hq., 2nd Squad.  
1st Lieut. William C. Robertson  
Troop E  
Captain Frederic C. Thomas  
Troop F  
Captain Ernest P. Lull  
1st Lieut. George C. Comstock, Jr.  
2nd Lieut. Robert F. Kohler  
Hq., 3rd Squad.  
Major Frederick A. Viotor  
1st Lieut. Edward A. Hill  
Troop I  
Captain Gilbert E. Ackerman  
1st Lieut. Milton Kornblum  
2nd Lieut. Charles A. Tuck  
Troop K  
Captain Henry R. Drowne, Jr.  
1st Lieut. Richard F. Lamarche  
2nd Lieut. Herbert Martin



Polo is now under full headway at both the Manhattan and Brooklyn armories, which will house the National Indoor Polo Tournament in the early Spring. Both groups of the regiment have teams in the field. The Manhattan units playing as Squadron A, the Brooklyn units as Squadron C.

The unit training schedules now in effect have made such complete demands on the regular time available that extra formations have been necessary to ensure the remote corners of storerooms being overhauled for the approaching annual inspection. Nevertheless, a respite was taken on January 13th when the officers of the regiment gave a farewell dinner to Major N. H. Egleston at the Cavalry Club. Major Egleston, who resigned command of the Manhattan units of the regiment (formerly Squadron A) upon completion of 25 years in the National Guard, was the subject of numerous complimentary remarks, he having also been promoted to the rank of Lieut.-Colonel in recognition of his long and able service.

It is planned to continue breeding at the farm at Huntington as in recent years, the well known *Curate*, donated by Mr. Widener, president of the Jockey Club, having already established his court. There are at present nearly 50 animals which were bred at Huntington doing duty in the regimental stables, a large percentage of which are registered thoroughbreds.

### 102nd Cavalry, N. J. N. G.

Newark, N. J.

Colonel Lewis B. Ballantyne, Commanding  
Major Frederick Herr, Unit Instructor  
Captain Royce P. Gerfen, Unit Instructor  
Lieutenant Colonel Henry L. Moeller  
Captain Edgar N. Bloomer  
Captain Harold C. Kirchner  
Captain Howard B. Norton  
Captain George P. Daugherty  
1st Lieutenant Frank A. Doetterl

**Hq. Troop**  
Captain Harry R. Stonaker  
1st Lieut. Bernard E. Beckman  
2nd Lieut. George W. Smith  
2nd Lieut. Hugh G. Barney

**M. G. Troop**  
Captain Cecil M. Boycott  
1st Lieut. Alvin Sauer  
1st Lieut. Harry D. Keller  
2nd Lieut. John L. Lee

**Med. Dept. Det.**  
Major Edward C. Klein, Jr.

**M. C.**  
Capt. Byron J. Smith, M. C.  
Capt. Charles E. Fanslau, V. C.

1st Lieut. Lewis W. Brown, M. C.  
1st Lieut. Clifford H. Gibbon, D. C.

**Hq., 1st Squadron**  
Major Henry H. Bertram  
1st Lieut. Adolph F. Weisgerber, Jr.

**Troop A**  
Captain Morton G. Sigler  
1st Lieut. Rudolph P. Munz  
2nd Lieut. Harry R. Stryker

The Band and Medical Detachments, 102nd Cavalry, will conduct their annual Gymkhana on Saturday evening, February 18, 1933. The program includes Rough Riding and Saber Tilting for the Regimental Championship. The Wright Medal which is

awarded for the Saber Tilting Championship has been in competition since 1890. The McGregor Medal awarded for Rough Riding Championship have been in competition since 1914. In addition to the above events and several military classes, the program includes an exhibition drill by a Battery of the 12th Field Artillery; a police class closed to members of the mounted squad of the Newark Police Department; and a horsemanship class open only to members of the Junior Essex Troop, which is composed of sons of members and former members between the ages of 12 and 15 years.

Troop B, 102nd Cavalry, has just been awarded for the 14th consecutive year, the National Trophy for having attained the highest figure of merit with the rifle in the State of New Jersey and the National Defense Trophy for having qualified the greatest number of men with the rifle. This organization has had 190 attendance at the last ten annual armory inspections and expects to repeat this year. Troop B has also been awarded the Regimental Efficiency Trophy for the second consecutive year.

The 13th Annual Newark Horse Show conducted under the auspices of the 102nd "Essex Troop" Cavalry, will be held on May 3, 4, 5 and 6. The Committee is planning to add a number of harness classes to the program of previous years. The Show is held indoors and is one of the largest conducted in the East.

The Annual Inter-Troop Polo Tournament started on December 17th and will continue until March 2nd, games being played on each Wednesday and Saturday evenings. Members of the Regimental Polo Squad are not permitted to play in this tournament.

The 102d "Essex Troop" Cavalry Indoor Polo Team has started what appears to be a very successful season, winning the first two scheduled games from Squadrons A and C, New York National Guard, on successive Saturdays. A schedule of 15 games has been arranged to date with teams in the metropolitan area.

The 102d "Essex Troop" Cavalry rifle team has started its indoor season. Matches have been arranged with various teams in this locality. This team has fired an annual match with the Cadets of the U. S. Military Academy, for the past nine years, and has won two of the matches fired.

### 52nd Cavalry Brigade

Columbia, Pennsylvania

Brigadier General Edward C. Shannon, Commanding  
Lieutenant Colonel R. D. Newman, Unit Instructor  
Major Stanley M. Livingston, Executive Officer  
Captain James H. Dailey, Intelligence and P. & T. Officer  
Captain Howard A. Achenbach, Adjutant  
1st Lieut. Norman W. Rowley, Aide  
2nd Lieut. Charles I. Thompson, Supply Officer  
2nd Lieut. Gordon A. Hardwick, Aide

**Hq., Troop, 52nd Cavalry Brigade**  
Captain Effingham B. Morris, Jr., Commanding Troop  
1st Lieut. Crawford C. Madeira, Communications Officer  
2nd Lieut. John C. Groome, Jr.  
Coronet Frederick C. Wheeler

### 103rd Cavalry, Pennsylvania N. G.

Philadelphia, Pa.

Colonel Arthur C. Colahan, Commanding  
Lieutenant Colonel Richard D. Newman, Unit Instructor  
Captain J. M. Shelton, Unit Instructor  
Lieut. Colonel John W. Converse  
Captain Edward J. Albert  
Captain Charles Blumhardt  
Captain George A. Wiggam  
1st Lieut. Joseph H. Kifer

**Hq. Troop**  
Captain Charles T. Cabrera  
1st Lieut. Raymond J. Cabrera  
2nd Lieut. Lynn L. Westwiler

**M. G. Troop**  
Captain James S. Williams  
1st Lieut. Harry M. Wood  
2nd Lieut. Joseph G. Rademan

**Hq., 1st Squadron**  
Captain Clarence L. Bender  
1st Lieut. Edward Hoopes  
2nd Lieut. Ralph V. H. Wood

**Troop A**  
Captain Kirk Swing  
1st Lieut. John A. Young  
2nd Lieut. William J. E. Simpson

**Troop B**  
Captain Jeremiah F. Neill, Jr.  
1st Lieut. Joseph J. Wall  
2nd Lieut. Thomas Boylan

**Troop C**  
Captain Leopold L. Krentzlin  
1st Lieut. George C. Schell  
2nd Lieut. Wallace W. Miller

**Hq., 2nd Squadron**  
Captain Samuel B. Wolfe  
1st Lieut. Edward G. Snyder

**Troop D**  
Captain Leland H. Walker  
1st Lieut. Robert A. Graham  
2nd Lieut. Philip F. Foster

**Troop E**  
Captain Foster S. Mathews  
1st Lieut. William H. McGowan  
2nd Lieut. Clarence P. Bryan

**Troop F**  
Captain Ralph T. Smith  
1st Lieut. Herbert M. Boezner  
2nd Lieut. Charles W. Roberts

A very interesting and instructive series of lectures has been presented to the Lieutenants and Non-Commissioned officers of the Philadelphia units of the Regiment during the past three months. The lectures have been presented by Lieutenant Colonel R. D. Newman, Senior Instructor of Cavalry, and have been prepared to cover the subjects of Scouting and Patrolling, Marches, Advance Guard, and Outposts. A plan is now in process whereby the benefits of these lectures may be extended to the Officers and Non-Commissioned officers of the 2nd and 3rd Squadrons.

The Regimental Polo team has been unusually successful this winter, placing high among the teams of the Philadelphia Indoor Polo Association. A number of well trained polo ponies were added to the Stables early in the season and were one of the factors that aided in the success of the team.

For many years the Regiment has maintained an average of Drill Attendance that has been among the very best, and this is reflected in figures recently compiled in anticipation of the award of State drill attendance medals authorized by the Legislature in 1931. These are to be awarded for 100% attendance at drills and encampments over periods of one, three and five years, and 237 members of the Regiment have qualified.

Athletics have been receiving their fair share of attention during the winter, basketball and boxing coming in for the greatest amount of activity. Teams representing the Troops of the 2nd and 3rd Squadrons have been playing in a local league organized in the central part of the State, while a team selected from among all the Philadelphia units has been entered in the play-off for the Military Athletic League championship. The Amateur boxing tournament being conducted by the Military Athletic League in the Philadelphia area has attracted a large number of entrants from the Regiment.

### 104th Cavalry, Pennsylvania N. G.

Harrisburg, Pennsylvania

Colonel Edward J. Stackpole, Jr., Commanding  
Captain Hans E. Kloepper, Unit Instructor  
Captain George H. Millholland, Unit Instructor  
Lieutenant Colonel George J. Shoemaker  
Captain Robert S. Cowan  
Captain John E. Shade  
1st Lieut. John H. F. Bittner  
1st Lieut. James E. Snyder

**Hq. Troop**  
Captain Herbert E. Thornber  
1st Lieut. Charles H. Kenworthy  
2nd Lieut. Wayne W. Brame  
2nd Lieut. John E. Gray

**M. G. Troop**  
Captain Robert J. Krepps  
1st Lieut. Gay E. Duncan  
1st Lieut. Harry H. Billett  
2nd Lieut. Frank J. Dippery

**Hq., 1st Squadron**  
Major Benjamin C. Jones  
1st Lieut. Paul M. Kienzie

**Troop A**  
Captain William A. E. Lentz  
1st Lieut. John K. Dufton  
2nd Lieut. Lester A. Shull

**Troop B**  
Captain Jesse L. Waite  
1st Lieut. Thomas J. Barnhart  
2nd Lieut. Paul F. Adams

**Troop C**  
Captain Benjamin I. Levine  
1st Lieut. John S. Fair, Jr.  
2nd Lieut. Walter J. Gippich

**Hq., 2nd Squadron**  
Major Albert H. Stackpole  
1st Lieut. Milton E. Koehler

**Troop D**  
Captain Edward D. Strite  
1st Lieut. Ralph B. Brown  
2nd Lieut. Harry C. McNew

**Troop E**  
Captain Harris N. Sumner  
1st Lieut. Walter C. Plasterer  
2nd Lieut. Charles G. Shaffer

**Troop F**  
Captain Allen J. Stevens  
1st Lieut. Ira D. Cope  
2nd Lieut. Daniel M. Timmens

**Hq., 3rd Squadron**  
Major Samuel E. Ertting  
1st Lieut. Wilbur Halbert

**Troop G**  
Captain Clyde E. Fisher  
1st Lieut. Charles M. Pollock  
2nd Lieut. Edgar L. Dapp

**Troop H**  
Captain Robert C. Lutz  
1st Lieut. Rollin M. Brightbill  
2nd Lieut. John T. Bell

**Troop I**  
Captain John T. Williams  
1st Lieut. James C. Williams  
2nd Lieut. John E. McCreight

The Regiment has entered on its third and final year program for the elimination of recruits at camp. This plan was started in 1931, at which time recruiting ceased on the 30th day of April and was not resumed until September 1st. Similar procedure was followed in 1932, and this year will wind up the schedule so that all recruiting in future years will be done between September 1 of one year and April 30 of another.

The results attained have been fruitful, giving Troop Commanders a full complement of enlisted personnel for training, the elimination of separate recruit schools during the Field Training period, and a more satisfactory training program throughout the Regiment.

#### Training for Commissions

The Regiment is again conducting, through its Regular Army Instructors, two Eligibility Schools to train enlisted personnel of the Regiment for commissions in the Cavalry Reserve Corps, for war-time assignment to fill vacancies in the Regiment. Two schools are being held, one at Harrisburg, where Regimental Headquarters is located, and the other at Tyrone, Headquarters of the First Squadron. Captain Hans E. Kloepper, Instructor at Harrisburg, is conducting one school, with Captain George H. Millholland, Instructor at Tyrone, conducting the other. The subjects listed for Second Lieutenants in Army Regulations 140-24 are being studied. At the conclusion of the School, in the spring, practical tests will be given each student, and those who pass satisfactorily will be recommended for Certificates of Capacity.

The Regiment conducted a similar school in 1929. Many of the successful candidates at that school now hold active commissions in the Regiment.

#### Holds Test Mobilization

The Regiment held a Test Mobilization, under its State Mobilization Plan, on November 22, 1932. The

situation assumed that the Governor of Pennsylvania had ordered out the 104th Cavalry for a State emergency. Channels of communication were confined to the telephone, telegraph and personal contact, in order not to alarm the civilian populace. On future occasions the probabilities are that the newspapers, police departments, local radio stations, and other means will be used to accelerate the assembly of the various Troops.

Considerable ingenuity was displayed by most organizations in the rapid assembly of their personnel. The test was made without previous warning. Of a strength of 52 officers and 788 men, only 2 officers and 62 men failed to report within three hours. Of the 62 missing, a large percentage had actually been contacted, but Troop Commanders exercised their judgment in not taking men away from their work. The mobilization was initiated at 3:00 P. M.

### 53rd Cavalry Brigade

#### Milwaukee, Wisconsin

Brigadier General Ralph M. Immell, Commanding  
Major C. J. Wilder, Unit Instructor  
Major Kellogg W. Harkins 1st Lieut. Fred J. Caffrey  
Captain George A. Flad 1st Lieut. Ceburne S. Bender  
Captain Atwood C. Elliott 2nd Lieut. Lawrence Modder  
Headquarters Troop, 53rd Cavalry Brigade  
Captain Leo W. Veaser 2nd Lieut. Odin E. Wang

On August 14, 1932, Brig. Gen. James J. Quill of the 53d Cavalry Brigade retired from active service at the age of sixty-four. A banquet in his honor was held at the Light Horse Squadron Armory, Milwaukee, which was attended by about three hundred with representatives from every cavalry unit in the state. Some of those present were Major General Frank Parker, Commanding General, 6th Corps Area, Adjutant General Ralph M. Immell, Brig. Gen. Irving A. Fish, Brig. Gen. Paul B. Clemens, Harold Falk, Civilian Aide to the Secretary of War, and many others.

General Quill, with 46 years of service, while retiring from active duty remains as custodian of the Light Horse Squadron Armory, Milwaukee, and will continue to supervise the training of Headquarters, 53d Cavalry Brigade, and the 105th Cavalry.

### 105th Cavalry, Wisconsin N. G.

#### Milwaukee, Wisconsin

Colonel John C. P. Hanley, Commanding  
Major C. J. Wilder, Unit Instructor  
Major J. K. Colwell, Unit Instructor  
Lieutenant Colonel John D. Alexander  
Captain Willard E. Baum  
Captain Julius E. Rektad  
Captain Douglas J. McKenzie  
1st Lieut. Otto F. Schroeder

Hq. Troop  
Capt. Herbert E. Whitaker  
1st Lt. Edward L. Carmichael  
2nd Lt. Robert J. McIntyre, Jr.  
2nd Lt. Erwin C. Biesel

M. G. Troop  
Capt. Rex S. Hovey  
1st Lt. Walter C. Crocker, Jr.  
1st Lt. William A. Sherman  
2nd Lt. Marshall G. Lassek

Hq., 1st Squadron  
Major Rudolph H. Mieding  
1st Lieut. Elmer F. Roeming

Troop A  
Captain Gilbert E. Embury  
1st Lieut. Allyn H. Tidball  
2nd Lieut. Clifton G. Burke

Troop B  
Captain Charles V. Narlow  
1st Lieut. Louis G. Patterson  
2nd Lieut. John C. Burke

Hq., 2nd Squadron  
Major Fred C. Coggeshall  
1st Lt. Melbourne E. Rabedeau  
Troop B  
Captain Albert E. Axtell  
1st Lt. Benjamin F. Stahl, Jr.  
2nd Lt. Arthur W. Johnson

Troop F  
Captain Everett C. Hart  
1st Lt. Erwin P. Beyer  
2nd Lt. Willard A. McLellan

Hq., 3rd Squadron  
Major Jacob W. Sproesser  
1st Lt. George O. Lewandowski

Troop I  
Captain William G. Lohmaier  
1st Lt. Leo W. Puerner  
2nd Lt. William J. Urban

Troop K  
Capt. Edwin H. C. Kaercher  
1st Lt. Bernard J. Richter  
2nd Lt. Joseph G. Richter

Last June two new instructors from the Regular Army were assigned to the 105th Cavalry and stationed at Milwaukee. They are Major C. J. Wilder and Major J. K. Colwell. The Cavalry of Wisconsin welcomes both officers and hopes to make their detail as pleasant as possible.

The officers at Milwaukee are participating in a mounted competition consisting of different jumping events and cross-country riding. This competition has aroused considerable interest amongst the officers and so far has resulted in a very close race, it being almost impossible to predict the ultimate winner.

In addition to conducting weekly officers' and N. C. O. schools at Milwaukee, Major Wilder and Major Colwell are conducting weekly schools at Watertown for the officers and selected N. C. O.s from Troops I and K. This is an innovation that is already bearing fruit, and Major Sproesser of the 3d Squadron and the two instructors are greatly pleased at the results obtained.

Headquarters Troop, 53d Cavalry Brigade, and all troops of the 105th Cavalry are competing in the Chief of Militia Bureau's Rifle Team Competition. Last year Troop K won the regimental and state events, and we are all hoping that one of the troops will represent Wisconsin again.

First Lieut. Benjamin F. Stahl, Jr., Troop E, Kenosha, has been detailed to attend the Troop Officers' Course, Cavalry School, Fort Riley, Kansas. Last year, Lieut. Carmichael, Headquarters Troop, Milwaukee, attended and made a very fine record. We all know that Lieut. Stahl will represent the Cavalry of Wisconsin in a creditable manner at Fort Riley.

The 105th Cavalry welcomes two new 2d Lieutenants who recently received their commissions. 2nd Lt. Robert J. McIntyre assigned to Headquarters Troop, and 2nd Lt. William J. Urban assigned to Troop I.

In addition to their regular activities the units at Milwaukee are furnishing horses and instructors to a very enthusiastic class of Reserve Officers, which meets every Saturday afternoon. The class has an average attendance of sixty officers.

Headquarters, 53d Cavalry Brigade, and the 105th Cavalry camp dates for 1933 are June 16th to 30th inclusive.

### 106th Cavalry

#### Chicago, Illinois

Colonel Walter J. Fisher, III, N. G., Commanding  
Lieut. Colonel Richard E. Cummins, Unit Instructor  
Captain Mortimer F. Sullivan, Unit Instructor  
Lieut. Colonel Harold T. Weber, Mich. N. G.  
Captain Chester F. Gage, Mich. N. G.  
Captain John E. Wolfe, III, N. G.  
Captain Charles F. Sleeper, III, N. G.  
1st Lieut. William F. Hewitt, III, N. G.

Hq. Troop (Ill. N. G.)  
Captain Paul B. Butler  
1st Lieut. Roy D. Keehn, Jr.  
2nd Lieut. William F. Kirby

M. G. Troop (Ill. N. G.)  
Captain Mark Plaisted, Jr.  
1st Lieut. Maurice G. Peter  
1st Lieut. Charles R. Bean  
2nd Lieut. Joseph Temple

Hq., 1st Squadron (Mich.)  
Major Frank T. Warner  
1st Lieut. George D. Crow

Troop A  
Captain William R. Hinz  
1st Lieut. Paul A. Brown  
2nd Lieut. John W. Van Erkel

Troop B  
Captain Howard L. Freeman  
1st Lieut. Ralph S. Pollard  
2nd Lieut. Kenneth W. Church

Hq., 2nd Squadron (Ill.)  
Major Kenneth Buchanan  
1st Lt. William A. Crook

Troop E  
Captain Ralph G. Gher  
1st Lt. Max S. Flewellin  
2nd Lt. John F. Hornfield

Troop F  
Captain Edward L. Styles  
1st Lt. Walter P. Binney  
2nd Lt. John F. Hornfield

Hq., 3rd Squadron (Mich.)  
Major Roy F. Bierwirth  
2nd Lieut. Milford S. Hicks

Troop I  
Captain Frank J. Wise  
1st Lt. Henry C. Lesszynski  
2nd Lt. William D. Linn

Troop K  
Captain Victor J. Garbarino  
1st Lt. Edward P. O'Connor

### 54th Cavalry Brigade

#### Cleveland, Ohio

Brigadier General Dudley G. Hard, Commanding  
Lieutenant Colonel Clark P. Chandler, Unit Instructor  
Major Maurice J. Meyer, Executive Officer  
Captain William B. Higgins, S-1  
Captain John W. McCaslin, S-2-3  
1st Lieut. James F. McCaslin, S-4  
1st Lieut. John B. Coffinberry, Aide  
2nd Lieut. John C. Morley, Aide  
Headquarters Troop, 54th Cavalry Brigade  
Captain James T. Flower, Jr. 2nd Lieut. Russell A. Trombley

### 107th Cavalry, Ohio N. G.

#### Cleveland, Ohio

Colonel Newell C. Bolton, Commanding  
Lieut. Colonel Clark P. Chandler, Unit Instructor  
Major John T. Minton, Unit Instructor  
Lieutenant Colonel Woods King  
Captain Ellsworth H. Sherwood  
Captain Hiram Garretson  
Captain Bryce H. Dettor  
1st Lieut. Alfred W. Gartman

Hq. Troop  
Captain Donn R. Austin  
1st Lieut. Lewis L. Austin  
2nd Lieut. Ralph N. Kingsbury  
2nd Lieut. John B. Votaw

M. G. Troop  
Captain Samuel B. Wood  
1st Lieut. William J. Manly  
2nd Lieut. Ralph W. E. Brady, Jr.  
2nd Lieut. Edward L. Shealey

Hq., 1st Squadron  
Major Ralph T. King  
1st Lieut. Charles L. Ebert  
Troop A  
1st Lieut. Edwin R. Mutch, Jr.  
2nd Lieut. Joseph R. Fawcett

Troop B  
Captain Julian M. Andrus  
1st Lieut. Richard L. Henn  
2nd Lieut. Gilbert P. Schafer

Hq., 2nd Squadron  
Major Clyde E. Lamiell  
1st Lieut. William A. Bird  
Troop E  
Captain Leroy E. Work  
1st Lt. Clarence L. Winters  
2nd Lt. John T. Bingham

Troop F  
Captain Legrand J. Measell  
1st Lieut. August S. Montz  
2nd Lieut. Joseph F. Sutter

Hq., 3rd Squadron  
Major Roy Green  
1st Lieut. Havelock D. Nelson  
Troop I  
Capt. James D. Macwhinney  
1st Lt. Louis Nippert  
2nd Lt. Frederick J. Kroencke

Troop K  
Captain William W. Johnson  
1st Lt. Herman P. Goebel, Jr.  
2nd Lt. Lionel A. Petrov

### 108th Cavalry

#### New Orleans, La.

Colonel James E. Edmonds (Louisiana N. G.), Commanding  
Major John Kennard, Unit Instructor  
Captain M. H. Patton, Unit Instructor  
Lieutenant Colonel Millard M. Foust (La.), Executive Officer  
Captain Charles N. De Russey (La.), Adjutant  
Captain Douglas G. Drennan (La.), Supply Officer  
1st Lieut. William M. Crawford (Ga.), Personnel Adjutant  
1st Lieut. Thomas A. Pedneau (La.), Plans and Training Officer  
1st Lieut. Ernest D. Elliott, Chaplain

Hq. Troop (Louisiana)  
Captain Fred A. Wulff, Jr.  
2nd Lieut. Stuart E. Smith  
2nd Lieut. James P. Armstrong, Jr.  
2nd Lieut. John L. Vincent

M. G. Troop (Georgia)  
Captain Theodore Goulsby  
1st Lieut. Wesley N. Moran  
1st Lieut. Ray Love  
2nd Lieut. William Erb

Medical Dept. Det.  
Major Charles E. Verdier  
Captain Frank S. Oser  
Captain Edward F. Karster, Det.

Hq., 1st Squad. (Georgia)  
Major Joseph B. Fraser, Jr.  
1st Lieut. William S. Waldo

Medical Det. Det.  
Captain George L. Touchton  
Captain Herbert G. Bailey

Troop A  
Capt. Alpheus L. Henderson  
1st Lieut. Frederick H. Quante, Jr.  
2nd Lt. Charles S. Rockwell, Jr.

Troop B  
Captain Charles J. Martin, Jr.  
1st Lieut. Ernest V. Martin  
2nd Lieut. John D. Darsey

Hq., 2nd Squadron (Louisiana)  
Major Jim W. Richardson  
1st Lt. Virgil F. Underwood  
Troop E  
Captain Karl L. Starns  
1st Lieut. William V. Knight  
2nd Lieut. Tom Hall

Troop F  
Captain Esco C. Simmons  
1st Lieut. Wesley P. Holden  
2nd Lieut. Lewis O. Lane, Jr.

Hq., 3rd Squadron (Louisiana)  
Major Frederick H. Fox  
2nd Lieut. James F. Barr

Troop I  
Captain John Barkley  
1st Lt. Joseph H. Duggan, Jr.  
2nd Lt. Joseph Gomila

Troop K  
Captain Jules Reaud, Jr.  
1st Lieut. Victor E. Reaud  
2nd Lieut. Herman J. Huber

During the Armory and Field Training Period the following objectives and activities are planned for the Regiment.

A. A schedule has been drawn up showing the officers required to expand the 108th Cavalry from a peace-time organization to a war time organization in case of a national emergency. Noncommissioned officers and officers of the regiment are at present taking

examinations to fit them to hold the vacancies that would occur in the regiment in the event of such an emergency. At present approximately 30% of the officers and non-commissioned officers have qualified for promotion in the Officer's Reserve Corps.

B. During the Field Training Period one complete day of 24 hours will be allotted to Platoon problems and tests. The Platoon Tests will be patterned after the Cavalry Leadership Test for small units. The twelve rifle platoons of the Regiment, each re-enforced by one Machine Rifle Squad, will take the field under the leadership of their platoon leaders. Each platoon will act absolutely on its own initiative.

C. Range practice, Course D. Pistol and Rifle will be completed before the Field Training Period.

D. During the Armory Drill Period, gaiting courses will be constructed at the various posts of the Regiment. All officers and noncommissioned officers will be expected to become proficient in the new 7-mile per hr. marching rate for Cavalry. Horses will be trained and confirmed in the 4-mile walk and lead and the 9-mile trot.

E. In New Orleans, we are gratified to report that there has been a considerable amount of interest revived in horses and horsemanship. During the last two years, there have been two high class riding schools established here. Several of the most prominent citizens of the city have banded together and incorporated a Horse Show Association. During the last two months, two horse shows have been held in New Orleans, one at the Jefferson Racing Track and the other at the Fair Grounds Racing Track. These shows were both given national advertising and were attended by thousands of local and visiting horse lovers and turf followers. Officers of the Regiment entered both of these shows and made a splendid showing in all events.

### 109th Cavalry

#### Nashville, Tenn.

Colonel Henry Dickinson, Commanding  
Major Joseph F. Richmond, Unit Instructor  
Major William H. W. Youngs, Unit Instructor  
Lieutenant Colonel Oscar L. Farris  
Captain J. Donald Ross, Adjutant  
Captain William A. Reed, P. & T. Officer  
Captain Robert C. Searcy, Supply Officer  
Captain Thomas B. Cowan, Chaplain

Hq. Troop (Tenn.)  
Capt. Willoughby P. Jackson  
1st Lieut. Robert Upshaw  
2nd Lieut. Waverly H. Jackson  
2nd Lieut. Joseph C. Jackson

M. G. Troop (N. C.)  
Capt. Godfrey C. Kimball  
1st Lieut. George Feld  
1st Lieut. John F. Long  
2nd Lieut. Henry H. Nicholson

Medical Detachment  
Major Frank F. Harris  
Captain Charles F. Porter  
Vet. Officer Guy P. Hatcher

Hq., 1st Squadron (Tenn.)  
Major Ira R. Summers  
1st Lt. Hugh J. Kennedy, Adj.

Troop A  
Captain William H. Crawford  
1st Lieut. Hugh J. Childress  
2nd Lieut. Milton L. Acuff

Troop B  
Captain Paul H. Jordan  
1st Lieut. Richard M. Nichols  
2nd Lieut. Raymond J. Bork

Hq., 2nd Squadron (Tenn.)  
Major Laurin B. Askew  
1st Lt. John G. Turner, Adj.

Troop E  
Capt. Ford N. McNeill, Jr.  
1st Lt. William R. Binkley  
2nd Lt. Neil P. Currey

Troop F  
1st Lt. Lewis L. Ingram  
2nd Lt. Jack K. Smith

Hq., 3rd Squadron (N. C.)  
Major Eugene P. Coston  
1st Lieut. Carl O. Shytle

Troop I  
Captain Wiley M. Pickens  
1st Lieut. Charles R. Jonas  
2nd Lieut. Edgar H. Reece

Troop K  
Captain William C. Lyda  
1st Lieut. Joseph W. Tallent  
2nd Lieut. Robert E. Bard

The historical 109th Cavalry, the only Tennessee outfit directly connected by authentic records with the

Forrest's famous cavalry in the War between the States, has ended an eventful year.

The year 1932 was marked by many changes in the accommodations for Federal property and facilities for mounted drill. Troop A of Cookeville, Tennessee commanded by Captain Crawford, erected a new stable, corral, and other buildings that make it one of the best equipped outfits in the state. Similarly Troop F of Clarksville, Tennessee, under Captain Askew, completed a new stable and grounds that, for the first time, give them the necessary terrain for mounted drill and maneuvers. Troop B of Chattanooga has established an out-of-town headquarters for the organization with the most spacious accommodations available in the regiment. Besides a stable, caretaker's quarters and a club house, this outfit has acreage available for mounted drill, polo and a rifle range. Headquarters troop at Columbia and Troop E of Nashville are planning further improvements in their property and drill areas.

The organization went to camp at Fort Oglethorpe, Georgia, from July 17 to July 31 under command of Lieutenant-Colonel Stuckey F. McIntosh. The commanding officer, Colonel Henry Dickinson, was unable to attend because of his candidacy for Congress in the Hermitage district. At that camp we had our first contact with Major J. F. Richmond who succeeded, as cavalry instructor, Lieutenant-Colonel George R. Somerville, who was transferred to the Finance Department and ordered to Washington, D. C.

A state statute included in the code of 1932 provided for the election of officers by enlisted men and the election of field officers by troop officers. Adjutant-General W. C. Boyd of Tennessee issued a general order enforcing this act. As a result elections were held in each outfit. Considerable upsets in the *status quo* of some organizations resulted. After the election of troop officers was completed the commanding officer, Colonel Dickinson, was unanimously reelected.

Because of labor disputes resulting in considerable violence and destruction of property in the Wilder and Crawford coal mining section, Troop A of Cookeville was ordered to this district on October 25, 1932, and has been on duty intermittently since that time. The terrain around Wilder and Crawford is such that it makes infantry operations almost impossible, although several companies of infantry were ordered to reinforce Troop A during the more critical period. The country in this section is very mountainous and heavily wooded, necessitating the use of mounted patrols day and night. Captain Crawford and his organization gained the respect of both factions and have handled an unpleasant situation admirably.

The officers of 109th Cavalry stationed in Nashville have taken an active part in equestrian sports. The Commanding officer, Colonel Dickinson is M. F. H. of the Harpeth Hills Hunt situated about ten miles outside of Nashville. Colonel Dickinson was also recently elected to the executive committee of the National Guard Association of Tennessee.

Captain Ford N. McNeill commanding Troop E at Nashville is planning extensive alterations in the property housing his troop. The stable his organization occupies was formerly used by some of the most celebrated horses of Tennessee, although its condition has deteriorated in the last few years. The men of the organization comprising many artisans have started on extensive improvements of the stables and grounds. This organization also plans to purchase horses for a troop polo team.

The regiment had the honor of having one of its officers, Major Oscar L. Farris, elected President of the National Guard Association of Tennessee for the year just past. At the recent National Guard Convention at Norfolk, Virginia, Major Farris sponsored several measures particularly advantageous to the mounted services.

### 110th Cavalry, Massachusetts N. G.

Boston, Mass.

Colonel Dana T. Gallup, Commanding  
Captain Frederick H. L. Ryder, Unit Instructor  
Lieutenant Colonel Percival C. Lewis  
Captain Robert M. Blair  
Captain William G. Regan  
Captain Harold A. Rose  
1st Lieut. George E. Deyarmond

**Hq. Troop**  
Captain Roland A. Mangini  
1st Lt. Gunnar F. Fredrikson  
2nd Lt. Charles J. Tinkham  
2nd Lt. Edwin A. Smith  
**Hq. 1st Squadron**  
Major Philip L. Brown  
1st Lieut. Allan E. Dick  
**Troop A**  
Captain Herman R. Hoffman  
1st Lieut. Edward F. Grigg  
2nd Lieut. Collin S. Campbell  
**Troop B**  
Captain Richard E. Anthony

1st Lieut. Royal C. Wilson  
2nd Lieut. Edwin O. Carlson  
**Hq. 2nd Squadron**  
Major Arthur W. Smith  
1st Lieut. Harvey E. Landers  
**Troop E**  
Captain Everett H. Jenkins  
1st Lieut. Nathaniel S. Carter  
2nd Lieut. Edwin P. Cushman  
**Troop F**  
Captain Herbert N. Odell  
1st Lieut. John A. Hanson  
2nd Lieut. Robert D. Rodas

137 enlisted men in this regiment are engaged in taking the Army Extension Courses under the direction of the Federal instructor, Capt. F. H. L. Ryder. Schools are held each month and the lessons discussed and illustrated in conference manner. While the enlisted men are busily engaged with Subcourse 20-4, Combat principles, the Rifle Squad and Platoon, the officers, having already completed Subcourse 30-1, this year, are now on Subcourse 30-3, Marches and Security.

Col. Dana T. Gallup, the regimental commander, is in receipt of a letter from Maj. Gen. George E. Leach, Chief of the Militia Bureau, congratulating the regiment on having 100% attendance for the sixth consecutive year of field training.

2nd Lieut. Edwin O. Carlson, Troop B, has been assigned to attend the Troop Officers' Course at Fort Riley, Kan. Pvt. Curtis R. Low, Troop E, with an average of 95.8% led the more than 50 National Guardsmen from various sections of the state in the recent preliminary examinations for West Point appointments, conducted by the Commonwealth. Another E Trooper, Pvt. 1st Class David R. Quinn, placed sixth with 85.6%. Last year Pvt. Kelso G. Clow, of the same troop, was high man, and is now a cadet at the Military Academy.

### 111th Cavalry, New Mexico N. G.

Santa Fe, N. M.

Colonel Clyde E. Ely, Commanding  
Major Frederick R. Lafferty, Unit Instructor  
Captain A. H. Norton, Unit Instructor  
Captain E. K. Newmann, Adjutant  
Captain Harry M. Peck, Int. & P. & T. Officer  
Captain William A. Poe, Supply Officer  
Captain George J. Weber, Chaplain  
1st Lieut. B. P. Wood, Personnel Adjutant

**Band**  
Warrent Officer Fred K. Ellis  
**Hq. Troop**  
Capt. Albert F. Marth  
1st Lieut. James H. Hazlewood  
2nd Lieut. James E. Sadler  
2nd Lieut. William B. Reardon

**M. G. Troop**  
Captain John C. Linkart  
1st Lieut. Ray Harrison  
1st Lieut. Henry M. Miller  
Medical Detachment  
Major John D. Lamont, Jr.

**Troop E**  
Captain James F. Adams, M. C.  
Captain T. I. Means, V. C.  
Captain Wallace E. Brown  
1st Lieut. M. C. Berrardi

**Troop F**  
Captain Paul W. Howard  
1st Lieut. Harold J. Vanderford  
2nd Lieut. Earl E. Irish

**Troop B**  
Captain Alfonso B. Martinez  
1st Lieut. Jose A. Castillo  
2nd Lieut. Augustus W. Wilson  
**Hq. 2nd Squadron**  
Major Charles G. Sage  
1st Lieut. Oliver B. Witten

**Troop E**  
Captain Memory H. Cain  
1st Lieut. Paul W. Schurtz  
2nd Lieut. Claud W. Stump

**Troop F**  
Captain Stuart Stirling  
1st Lieut. John W. Turner

**Hq. 3rd Squadron**  
Major Aud E. Lusk  
1st Lieut. Herbert Mitchell

**Troop J**  
Captain William R. Anderson  
1st Lieut. William C. Brown  
2nd Lieut. Virgil O. McCollum

**Troop K**  
Captain Cristobal J. Quintana  
2nd Lieut. Harry E. Simms  
2nd Lieut. Palemon R. Martinez

### STATE OF NEW MEXICO OFFICE OF THE ADJUTANT GENERAL

Santa Fe

January 19, 1933.

#### GENERAL ORDERS No. 2

The Commander-in-Chief, with sincere regret, announces the death of Colonel Norman King, 111th Cavalry, which occurred at his home in Santa Fe, on January 3, 1933. The passing of this officer leaves a void in the National Guard of New Mexico and his many friends throughout the State, a feeling of deep and irreparable loss.

Colonel King was born in the District of Columbia, August 2, 1871, and after graduating from the Maryland Agricultural College, and George Washington University, came to New Mexico to take up his permanent residence. His initial service with the National Guard of New Mexico dates back to May 29, 1896, when he was commissioned First Lieutenant, First New Mexico Infantry, and he passed successfully through all grades, receiving his promotion to Colonel, 111th Cavalry, March 6, 1924. His service included active duty with the First New Mexico Infantry along the Mexican Border during the troubled days preceding the entry of the United States into the World War. During the World War he served as 1st Lt. Marshall at Camp Kearney, California, where he commanded the 111th Company, Headquarters and Military Police, later accompanying his command to France. Subsequently he became Brigade Adjutant of the 10th Infantry Brigade, overseas. After his discharge from Federal service, on May 13, 1919, he rejoined the National Guard of this State, serving as United States Property and Disbursing Officer for New Mexico, and then as Lieutenant Colonel of the 12th Engineers, prior to his promotion to the command of the 111th Cavalry.

He was a graduate of the Army War College, G-2 course, 1924, and was on the General Staff Eligible List. He was awarded the Border Service Medal for his service on the Mexican Border in 1916, and the Victory Medal for his participation in the World War. In addition he was the first officer of this State to receive the Distinguished Service Medal of New Mexico. This award was made for exceptionally long and meritorious service to the State as an officer of the National Guard; an oak leaf cluster was awarded for exceptionally meritorious and efficient service to the state as Commanding Officer of the Martial Law District embracing McKinley County during the period of the mine and railroad strikes in 1922. A second oak leaf cluster was awarded for exceptionally meritorious and efficient service to the State as Commanding Officer of the Martial Law District in San Miguel County in 1924. He also received awards of the State Medal for Long Service with the Guard and the Attendance Medal.

In his passing the State has lost a tactful, considerate, unselfish and lovable officer, of long, faithful and efficient service. The heartfelt sympathy of the personnel of these Headquarters and of the National Guard is extended to his bereaved wife.

BY COMMAND OF THE GOVERNOR:  
OSBORNE C. WOOD,  
The Adjutant General,  
Chief of Staff.

### 56th Cavalry Brigade

Houston, Texas

Brigadier General Jacob F. Walters, Commanding  
Lieutenant Colonel Innis P. Swift, Unit Instructor  
Major Edmond L. Lorehn  
Captain John M. Mettenheimer  
Captain Fred W. Edmiston  
1st Lieut. John W. Neville  
1st Lieut. Charles A. Peritz  
2nd Lieut. John W. Wiseheart

**Hq. Troop, 56th Cavalry Brigade**  
Captain Grover G. Goodrich  
2nd Lieut. John A. Ellsworth

### 112th Cavalry, Texas N. G.

Dallas, Texas

Colonel Laurence E. McGee, Commanding  
Major Carl H. Strong, Unit Instructor  
Lieutenant Colonel Walter B. Byron  
Captain John A. Mann  
Captain Albert S. Johnson  
Captain McLeod McIntire  
1st Lieut. Carroll R. Allen

**Hq. Troop**  
Captain George A. Brewer  
1st Lieut. James H. Hickerson  
2nd Lieut. James I. Grant  
2nd Lieut. Allen B. Wallace

**M. G. Troop**  
Captain John B. Dunlap  
1st Lieut. Louis A. Beecherl  
2nd Lieut. Forrest M. Cowman  
2nd Lieut. Relf N. Fenley

**Hq. 1st Squadron**  
Major William P. Cameron  
2nd Lieut. George S. Metcalfe

**Troop A**  
Captain Campbell W. Newman  
1st Lieut. William M. Hill  
2nd Lieut. James H. Neel

**Troop B**  
Captain David T. Stafford  
1st Lieut. William T. Starr  
2nd Lieut. John E. Rogers, Jr.

**Hq. 2nd Squadron**  
Major Clarence E. Parker  
1st Lieut. William A. Johnson

**Troop E**  
Captain James M. Gilbough  
1st Lieut. Henry L. Phillips  
2nd Lieut. Thomas R. Houghton

**Troop F**  
Captain Royal G. Phillips  
1st Lieut. William E. Parker  
2nd Lieut. Allen E. Alston

Training since the first of the year has concentrated on two objectives:

Various phases of marksmanship: Gallery Practice, Pistol Dismounted, and the mounted Pistol and Saber Course. Much of the Gallery Practice is now done outside of regular drill hours in the evening, as all troops are now equipped with well lighted Gallery Ranges indoors.

Training for Federal Inspection: This includes dismounted and mounted scouting and patrolling, musketry, etc. Storerooms are in excellent shape, but marking tables used in this Corps Area are being carefully checked against actual conditions, to obtain as near a perfect score as possible.

Headquarters Troop is specializing in two-way Air-Ground radio communication, panel work, dropped and pick-up messages and small tactical problems in cooperation with the 366th Observation Squadron, Hensley Field, Texas.

Troop A won the small bore competition by the narrow margin of ten points to represent the regiment in the Chief of Militia Bureau's Match.

Troop F at Tyler, Texas, is just moving into a new \$15,000.00 establishment provided by local effort.

### 57th Cavalry Brigade

Des Moines, Iowa

Brigadier General Park A. Findley, Commanding  
Major Frank G. Ringland, Unit Instructor  
Major John Baird Smith (Kansas), Executive Officer  
Captain Frank B. Hallagan, Adjutant, S-1  
Captain Ray C. Fountain, S-2, S-3  
1st Lieut. Glenn L. Laffer, S-4  
1st Lieut. Claire B. Laird, A. D. C.  
2nd Lieut. Morris F. Hanson, A. D. C.

### 113th Cavalry, Iowa N. G. Des Moines, Iowa

Colonel Raymond A. Yenter, Commanding  
Major Frank G. Ringland, Unit Instructor  
Captain Rohland A. Isker, Unit Instructor  
Lieutenant Colonel Maxwell A. O'Brien  
Captain Thomas P. Hollowell, Jr.  
Captain Frank E. Bigelow  
Captain Ronald B. Engelbeck  
1st Lieut. Donald F. Clutter

**Hq. Troop**  
Captain Ellis W. Conkling  
1st Lieut. Wilbur F. Stephenson  
2nd Lieut. Homer G. Hamilton  
2nd Lieut. Charles J. Crawford  
**M. G. Troop**  
Captain George W. Hoar  
1st Lieut. Ralph D. Hoar  
1st Lieut. Charles E. Roberts  
2nd Lieut. Harold T. Caldwell  
**Hq., 1st Squadron**  
Major Marion C. Whitmore  
1st Lieut. Fred C. Tandy  
**Troop A**  
Captain Walter Livingston  
1st Lieut. Kenneth S. Enochson  
2nd Lieut. Edwin P. Wallace  
**Troop B**  
Captain Leslie E. Williams  
1st Lieut. Tom H. Ross  
2nd Lieut. William C. Brunadon

### 114th Cavalry, Kansas N. G. Topeka, Kansas

Colonel William K. Herndon, Commanding  
Major Welton M. Modisette, Unit Instructor  
Major T. F. Limbocker, Unit Instructor  
Lieutenant Colonel Paul A. Cannady, Executive Officer  
Captain Clarence A. Hudson, S2 & 3  
Captain Jewell K. Watt, S4  
Captain Monte V. Kistler, S1  
Captain Roy N. Hillier, Chaplain  
1st Lieut. Ward W. Conquest, Personnel Adjutant

**Hq. Troop**  
Captain Chester L. Thomas  
1st Lieut. Byron S. Cohn  
2nd Lieut. Herbert L. Crapson  
2nd Lieut. Philip H. Hoffman  
**M. G. Troop**  
Captain Leo A. Swoboda  
1st Lieut. Harry L. Lyon  
1st Lieut. J. H. Hetherington  
2nd Lieut. Harry O. Willhite  
**Squad**  
W. O. Harry M. Swartz  
**Hq., 1st Squadron**  
Major Eric J. Monroe  
1st Lieut. Albert F. Tustison  
**Troop A**  
Captain R. L. Thompson, Jr.  
1st Lieut. Wendell W. Perham  
2nd Lieut. Emerson E. Lynn  
**Troop B**  
Captain Francis W. Walden  
1st Lieut. Braum L. Bentley  
2nd Lieut. Frank W. Sutton  
**Hq., 2nd Squadron**  
Major Ralph A. Poe  
1st Lieut. Claude N. Shaver

#### The Tail Wags the Dog

The 114th Cavalry, Kansas National Guard, like many other Guard organizations, has and is being benefitted by the w.k. Depression to which we are almost becoming accustomed.

Recruiting, drill attendance, turn-over, and some other things are almost forgotten. Time and energy formerly devoted to those matters is now being utilized to increase the knowledge, training and efficiency of all ranks and grades. Phases of training never dreamed of in the days of prosperity are becoming routine. Courses of study which were assigned only to officers a few years ago are now being pursued by practically every non-com and specialist and many others as well. It is not unusual to find twenty-five percent, and in some troops even fifty percent, of the enlisted personnel enrolled in Extension School Study Courses.

\*All officers of this regiment are members of the U. S. Cavalry Association.

This stimulation of interest in study was not brought about easily. The importance of study was realized several years ago and introduced into the Regiment by requiring all staff officers to enroll in the Correspondence Study Courses and complete a minimum of forty hours each year. Later, this requirement was extended to include all officers of the Regiment. This was not an easy undertaking. It did not appeal to many of the officers. Many performed the work grudgingly, some did it under circumstances almost compulsory, a few flatly refused.

Now, the situation is changed. Our program still specifies a minimum study requirement but it is of no more necessity than the regulation which requires that payrolls shall be submitted at certain intervals. Officers began to realize that knowledge of military tactics could be acquired by study as well as by experience and years of service. This aroused interest, and interest developed into enthusiasm. This interest and enthusiasm developed to the point where it was taken up by the enlisted personnel, and the officers now have to work harder than ever, or appear incompetent in the eyes of their men. *The tail wags the dog.*

Some may think that so much "paper" training is apt to develop a lot of "swivel chair" soldiers but we do not find it so. True, a man who has put in months of study without actual practice may feel and appear "lost" when he rides out on the drill field at camp for the first time but he soon finds himself. The combat principles, contours, etc., stored up in his memory soon shape themselves to the hills and ravines over which he rides and, before camp is over, he is saying and doing things in the regulation style and manner. Our experiences during the past few years at camp have proved this to be true, and we are looking forward with more enthusiasm than ever to this year's camp.

### 58th Cavalry Brigade Cheyenne, Wyo.

Brigadier General William R. Taylor, Commanding  
Major James McDonald (Idaho)  
Captain Fred Vandergraft (Idaho)  
1st Lieut. George F. Guy (Wyo.)  
1st Lieut. John E. Walsh (Idaho)  
2d Lieut. Glenn O. Balch (Idaho)

### 115th Cavalry, Wyoming N. G. Cheyenne, Wyo.

Colonel Roche S. Mentzer, Commanding  
Major Harold C. Mandell, Unit Instructor  
Captain Carl B. Byrd, Unit Instructor  
Lieutenant Colonel Albert B. Tonkin  
Captain Ralph S. Grler  
Captain Willard S. Doane  
Captain Joseph F. Jordan  
1st Lieut. Ben F. Marable

**Hq. Troop**  
Captain Edward E. Murane  
1st Lieut. Dean C. Morgan  
2d Lieut. Harold E. Strickler  
2d Lieut. A. W. McCartney  
**M. G. Troop**  
Captain Theodore C. Howell  
1st Lieut. Arthur L. Bettis  
2d Lieut. Elmer L. Rogers  
2d Lieut. Harold L. Wham  
**Hq., 1st Squadron**  
Major Roscoe L. Lamb  
1st Lieut. Harry M. Astin  
**Troop A**  
Captain Woodruff Gwynn  
1st Lieut. Archie R. Boyack  
2d Lieut. Joseph L. Earl  
**Troop B**  
Captain Reginald L. Hatt  
1st Lieut. Cecil R. Fleming  
2d Lieut. George O. Pearson

**Hq., 2nd Squadron**  
Major Everett L. Knight  
**Troop E**  
1st Lieut. John Oliver  
1st Lieut. Phil L. Rouse  
2d Lieut. Alvin E. Yoder  
**Troop F**  
Captain Stanley Edwards  
1st Lieut. Radcliff W. Clark  
2d Lieut. L. T. Irwin  
**Hq., 3rd Squadron**  
Major Ferne M. Schmale  
1st Lieut. Samuel F. Mark  
**Troop I**  
Captain Frank E. Hays  
1st Lieut. John T. Lucey, Jr.  
2d Lieut. Hugh D. Spangler  
**Troop K**  
Captain Cecil T. Mau  
1st Lieut. Archie J. Stenne

Interest in horsemanship in the Wyoming National Guard centers around Casper, the station of the Headquarters Troop and Medical Detachment. A splendid riding path, constructed last summer, is in almost daily use. Ditches, stone wall, post and rail, brush, bank and log jumps form obstacles on the course in addition to steep slides and varied broken ground. At Casper also several regularly organized polo teams of civilians and troopers play outdoor polo when weather permits and indoor polo during the stormy season. Considerable interest in polo is also manifested by Troop F at Laramie.

The 1932 target season closed October 31 with the most satisfactory results the regiment has enjoyed since its reorganization following the World War. Qualifications with the rifle are 45 Experts, 73 Sharpshooters, 221 Marksmen, and 59 Unqualified, or a total of 388 men completing the course and 85.17% qualified. The Machine Gun qualification was 1 Expert, 6 1st Class Gunners, 31 2nd Class Gunners, and 11 unqualified, a total of 49 completing the course with 77.5% qualified.

The regiment has conducted schools and courses of individual instruction during the winter, using Army Extension Courses as a base. At present 26 officers out of 36 assigned to the regiment are actively enrolled for such courses.

Armory drill attendance for 1932 was 81.86% of the actual enlisted strength, while the annual field training period 1932 was attended by 92% of the actual enlisted strength.

### 116th Cavalry, Idaho N. G. Boise, Idaho

Colonel Samuel D. Hays, Commanding  
Captain Joe C. Rogers, Unit Instructor  
Lieutenant Colonel Frank E. Meek  
Captain Carl L. Isenberg  
Captain George W. Wright  
Captain Freeland A. Colvard  
1st Lieut. William E. Brennan  
**Hq. Troop**  
Captain Clarence J. Martin  
1st Lieut. Lee Roy Clemons  
2d Lieut. Howard F. Colvard  
2d Lieut. Sam W. Davis  
**M. G. Troop**  
Captain Elijah W. Horner  
1st Lieut. Frederick D. Stover  
1st Lieut. Darwin N. Hite  
2d Lieut. John T. Jensen  
**Hq., 1st Squadron**  
Major Russell S. Clore  
1st Lieut. H. H. Bevington  
**Troop A**  
Captain C. R. Bevington  
1st Lieut. Samuel W. Folsom  
2d Lieut. Dwight W. McCombs  
**Troop B**  
Captain E. J. Therkildsen  
1st Lieut. Harold D. Stoy  
2d Lieut. Edmund B. Roche

**Hq., 2nd Squadron**  
Major Lou J. Farber  
1st Lieut. Lynn Spillman  
**Troop E**  
Captain Wm. H. Abendroth  
1st Lieut. Ben A. Stroup  
2d Lieut. Lester M. Johnson  
**Troop F**  
1st Lieut. Robert L. Reynolds  
2d Lieut. George H. Potter  
**Hq., 3rd Squadron**  
Major Frank H. Townley Jr.  
1st Lieut. James M. Willis  
**Troop I**  
Captain Samuel R. Lough  
1st Lieut. Harry T. Phillips  
2d Lieut. Sidney J. Conner  
**Troop K**  
Captain Harry A. Brenn  
1st Lieut. Gerald B. Hodgins  
2d Lieut. Lee Roy Brannan

The 116th Cavalry, organized in 1921, has weathered all of the difficulties and troubles which fall to the lot of the newly organized regiment. We have had many changes in the location of units as well as a heavy turnover in the personnel. For the past two years we have had a steady smooth-running organization.

All the troops of this regiment are situated in the valley of the Snake River, a country rich in history of mounted campaigns against the Indians. This is a horse country and is peculiarly suitable for cavalry. It will not be long before our troops will own all their mounts.

During the fall of each year each troop puts on a Horse Show either of its own accord or in conjunction with a County Fair. Through the activities of the different troops has come a growing interest throughout the section in fine horses, riding and polo.

Our armory situation is excellent. Armories are all owned locally, either as War Memorials in conjunction with the American Legion or by the local National Guard Association. We have no state-owned armories. We have the good will of the State and local authorities, and our outlook for the year 1933 is very bright.

### 117th Separate Squadron, Colorado N. G. Denver, Colorado

Major Raymond W. Conbs, Commanding  
Captain Fr-Jerrick F. Duggan, Unit Instructor  
Captain Jay H. Bouton, Veterinarian  
1st Lieut. Robert D. Charlton, Adjutant  
1st Lieut. Edgar Durbin, Surgeon  
2d Lieut. Ralph D. Caldwell, Supply Officer  
**Troop A**  
Captain Harry E. Kistler  
1st Lieut. Lloyd C. Haggard  
2d Lieut. George Nicoll, Jr.  
**Troop B**  
Captain Elmer F. Arnbrecht  
1st Lieut. Fred L. Plante  
2d Lieut. Lawrence J. Ensor  
**Troop C**  
Captain William F. Hunn  
1st Lieut. Howard E. Reed  
2d Lieut. Edward M. Specht

### 121st Cavalry, N. Y. N. G. (51st Brigade) Rochester, N. Y.

Colonel Kenneth C. Townson, Commanding  
Major William T. Haldeman, Unit Instructor  
Lieut. Colonel Donald Armstrong  
Captain Richard J. Toole  
Captain Raymond J. Bantei  
1st Lieut. Cyril T. Tucker  
2d Lieut. James J. Wadsworth  
**Hq. Troop**  
1st Lieut. Alfred H. Doud  
2d Lieut. John E. Van Marter  
2d Lieut. Wm. J. Schubmehl  
**M. G. Troop**  
Captain Hiram L. Turner  
1st Lieut. Russell E. Burt  
1st Lieut. Joseph F. Gunning  
2d Lieut. Robert F. Taylor  
**Hq., 1st Squadron**  
Major Charles N. Morrison  
1st Lieut. Keith F. Driscoll  
**Troop A**  
Captain Ralph A. Glatt  
1st Lieut. E. J. Cunningham  
2d Lieut. Albert E. Milliken  
**Troop B**  
Captain Reginald H. Wood  
1st Lieut. Madison E. Trimble  
2d Lieut. Edward W. Skelly  
**Hq., 2nd Squadron**  
Major George M. Denny  
1st Lieut. Eugene J. Welte  
**Troop E**  
Captain Chas. D. Reidpath  
1st Lieut. George B. Archer  
2d Lieut. D. J. Kamphausen  
**Troop F**  
Captain Edward Harris, 2d  
1st Lieut. Cyril G. Kress  
2d Lieut. H. C. Wickenden  
**Hq., 3rd Squadron**  
Major John Weston  
1st Lieut. Julian B. Barrett  
**Troop I**  
Captain Benjamin Linfoot  
2d Lieut. Wm. P. Wadsworth  
2d Lieut. Hollis J. Ehaney  
**Troop K**  
Captain Hamilton Armstrong  
1st Lieut. Willis A. Becker  
2d Lieut. James F. Wooster

### 122nd Cavalry, Connecticut N. G. New Haven, Conn.

Lieutenant Colonel William H. Welch, Commanding  
Captain Horace W. Forster, Unit Instructor  
Captain Donald T. Peck  
**Hq. Troop**  
Captain Walton Smith  
1st Lieut. Dexter A. Carrell  
2d Lieut. W. F. Corcoran, Jr.  
2d Lieut. Andrew S. Patterson  
**Hq., 1st Squadron**  
Major Philip S. Wainwright  
1st Lieut. John R. Stoddard  
**Troop A**  
Captain Milton A. Wilson  
1st Lieut. Guy B. Welles  
1st Lieut. Richard P. Gowdy  
**Troop B**  
Captain Louis S. Tracy  
1st Lieut. Richard Henderson  
2d Lieut. Arthur A. Baedor

#### New Haven Notes

In addition to their regular Armory Training and preparation for the Annual Inspection, the Headquarters Troop held a very successful annual banquet, at which the Adjutant General of Connecticut, Brigadier General William F. Ladd, and other distinguished guests were present, on January 28th.

Entries are starting to come in for the small indoor horse show, which it is planned to make an annual affair. It is the first horse show to have been planned



in the local armory for several years and will be held on February 25th, which will be the 26th anniversary of the first horse show held in the (then new) Troop A Armory.

The Medical Detachment will have its Armory Inspection on February 14th.

### 1st Squadron, Hartford

Among the social events to occur during the current training period was the annual paper chase given by Troop A on Thanksgiving day. A field of about fifty troopers and their guests followed the elusive trail on a glorious, brisk morning, ending with a "hunt breakfast" at the Troop's bungalow on Avon Mountain. Private Elihu BenDror made the "kill," winning the prize crop.

Troop B completed the building of a cabin-bungalow early in the fall, and a successful house-warming was given to inaugurate activities. The property consists of several acres of land west of the town of Avon and is within easy riding distance of the Armory. The Troop plans to construct a 200-yard rifle range and a pistol range nearby.

On the last drill night before Christmas holidays Troop A staged a turkey-shoot on the indoor range using the "Fitz Luck Targets." In addition to members of the Troop, Captain H. W. Forster, D. O. L., Cavalry Instructor, and the Squadron Commander took part. First place was won by Private BenDror, second place going to Captain Forster.

The principal "extra curriculum" activity of the Squadron is polo, carried on under the auspices of the Hartford Cavalry Polo Association. Each troop has a first and second team, and the Farmington Valley Polo Association and the team of the Avon Old Farms School are civilian members of the Association. This writing finds us midway in our Schedule of twelve Saturday night games, and results have exceeded our highest expectations, both from the standpoint of interesting contests and the enthusiasm shown by the public which throngs the riding hall at each event. Norwich University, the Yale Junior Varsity and a West Point officer's team have already gone down to defeat before our teams, while Troop B defeated Troop A in an epic battle on January 21st. The Boulder Brook Club, Squadron A of New York, 101st Cavalry, N. Y. N. G., Cornell, Turkey Hill Club of Worcester and Yale Freshmen are scheduled to meet us during the remainder of the season.

Troop B gave an exhibition and show to which the public was invited and which jammed the hall to overflowing, on February 2d. The feature was a polo game in which the Farmington Valley team defeated the Troop team by a narrow margin. Other events were a musical ride without commands by a platoon, a competitive drill between four squads, a rough-riding exhibition, a comedy skit, and a demonstration of a platoon in dismounted and mounted attack. Col. Welch, Major Wainwright and Captain Forster judged the competitive squad drill.

2d Lieutenant Arthur A. Baedor, Troop B, will take the N. G. Troop Officers' course at the Cavalry School this spring.

The Hartford Cavalry Horse Show is planning a spring show for the second week-end in May, after a lapse of one year. So much interest has been expressed among local horse lovers in a renewal of the highly successful shows held in the past, that the committee feels justified in going ahead with plans in spite of present conditions.

### 123rd Cavalry, Kentucky N. G.

Louisville, Kentucky

Colonel Henry J. Stites, Commanding  
Lieutenant Colonel Hugh H. Broadhurst, Unit Instructor  
Lieut. Colonel John A. Polin, Executive Officer  
Captain Thomas E. Bates, S-3  
Captain Gaylord S. Gilbert, Adjutant  
Captain Louis A. Barber, Supply Officer  
1st Lieut. Edward S. Pedigo, Personnel Adjutant  
1st Lieut. John Henry Chillington, Chaplain

Hq. Troop  
Captain Albert E. Ely  
1st Lieut. Samuel Sears  
2d Lieut. Walter E. Nunn  
2d Lieut. Richard Lee Garnett

M. G. Troop  
Captain Alvin H. Schutz  
1st Lieut. James E. Higgins  
1st Lieut. John C. Fleming  
2d Lieut. George S. Jake

Medical Detachment  
Major Philip E. Haynes  
Captain G. P. Isbell  
Captain Omar S. Meredith  
Captain George Wm. Pedigo  
Captain Clifton Richards

Hq., 1st Squadron  
Major R. Carey Graham  
1st Lieut. F. Coburn Gayle

Troop A  
Captain Hartwell D. Reed  
1st Lieut. Louis P. Smith  
2d Lieut. Haskell T. Reed

Troop B  
Captain Dewey S. Congleton  
1st Lieut. James D. Foster  
2d Lieut. Mortimer M. Benson

Hq., 2nd Squadron  
Major George E. Nelson  
1st Lieut. J. R. Dorman, Jr.

Troop E  
Captain Walter B. Rawlins  
1st Lieut. Earl Eversole  
2d Lieut. Jackson A. Smith

Troop F  
Captain Frederick M. Warner  
1st Lieut. W. J. Schneider, Jr.  
2d Lieut. Stephens B. Blakely

Hq., 3rd Squadron  
Major Joseph M. Kelly  
1st Lieut. F. S. Lebkuecher

Troop I  
Captain Hugh B. Gregory  
1st Lieut. Henry W. Merritt  
2d Lieut. William C. Mudd

Troop K  
Captain Joel L. Stokes  
1st Lieut. Raymond O. Cook  
2d Lieut. Edward B. Allred

On November 14th, 1932, the citizens of Louisville tendered a testimonial dinner to Brigadier General Julian R. Lindsey, commanding Fort Knox, in the Crystal Ballroom of the Brown Hotel in Louisville. Major General Hugh A. Drum, commanding Fifth Corps Area; Honorable Ruby Laffoon, Governor of Kentucky; Brigadier General Henry H. Denhardt, 75th Infantry Brigade and the Adjutant General of Kentucky; Honorable William B. Harrison, Mayor of Louisville; with General Lindsey and other distinguished guests, were at the Speakers' Table. Approximately four hundred men and women were in attendance. Cavalrymen serving on the Organization Committee were Colonel George H. Baird, Chief of Staff, 64th Cavalry Division; Lieutenant Colonel Adna R. Chaffee and Major William G. Simmons, both of 1st Regiment Mechanized Cavalry; Colonel Henry J. Stites, Captain Gaylord S. Gilbert and First Lieutenant James R. Dorman, Jr., 123rd Cavalry. Colonel Stites was Chairman of the Committee and Toastmaster.

Colonel Clarence A. Dougherty, who was assigned as senior instructor of 123rd Cavalry during early summer of 1929, has been promoted to Colonel and assigned to the command of U. S. Transport "Republic." Colonel Dougherty is popular with both officers and men of this regiment, as was illustrated by the presentation of a silver mounted riding crop during 1932 field training. Lieutenant Colonel Hugh H. Broadhurst was also presented a similar riding crop and will continue as instructor. Colonel Broadhurst, too, has been with the regiment since 1929.

Colonel Newell C. Bolton, commanding 107th Cavalry, Ohio National Guard, has presented a Sterling

silver trophy to 123rd Cavalry, to be known as "107th Cavalry Cup" and to be presented annually to the platoon in 123rd Cavalry receiving the highest tactical rating after three days' maneuver in the field under war conditions in connection with field training.

Lieutenant Colonel John A. Polin, Captain Gaylord S. Gilbert and First Lieutenant James R. Dorman, Jr., have been designated by the Regimental Commander to accompany him on a visit to Fort Knox to call on Colonel Daniel Van Voorhis and express greetings and felicitations to the First Regiment Mechanized Cavalry, following its recent arrival at Fort Knox from Marfa, Texas.

### 124th Cavalry, Texas N. G. (56th Brigade)

Dallas, Texas

Colonel Louis S. Davidson, Commanding  
Major James R. Finley, Unit Instructor  
Captain Frank H. Barnhart, Unit Instructor  
Lieutenant Colonel Calvin B. Garwood  
Captain Frank L. Chapa  
Captain Ralph H. Cameron  
Captain Grover C. Simpson  
1st Lieutenant Donaldson W. Peacock

Hq. Troop  
Captain Fred E. Dickinson  
1st Lieut. Wm. L. Riddle  
2d Lieut. Ben. P. Bailey, Jr.  
2d Lieut. Frank I. Dahlberg

M. G. Troop  
Captain James O. Vaughan  
1st Lieut. Glenn C. Wilson  
2d Lieut. Day P. McNeil  
2d Lieut. John W. Wilder

Hq., 1st Squadron  
Major John W. Naylor  
1st Lieut. Edward A. Compton

Troop A  
Captain George B. Bennett  
2d Lieut. Walker T. Moore

Troop B  
Captain James L. Stitt  
2d Lieut. Thomas A. Howard

Hq., 2nd Squadron  
Major Harry H. Johnson  
1st Lieut. Jule R. Smith

Troop E  
Captain Wm. C. Dorbritz  
1st Lieut. Melvin H. Ehler  
2d Lieut. William G. Eldred

Troop F  
Captain Charles K. Davis  
1st Lieut. Jack Dews

### 305th Cavalry

Philadelphia, Pennsylvania

On November 23, 1932, by orders from the War Department, Colonel William Innes Forbes was transferred to the Auxiliary Reserve, severing his official connection with the Regiment. A mounted formation made up of thirty officers of the Regiment proceeded from the 1st City Troop Armory to Colonel Forbes' place of business. After a brief ceremony there, Colonel Forbes mounted and conducted the return march to the Armory. Colonel George T. Bowman, Cav. DOL, Chief of Staff, 62nd Cavalry Division, there read the official order from the War Department, gave a fine tribute to Colonel Forbes on his excellent service for over 40 years in a brief farewell address and presented a silver service as a final token of respect from the officers of the Regiment. The ceremony closed with a buffet supper in the banquet hall of the 1st City Troop Armory.

At the time of Colonel Forbes' retirement, orders were received announcing the assignment of Lieut. Colonel Matthew F. James, who since assuming command has been promoted to Colonel. Colonel James is welcomed as an old friend of the Regiment.

Captains L. H. Esler and Wm. J. Taylor, Jr., are now receiving the congratulations of brother officers on their recent promotion.

In addition to working on the regular inactive schedule the Regiment has started practice for the exhibition ride to be given at its annual Regimental Day Celebration.

### 306th Cavalry

Baltimore, Maryland

Heavy snows and cold weather have forced the discontinuance of riding classes at Fort Hoyle. This work will be taken up again next spring.

The period for active duty training of the 306th Cavalry at Fort Myer, Virginia, has recently been changed from August 6-19, 1933, to August 13-26, 1933. The 305th Cavalry, 307th Cavalry, 462nd Armored Car Squadron, and 402nd Engineer Squadron will attend camp during the same period. This should afford opportunities for interesting tactical exercises as well as renewal of old friendships.

### Second Squadron and Machine Gun Troop,

306th Cavalry

Washington, D. C.

Our conference schools, equitation classes and Extension School work continue with increased interest. Last year's records of attendance at conferences and equitation classes and of Extension School lessons submitted have been greatly exceeded for the three months' period just completed.

The officers of the Squadron are looking forward with a great deal of pleasure to the prospect of being associated with the officers of the 305th and 307th at Fort Myer, Virginia, during the two weeks' active duty training there next August.

### 307th Cavalry

Richmond, Virginia

Second Lieut. Ernest T. Upson is in his fourth year of Medicine at the University of Virginia, and 2nd Lieut. Byrd S. Leavell, Jr., is in his second year at the same institution.

First Lieut. Henry S. Kane, Jr., is teaching at the Greenbrier Military School, Lewisburg, West Virginia.

Second Lieut. Turner R. Rattie is holding down a position in a Chemical Plant and in addition is taking a Business Course, in Charleston, W. Va.

1st Lt. Wm. L. Threlkeld is teaching and directing research work at V. P. L. Blacksburg, Va.

2nd Lt. Alexander W. Bryant, 307th Cavalry, is in Berlin, Germany.

2nd Lt. Virgil B. Grow, Jr., is studying Mathematics at the University of Grenoble, France.

Sgt. Richard F. Beirne, Jr., is attending Randolph-Macon College, Va.

Capt. Henry Howard Page, 307th Cavalry, has recently passed the Bar Examination held in Richmond, Va. Captain Page was one of fifty-two successful candidates out of one hundred seventy-five applicants.

Promotions: 1st Lt. Hugh H. Jones to Captain; 1st Lt. Henry H. Page to Captain and 2nd Lt. Frederick Sale to First Lieutenant.

New Assignments: 2nd Lt. George W. Day, 116 Oxford St., Roanoke, Va., assigned to the 307th Cavalry, and is assigned to Troop "E."

Transfers: The following officers have recently been transferred to 154th Cavalry Brigade:

Captain Joseph J. Matthews, 68 Cherokee Rd., Hampton, Va.

Captain Henry H. Page, Arvonnia, Virginia.

1st Lieut. Julius T. Ames, c/o Richmond Rubber Co., Richmond, Va.

2nd Lieut. Clarence U. Boykin, 518 W. Franklin St., Richmond, Va.

Discharged: Sgt. William Henry Clifford, Jr., who is attending College at Yale, New Haven, Conn., was discharged by reason of "Expiration of Term of Service" on December 20, 1932.

### Third Squadron and Machine Gun Troop, 307th Cavalry Norfolk, Virginia

"Mechanized Cavalry" was the subject of a lecture delivered in December, by the Unit Instructor, Major David H. Blakelock, Cavalry. (DOL), before the Reserve Officers of both Newport News and Norfolk, Virginia. The attendance at these meetings was very satisfactory. In Norfolk the Officers of the Squadron turned out in full force, with many Reserve Officers of other branches, to learn of the latest developments in organization and equipment of our Mechanized Cavalry.

An interesting series of tactical problems has been worked up for the Cavalry Troop School. These problems will deal with a continuing situation covering reconnaissance, attack, defense, and withdrawal. As the majority of the Cavalry Officers in Norfolk are of junior grade, the problems deal with the operation of a Troop and Squadron which forms part of a Cavalry Brigade, thus giving them theoretical tactical training in units appropriate to their grade.

Preceding the conferences which will be conducted by the Unit Instructor, one of the Reserve Officers will outline and discuss the principles involved in the tactical problem to be studied that evening. This procedure should prove very beneficial in developing the teaching ability of the individual reserve officers.

### 308th Cavalry

Pittsburgh, Pennsylvania

During December and January the Officers' Riding Classes have been well attended, in spite of the fact that a good many officers have been obliged to retrench this year. For the coming months we intend to do some jumping in preparation for the outdoor season in the spring.

The Indoor Polo League has played a number of games at the 107th Field Artillery Armory. These games have been well attended. During the last Game Lieutenant Morris Linton took a hard fall but was not seriously hurt. Lieutenant Linton has, through conscientious practice, developed into an excellent player, both accurate and aggressive.

At the December Unit Meeting Lieutenant Parks gave an interesting lecture on the Employment of Machine Guns.

On New Year's Day the officers of the Regiment paid a formal mounted call upon the Regimental Commander, Lieutenant Colonel George H. Cherrington, at his home on Marlborough Street.

Colonel Cherrington received the salute from the

officers before they dismounted and then invited them to dismount and join him indoors where Mrs. Cherrington and he entertained at tea. The National and Regimental Standards were displayed in honor of the occasion, which was the first of the kind among the Reserve Units in Pittsburgh.

### 862nd Field Artillery (Horse)

Baltimore, Maryland

The Sunday morning riding classes at Fort Hood, Maryland, have been discontinued on account of the weather until Spring. We have a number of enthusiastic horsemen who will be waiting impatiently for a favorable change of the weather.

Also it is hoped that the pistol gallery in the new Post Office building will soon be ready for use. Pistol practice in Baltimore always has an interested following.

Our conference work is now directed to the tactics of field artillery with cavalry and will so continue until March 1st, when the officers will begin their training to prepare them to act as instructors at the Citizens' Military Training Camp.

### The Annual Meeting

(Continued from Page 40)

Upon motion the report of the Secretary-Treasurer-Editor was accepted.

The following were unanimously elected to the offices indicated:

*President:*

Major General Guy V. Henry

*Vice-President:*

Colonel Llewellyn W. Oliver, Cavalry

*Executive Council:*

Colonel Aubrey Lippincott, Cavalry

Colonel Robert McC. Beck, Cavalry

Colonel Charles Burnett, Cavalry

Colonel Edward J. Stackpole, Jr., 104th Cav.

Colonel John Philip Hill, 306th Cavalry

Lieut. Colonel Henry D. Whitfield, Cav. Res.

Major Sidney V. Bingham, Cavalry

Captain Lucian K. Truscott, Jr., 3d Cav.

1st Lieut. Willard G. Wyman, 3d Cav.

The meeting was then given over to general discussion, which was directed in happy fashion by the presiding officer, Colonel Leon B. Kromer. The following officers were heard:

General W. C. Brown, Colonel R. J. Fleming, Colonel H. La T. Cavanaugh, Colonel Aubrey Lippincott, Colonel Charles Burnett, Lieut. Colonel H. S. Merrick, Cav. Res., Major William M. Grimes, Major George S. Patton, Jr., Major Wilfrid M. Blunt, Captain Lucian K. Truscott, Jr.

Comment was made on Cavalry subjects, past, present and future, all developed in an atmosphere of professional interest and good comradeship.

There being no further business, the meeting adjourned at 9:45 p. m.

GEO. M. RUSSELL,

Colonel, Cavalry, Secretary

# The CAVALRY JOURNAL

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THE UNITED STATES CAVALRY ASSOCIATION

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## The Secretary of War and Assistant Secretary of War



### GEORGE HENRY DERN

Honorable George Henry Dern, Secretary of War, was born in Dodge County, Nebraska, September 8, 1872; son of John and Elizabeth Dern. He graduated from Fremont (Nebraska) Normal College in 1888 and attended the University of Nebraska in 1893-94. He married Charlotte Brown of Fremont June 7, 1899; children—Mary Joanna (Mrs. Harry Baxter), John, William Brown, Elizabeth Ida, and James George. He began mining in Utah in 1894; treasurer Mercur Gold Mining and Milling Company, 1894-1900; general manager, Consolidated Mercur Gold Mines Company, 1900-1913; various other mining and metallurgical enterprises since 1913; vice-president and general manager, Holt Christensen Process Company (owner Holt-Dern Roaster patents); director, Pleasant Grove Canning Company; director, First National Bank of Salt Lake City; director, Mutual Creamery Company; director, First Security Trust Company; member Utah State Senate, 1915-1923; member State Council of Defense, World War; Governor of Utah two terms, 1925-1932 inclusive; member, American Institute of Mining and Metallurgical Engineers, Delta Tau Delta, Democrat, Congregationalist, Mason (K. T., 33°), Shriner. Clubs: Chamber of Commerce, University, Alta, Rotary, County (Salt Lake City). Joint inventor with Theodore P. Holt of Holt-Dern ore roaster. He was appointed Secretary of War March 4, 1933.

~



### HENRY HINES WOODRING

Henry Hines Woodring was born in Elk City, Kansas, May 31, 1890. He attended Lebanon University, Lebanon, Indiana. Returning to his native state he entered the banking business, where he displayed marked business ability. His career in this field was interrupted by the World War. At the outbreak he enlisted as a private in the Tank Corps and rose to the rank of lieutenant. Since the war he has been active in the American Legion as an organizer and as a leader. In 1928 he was elected State Commander.

While Governor of Kansas, Mr. Woodring saved the taxpayers of his state through direct economies nearly three million dollars. The successful passage of the state income tax amendment was another triumph of his governorship. He was also particularly interested in the passage of the budget law which gave the people an insight into state affairs and provided a scientific method for the control of tax problems.

As a successful Democratic governor in a normally Republican state his words carried weight. Early in the national Democratic campaign Governor Woodring was sought by the national chairman and has long been outspoken as a supporter for President Roosevelt. After Mr. Roosevelt's nomination he was considered a key man in holding the Middle West in line for the President.

Secretary Woodring is well fitted by his experience in business and as Chief Executive of Kansas to administer the affairs of the office to which he has been appointed. He is forty-three years old and a bachelor.

## The United States Cavalry Association

Organized November 9, 1885

### DESIGN

1. The aim and purpose of the Association shall be to disseminate knowledge of the military art and science, to promote the professional improvement of its members, and to preserve and foster the spirit, the traditions, and the solidarity of the Cavalry of the Army of the United States.—Article III of the Constitution.

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MAJOR GENERAL GUY V. HENRY

*Vice-President*

COLONEL LLEWELLYN W. OLIVER, Cavalry.

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CAPTAIN LUCIAN K. TRUSCOTT, JR., 3d Cav.

1ST LIEUT. WILLARD G. WYMAN, 3d Cav.

### MEMBERSHIP

Membership shall be of three classes, which, together with the conditions of eligibility therefor, are as follows:

- (1) Active, for which all general officers of the Army of the United States and all commissioned officers of the Cavalry of the Army of the United States shall be eligible.
- (2) Associate, for which all present and former commissioned, warrant, and non-commissioned officers of honorable record of the military or naval services of the United States not included in class I shall be eligible.
- (3) Honorary.

Application for membership, showing present or former military status, should be addressed to the Secretary, U. S. Cavalry Association, 1624 H Street, N.W., Washington, D. C., and be accompanied by remittance of dues for one year.

### DUES AND SUBSCRIPTION TO THE CAVALRY JOURNAL

There is no initiation fee. Annual dues, payable in advance, \$3.00, which includes subscription to the CAVALRY JOURNAL, 60% thereof being so designated.

Any person or organization not eligible for membership may subscribe for the JOURNAL at the regular subscription rates of \$3.00 per year. Canadian and foreign postage, 50 cents additional.

Members and subscribers are requested to give prompt notice in advance of change of address. Changes in address are made only on notification.

# Chicago Cavalry Command Post Exercises

By Colonel Edward Davis, Cavalry

A VERY satisfactory utilization of the command-post method of instruction is employed in training the Reserve Cavalry officers of Chicago. Some of its features are unique. The arrangements can be duplicated in any city, town or village. It is a very practical scheme combining sound instruction with a strong element of reality which arouses and maintains keen enthusiasm. A statement of how this plan works may be of interest to those engaged in the training activities of any of the three components of the Army, though this method is especially applicable to the Reserve. Such a statement can appropriately be made by describing the "Chicago Cavalry Command Post Exercise of November 17, 1932."

The following units participated in this exercise: Second Cavalry Corps Staff and Corps Troops; 65th Cavalry Division Staff and Division Troops; 159th Cavalry Brigade Staff; 317th and 315th Cavalry Regiments. A total of 200 Reserve officers, supervised by 23 Regular Army officers, functioned as personnel for the above named units and for the Directorate.

The Chicago telephone system was the wire net which carried message traffic for the 27 command posts which were in operation over a front of three miles and a depth of eight miles, the platoon CP's being along the north city limits, while Corps CP was down in the "Loop" district. This gave prompt and accurate service at almost no cost because the CP's were installed in Reserve officers' homes and business offices, and in other offices which were lent to us, the telephones of these homes and offices being used. Obviously, the use of Army Signal Corps equipment for so large an exercise in so great a city was impracticable; furthermore it was unnecessary with the city telephone system available. This use of homes and offices did more than provide us with the necessary facilities; it stimulated interest in military matters among many civilian friends of Reserve officers, most of whom had never, theretofore, come in intimate contact with an extensive military exercise actually being worked out and the general object of which they could understand. As the exercise was held at night, outsiders had sufficient leisure for observation. The problem-time was, of course, adjusted to daylight hours.

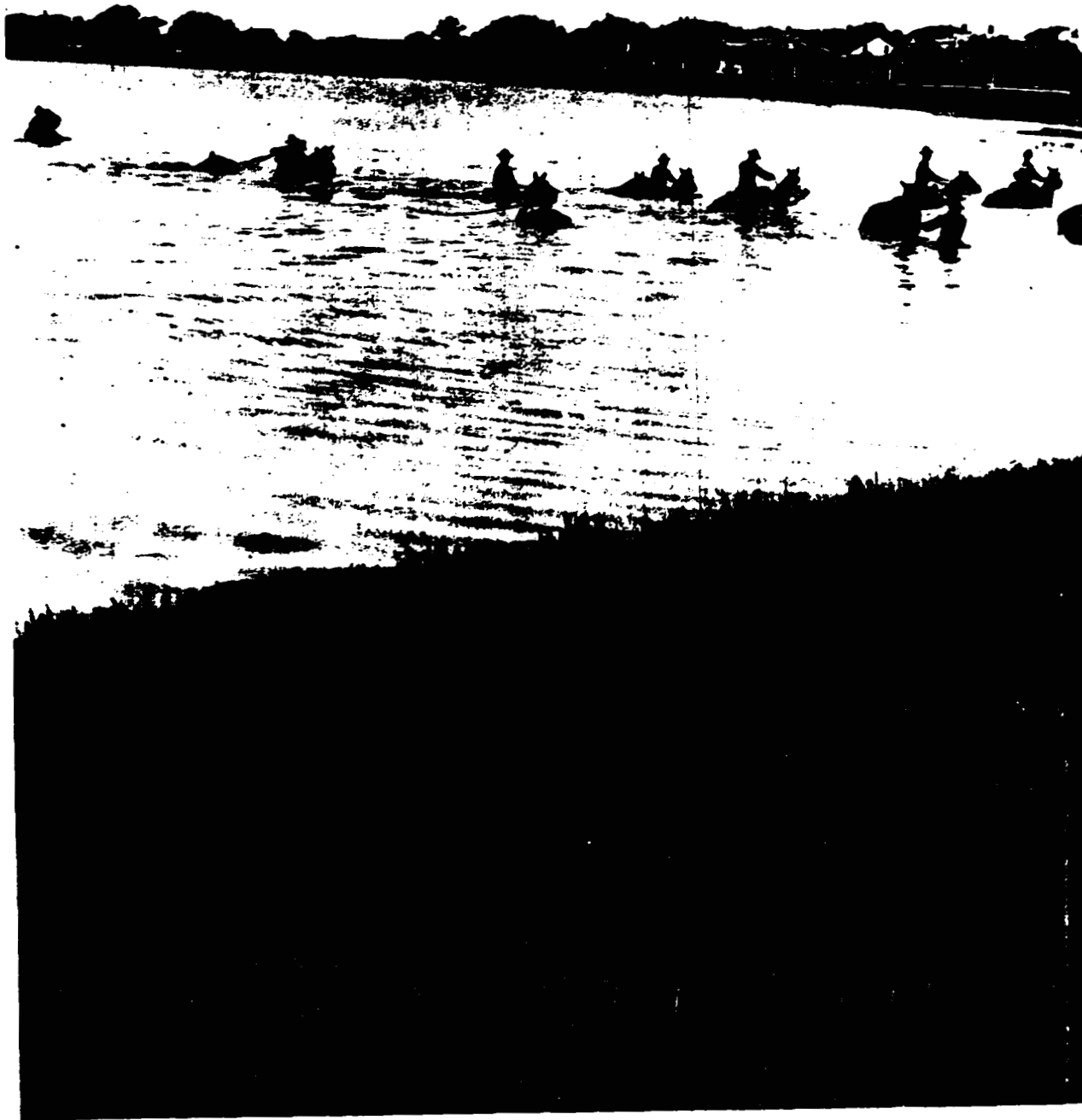
The 65th Signal Troop, reinforced by other Reserve signal officers provided personnel for five message-centers, and, in addition, one instructor for the communications personnel at Brigade, at each of the two Regimental and at five of the Squadron command posts. These instructors were provided in order to enhance signal training in the line units and to insure uniformity of methods. At each message-center, Signal Corps officers served personally as telephone operators and clerks. Message-center functioning was emphasized in every way in order to impress officers with the importance of this agency and to acquaint them with correct procedure.

There was an Assistant Director at each command post. Most of them were Regulars. The Assistant Director with each platoon and troop was a Regular Cavalry officer from Fort Sheridan. Regulars were also at Regiment, Brigade, Division, Corps and some of the Squadrons. At others, especially qualified Reserve officers were used. They handed out prepared messages and were also authorized to control the situation in case of the unexpected.

As to problem conditions, all buildings were assumed to be non-existent. Road net was limited to certain streets about one mile apart in order to approximate average open-country conditions. These streets were marked in brown on the map and were the only streets that could be used by units or trains or by officers or messengers moving by motor car or motor cycle in rear areas or by horse in forward areas. As the Reserve officers who participated are residents of the Chicago area they know their city distances, viz: 800 street numbers equal one mile approximately; thus their knowledge of local distances was availed of as an accelerating factor in teaching, by visualization, certain distances and intervals, yardage of front and depth and the relative locations of CP's and the various rear installations. For co-ordinates we used the street names and block numbers. This was exact and simple.

At each command post rigid adherence to regulations and current doctrine was sought. The commander himself was expected to distribute his work, through his executive, requiring staff officers to function fully, each in his prescribed sphere; this, to counteract the tendency of a certain type of commander to attempt to do all the work himself. Commanders were also instructed to leave their command posts for definite intervals of time; this, to give the second-in-command or the executive a chance to show his capacity for decision. It was pointed out that each message should be exactly complete as to number, date, hour, address and signature; that maps should be completely posted at all times; messages securely and sequentially fastened in the message file; journal entries succinct and in the proper columns. Journals were kept at each command post, even at platoon, on the principle that a lieutenant commanding a platoon to-day may be on duty at regimental headquarters to-morrow; hence the necessity for this instruction. It was for this reason also that the problem was arranged so that each platoon had a definite tactical mission and a separate command post.

As to the tactical situation: Cavalry Corps covered Army advance to a selected line. Cavalry Corps fought delaying action on the principle of the elastic defense. Cavalry patrols facing north were in contact with enemy patrols when problem opened. The initial messages were from patrols, platoons, indicating contact, progressing toward definition of contour of enemy line, reporting losses of men and animals.



SWIMMING HORSES IN THE RESACA AT FORT BROWN, TEXAS



capture of enemy prisoners, etc., etc. As a preparatory measure this system of messages and resultant reports, had been timed clear back to Corps, by test messages over the city telephone system when the exercise was being prepared. This gave the framework for the general time-table of messages. Into the resultant blank time periods at each CP, other messages regarding combat and supply were fitted into the time-table, until the telephone traffic capacity was reached leaving some time available for spontaneous messages by commanders and for a margin of safety.

It will be observed that the mechanics of the exercise are more fully described above than are the tactical conditions. There are two reasons for this. First, the novel nature of the exercise, that is to say, its staging in a large city availing ourselves of city advantages and making adjustments to neutralize the disadvantages. Second, the fact that practice in the mechanics of command post functioning is the staff training equivalent of close-order drill. When each officer, by repeated exercise of the relationship between command and staff, and between the sections of the staff, has attained automatic proficiency, his solution of the tactical problem begins to take care of itself, because he approaches it with a mind unharassed by these necessary details of functioning. In other words, superior battle management is largely in the ratio of orderly thinking and orderly action at high speed and these, in turn, must be based on complete familiarity with all details, a familiarity attained in training only by constant repetition of functioning, always in an orderly manner.

Major General Frank Parker, Commanding Second Army, personally inspected this CPX during its operation, visiting the various command posts. At the critique, which was held in December, with a majority of the participating officers present, Major General Parker addressed the assembled officers, pointing out the value of this type of instruction and speaking also of the employment of great units of cavalry.

This critique was made as searching and detailed as possible, each of the 27 command posts receiving separate criticism regarding all of its phases of operation. Although the exercise lasted only a few hours, approximately one thousand documents resulted therefrom. Each of these had to be examined by the Director, the present writer, in preparing his criticism. Such examination of all documents is essential to a thorough critique, and it is the critique that clinches the instruction.

Another CPX marked by novel features, was that of the 159th Cavalry Brigade (Chicago) held in August, 1932. This Brigade (317th and 318th Cavalry Regiments) and the 65th Signal Troop were in camp at Fort Sheridan. The Sheridan reservation is so small that the design of a realistic problem, on the ground, for Cavalry CPX purposes, seemed a difficult undertaking. If the long axis of the reservation were taken for the depth of the formation and installations, the short axis would not permit sufficient yardage as

to front. A reversal of choice as to axes would give sufficient front but not enough depth and nothing at all for a desirable representation of enemy area.

All these difficulties disappeared and a most attractive problem resulted when "The defense of a coast line" was selected as the problem and the operation of the Commandant, U. S. Naval Training Station, Great Lakes, Illinois, was secured. The Commandant, Rear Admiral Crosley, sent a naval craft, called a motor-sailer, to appear off Fort Sheridan at a certain hour and to cruise off shore displaying a sequence of certain Navy signal flags on an exact time schedule which had been agreed upon by the Admiral and myself. Each of these flags announced the progressive activities of an enemy transport fleet, with naval escort, which sought to effect a landing. The shore troops had a list of these flag signals and their respective significance. When the Navy displayed a flag, the shore troops on the line of observation could refer to their lists, note the enemy action indicated and act accordingly. However, there was a "catch" in all this, because the Director, the present writer had arranged to have the Navy display many flags that were *not* on the list, in addition to those that were, so that observers on shore found that they could take nothing for granted and must keep their eyes open. Under this signal system there was a naval bombardment of the coast-line, loading of troops into small boats, towing of these toward shore, the use of armed motor-barges by the enemy, actual landing, enemy repulse at one point, success at another and so on.

Preparatory to all of the above, the Cavalry Brigade, as a part of a Cavalry Corps, had approached the "coast line," mounted: had selected and organized all the elements of a position for observation and resistance, including machine-gun and one-pounder positions, aid stations, led horses, command posts, observation posts and all other installations. Meanwhile, the 65th Signal Troop, reinforced by a large detachment of ROTC Signal Cadets, had established unusually complete signal communications, including messengers, telephone, telegraph and radio from Squadron back. All of this was completed before the Navy appeared on the scene.

This CPX included several stimulating features in addition to the Navy participation. This latter is mentioned because the idea may be useful to Reserve units located, or in training camp, where land space is too restricted but where a body of water is adjacent. The whole idea, of course, is to get a tactical set-up with a touch of realism and which will justify the installation of command posts and the resultant training.

Just at present the Chicago Cavalry units are preparing for a CPX of an extensive and interesting nature which will be worked out on the Gettysburg three-inch map but with the command posts installed in the Chicago area in locations corresponding to the Gettysburg locations as to distances and directions.

## The Cavalry-Artillery-Aviation Team

By Lieutenant Colonel Kinzie B. Edmunds, Cavalry  
Instructor, Field Artillery School

THE expression "Cavalry Division" gives, perhaps, a false impression of a unit not composed entirely of cavalry. A cavalry division commander controls a team made up of many different elements all of which he uses for the accomplishment of his mission and the attainment of his objective. This objective is the objective, not of the cavalry alone, but of the division as a whole, and it is only when the various components, differing in their organization and tactical function smoothly together for the attainment of their common goal that efficiency is fully attained.

Considering only three of the components of a cavalry division, the cavalry, artillery, and attached aviation, it is essential that senior cavalry officers to include at least squadron commanders, should understand the tactics, powers and limitations of horse artillery and that horse artillery officers, to include battery commanders, should be familiar with cavalry tactics. For how can one ask intelligently for artillery support if he knows not the positions, range and observation required by the artillery? And how can one furnish support intelligently if he does not know the objectives of the troops supported and the methods used by them in reaching such objectives? As for the aviator, he must know the cavalry formations to look for and where to look for them; appropriate artillery targets and effective ranges; adjustment and surveillance of fire. In addition, aviation is becoming our most effective agency of liaison between the other two arms.

It is the purpose of this paper to show a few of the instances in which the coordination of the Cavalry-Artillery-Aviation Team may be studied and improved.

I. *The cavalryman should realize the feasibility and desirability of an early opening of the fire action.*

A conservative estimate of the effective range of any piece liable to be used by horse artillery is 7500 yards. This is easily within the limits of the French 75, the American 75, or the 75 mm Pack Howitzer. The limiting factor in the opening fire is not range but is observation. When observation is limited to the ground, batteries must be advanced to within easy communication distance of observation points from which targets can be seen. But the development of air observation allows the guns to open fire at the limit of their effective range. This can best be illustrated graphically.

Figure 1 shows a point road intersection where a cavalry force of the same composition and strength. The leading elements of the opposing forces are still two miles apart; ground observation of the point of probable contact, P, from the ridge Q, is still three miles from the horse artillery; yet it is not too early for part of the artillery to go into position. A battery with air observation can be placed at A well within range of the opposing front lines when they reach P. A second battery at B will be within range of the probable positions of the opposing artillery on the reserve slope of the ridge R. The third battery can continue to C, where ground observation is available, and the rear batteries can then move forward. The effect of this advance of the artillery by bounds, starting at its limit of effective range, in delaying enemy development and protecting advance friendly troops from enemy artillery fire, may well be demonstrated.

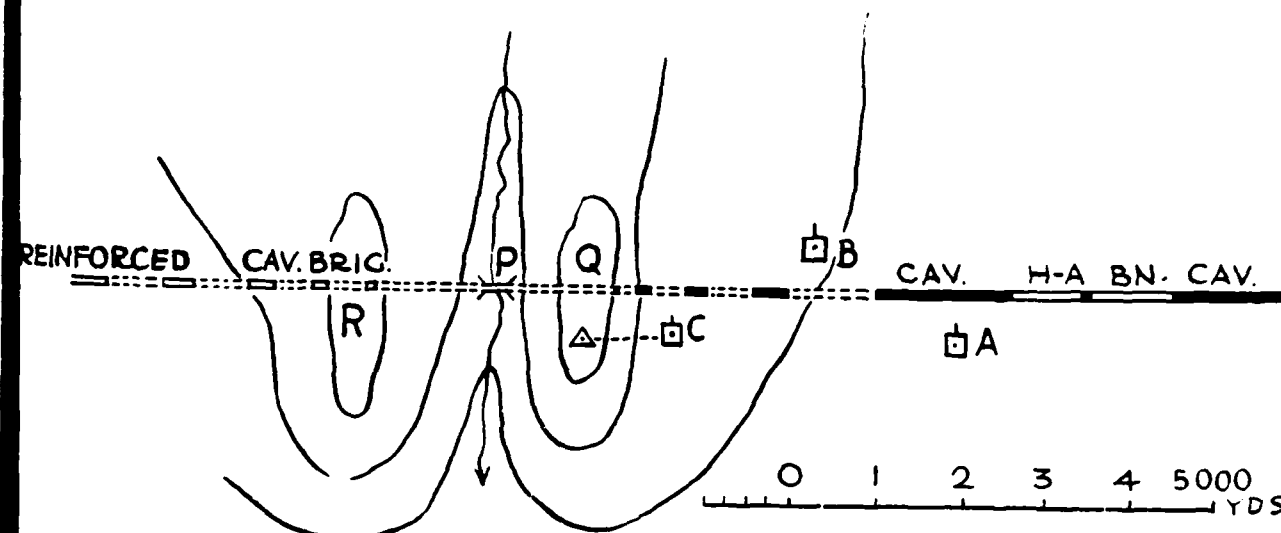


Figure 1.

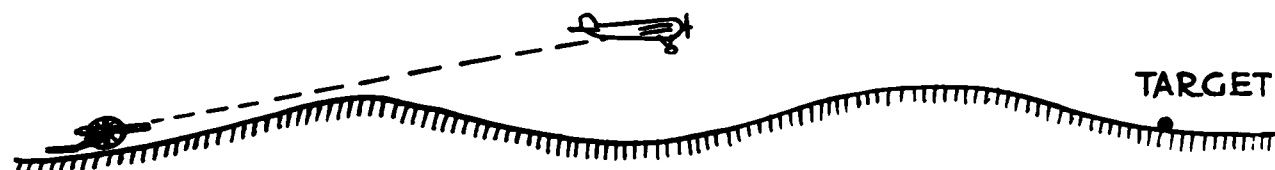


Figure 2. Profile. Gun, Ship and Target in Same Vertical Plane. The "Lay on Me" System.

cisive against an opponent who does not use the same system.

Figures 2 and 3 show how the air adjustment of artillery fire can be accomplished.

The "Lay on Me" System (Figure 2)

Observer signals "Lay on me, range (5000)" and flies on the line between gun and target. He observes the burst, signals the error, and continues until battery is on the target.

Observer signals "Fire on base line" and watches the burst. On observing it he estimates, in yards, the

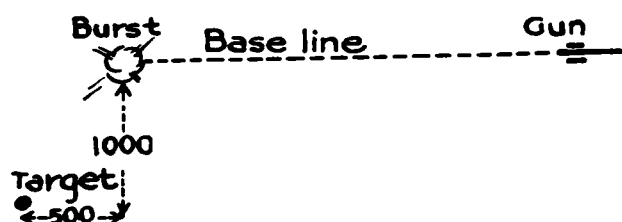


Figure 3. Plan. The "Fire on Base Line" System.

deviation between the burst and the target, (as, "1000 right, 500 short"), signals it to the battery and observes the next burst, continuing until the battery is on the target.

Communication between plane and ground may be by radio telegraph from plane to battalion command post. Communication can also be had through dropped message, panels and wing signals.

II. The cavalry should realize that artillery maneuvers largely by fire rather than by movement.

Artillery functions best under central control. A massing of guns favors concentration of fire on critical points: dispersion of guns causes dispersion of effort. A wide maneuver of artillery, delaying opening of fire, reduces fire support in the opening phases of a battle.

Whenever practicable, therefore, horse artillery should be kept close to the axis of movement. As in the previous case, the principal governing factor is observation: the artillery will usually have range, from a central location, over all points of contact, however wide the initial maneuver of the cavalry mass. If observation also is available the guns should be kept together.

III. The cavalryman should know the powers and limitations of artillery.

The effect of artillery varies within very broad limits according to variations in the situation. Perhaps artillery is more sensitive, in this respect, than any other arm: it is particularly dependent on observation and, when good observation points are lacking, or when they are blinded by darkness, fog or smoke, the effectiveness or artillery fire decreases rapidly. Also, artillery needs an appreciable time for the occupation of positions, the

preparation of fire data, the installation of communications and for adjustment of fire trial shots for range and direction. The amount of artillery present in a cavalry engagement is strictly limited on both sides: it usually has wide fronts to cover and many missions: it cannot be expected to fire immediately on every target of opportunity which appears. These factors enter into the computation of the effect of artillery fire in any given situation.

For example, in Figure 4-A, we have an enemy reinforced cavalry brigade which has had time deliberately to occupy and organize a defensive position. Its artillery battalion has fully prepared its fire data, completed its installations, and has registered on important points to the limit of its range and observation. Visibility is excellent. Under these conditions, the maneuver of anything like a mounted troop or battery column forward of the line: X-Y (the limit of enemy ground observation) would be extremely hazardous. It would draw immediately a battalion concentration and would suffer heavy losses. Movement forward of the line indicated must be in approach formations and supported by artillery fire. The movement must be dismounted, unless it can end on ground defiladed both from sight and fire.

In Figure 4-B our own cavalry has attacked the same position with an envelopment. The enemy artillery is fully occupied in the defense of its front lines. Its observation points are within range of cavalry weapons: they are blinded by fire and smoke; possibly the artillery observers have been forced to don masks. One of the batteries is out of action, being forced to move to avoid capture. Under these conditions our mounted cavalry reserve, or part of our artillery, can maneuver forward almost with impunity. The slogan "A battery seen is a battery lost," does not always apply.

IV. The cavalry staff must cooperate in the supply of artillery ammunition.

The field artillery brigade of an infantry division includes an ammunition train. It carries a reserve of artillery ammunition and, in addition, operates between the refilling point, established by agencies in rear, and the ammunition distributing points where the artillery battalion combat trains replenish their supplies. This unit is not represented in the cavalry division, and its functions must be performed by the Division Quartermaster Train which operates under the Division Quartermaster, coordinated, with other supply agencies, by the Division G-4. In order to function for ammunition supply it must dump part of its usual load. The horse artillery commander, then, instead of giving orders directly to his own agency, must take up the question of ammunition supply through the division staff, and prompt cooperation by the latter is essential.

V. All must realize the necessity of liaison and its difficulties.

The wide and rapid maneuvers of cavalry make liaison peculiarly difficult: yet horse artillery must have accurate information of cavalry locations and objectives if it is to furnish effective support. The difficulty cannot be met by attaching artillery to cavalry flank columns, for these latter maneuver within themselves and their elements may be widely separated from the attached guns. Cavalry wire will usually be absent. There remain the following agencies:

**Radio from artillery liaison officers to artillery.** While radio communication is improving rapidly, it is not yet wholly reliable. When messages must be encoded, it is slow. Artillery liaison officers usually function with cavalry regiments (there are two liaison detachments with the artillery battalion), and cavalry regiments are frequently slow in getting exact locations of their front lines.

**Pyrotechnics.** These have a limited use for very simple messages, such as the start of an attack or a request for lifting of fire. They should not be depended on exclusively, as they may not be seen.

**Messengers** are a very reliable, but slow, means of communication.

**The battery observation post.** The fire of a battery is directed by telephone from its observation post, and an observer who is in a position to see the maneuvers of the troops he is supporting can immediately shift his fire in accordance with the situation. This method is particularly applicable to mounted maneuver, mounted attack and the assault of a mechanized unit, since these operations are usually plainly visible from a distance. Horse artillery positions and observation posts should be selected with this in view.

**Aviation.** An observer in an airplane can see the dispositions and maneuvers of ground troops and can communicate with the artillery very rapidly either by radio telegraph or dropped message. With the development of a reliable radio telephone, this may become our quickest and most reliable means of liaison. However, it will require a training of the combined arms difficult to secure. Front line troops must be trained to signal their locations promptly on request from a plane: friendly planes must be distinguished from enemy; the requirements of secrecy will frequently compel the use of a code: an observer must understand and interpret the cavalry dispositions that he sees.

VI. The Horse Artillery.

If a member of another arm may venture to offer criticism, it is believed that the efforts of the artillery should be directed toward the following:

- The development of a more mobile piece than the French or American 75 mm Gun.
- The development of materiel for the support of mechanized units.
- A reduction of the excessive road space of horse artillery units.
- Greater mobility on the battlefield.
- Less vulnerable formations for maneuver.

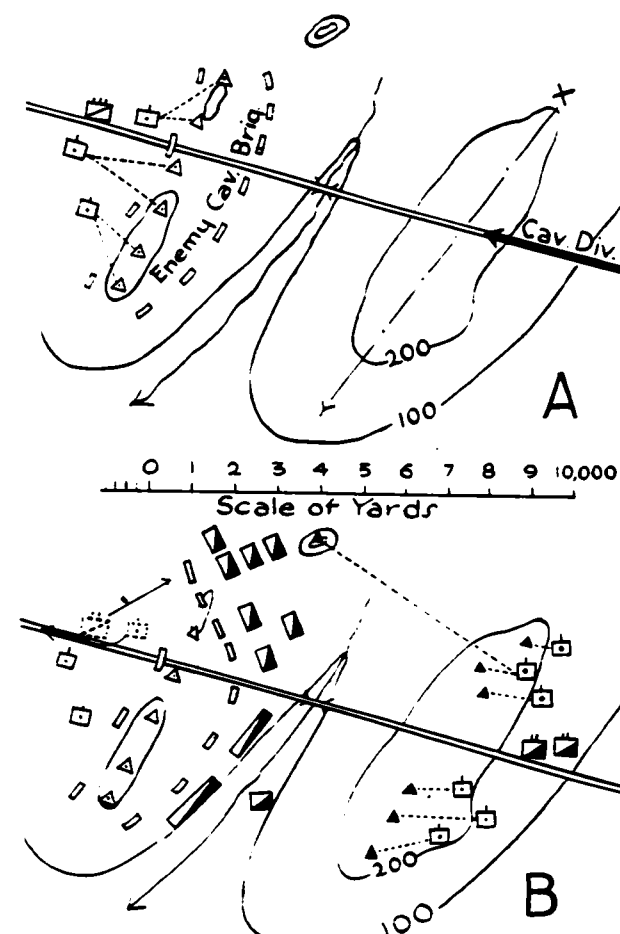


Figure 4.

Experiments are already under way to adapt the 75 mm Pack Howitzer for draft. This weapon has a range of 9000 yards; its ballistic qualities are highly regarded by artillerymen: it is about half a ton lighter than the 75 mm Gun. It will probably replace the gun in whole or in part with the cavalry division.

It is evident that our mechanized units will need fire support: it is equally evident that horse artillery can not efficiently furnish this support. Experiments are being made to adapt light artillery pieces to draft by light trucks, the cannoneers riding in the trucks, but this combination, while it may have great road mobility, will have limited maneuver mobility. It is desirable that artillery supporting combat cars have the same ability to move across country as have the combat cars themselves. A self-propelled gun mounted on a combat car chassis, or a gun drawn by a combat car, would meet the requirements, but I have not heard of any experiments on these lines.

The road space of a horse artillery battalion, less combat trains, field trains and motorized elements, as given in Reference Data, G. S. S., 1930, is 1955 yards. When it is considered that the twelve guns with their limbers, teams and mounted cannoneers take only about 500 yards of this distance, it becomes a source of amaze-

ment. The remainder is consumed by battalion and battery commander's details, caissons and 5th Sections (ammunition carriers) and Maintenance Sections (kitchens, rations, forges, spares, etc.). Artillery regulations provide that Maintenance Sections may join the Combat Train when desired, but it would appear as though much of the personnel and materiel of the details could also be relegated to a rear echelon. They will not be necessary in the opening phases of a cavalry action. A battalion commander's detail, for example, contains 64 mounted men, 4 packs, 2 reel carts, a radio wagon and a command post wagon.

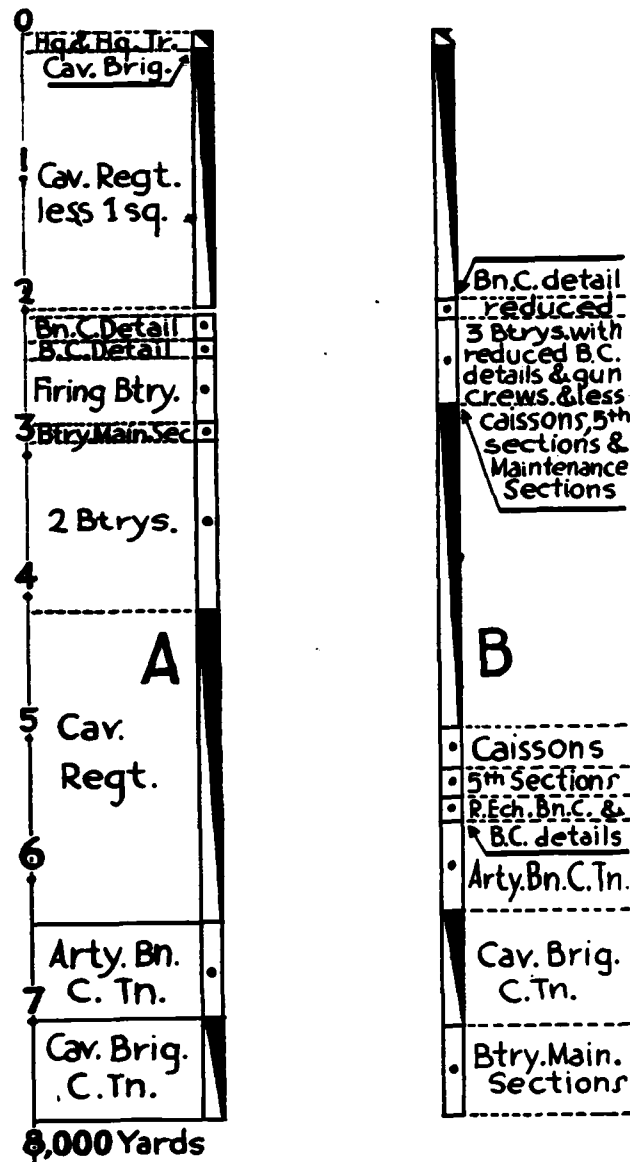


Figure 5. Reinforced Cavalry Brigade in Column (Fours).

There is a question also in my mind if the ammunition carriers can not be initially separated from the guns. Figure 5 shows the effect on the road space of the combatant elements of a reinforced cavalry brigade by the formation of rear echelons for artillery bat-

talions and batteries and the inclusion of ammunition carriers in the rear echelons. It places the rear cavalry regiment about 1200 yards nearer the front and advances the guns of the rear battery about 500 yards. The resulting advantages in rapid development and maneuver, for both cavalry and artillery, are obvious. In the figure, battalion and battery details are grouped for convenience; in a march to battle parts of them would be with forward cavalry elements, but they would consume road space in any case.

The only objection evident to this is that the guns might run out of ammunition before the arrival of the caissons. The gun limber carries 35 rounds. In Figure 5-B the caissons would be separated from the guns by the road space of a cavalry regiment; about 2000 yards in fours and about 4000 in twos. Even at the larger figure this should not be over a half-hour marching time. The estimated expenditure per gun per hour in development, advance and deployment is 60 rounds (Reference Data, G. S. S., 1930, Page 33). The 35 rounds in the gun limber, therefore, appear to be sufficient for the opening phases of a cavalry action. If the 75 mm Pack Howitzer is adopted for horse artillery, part of the resulting saving in weight might be utilized to increase the capacity of the limbers. The use of gun limber ammunition would involve some change in Training Regulations, as the present Field Artillery policy is to serve the piece from the caisson, limber ammunition being held as a reserve. It would be necessary to arrange for dumping limber ammunition at the piece and for a fuse-setter somewhere on the gun carriage, this instrument now being attached to the caisson. Gun and caisson limbers are interchangeable, and this fact could be utilized to insure that the piece always change position with a full limber.

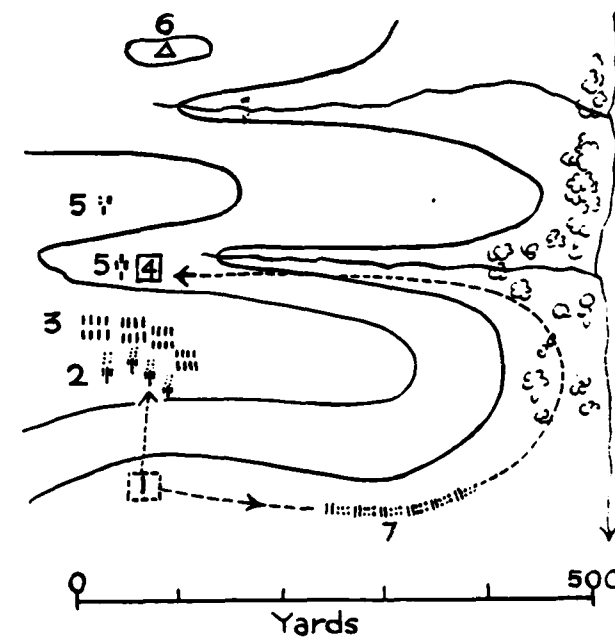


Figure 6.

- |                                |                              |
|--------------------------------|------------------------------|
| 1. Rear position               | 5. Arty. reconnaissance      |
| 2. Guns                        | 6. Enemy observation         |
| 3. Cannonners and horseholders | 7. Caissons and 5th Sections |
| 4. Forward position            |                              |

Considering battle mobility, the horse artilleryman should realize that, whereas the rate of infantry decreases when the troops leave their route columns in development and deployment, the rate of cavalry usually increases at that time. This will require very rapid movements and displacements of the horse artillery, as well as exposure, during movement, to enemy observation and fire whenever the time element conflicts with the desire for defiladed routes. The adoption of a lighter gun should increase materially maneuver mobility, but some less vulnerable formation than the usual battery and battalion columns should be considered. Here, again, the separation of gun and caisson comes up. Figure 6 indicates a possible solution when the time element is paramount.

## VII. Aviation.

The duties of aviation, where they touch both cavalry and horse artillery in action, have been indicated. Of course these are but part of the tasks of observation aviation attached to a cavalry division. But the need of combined training for these phases of battle reconnaissance is evident and, unless the small number of air corps observers necessary for adjustment, placing fire on the targets, surveillance, correction of fire, and contact missions, are assigned permanently to the cavalry division, it will be necessary to train horse artillery and cavalry officers for these duties. We cannot expect to find officers with the necessary qualifications in an observation squadron attached at random from an army pool.

## The Army and Navy Club of Chicago

THE Army and Navy Club of Chicago has established new quarters occupying the whole fifth floor of the Lake Shore Athletic Club at 850 Lake Shore Drive. Members of The Army and Navy Club are accorded full privileges of the Lake Shore Athletic Club and are invited to participate in all its activities. The lounge rooms, library, Salem Grill, dining rooms, bath department, and athletic facilities are at the disposal of club members and guests.

The appointments and privileges of the Club make it second to none in the United States as a home and meeting place for officers of the services. The club-rooms overlook Lake Michigan and are easily accessible from any point downtown by bus or street car. The success of the organization is already assured through more than 500 members.

Arrangements are being perfected for the reception and identification of officers visiting Chicago who are cordially invited to make the Army and Navy Club their home.

The Club has already become the center of Army and Naval activities in the Middle West. Many of the military organizations in the Chicago area hold their regular business meetings and social gatherings there, among them: 52nd Infantry Association, 346th Medical Regiment, 78th Field Artillery, Engineers Procurement, National Sojourners, Air Corps R. O. A. Medical Reserve Officers Ass'n., Chemical Warfare

Procurement, 6th and 7th Batteries of the Second O. T. C.—Ft. Sheridan, 11 General Hospital Units, Battery Officers of Third O. T. C.—Camp Grant.

The National Sojourners have designated the Army and Navy Club as headquarters for their National Convention to be held June 22-24.

One of the recent social gatherings sponsored successfully by the Army and Navy Club was a Dinner Dance, on the formal opening of the Club, in honor of Major General Frank Parker, commanding the Sixth Corps Area of the Army, and Rear Admiral War T. Cluverius, Commandant of the Ninth Naval District.

Probably the greatest social function of purely military character in Chicago in some years was the Army Relief Society Military Ball given on Washington's Birthday, with an attendance of over 3000. Over \$4000.00 was netted for the Society.

The Army and Navy Club undoubtedly will play a large part in the military aspect of the coming "Century of Progress," when it is expected that officers of the Army, Navy, Marine Corps, National Guard and Reserve, will make the Club their gathering place. Many have already made room reservations.

Communications may be addressed to: The Secretary, Army and Navy Club of Chicago, 850 Lake Shore Drive, Chicago, Illinois.

# Experiments in Crossing a Cavalry Command Over an Unfordable Stream

By Major O. I. Holman, 12th Cavalry

FOR some time, the 12th Cavalry troops at Fort Brown, Texas, have been experimenting with various methods of crossing the command with full field equipment and transportation over an unfordable stream. These experiments were conducted in a resaca—a part of the old river bed of the Rio Grande—at a place about one hundred yards wide. There were two phases to the experiment. The first, to ascertain the best method for horse and rider to swim together and the second, to cross the transportation and such loads as a horse could not carry over that distance.

It was assumed the horses had never been in deep water, and most likely the great majority never had. Horses and mules can, of course, swim naturally. But to teach them to like the water and to swim with maximum freedom under the control of the rider were the first aims. The factors taken into consideration for experiment were the horse, the equipment and the position of the rider. The first difficulty encountered was with horses turning back to the bank when the water began to deepen. It was soon found that there were several horses in each troop which liked water. By using these horses as leaders and having the others enter the water in column of troopers at about five yards distance, the others followed with less trouble.

In the first trials halters and halter shanks only were put on the horses, and the rider mounted bareback. This equipment did not permit any control of the horse, especially as they were then green at swimming. It was difficult for men to stay on their bare backs. In an effort to remain in position they were inclined to hold the horses' heads too high, which in some cases tended to pull the horse over backwards. This method was quickly discarded.

Next, the horses were equipped with a halter and halter shank tied around the horse's neck and a snaffle bridle. The trooper swam on the near side of the horse, with his right arm over the withers, guiding the horse with a rein in each hand. This method was no better than the first method for either control or guiding.

The third and most satisfactory method consisted in using the equipment, i.e., halter and shank tied around the horse's neck, snaffle bridle but with the reins knotted, to prevent becoming tangled in horses' legs, and the addition of a surcingle and blanket. The rider, of course, was mounted. From this position the rider could control his horse. Then, to combine control of the horse without impeding the horse's

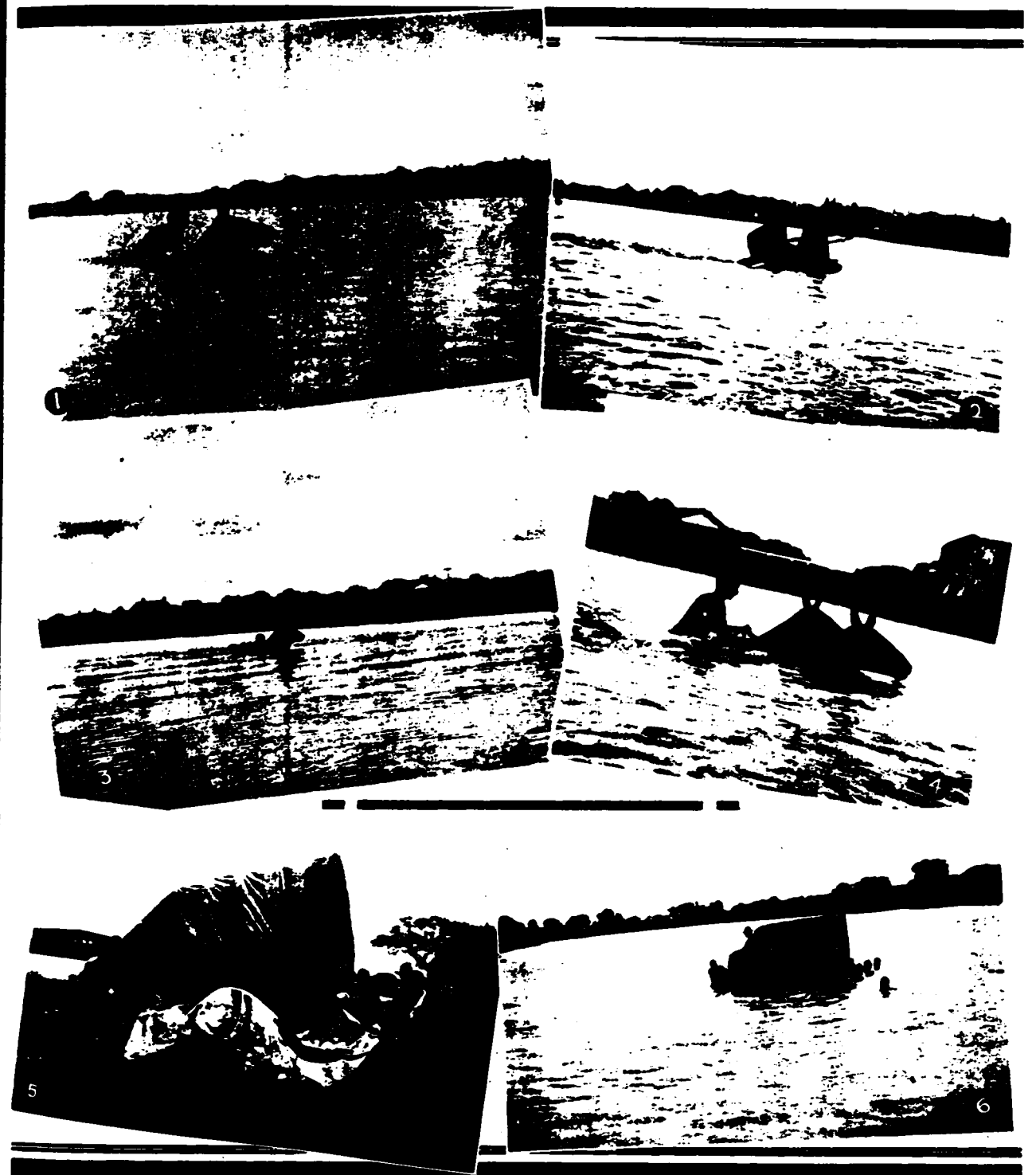
freedom, different positions of the rider on the horse were tried out.

The action of the horse's legs swimming is the same as that of a horse walking, except that the action is exaggerated. Due to the fact that in swimming there is no solid support, it is more difficult for the horse to maintain balance. Therefore, any misplacement of the rider's weight greatly interferes with the horse's progress. The rider's weight carried too far forward tends to lower the horse's head in the water or push it entirely under. The rider's weight too far to the rear tends to sink the haunches further under water and to cause the forehead to come up, thereby impeding forward progress. Keeping these points in mind, the proper position of the rider on the horse's back to interfere least with the horse's balance, is approximately the position of the trooper mounted on a surcingle and blanket, but with the upper body inclined slightly forward to meet the slight upthrust of the front end of the horse. It was found also that it is necessary for the rider to grip considerably with the legs. The forward movement through water has a strong tendency to slide the rider to the rear with the result mentioned above. In fact a quick jerk to the rear without releasing the reins would easily pull the horse over backwards. It was further found advisable for troopers to grasp either side of the halter shank, which, as has been said, was tied around the horse's neck. This enabled the rider to maintain his seat more easily and steadily and kept his hands low on the horse's neck with better guidance resulting. The horse had more freedom of movement and was not continually shifting his balance to compensate for the rider's change of position.

When the horse is equipped for the field the above still holds, but there must be one added precaution. The loss of stirrups must be guarded against. The high action of the horse's hind legs when swimming often causes them to catch in a loose stirrup. Long legged men must watch this particularly.

During all the experiments the troops were allowed to be in either bathing suits or fatigue clothes. As continual soakings were hard on the saddles, they were used only a sufficient number of times to prove that they could be used with the same results as with the surcingle and blanket.

After the horses ceased to fear the water and would swim freely and willingly, they swam with the rider grasping their tails. This method is a good one for unusually long swims, such as are necessary when transports cannot dock. But until the horse has been



1. Swimming mounted. 2. Note effect of pulling on horse's mouth. Rider should hold to halter shank. 3. Swimming on near side of horse—correct form. 4. Swimming mounted and leading horse; rider in correct position. 5. Placing the tarpaulin under body of escort wagon. 6. Escort wagon with wheels lashed to body; tarpaulin under body.



taught to swim, the man has obviously no control whatever. For a short swim it has no advantage.

Pack animals present a different problem, since they necessarily carry dead weight. The amount of dead weight a horse can carry varies with each animal. However, for a short swim of ten to fifteen yards, all horses can carry their packs and loads. Where they must swim a longer distance, say one hundred yards, it was found but few could manage, those so doing only with great difficulty. Other means of transportation of the loads were employed, to be discussed further on.

Horses now swim across the resaca during warm weather three or four times a week after drill. Not only does it assist in grooming, but it cools and refreshes both horses and men in a tropical climate such as this. The horses enter the water and swim over with no show of excitement or resistance. In fact, they seem to like it. It has become as usual as going out for drill or exercise.

## II

Crossing the packs and loads too heavy for the horses and the transportation and its loads constituted the second phase of our experiments. It will be kept in mind that all these experiments were carried on as though the command were actually in the field. The only facilities available were those which could be improvised from the regular equipment or were found at hand on the terrain.

The first consideration in crossing transportation must be an approach and landing to and from the water. Should the banks be too steep, they must be cut back sufficiently to maneuver the transportation into and out of the water.

Two methods were used to cross the escort wagon. The wagon was unloaded, and the body removed. The tarpaulin, included in Equipment "A," was placed under the bed and fastened securely forming a pontoon. It was then carried into the water. The wheels were taken off the running gear, which was placed astride the bed. The wheels, harness, other equipment, and as much of the load as possible were placed in the bed. Four men with shovels as paddles then ferried the wagon across. The bed was pulled up on the opposite bank by man power and reassembled.

The second and better method is as follows: The wagon was unloaded, and bows and wagon cover removed. The paulin was passed through under the body of the wagon between front and rear wheels, and between the bottom of the bed and the running gear. The front end of the bed was lifted until the paulin could be pulled forward to come to the top of the front end of the wagon body, which was then lowered to position. The rear end of the body was then raised and the canvas stretched until it reached the top of the tail gate. The paulin and the running gears were lashed to the body. By this method the

running gears act as a keel and ballast, insuring greater stability to the improvised pontoon. The lash rope was tied to the end of the tongue and the wagon pulled into and across the water. Should the lash rope not be long enough to reach across, pike lines in addition can be utilized. Should the current be strong and tend to pull the wagon downstream, a second rope fastened in the rear of the wagon and held on the launching side will prevent the downstream drag.

When loading the wagon for the crossing the distribution of the load must be as even as possible to prevent listing, and the center of gravity kept as low as practicable to prevent an upset. From 1200 to 1600 pounds may be loaded, depending on the bulk of the load, the wind and the strength of the current. Hay, for instance, due to its bulk, must be ferried over in loads of much less weight.

Crossing the mountain wagon proved one of the most difficult problems. It appeared at first that to float it over on a raft would be the most expedient method, as there is usually some timber, even though light, along the banks of water. Should the plan of using a raft prove feasible, it would be one which could be used in almost any locality. Floating the mountain wagon on a raft was not, however, a practical method. A raft sufficiently buoyant to carry the load was difficult to construct of the small green material available. Efforts to augment the buoyancy of the only type raft practical to construct in a reasonable length of time with milk cans and G.I. cans made watertight and lashed to it, were successful to a degree. This method could be used under very favorable conditions of banks and stream. However, a quicker and surer method was determined: that of ferrying the mountain wagon over on the escort wagon. The mountain wagon was unloaded and mounted astride the escort wagon. This was accomplished by having a detail of from twelve to sixteen men lift the mountain wagon on to the escort wagon with the aid of skid poles from the escort wagon to the ground. Great care had to be exercised to center the load, as it is inclined to be topheavy and consequently list. It was then pulled into the water and onto the opposite bank by ropes. Should the conditions of the banks make it too difficult for pulling by man power and should the terrain on the far bank permit, a team of mules hitched to a double-tree will expedite the crossing.

It is hoped that the results and conclusions set down in this article may be of some practical service. At the end of the target season at Fort Brown, the entire 12th Cavalry command with full field equipment, transportation and loads, will make a training trip. Part of it will be a problem where an unfordable stream must be crossed. It will be an interesting finale to the work of experiment and training and will demonstrate, it is trusted, the practicability of the conclusions reached.

# A Cavalry Horse of Ye Olden Days

By Major Charles B. Hardin, U. S. Army, Retired

PAT was a horse of the old-time cavalry. He was purchased in the fall of 1879 at Boise Barracks, Idaho, for Troop G, 1st Cavalry. The man who sold him was a gambler, who had misplaced his bets and therefore was obliged to part with his pet horse. So far as pedigree, known by me, is concerned, Pat was just a horse, but, from the tip of his nose to the end of his beautiful tail, he showed aristocracy at every point. A beautiful sorrel, well trained, very affectionate, and trusting his rider in all things, he appeared happiest when under saddle and rider. As a jumper, I have yet to meet his superior. How he loved to take a hurdle! No balking at the bar. As light as a bird in flight he would skim over a hurdle, come back to earth without shock. He would try any barrier that faced him—water, bars or brush.

When the assignment of the newly purchased horses was made, I, Sergeant Hardin, was given first choice, and of course I chose Pat. For already I had been petting and playing with him for several days, all the time praying that, when the new horses were to be assigned, our captain would remember that a deserter had decamped with the horse that I had ridden through the Sheepeater Campaign of 1879 and had brought back to our station in perfect condition. Apparently our captain did remember. At any rate I got Pat, although the first sergeant, who had hoped to draw first choice, had decided to choose him.

In June, 1881 I was detached from the troop, and ordered to duty at the Cavalry Depot, Jefferson Barracks, Missouri. As I had passed my examination for a commission, it appeared that I must part with Pat forever. Being allowed to choose the new rider for my pet, I chose Corporal Luther A. Secor, who I knew would appreciate and love him. Corporal Secor soon became First Sergeant Secor, and thereafter Pat remained near the head of the troop, where he belonged.

Soon after I was detached, the troop was ordered to Arizona for field duty against the Apaches. Later I heard that Pat had been killed in action. After my retirement from active service I got in touch with Secor, then a prosperous building contractor of San Francisco, California. An extract from a letter received from him is given here, to prove that I have not been unduly extravagant in my praise of Pat. Secor's letter, in part, follows:

"When I said, in my last letter, that I wanted to write to you about an old friend of yours, and mine, you were right in guessing that I referred to Pat. Pat was not killed in the Arizona campaign. He was shot through the neck, but it did not appear to do him much harm, for I gave him some very hard riding a few days after he was shot, of which I shall tell you later, and I rode him until I was discharged, when I turned him over to Bruce, whom I considered one of the best horsemen in the company and a man who would give him the best of care.

I will now give you an account of the Arizona

campaign, as I remember it, lost my notes, as I told you in my last letter.

"On September 4, 1881, I was on herd guard up the cañon above Fort McDermitt, Nevada. Just before noon, two of the guard, who had gone in for dinner, came galloping back with orders to drive in the herd immediately. When we got in with the herd the men were ready to saddle up, and in half an hour we were on the road, without rations or transportation of any kind. We marched all of that afternoon and late that night to within twelve miles of Winnemucca, when we received word that there would be no cars for us until the next afternoon. So we made a hungry camp. The next day we marched to Winnemucca, had dinner at a hotel, fed and loaded our horses, and then sat down to await the arrival of Company I. Finally the train of Company I came along, and we were on our way. We had breakfast at Truckee and dinner at Sacramento, where we unloaded and fed our horses. At Lathrop we got six four-mule teams and travel rations. On the fourth day we arrived at Wilcox, Arizona, drew field rations and marched to Fort Grant that afternoon. On the next day we marched to Fort Thomas and on the next day to San Carlos Agency. Here we left our wagons and got a pack train. Next, in four days, we marched to the White Mountains. We scouted through these mountains for several days and then suddenly ran on to the Indians we were after, who surrendered without a fight. In this band there were thirty bucks and several squaws. We took our prisoners to San Carlos, loaded them into our wagons, placed irons on the bucks, and started for Wilcox. On the third day out, we were overtaken by a courier, who informed us that three hundred Indians had left the reservation and had boasted that they would take our prisoners from us. Soon after the arrival of the courier, we sighted these Indians. We formed the wagons in two columns. Dismounting, we placed all of the horses between the columns of wagons, in charge of numbers four, and deployed the remainder of the command as skirmishers around the parked wagons. The Indians would not come within four or five hundred yards of us, so we had no trouble in standing them off for about an hour, when we were joined by two companies of the Sixth Cavalry. Then, Major Sanford, with Company I, First Cavalry, remaining with the wagons, Bernard, with our Company G, First Cavalry, and the two companies of the Sixth Cavalry, charged the Indians. We drove them up into the hills and skirmished with them until dark, when we rejoined the wagons, and proceeded to Fort Grant that night. In this fight I lost my bunkie. He had an eye shot out. We left him at Fort Grant, and I never saw him again. On the next morning the companies of the Sixth Cavalry took the trail of the Indians, while Companies G and I, First Cavalry, marched to Wilcox, where we turned over our prisoners to a company of infantry that took them to Tucson. Later in the day the companies of the Sixth Cavalry

came in with the report that the Indians were heading for the Dragoon Mountains. During the night two companies of the Ninth Cavalry came in by train from Texas.

"On the following morning, Major Sanford, our commanding officer, with his staff remained in Wilcox, while the six companies of cavalry, with Bernard in command, loaded our horses and mules into cars and, with the men on top of the cars, started for Dragoon Pass. When near the Pass we saw the Indians crossing the track, four or five miles ahead of us. We ran up to where they had crossed, pulled the doors off the cars for gangways, unloaded our stock, and were soon after them. In six or seven miles we got within long range of them. We formed left front into line, with two yards intervals. First Cavalry on the right, Sixth on the left, and Ninth in center. Then, advancing at a gallop, we commenced firing.

"The Indians would make a stand on every high elevation, trying to hold us in check. This they did to some extent, but we would soon outflank them, and then they would beat it. This was kept up for from twenty to twenty-five miles. Then they turned into the mountains, at a very bad rocky place, and we had to dismount to fight on foot. When the Indians turned into the mountains there was one party of between twenty and thirty that was separated from the others. Lieutenant Pitcher took twenty men from our company and charged this party. It was in this charge that Pat was wounded. The Indians among the rocks, although there were but about a hundred of them, held us in check until dark. Soon after dark Bernard took our company, G, and we rode down the mountain about five miles and through a pass, trying to head off the Indians. But we were too late. The Indians had gone by the pass and into the mountains on the other side. We returned to the command and camped for the night. From the surgeon I got some carbolic salve and adhesive tape and fixed Pat's wound.

"On the next morning three men from each company were detailed to escort our wounded and a lot of squaws we had picked up to Wilcox. Kelly, Meehan and I represented our company on this detail. Unlucky me. I lost the trip into Mexico and found lots of hard work when we arrived at Wilcox.

"We marched to the railroad by three o'clock that day and had to wait there for cars until midnight. We put our wounded, the squaws and our horses in cars and we rode on top in a hard rain. We arrived at Wilcox at two o'clock, a. m. At six o'clock that morning, Kelly ordered me to report to the Superintendent of Telegraph, who proved to be our old friend, Lieutenant F. K. Ward. He told me that the wire to Fort Grant was not working and directed me to get a light wagon, a team of mules, and some tools from the Quartermaster, take two men with me, and follow the line until I located the trouble. I found a pole down, and the wire grounded. We made the necessary repairs and returned to Wilcox.

"Just after retreat I was ordered to report to the commanding officer, who ordered me to take dispatches to a command of the Sixth Cavalry, scouting along

the Border. I was to take two of the best mounted men in the detachment, ride due south until I found the trail of the Sixth Cavalry, and follow this trail until I found the command. I selected Meehan as a man of the Sixth Cavalry, who knew something of the country along the Border. We rode all through that night and struck the trail for which we were looking early in the morning. Following this trail until a little past noon, we found our men in camp. We turned our horses out with their herd, got a big cup of bean soup and were just spreading our blankets for a good sleep when I was ordered to report to the commanding officer, who told me that we were to take dispatches to the town of Dos Cabezas, and wire them to Wilcox, and to make the best time possible. We rode all of that afternoon and all night, arriving at Dos Cabezas at six o'clock, a. m. I routed the operator out of his bed, gave him the dispatches and told him to ask for orders for us. Our orders came, directing us to come on to Wilcox without delay. We then went to the hotel, where I got a feeding of grain for our horses and breakfast for ourselves. I gave the manager an order on the Q.M. for two days' rations for three men and three horses. We went on to Wilcox that day. We had spent forty-four hours on this last trip, had rested less than three hours and had traveled one hundred and forty miles.

"There was no grain for the cavalry horses at Wilcox, but there was grain for the Q.M. mules. So Pat had a big feed of grain that night and another on the next morning, if it did take some scouting after dark to get it.

"The next morning I received the cheerful information that I was to start back immediately with dispatches for Colonel Bernard. This time my instructions were to go to a place called Soldier's Hole, at the south end of Dragoon Mountains, where it was known that Bernard had camped for one night, find his trail and follow it until I found him. I picked the same two men, with fresh horses for them, and I still stuck to Pat. We reached Soldier's Hole that evening, stopped for an hour and then followed the trail until three o'clock next morning, when we lost the trail and had to wait for daylight to find it. We met Colonel Bernard's command that afternoon. The command was out of rations and coming back, which was the correct move, as the dispatches that I carried ordered Bernard out of Mexico. Where we met Colonel Bernard was ninety miles from Wilcox. I had ridden Pat two hundred and thirty miles in less than four days, with one night and a few short rests. Some going for one little horse, with a bullet hole through his neck! We then went by easy marches to Bowie, where we received six months' pay. Then back to the Mexican Border for two weeks of scouting. Then back to Bowie. Then to the railroad, and back home, to Fort McDermit, Nevada, if one might call that God-forsaken place home."

So ends my story of Pat. He lived past the day when I was passed to the infantry arm but of this he knew nothing. I wonder what he would have thought of *portia* Cavalry.

## A Frontier Encounter, 1942\*

By As. Saiq.

*For in a night the best part of my power,  
As I upon advantage did remove,  
were . . . all unwarily  
Devoured by the unexpected flood."*

KING JOHN, Act. V. Sc. vii.

AS BERT FRANKAU chugged his way down to the racecourse in his antediluvian car, on that summer morning of 1942, a scene of unusual activity met his gaze.

It was early, even for him to be about: the topmost peak of Kanoon was only just taking on that salmon tint that indicates the dawn, the lower slopes and the sloping valley itself were still wrapt in a dove grey mist of mingled smoke and mist.

Early as the hour was, troops had been on the move some time. The group of armoured fighting vehicles which attracted his attention, was somewhere near the end of the column that was hurrying, with more noise per vehicle than even his old car made, in the direction of the frontier town of Banoon.

Watching this ungainly clanking army clatter past, he thought with regret of those days when he had ridden out at the head of a squadron of cavalry, an arm of the service, which now seemed doomed to extinction.

A shrill whistle interrupted his reverie and, looking over his shoulder, he saw a train approaching along the railway track behind him. Another, though less modern, mechanical monster. This one, however, was not so bad, as his first glance told him it carried horses, obviously a cavalry regiment on the move. As the train slowed up before an adverse signal, cat calls and friendly voices came from a first-class carriage.

One of the officers, a well-known G.R., leaned out of the window and chatted to Frankau. They were off to Banoon: a whole cavalry brigade, which had been standing for a week, had got orders to entrain last night, for there was trouble with Nemesia. Another shrill whistle and off went the train.

Frankau knew the story that had been in the papers for days past. Nemesia had made a treaty with Portulaca some years ago, which entitled her to run an air service to Portula for a period of two years. When this treaty was due for renewal, they had added a clause, which would entitle them to run an air service to Demesh as well. Now an air service would mean ground organization, and we could not agree to a Nemesian aerodrome as near to our frontier as Demesh.

The Portulacan Government had made this clause a reason for rejecting the whole treaty. The Nemesian had attiled the sabre and threatened to occupy

Demesh. If they did we must come to the aid of Portulaca.

His curiosity aroused by what he had seen and heard, Frankau hurried off to the town to get the latest news.

### II

"Before you start," said the Brigadier, "I want to run through the orders you got out last night and make sure there is nothing more to add before we go."

The scene was the Brigadier's study, and he was speaking to his Brigade-Major. The Brigadier was commanding the newly arrived Medium Armoured Brigade which had replaced the old-fashioned units as a spearhead formation in case of war with Nemesia.

"Let's see what you have told them," he said. "Information: Nemesia has declared her intention of occupying Demesh. They have a mechanized force at Dangli the equivalent of two of our medium armoured brigades. From information received they are due to reach Demesh on the 8th of June, that is tomorrow, so we have today to forestall them.

"I see we are marching in three echelons, the first one was down at Banoon already so we can march at 8 a.m. and should do the 50 miles to Demesh by noon. The other two echelons should be up by 4 or 5 o'clock at latest. I shall wait here to get the latest possible news from A.H.Q. before following in my Rolls in time to reach Demesh with Brigade Headquarters. The plane arranged to take you leaves the aerodrome at 9:30 a.m. Go direct to Demesh and select a camp site from the air: the one given in the route book, one mile south of Demesh, seems reasonable. The Tamarisk jungle should give cover for the A.F.Vs. from hostile aeroplanes, and there is a landing ground conveniently nearby. The only disadvantage is, that it is rather low lying and may get muddy if it rains: however, anywhere else we should be in the open, without any cover from the air, so we may have to risk it. When you have selected the camping ground, go on towards Dangli and be prepared to tell me about the country we may have to fight over tomorrow.

"Remember that 45 Squadron R. A. F. Troop Carriers will be bringing out three companies of the 12nd, in two trips: be back in time to meet the first batch about noon and get them round camp to keep off tribesmen. Although we are going to Demesh at the invitation of Portulaca, the King's word does not have much effect down there and we may not be very well received.

"The Group Captain is arranging for air defence while the troop carriers are landing. By the way, the Cavalry Brigade is marching from Banoon tonight and is due at Demesh the day after to-morrow

\* From the British Cavalry Journal, January, 1933.

evening. They are taking alternative pack and motor transport, so should be useful if it rains."

## III

"Right behind?" "Yes." The pilot signalled all clear and a moment later the plane was taxiing down the aerodrome. The Brigade-Major had hardly had time to look round before he saw the earth dropping away beneath him.

Half an hour took them to the top of the Knaboor pass and they got their first uninterrupted view over Portulaca. To the left they saw a flat featureless plain with, just short of the southern horizon, a line of low misty clouds, looking like flakes of cotton wool, mist rising from the distant Merhman river. To the right the plain was bounded by hills much the same as those they had been flying over, but which got gradually lower as they stretched westwards terminating in a bluff, like the prow of a battleship, some 80 miles away.

That cloud of smoke and dust below the bluff must have been Demesh, but for the present objects nearer and more clearly seen absorbed their attention. Leaning over the left of the machine the Brigade-Major saw a snake-like formation of dark objects moving rapidly west. This was the rear echelon, the major portion of a medium tank battalion, some close support artillery and two companies of light tanks. A few miles further on they overtook the second echelon, Brigade Headquarters leading, with its call signs out in case they wanted to drop a message.

Gradually out of the smoke and dust, already noted, the minarets and domes of an oriental city began to appear, and soon the walled city could be separated from the more modern buildings on a hill to the north. Finally, as the machine dived low, the tamarisk jungle could be seen on the edge of a wide river bed.

The flat ground beneath the trees looked as it would make an excellent camp, there was plenty of cover from view and, by selecting a site on the left bank of the dry river bed where it made a marked loop, a Tank obstacle was provided on all but a very small portion of the perimeter.

Now for a look at to-morrow's battle field, as there was about threequarters of an hour before the troop carriers were due to arrive.

A paper was passed to the pilot and he swung quickly on to a north-westerly course. The ground they now passed over was rather curious, hardly a stone to be seen, but a succession of deep dry river beds running through a brick-like formation broken here and there by cracks and fissures.

A stampeded antelope threw up a cloud of dust that clearly showed the soft nature of the soil. The whole was covered with patches of jhow and dry reeds, a likely cover for pig.

As the Brigade-Major in a kind of reverie concentrated on the interesting sights below him, the rhythmic roar of the engine was broken by a series of

sharp cracks. He instantly looked up in the direction of the noise, distinct but not very near.

The cause was obvious; a thousand feet above him and about half a mile away, the escort flight was engaged in combat with a flight of enemy machines.

Tat-tat-tat went the Vickers; and now an enemy was seen to go down in flames and, shortly after, another left his formation, and swung down slowly like a wounded mallard.

He came towards the Brigade-Major's machine, and this temptation was too much for his pilot. Sweeping up to gain height he dived on the tail of the wounded duck and down the latter went but not before he had bitten back; for like the scorpion he carried a sting in his tail.

A group of bullets struck the plane and, as he recovered from his involuntary shudder, the Brigade-Major saw the pilot collapse in his seat.

He leaned forward and tapped him on the shoulder. No response, and now the machine began to wobble.

There was no time to lose, so he fitted the dual control joy stick and got his feet into the rudder controls.

The machine began to spin, so setting all controls central he put her nose down and heaved a sigh of relief as she dived gracefully downwards. Raising her slowly he gently turned towards Demesh. Though no pilot, he had had a few hours dual on previous flights, but this was his first solo and he felt the responsibility.

Now the machine was flying itself and all was easy but what about landing? Demesh came nearer and there on the landing ground he could make out a couple of troop carriers. The "T" was laid out, so he knew the direction of the wind. Sweeping down in the widest of "S" turns he got opposite the end of the landing-ground at a reasonable height to land. He decided to risk it.

Down went the nose for a while, then up, then level, up again, the engine was throttled right back and the machine was losing speed rapidly. Once more he pulled back the joystick and then came a thud. The machine bumped forward twice and then came to rest with its nose in the ground and the tail pointing skywards.

He had shut off petrol, so there was little chance that the machine would catch fire. Men came running over from the troop carriers bringing a couple of ladders and he and his pilot were quickly lifted out of the wrecked machine. The latter is regaining consciousness and a young doctor with the troops is hopeful of his recovery.

Another batch of troop carriers arrived and it was strange to see the men pouring out of the side like Noah and his family from the Ark. Some were eager, others reminded him of a channel passage in rough weather, while many on landing had such urgent and intimate business of their own to attend to that they were best left alone.

However, in a very short time he had mustered the platoons and told them off to various piquets guarding

the camp. This was now marked out to receive units, and a message was sent to be dropped on the column telling them where to come and giving a rough sketch of the lay-out.

While these preparations had been going on a small procession had arrived from the town headed by a somewhat surly individual in a long black coat and wearing a fez.

In passable French he explained that he was the Governor of Demesh and asked the reason for this, to him, unwarranted invasion. In French, not quite so good, the Brigade-Major did his best to explain and persuaded the Governor to await the arrival of the Brigadier who would have written authorization with him.

The latter arrived very shortly after, having caught up the leading echelon, and in a few hours all were comfortably settled in camp.

A minor R. A. officer, after flying round, dropped a message before departing to say all the A. F. Vs. were admirably concealed, so every one settled down for a comfortable night. Bombing there might be, but it was hoped that a dummy camp about half a mile away would draw all such unwelcome attention.

## IV

As was expected the night was not entirely uneventful in the A. F. Vs. Camp, for at about 11 p. m. the hum of aeroplanes and the dropping of parachute flares was followed by a crash of bombs on the dummy camp.

This was repeated about 3 a. m., but what affected the troops more was a determined attack by snipers. On three sides they were easily kept off, as any attempt to cross the river bed was immediately spotted and stopped by machine gun fire. On the remaining side, however, a determined attempt to penetrate the camp was made. This was quickly checked with a counter attack by light tanks which made a rapid sortie on a previously reconnoitered route.

Then it happened: clouds had been working up all the early part of the night with marvellous rapidity. By 3.30 a. m. the sky was black as ink and after a clap of thunder, like the knell of doom, down came the rain.

The force of these storms must be seen to be believed, and this was one of the severest ever chronicled. In a few moments torrents of the water were running everywhere and the queer red cotton-like soil rapidly became like a cross between porridge and pea soup.

When morning broke it was raining still, but the force of the first downpour had slackened and a steady drizzle was maintained.

A sub-section of light tanks started out on a reconnaissance that had been detailed the night before. They got a few yards from camp and by that time they were axle deep in mud and their tracks began to slip aimlessly round, like the paddles of a paddle steamer, only without making any progress through what was now literally a sea of mud.

The Brigadier hastily countermanded the patrol and

gave orders that no vehicles should leave their shelter under the trees. "After all," he said, "the enemy A. F. Vs. are just as helpless as we are; the only danger is from air attack and so we must concentrate on keeping hidden."

About 5 o'clock the most amazing air report was dropped on the camp.

It appeared that about ten miles out, on the road to Dangi, a force of enemy armoured fighting vehicles appeared to be stuck in the mud. They were in marching formation and must have been caught in the rain while making a night advance on Demesh. Such an advance was possible and most likely, had they got news of our arrival in Demesh the night before.

The report went on to say that bombing operations against these A. F. Vs. had been interfered with by hostile fighters. Good results were hoped from bombs dropped, but another attack would be made in the afternoon.

Nature was taking a hand in grim earnest and showing that Napoleon's fifth element was still to be taken into account.

## V

All day long our camp had been observed by hostile tribesmen and, as it grew dark, emboldened by our inactivity they again started to snipe from fairly close range. The continuous rain made it very difficult to use searchlights, and as the night went on the situation grew more and more critical.

For the size of the perimeter, the available garrison was ridiculously small and the state of the ground made digging farcical; as fast as a trench was dug it filled to the brim with muddy slime.

The Brigadier was having a very anxious time, but if they could last out till dawn he knew help was at hand. An S. O. S. for air assistance had been answered, and he was sure that fighters flying low would shoot up his assailant as soon as it was light enough to see, but in addition to this he was in touch with the Cavalry Brigade.

By R. T. he had told them his situation. The Cavalry Brigade had camped at a spot about twenty miles distant after having covered sixty miles in two days, but hearing of the A. F. Vs. predicament was on the move once more. Fortunately they were on higher ground and by keeping to a road that skirted the hills the Cavalry Brigadier hoped to reach Demesh without difficulty, about 7 a. m. He was using pack transport leaving his M. T. behind with a small guard.

## VI

The eastern sky was beginning to lighten. Hand-to-hand fighting was going on in the southern part of the camp. Tribesmen had crept in and got among our infantry at the south-east corner and machine gunners in A. F. Vs. could not shoot for fear of hitting our own men. Gradually it grew lighter and at last could be heard the far away purr of aeroplane engines.

Down they came, the purr became a roar, direction arrows were put out and a few seconds later came the crash of bombs in the undergrowth north of camp. The first salvo was perilously near our own front line, but the next was perfect. Now the tribesmen could be seen bolting, dodging through the Tamarisk jungle and single seaters darted above them adding their quota of fire to that already coming from the camp.

Men began to smile again, and had it not been for the continual rain life might have been bearable once more.

## VII

Half an hour later the sound of rifle shots came from the direction of the native city. Later artillery could be heard in action, and about 8 o'clock the Cavalry Brigadier was talking on the radio telephone.

On arriving before Demesh his patrols had been fired on. He had been obliged to attack the old fort, which was now in his possession. He had taken hostages for good behaviour, including the Governor, and his troops were holding points in the City dominating all movements therein. He now proposed to move out to deal with the enemy mechanized force reported bogged on the Dangi road.

## VIII

Still keeping as far as was possible to the higher ground north of the Dangi road, the Cavalry Brigade (less all wheels) had reached by midday a spot about twelve miles from Demesh and between Dangi and the Nemesian mechanized force.

Cavalry patrols had confirmed the air reports, and now standing on one of those small artificial mounds that exist in that part of the world the Brigadier gazed on a most extraordinary sight.

The country ahead of him was perfectly flat, covered in places with jhow and tall reed-like grass out of which protruded a number of black looking objects. He was reminded at the same time of Pharaoh's chariots, and of elephants beating for the Kadir Cup. But these elephants did not move.

His plan was quickly made.

One regiment was to operate astride the Dangi

road, one to the south of it and one to the north. These two would connect towards Demesh to prevent fugitives escaping on foot.

The cordon being set and the co-operating squadrons of R. A. F. in sight, the troops began to close in. Now their difficulties began. The moment they reached the level of the river banks the horses sank above their hocks and progress was terribly slow.

However, fire from hostile machine guns soon made them dismount and then began what must have been one of the most extraordinary operations of war that ever happened.

Crawling forward on their bellies, in liquid mud, the men man-handled their anti-tank weapons until they got within range of a vehicle.

Then, one by one, all within range were taken on. If the garrison bolted a short burst of machine gun fire brought them down.

Meanwhile the air force was not inactive: as the cavalry took on the outer fringe a squadron of bombers dealt with the vehicles within. Away towards Dangi the fighters could be seen warding off the enemy air attack.

The fight was long but one-sided: it could have but one ending. Some of the crews held out till their vehicles blew up. Others recognized the hopelessness of the struggle and surrendered. Gradually white flags appeared on more and more vehicles, till at last about 4 p. m. the fight was over.

About the same time the sun came out for the first time in two days and shone down on a happy band of bedraggled and dripping riders, escorting their prisoners back to Demesh.

## IX

Bert Frankau stood at the Club Bar that evening. The latest wireless reports from Demesh were being passed round.

"I give you a toast," he said, as the waiter finished handing out a round of drinks. "Here's to the horses; you can't do without them." "Quite right—you can't," said an ugly little man in the corner. "But I will give you a better toast: 'Co-operation'—and make the best of the old and the new."



# Communications of a Modern Motor Truck Convoy

By 1st Lieut. H. W. Ketchum, Jr., 1st Armored Car Squadron, 1st Cavalry Division

A CONVOY of forty motor vehicles is making a trip of over six hundred miles in west Texas. The maximum speed of the slower vehicles is less than twenty miles an hour. With a distance of about a hundred yards between vehicles, the convoy stretches out for a distance of about two and a half miles from head to tail. The convoy commander, having the responsibility of "kicking" the convoy down the road, is most generally at the tail of the column, prodding the cripples along or putting the paralytics on the towing string; patching this one and soothing the one; herding them all along, for the best of the several types of automotive equipment now in use in the Army have the inherent and unfortunate habit of becoming temperamental at the most unexpected places and at the most embarrassing times.

There comes a time when the convoy commander must leave the all-important sweeping-up job to go to the head of the column. Perhaps the road ahead is presenting difficulties or is poorly marked. He can be at but one place at a time. If he leaves the tail of the column—well, he leaves it, and what then? How will he coordinate the movements of his convoy? Imagine the wear and tear on the energy and nerves of the harassed convoy commander. Imagine the number of miles over and beyond those called for by the itinerary which are put on the speedometer of the convoy commander's car. It will very probably cover twice the distance that any other vehicle in the convoy does.

This picture should provoke thought—serious thought.

And yet, picture another scene. The same convoy of forty vehicles is moving down the road. The leading vehicle is equipped with a radio set capable of operation while in motion. The last vehicle in the column is similarly equipped. The two cars are in continuous communication. The convoy commander is able, in effect, to be in two places at the same time. He can easily keep in touch with conditions at both ends of his convoy and yet remain at the head of the column. This picture, too, should provoke thought.

Ask any old-timer at the convoy game, and he will tell you that the first picture is only too realistic. He will probably raise questioning and doubting eyebrows at the second picture. But it, too, is a reality. On the first of November, 1932, a convoy of forty-one motor vehicles departed from Fort Bliss, Texas, en route to Normoyle Quartermaster Depot, San Antonio, Texas—more than six hundred miles away.

The detachment manning the convoy was under the command of First Lieutenant DuVal C. Watkins, Quartermaster Corps, and consisted of two officers and sixty-one enlisted men. It was made up of volunteer drivers from almost every unit stationed at Fort Bliss, built around a nucleus of trained men from the 51st Motor Repair Section and the 49th Motor Transport Company. Both of these latter organizations belong to the 1st Cavalry Division Quartermaster Train.

Twenty-eight of the vehicles comprising the convoy were 1917 model Four Wheel Drive trucks which were being taken to Normoyle for modernization and re-issue to the service. These twenty-eight trucks had been in storage for more than twelve years. It is not difficult to imagine the deterioration which had taken place during that length of time nor to judge the added difficulties of the convoy commander occasioned by the consequent innumerable minor breakdowns and more than average number of major breakdowns suffered by these vehicles. Besides these twenty-eight old "wobblers" there were the usual vehicles, all modern, required for mechanics' and cooks' gear, the gasoline tank truck, spare trucks required to transport the drivers of the old trucks back to Fort Bliss from Normoyle, and three radio-equipped cars. Two of these last named vehicles were used constantly to furnish interior communication for the convoy, while the third one carried a spare radio set.

The manner in which the interior radio communication operated was this: when at the head of the column and wishing to know if the tail was still coming along without difficulties, it was a matter of but a few minutes for the rear radio car to report his location, by means of his trip speedometer reading, and whether he was halted or moving. Knowing the speedometer reading of the leading radio car, the convoy commander was told all that he wanted to know by that message. The convoy had not been halted. If required, more detailed and accurate information came to him in a few more minutes. Conversely, when at the tail of the column and having been halted for some time with a major repair job, he knew in a minimum period of time whether or not the head of the convoy was moving along at a normal rate of speed. Thus, the necessity of overtaking the column, cutting in and out between vehicles, was obviated.

Even with the perfect continuous communication thus afforded by radio, the fact that it required seven days to complete the six hundred mile march is indicative of the difficulties encountered by this particular



convoy. Because men were volunteers did not necessarily imply that they were experienced drivers. All were competent to drive a truck, but few of the drivers had ever had any previous convoy experience. As a consequence, road discipline, for the first few days' march, was very poor. The drivers, willing but green, were either losing or gaining distance continuously, thus bringing about the whip at the tail of the column which is present in every marching column, foot, horse, or motor, exaggerated by the number of elements in column and the rate of march. The convoy commander thus had the added task, not ordinarily to be expected, of training his personnel while in march, as well as keeping the column moving and on the correct route. On such occasions, most numerous in the early part of the trip, when he was neither at the head of the column nor at the tail, the third radio car accompanied his car and kept him in touch with his entire convoy.

Two days and part of a third day, the convoy ran in rain on slippery dirt roads. Scenically beautiful—but realistically horrible—canyons were slipped into and climbed out of by the almost three-mile-long column of long-in-storage trucks. Devil's River, twelve miles west of Del Rio, with its causeway destroyed by recent floods of phenomenal magnitude and closed to civilian traffic because of dangerous local flood conditions of the moment, was crossed on an improvised causeway with eighteen inches of water rushing over it. Radio communication was particularly useful at this point. Vehicles which had been halted at the edge of the canyon were sent down to the actual crossing place, a half mile distant and out of sight of the assembly point on the edge of the canyon, by radio command.

The radio communication for the convoy was furnished by Troop A, 1st Armored Car Squadron. Three Armored Command Cars, equipped with SCR 163 Radio Sets, with operating personnel, were attached to the convoy by that organization. The sets used in this test were modified by substitution of the PE-6 Dynamotor and storage batteries for the hand generator as power equipment and also by the substitution of the loop antenna designed by Pvt. Ralph E. Colton, Troop A, 1st Armored Car Squadron, for the umbrella antenna. This antenna, being a built-in feature of the car on which the set is carried, makes it possible to operate while the car is in motion. In tests, efficient and reliable transmission and reception have been accomplished between moving vehicles using the Colton Antenna up to distances of fifteen or twenty miles and between cars halted, using the same antenna, up to distances of thirty-five or forty miles. Although reception is difficult in a moving car at distances beyond twenty miles, the operator is still able to recognize call signals, so that he can bring his car to a halt and complete the reception, thus obviating the necessity of a prearranged schedule for communica-

tion in the command using this equipment, when on the march. Since the limit of transmission between sets using the standard umbrella antenna is also about forty miles, due to the well-known "skip-distance" effect met with in short-wave radio communication, the Colton antenna has been found to be of great value to tactical units mounting their sets on motor vehicles.

In addition to using the radio sets which accompanied the convoy for interior communication, daily schedules were worked by one of the sets with stations at Fort Bliss, Fort D. A. Russell and Fort Clark, while a receiving station at Fort Sam Houston logged all stations in the net. Transmissions at noon daily were invariably successful, excepting only those upon those occasions when the distance separating the mobile station fell within the skip distances of the permanent stationary stations. Transmissions at five P. M. were just as successful, with the same exceptions, as those at noonday. Transmissions after dark were uniformly unsuccessful, with, however, several outstandingly brilliant exceptions, for which there is apparently no explanation, other than an indication that there is still much to be learned by the trade concerning the eccentricities of the short radio frequency waves. Interference from other nearby stations and from distant but more powerful stations and some little static interference were noted. Atmospheric or meteorological conditions also were noted to exert powerful influences on transmission and reception alike. Also, with the comparatively weak power units of the sets in the test, geophysical and probably geological and mineralogical conditions had both strange and strong effects on signals. With all of these adverse influences, however, perfect communication resulted between the set with the convoy while it was at San Antonio and a set operated at Fort Bliss by the 1st Signal Troop, First Cavalry Division. Strangely enough, when a night schedule was worked, with hourly call-ups, signals were received by both stations with more than moderate strength. The night in question was cold and clear, with little static interference.

One of the sets with the convoy, and which was also the one that carried out the distance tests in addition to working in the interior or convoy net, was operated by Sgt. Wesley J. Moseley and Pvt. Ralph E. Colton, both of Troop A, 1st Armored Car Squadron. The other set was operated by Cpl. Jack Dalton, Troop A, 1st Armored Car Squadron, and Pfc. Wade H. Taylor, 1st Signal Troop. Privts. Thomas J. Crawford, Nathan E. Ward, and Russell Gibson, all of the 1st Signal Troop, who had acted as drivers for the convoy on the trip to San Antonio, stood reliefs on the set during the all-night test with Fort Bliss and also acted as operators on the spare set on the return trip.

Radio communication in convoys is feasible and practicable. This trip demonstrated that much, and it is predicted that in due time all motor convoys will be so equipped.

## American Military History

By Major C. C. Benson, Cavalry

*"In my opinion the proposal with which this article concludes offers a sound and practicable solution of the problem presented, which merits the careful consideration and support of officers of the Army and all others interested in a comprehensive and accurate recording of the facts of American Military History."*

(Geo. S. SIMONDS,  
Brigadier General, U. S. A.)

THEODORE ROOSEVELT, speaking about American military history at Boston on December 28, 1912, said: "I know my fellow countrymen, and I know that no matter what general resolutions they come to in advance, no matter what the lack of preparation, they would go to war on the drop of a hat if the national honor or the national interest was seriously jeopardized. The way to prevent the possibility, therefore, is to keep ourselves, our whole military system, the Army and Navy as part of the whole military system, in such a condition that there won't be any temptation on the part of anyone else to go to war with us. You can't do that unless you make our people wake up to the real meaning of our past history."

To "make our people wake up" to the real meaning of our military history is especially difficult. Many of our citizens are satisfied with histories that recount only our ultimate success in every war in which we have engaged. There are others, of pacifistic tendencies, to whom military history is a subject for avoidance rather than study. They may consider the study of military history to be antagonistic to their aims; but it would appear that, under present world conditions, efforts to promote peace must take into account the facts about war. The human factors that make for war have not disappeared; they recur in both hemispheres as strongly today as at any time in the course of recorded history. Many nations are crowding each other in their struggle for existence; some are seething with revolution. Wars are now in progress in various parts of the world, and have been continuously since the close of the Great War which was to have ended war. War is not a latent disease; it is a virulent pestilence. To limit its ravages, and to avoid having our nation subjected thereto, are the heartfelt wishes of every American. Despite the fact that war would bring to our professional soldiers opportunities for increased rank, pay and reputation, those who have experienced the horrors of war sincerely desire peace. Both military and non-military advocates of peace are here on common ground. If both can find secure footing on this common ground, there is hope that peace movements will develop along lines that hold the greatest promise of success.

The surest way to guarantee continued peace for the United States is to develop in the American people a broad knowledge of the facts of our military history, and an appreciation of their true significance. Let them

know how close this nation has come to the brink of disaster; in addition to exploiting our triumphs, dwell on the humiliating defeats that we have suffered. Failure to investigate thoroughly our military history, and to apply its teachings, has added to our public debt billions that might otherwise have been devoted to the maintenance of peace. Before, during and after each great national emergency, we have repeated many of the costly errors that could have been avoided had experience been our guide. If our people could but know the truth, it would constrain them to recoil from war until there is, with honor, no alternative. All the peace societies in the world could do no more. Instead of antagonism between students of American military history and those who advocate peace at any price, there should be close cooperation.

It is essential that we know the strength and weaknesses revealed by our past military experience. This experience should be studied, in its proper relation to economic, social and political factors, as an integral part of our national life. It involves not merely the strategy, logistics, organization, training and tactics of military forces; it involves an analysis of our national growth, and of the attitude of our people towards their federal government, towards their national military system, and towards foreign nations whose interests have conflicted with our own.

The work necessary to the proper study of our military history includes four distinct operations:

Assembling historical evidence

Preserving the evidence

Writing history

Publishing and distributing historical material.

No one agency, official or otherwise, is capable of performing efficiently all of these operations; nor is it desirable that any one of them should undertake the whole task.

### Assembling Historical Evidence

To establish historical facts, it is necessary to assemble evidence, evaluate it, and then, from a study of all available data, to deduce the truth. The evidence required may be in the form of an authentic contemporary written document, map, photograph, an article of uniform or equipment, field fortifications, and so on in endless variety. The important thing is to bring together in one place as much evidence as possible, in order that personnel trained in modern historical methods may evaluate it, index it, and prepare it for the use of students and historians.

It might be supposed that the evidence necessary to cover the comparatively brief period of our national life would be readily available; but that is not so. In the Congressional records, the printed official records of our Civil War, and in many unofficial publications pertaining thereto, we have a wealth of documentary source material for that war. And there are, in various publications and museums, fairly complete and reliable data on the Revolution. The same can not be said about our Hundred Years War with the Indians, the War of 1812, the War with Mexico, the Spanish-American War, or the World War. Until the evidence relating to each of these wars is assembled, evaluated, and made available for research, the facts can not be established, nor can the lessons of our past wars become known.

How necessary it is to assemble the evidence is indicated by the efforts of the 1st Division Association to complete the World War records of that Division. Soon after arrangements were made in 1927 for representatives of this Association to examine the official files, it became evident that there were great gaps in the records. Important field orders, situation maps, operations reports, and similar documents were missing. They were found, after diligent and systematic search, in other official files; among the current records of 1st Division units; and in the possession of individuals. The search was made by former members of the 1st Division who were well acquainted with its war-time personnel and operations. They wrote thousands of letters and made hundreds of personal visits. Curiously enough sergeants who had served at battalion and regimental headquarters were able to produce carbon copies of many documents for which no originals could be found. The official 1st Division files originally filled nine filing cabinets; when the job was done, there were nineteen.

The experience of the 2d Division Association parallels that of the 1st. Their initial efforts along this line preceded those of the 1st Division, and blazed the trail. One brigade of the 2d Division was composed of Marines; consequently, it was necessary to search the historical files of the Navy Department and the Marine Corps files at Quantico, Virginia, where this brigade was demobilized. Had the former members of the 2d Division not been determined to complete their records, and willing to support the project with approximately \$5,000, the work could not have been carried on to a satisfactory conclusion.

These examples have been cited to show the unsatisfactory condition of the official historical records of typical World War units. The assembling of World War records is still practicable because so many of the participants are living. They can be reached by mail or personal visit; and, on the whole, are seriously interested in helping to preserve the history and traditions of their units. Even for the World War, however, the situation is rapidly changing for the worse. The papers of deceased veterans fall into unappreciative hands, are mislaid, consumed by fire, eaten by mice, are simply thrown away or otherwise destroyed.

It will not be long before the great mass of the documents in the possession of individuals has passed beyond the hope of recovery. That condition now applies to many of the scattered records of our prior wars.

Although official records will usually provide the backbone of our military history, much additional evidence must be assembled. Official documents are generally too restricted in scope to meet the historical needs; an order, for example, states what certain troops are to do, but the commander's reason for issuing the order must be sought elsewhere. It may be found in his diary, in personal correspondence, or in the private papers of officers who were on duty at his headquarters. For periods in which small groups of observant educated people lived in isolation on the frontier, as Army garrisons commonly did during our Indian Wars, the casual letter of an officer or lady may establish facts of great value to historical research. The private correspondence of George Washington is invaluable as historical evidence on many matters connected with our early military history. Similarly, the letters of General Robert E. Lee to his wife throw much light on certain events of the Civil War. The diary kept by General Charles G. Dawes, and published in 1921 under the title "A Journal of the Great War," contains historical material of primary value that can not be found in official documents.

The assembly of this non-federal but none the less authentic evidence presents a serious problem. This material includes letters sent and received, diaries, account books, drafts of reports and studies on military and non-military subjects, miscellaneous notes and memoranda. Some of it is probably assembled now, in the archives of state and other historical societies in this country, where it could be reproduced, or consulted; but no one knows exactly where to look for the remainder. Even when found, the present owners may be reluctant to part with it, or to permit the unrestricted use of documents that reveal the intimacies of family life. These obstacles can often be overcome by returning original documents after true copies have been made; and by safeguarding certain papers through suitable restrictions. Typical restrictions that might properly be imposed are that ownership is not relinquished; that examination will not be permitted during the lifetime of the donor; that the documents may be examined only by serious scholars or upon specific authorization of the donor. Persons who are justly proud of the achievement of their ancestors should regard it as both a duty and a privilege to deposit historical papers where they will be preserved for the future use of historians. The principal difficulty is the lack of a responsible central agency of unimpeachable standing that could undertake to assemble this non-federal material.

Little can be said, without over-extending this discussion, about evaluating evidence and making it available to students and historians. These additional steps must be taken to complete the assembly. When the Historical Section, Army War College, completes its

present primary task of assembling, collating and indexing the official historical records of World War organizations, it will know what records are missing and will have ready for use a directory for all the important documents that are now in the files. The experience of the Historical Section in evaluating evidence contained in organizational records, shows that this work should be done by those who have a broad background of military experience and knowledge in general, by officers who are qualified for duty on the General Staff. Their work on official records should be supplemented, in the non-federal field, by that of qualified civilians and retired officers who are especially interested in our military history. Anyone who has attempted to dig out facts on a particular subject from a mass of documents, will appreciate the value of having all the pertinent evidence indexed in advance.

The task of assembling this evidence falls naturally into three parts. That connected with the official service records of individuals belongs exclusively to The Adjutant General. That which deals with the official historical records of organizations is, as stated in Army Regulations 345-105, the particular concern of the Historical Section, Army War College. The assembly of all non-federal evidence relating to important individuals and to organizations, must be entrusted to a non-governmental agency which has yet to be created. To insure progress there must be complete co-operation between responsible and competent agencies. The most urgent historical task that now confronts these agencies is to assemble such evidence as is readily available, and then to search out more, before it is destroyed.

#### Preserving the Evidence

The necessity for preserving the evidence needs no discussion; this is simply a question of who is to do the work. The Adjutant General is the legal custodian of official War Department records, and should remain so. The Historical Section, Army War College, is made responsible for assembling the official historical records of organizations, because this work can best be done by an agency which makes it a primary function. These records must be set up separately from those pertaining to routine administration and personnel; but they should be kept under the official custody of The Adjutant General. Thus, they are available for both administrative and historical purposes until they are ready for transfer to the Federal Archives Building.

Legislation governing the transfer of records to the Archives Building has not yet been enacted; but the building is now under construction, and we may reasonably anticipate that it will be in operation within two years. Hearings on bills that have been introduced in Congress indicate that deposits will be strictly limited to the official Federal records, and that the documents will generally be fifty years old when they become eligible for admission. Once they are in the Archives Building, the official records will be more completely safeguarded than would be possible elsewhere.

Preservation of non-federal evidence is another mat-

ter. Assuming that an assembly of this material is to be made, as it must if we are to know the truth, adequate facilities to preserve it must be provided. It finds no proper place in the files of The Adjutant General; nor will it be admitted to the Archives Building. Some of it might prove acceptable to the Library of Congress where it would be classified, indexed, safeguarded and held under any reasonable conditions that the owner might prescribe. As the funds available to the Library for these purposes must be applied to manuscript collections of outstanding importance, most of the non-federal evidence pertaining to our military history must be housed and cared for by a non-governmental agency. Until that agency is properly established, there can be little progress towards this objective.

#### Writing Military History

Through the control that a government has over its archives, it can influence the writing of military history. It may restrict the use of its material so that only facts which support a predetermined viewpoint will come to light. This course has been pursued so consistently by some nations that their "official" histories are now regarded as mere propaganda. No matter what precautions are taken, the truth turns up from some unsuspected source. The action of our government in publishing the records of the Civil War without comment, has been widely recognized as the greatest contribution to the study of military history that any nation has ever made. Our policy has been to make all the important evidence readily available, and to let historians use it as they see fit.

Though many of the more spectacular episodes of our military history have been admirably presented by various historians, no history has as yet been written that adequately covers the whole field. Once the evidence is ready to use, there will be as many different histories written as there are military historians. Many will be written by civilians, and it is highly desirable that this should be so. There are some things that must be said which would come with poor grace from military men. We can not, with propriety, criticize Congress, the President, the Executive Departments or the American people for their shortcomings. These matters should be left largely to civilian historians.

There are, however, many phases of our military history which must be handled primarily by military men. Under the provisions of Army Regulations 345-105, which require the preparation of organization histories, certain officers have acquired some experience in writing military history. In addition, the Army War College, the Army Industrial College, and the General and Special Service Schools have seriously undertaken the study of military history. These factors operate to educate Army officers in the methods of historical research, and to make them appreciate its high professional value. Thanks largely to a good Army school system, our Army is better prepared to undertake its share of this work than it has ever been before. Some of these historical studies will deal with special and technical subjects; others with broader

subjects such as the coordination of land, sea and air forces; the control of manpower, munitions and finance in war; the selection of proper strategic objectives; and methods of cooperating with allies. The responsibilities of those entrusted with these studies will be great, for decisions that control the expenditure of large annual appropriations will result from their work.

The possibility of collaboration by military men and civilians on the most important parts of our military history should not be overlooked. If such collaboration could be arranged, it would provide the most favorable conditions for first class work. Professor R. M. Johnston of Harvard has enumerated four qualifications that he considers essential for the writer of military history, i.e., technical knowledge of the military art, erudition, critical skill, and literary skill. To find a well-balanced combination of these qualities in an individual, soldier or civilian, is rare; but in a properly organized group, the best qualifications of both elements would be in mutual support. If a group of qualified officers and civilians could be permanently organized, with adequate financial resources, it would provide the stability and continuity that are essential to the planning and execution of extensive historical projects. There will be need for just such an organization as long as there is need for an American Army.

#### Publication and Distribution

There are several routes that a military author's manuscript may take to appear in print. The manuscript must first be submitted to the War Department, and authority obtained for its publication. It may be published privately, in which event the author pays the cost of printing and distributing his product. Military men can rarely afford this luxury. Commercial publication affords another route. To find a publisher who will assume the expense of publication and distribution is difficult. Few worth while books on military history have a sufficiently wide appeal to justify their publication commercially. As commercial publishers must make profits if they are to remain in business, they are seldom eager to publish military histories. The third route to publication is through subsidization. Should an officer write, for example, a meritorious History of American Cavalry, he might persuade the Cavalry Association to publish it. Neither the author nor the Association could expect to profit financially; but both would have the satisfaction of having contributed something of value to the Service. The fourth route is through the Public Printer, who publishes and distributes "official documents" for all branches of the Federal Government. Military historical studies may reach him through the efforts of Congressmen or through the War Department. The size of each edition is fixed by law or by the sum that the Department can devote to a particular project. War Department funds for printing are so limited, and current demands for technical and administrative publications are so great, that but few crumbs

fall from the table to nourish the publication of historical studies.

The War Department can not issue an "official" history without assuming full responsibility for its contents and the manner in which the material is presented. Whenever it does so, it has to weather a storm of abuse because of the expressed or implied criticisms that a truthful history is sure to contain. Current War Department instructions to the Historical Section, Army War College, on the writing of historical narratives, prescribe: "The narrative of facts will contain no comment, estimate, comparisons or conclusions." The publication of narratives thus written may serve some purposes; but would it not be better for the War Department merely to publish the official records?

It would appear that the publication and distribution of military histories can best be managed by a non-commercial organization that is entirely independent of the government. Such an organization could collect and disburse funds for historical work, and could integrate specific projects into a broadly conceived plan. What might be accomplished is well illustrated by the "Chronicles of America," published by the Yale University Press. With a definite, coordinated plan of this kind, covering our whole military experience, it should be possible to secure the necessary funds from interested individuals and societies to publish and distribute the books on American military history that the American people should have. Lacking such an organization, progress on this work will continue to be haphazard.

#### New Organization Proposed

There are in the United States hundreds of historical societies, including national, state, county and local organizations. Two of them, the Military Historical Society of Massachusetts, and the Naval Historical Foundation, are of special interest to us. The former, organized in 1876 by the distinguished military historian, John Codman Ropes, has rendered invaluable service to students of our military and naval history. Its publications, library and museum contain materials that greatly facilitate research.

The Naval Historical Foundation was incorporated in 1926 under the laws of the District of Columbia with its objects defined mainly as: "The collection, acquisition, and the preservation of manuscripts, relics, books, pictures, and all other things and information pertaining to the history and traditions of the United States Navy and Merchant Marine, and the diffusion of knowledge respecting such history and traditions." Supported largely by regular contributions from the United States Naval Institute and occasional sums from interested individuals, it has operated on a modest scale and has gradually built up its resources. Among other things, it has sponsored the preparation and publication of an accurate history of the Revenue Cutter Service, in accordance with the terms of a bequest made with that end in view. Its greatest value has been in providing a rallying point for the

diversified activities of those who desire to foster the history and traditions of our Navy.

What is being done for our naval, economic, political, social and religious history, can and must be done for American military history. A permanent non-governmental organization is essential for this purpose. It might be possible to organize a military history branch of an existing national organization, such as the American Historical Association; but it would probably be better to create an independent society which could later affiliate with that Association. Government agencies, such as the Library of Congress, the National Museum, the Smithsonian Institution and certain parts of the War Department, have done and are doing military historical work, to the extent of their capacity; but no one of them is in position to coordinate this work. Some of the things which can best be accomplished by a permanent non-governmental organization, may be briefly summarized as follows:

To make detailed, comprehensive and coordinated plans for work on all phases of our whole military history.

To affiliate with organizations that are willing to cooperate.

To consolidate data on the location and contents of deposits of source materials pertaining to our military history that now exist in governmental archives, libraries, museums and historical societies, both in this country and abroad; and to facilitate the use of these materials.

To assemble, collate, index and preserve all the pertinent non-federal historical evidence that can be found.

To establish a National Military Museum in Washington, D. C., which would serve as headquarters for the organization, provide proper housing for its archives and educational exhibits, and facilitate the research work of students and historians.

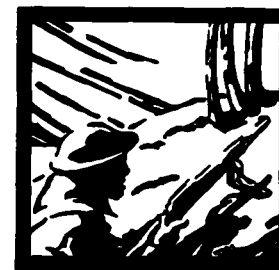
6. To arrange for the collaboration of military men and civilians in the writing of a complete series of first class military histories.

7. To subsidize the publication and distribution of these histories.

8. To develop in the American people a broad knowledge of the facts of our military history, and an appreciation of their true significance.

The establishment and maintenance of such an organization will require ample funds. Some financial assistance may be expected from interested civilians; but the responsibility for initiating and carrying on this work will devolve upon active and retired Army officers. It may be difficult at present to assemble funds for all eventual purposes, but there is no immediate need for large sums. The project can be launched and maintained for the first five years on the income from \$100,000. There will be time enough to seek additional financial resources after the organization has perfected its plans for the future. To provide a definite basis for discussion on this subject, it is proposed that there be established a non-commercial corporation—THE AMERICAN MILITARY HISTORY FOUNDATION—whose principal business and objects will be as outlined above.

This proposal has received serious consideration during the past two years from a group of active and retired officers in Washington, D. C. After consulting with a number of distinguished military and civilian historians, they have drawn up tentative articles of incorporation for the proposed Foundation, and have drafted its constitution and by-laws. If the publication of this article evokes sufficient response to warrant the formation of a permanent organization, a meeting for that purpose will be held in the near future. All who desire to cooperate in the further development of this project are invited to communicate with Lieutenant Colonel Charles E. T. Lull, Chief of the Historical Section, Army War College.





# The Evolution of Infantry Drill

By Major Fred M. Green, Coast Artillery Corps

**I**NFANTRY drill, as a preparation for war, has as its primary object the training of a command to execute the most essential functions, (such as the formation of a column for road marching, or deployment into line for firing), in a rapid and orderly manner. To quote the delightful phrase of a military manual dated 1634, it is intended to enable the command "to fall into battle with grace and brevity."

A new infantry drill regulation has recently been issued by our War Department for test. It forms the most radical change we have had in our close-order drill for 65 years. When so profound a change is to be made, we shall all reconcile ourselves more cheerfully to the inevitable inconveniences and annoyances of the period of transition if we understand how and why such changes come about.

A certain pious cavalryman is quoted as having said that God made horses 8 feet long and 2 feet wide so that they could wheel by fours. I think that we all, unconsciously, have accepted the column of fours (or column of squads, as we call it now) as something inevitable—possibly Divinely inspired. Certainly we form in two ranks without ever thinking of the origin of, or the former necessity for, that arrangement. The following notes are designed to indicate how these formations originated, why we use them now, and why the new drill, which contains neither a column of fours nor a double-rank formation, is not wantonly iconoclastic.

The tactical methods of different nations are colored by their strategic situation, racial peculiarities, and military traditions. Thus the French, lacking manpower (other than colonial troops) for infantry, tend to place extreme weight on artillery preparation, leaving it to the infantry merely to occupy the ground which the artillery fire has conquered; the Japanese, with their racial enthusiasm for cold steel, attach great importance to the bayonet charge; we traditionally lay much stress on rifle fire, and (since the bulk of our armies will always be relatively untrained men), we must attempt to simplify our drill in every possible way.

A profound factor in altering tactics from time to time, and especially during and after each war, is found in the changing relative importance of the various weapons then in use. Each new weapon, or each marked improvement in an existing weapon, will have its effect upon tactics. The latest drill is our first to provide simple formations for use against hostile attack aviation (a new weapon), and in its admirable provisions for deployment it illustrates the evergrowing effectiveness of the fire of artillery, machine-guns, and self-loading rifles.

Now drill necessarily must accord with the tactics and combat formations of the day, so it is clear that drill will tend to change with the evolution of weapons. Let us see how weapons and combat formations have developed during the last few centuries, and then follow through their effect upon drill.

In the Middle Ages, the bulk of every army was made up of a dull, practically untrained rabble, armed mostly with pikes. These pikes were so long that the points of those carried by the sixth rank stuck out in front of the breasts of the front-rank man. The men were formed in solid squares or heavy columns, which maneuvered much like the Macedonian phalanx of almost 20 centuries before. (See Fig. 1.) This arrangement was partly to encourage the men by the presence of their comrades; partly to terrify the enemy at the sight of a compact, orderly mass bearing down on them; partly to permit losses to be replaced instantly from the ranks behind; and partly because a footsoldier, caught alone in the open, would promptly fall a victim to the first armored horseman, or knight, who discovered him. The men huddled together for mutual support and protection, and the mass moved along a good deal like a gigantic porcupine.

When bows and arrows were used, the archers could fire not only from the front rank but also from the interior of the mass; as there was a good deal of "drop" to the flight of an arrow, the bowmen had to aim quite a bit upward anyway, and the ranks in rear could loose their arrows over the heads of the men in front until just before the opposing forces came together.

Even after firearms had been introduced, the use of these mass formations continued. At first the proportion of musketeers was but small, for the earlier matchlocks had inspired but little confidence. They were limited in range, and both slow and inaccurate in fire: the slow-match fuzes by which they were to be fired would be extinguished by a rain, and there was then no way of relighting them; due to their weight, and also since it was never certain just when the priming would ignite, the pieces had to be fired from a forced rest, and the butt was placed against the chest, "six inches below ye chinne," sometimes with disastrous effects. Such musketeers as there were would fire from the front rank, and then fall back to the rear of the column, or to the interior of the mass, hoping there to find sufficient time and freedom from interruption to reload their pieces—an operation which, when reduced to a drill, required 94 distinct motions! Most of the men were still armed with pikes alone; he musket was looked upon as a freakish and barbarous contrivance, (just as gas is today), and at least one military leader announced he would give no quarter

to men captured bearing so unheard-of and so unsportsmanlike a weapon. The bow was retained by English "trainbands" until 1595.

Throughout the 16th century, cavalry had steadily declined as a menace, due to the dawning fire-power of infantry and sanguinary evidence that the armor of a horseman no longer conferred invulnerability. As the infantry dread of a mounted charge diminished, musketeers were placed on both flanks of the pikemen. Improved matchlocks led to a gradual rise in the ratio of musketeers to pikemen: early in the 1600's their numbers had become approximately equal. (See Fig. 2.)

About the time the Pilgrims landed here, improved types of firearms were coming into use. First came the wheellock, but this proved "too curious, and too soon outtempered with an ignorant hand" for general military purposes. The flintlock was better suited to army needs, and by the middle of the 17th Century more than half of each company had been equipped with firearms. Says a writer of the time: "Fire-locks are better to misgive than muskets" (i.e., than matchlocks)—"through the defects of the flints and springs." Obviously, they were less rugged and less durable, but

they were less subject to malfunction from wet or windy weather (which would deaden or blow away the priming of a matchlock); they were quicker to make ready; they required no forked rest; there was no risk of accident from sparks dropped from smouldering matches into loose powder: there was no glow of matches to betray men's positions at night: there was no longer a heavy load of slow-match to be carried, and the troublesome task of drying it out after each rain. Finally, with the flintlock the instant of discharge could better be controlled: (one tells, with apparent relish, how he "let flye the guts of his gunn"); and this rendered it possible to take aim, with the butt against the shoulder and the eye glancing down the barrel. Fire-power was not a reality.

The doom of the remaining pikes came from the introduction of the bayonet. Hard-pressed musketeers had found it expedient to insert daggers (or even the spikes of their forked rests) into the muzzles of their pieces, and in 1647 the first "plug-bayonets" were issued. Not until the "ring-bayonet" or "socket-bayonets" were issued in 1659 was it possible to load or fire with the bayonet fixed; to the end, the presence of a bayonet on a muzzle-loading weapon hampered the operation of loading, and diminished the effectiveness of its fire.<sup>2</sup> The French finally discarded pikes in 1703, and the English shortly afterwards. All infantrymen were now musketeers.<sup>3</sup>

These rapid successive improvements in small-arms led to equally rapid changes in combat formations. Artillery, no longer restricted to siege operations, had meanwhile assumed an important role on the field of battle, and its round shot proved very destructive against dense masses of troops. Both to exploit the rapidly-developing fire-power of their new weapons, and to diminish vulnerability to hostile fire, a general drift to more nearly linear formations became inevitable. A formation 10 ranks deep was first used: Gustavus Adolphus reduced the number of ranks to six, which deployed for firing into a formation only three ranks deep. As loading of the pieces was so slow, it was important that a considerable proportion of the men should always be prepared to receive an attack: to this end, the firing was at first by rank: later on, all men of every second or third platoon would fire, the other platoons reserving their fire to

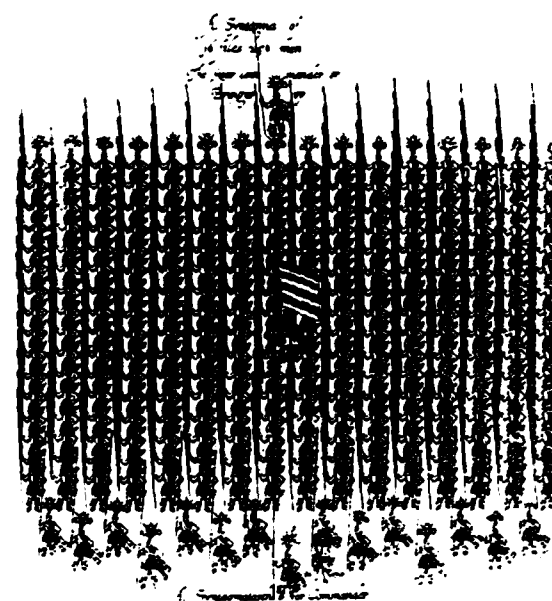


Figure 1.

Basic organization of the Greek phalanx, shown in "The Tactics of Elian, or Art of Embattailing an Army after ye Grecian Manner," printed at London in 1616. This translation from the Greek was apparently intended less as a military manual for current use than as a reference text for the use of professional soldiers and students. However, as in 1916 only about half the English soldiers bore fire-arms, the organization and "tactics" of pikemen were still live issues. The figure leading the square is labelled: "A Syntagmatarch or Commander of 16 files." The solitary figure in rear is marked: "The Rear-commander or Bringer-up," which suggests that for our "second-in-command," who act as battle-police for every unit in the 1933 drill, there is ample and ancient precedent.

The British army adopted the flintlock musket in 1690. Nominally the French had adopted it in 1630, but for almost 90 years afterwards there was no uniform arming of French troops. Some organizations actually used the match-lock until 1708, but members of units so equipped often individually armed themselves with flintlocks captured in battle. During this chaotic period, higher authority asserted its prerogatives in at least one instance: an irascible commander directed his inspectors to destroy any flintlocks found in the hands of troops, and to have them replaced by matchlocks at the company commander's expense! Issue of the model 1717 flintlock finally standardized the armament of all French infantry.

<sup>2</sup>Almost a century later, it was enjoined that: "Great Care ought to be taken in making up the Cartridges to such an exactness, that after they are placed in the Muzzle, one Thump with the Butt-End on the Ground, may make them run down to the Breach of the Barrel; but as the ramming down of the Cartridges is for many Reasons, very necessary, it ought by no means to be Difused."

<sup>3</sup>Toward the end of the 17th Century, there were actually four kinds of infantry: pikemen, musketeers (armed with matchlocks), fusiliers (armed with fire-locks), and grenadiers. During the War of the Spanish Succession (known here as "Queen Anne's War", 1702-1713), these differences disappeared, and all British infantry were uniformly equipped with the fire-lock and socket-bayonet.

The frontage allotted each file was originally about 3 feet. When firing was by rank, considerable interval was required to permit the passing of pieces, and still more when the ranks actually interchanged places after firing: the complicated ritual of loading the earlier muskets also demanded elbow-room. As firearms improved, as uniforms and equipment were simplified, as the sword was abandoned, and as platoon-firing came into use, the frontage per file was reduced to 2 feet or less. This greater density of formation in each rank naturally encouraged a reduction in the number of ranks, as the line required fewer ranks to give the same number of bayonets per unit of frontage.



meet unexpected contingencies until reloading by the first was well under way. (An echo of this practice is found as late as our 1891 drill.) Troops with empty pieces were not only at a grave disadvantage, but were also especially susceptible to panic, and consequently great attention was given to this point.

By the middle of the 17th Century, large mass formations had generally disappeared, and the number of ranks in every European army had been fixed at either three or four. When the former system was in use, the front rank habitually fired kneeling; the rear rank "locked" with the center rank by stepping off to the right front. The pieces of the day were so extraordinarily long (from 5 feet, 2 inches to 5 feet, 10 inches) that firing in double rank was not in itself difficult, but Marshal Saxe pointed out an inevitable inconvenience as regards the kneeling men in front: "... all those who labor under any degree of fear, are naturally desirous to continue as long as possible in such an attitude; and after they have fired, do not rise up, in order to load again, with that briskness which is necessary." Between the whistling of hostile bullets overhead, and the probability of a hang-fire in one of the temperamental flint-locks behind them, this diffidence is not hard to understand.

Early in the 18th Century, the French actually prescribed volley firing in four ranks; the first two knelt, the third "stooped," and the fourth stood erect. At a later time, when the French had adopted the 3-rank formation, they provided that in cases where the front rank could not kneel, only the two leading ranks should fire, and the third rank was merely to load for the second. St. Cyr protested, however, that in the excitement of battle these orders were never obeyed; the rear rank, designated only to load, would fire too. It is not surprising to learn that so many accidents occurred among the young conscripts that Napoleon himself at first mistook them for self-inflicted wounds. The formation in four ranks was continued by the Russians until the latter half of the 19th Century.

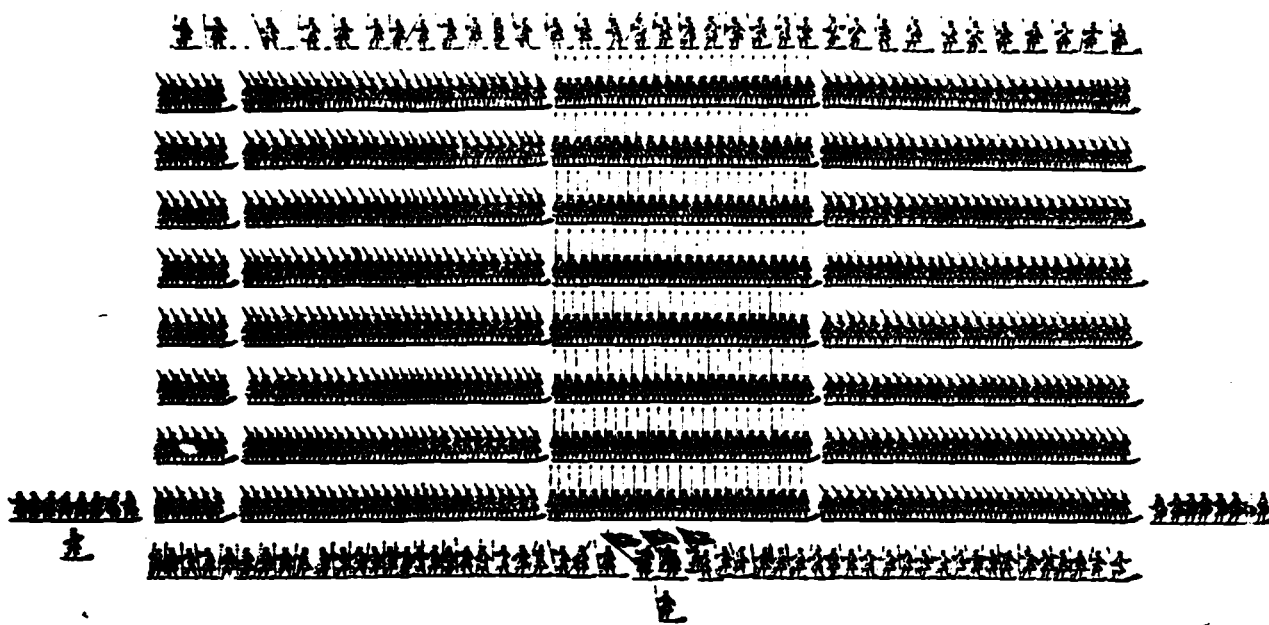


Figure 2.

A French battalion of the 17th century, containing 17 companies, each of 3 officers and 50 men. One company was a fusilier-grenadier company; each of the 16 other companies consisted of 12 pikemen and 38 musketeers. The battalion is shown in line of battle in 8 ranks. Each rank consists of two line companies, each in single rank with pikes massed. The 24 files of pikes in the center made what was called the "Corps de Bataille"; on either side of this a wing of 24 files of musketeers; on the right of the right wing, 6 files of fusilier-grenadiers. Field music in line with the front rank of either flank: officers and colors in front; other officers, apparently subalterns, in the file-closers.

Where the four-rank formation was used, the two rear ranks generally loaded the pieces, and passed them forward to the two front ranks to be fired.<sup>5</sup>

From the middle of the 17th Century to the middle of the 18th, there was but little change in tactics. Then Frederick the Great, grasping the importance of fire-power, reorganized his infantry. Seeing that musket-fire was now effective at 100 yards, and capable of hitting large bodies of troops up to 150 yards, he reduced the number of ranks from four to three and speeded up the fire to twice the rate attained by any other army.<sup>6</sup> By a very rigid and precise drill, he attained the ability to wheel instantly from column into line of battle.<sup>7</sup> Baron von Steuben, the first drill-master of our Continental Army, naturally trained our Revolutionary troops along these general lines, but with one surprising difference—he prescribed a double-rank formation, as will be discussed later.

"Other armies of the time could attain a rate of 2 to 3 rounds per minute only at the expense of such hurried loading that many misfires resulted. Frederick's troops attained a rate of from 4 to 6 rounds per minute. This was secured partly through thorough drill, partly by the use of a tapered touchhole (which eliminated the need for adding priming), and partly by the replacement of wooden ramrods by iron ones which were alike on both ends, and so need not be reversed before and after ramming. Leather patches were issued to guard the left hand from the heat of the barrel.

"During the 17th Century, it had been quite customary for the length of a force in column to be twice or three times its front: when in line of battle. After the head of the column had halted time was required to permit the force to "close up" before facing into line. Diminution of the frontage for each file from 36 to 24 inches (to increase fire effect and enhance accuracy of movement, naturally accentuated this difficulty. By reducing the number of ranks to 3, at one pace distance, columns could be formed with frontage suited to ordinary roads without excessive elongation. The Prussians marched in column of sections (10 files front); on narrow roads, in column of subsections (presumably 5 files front); from these formations they could wheel into line almost instantly, making their movements rapid though unhurried. ("Common time" varied from 78 to 90 steps per minute in those days; apparently to permit attaining the accuracy required.)

Among the American forces there were many hunters and woodsmen who had learned the Indian methods of warfare. Being self-reliant, and skilled in the use of arms, they tended to fight individually from behind cover rather than in ranks. Here the use of skirmishers is first seen, though only for certain limited purposes: in the attack, they preceded the assaulting wave as scouts; in defense, they gave warning of hostile approach, and delayed and harassed the enemy's advance—in short, as we would say today, they formed an "outpost." But only about 10% of the men were so employed; the bulk of the force was held in a rigid "line of battle" (like our close order of today), with supports and reserves in rear of it. When the French

curacy of the flint-lock musket, and the consequent predominant importance of the bayonet.<sup>8</sup> Napoleon used small columns of infantry for the approach march, for maneuver, and for assault, because the men could thus be kept under better control: they could be led better; straggling and skulking were diminished; confusion from obstacles was reduced; a line of columns advanced to the attack more easily, with less exhaustion, than could a deployed line; and the small columns could quickly deploy into line if the attack were checked and the force had to shift to the defensive. The advance was covered by a thin line of skirmishers which preceded the assault wave by a short distance.

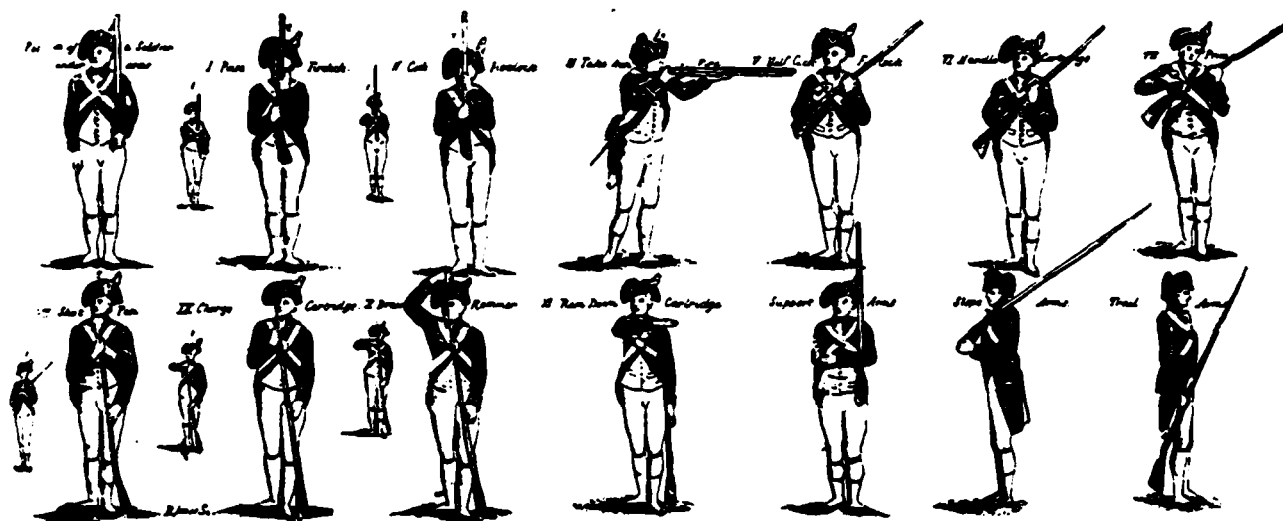


Figure 3.

An illustration from our first Infantry Drill Regulations. Ten out of the fourteen cuts show various stages of the operation of loading and firing a flintlock musket.

officers who accompanied Lafayette returned to Europe after the war, they carried with them this idea of a thin skirmish line, and it was generally adopted abroad during the Napoleonic Wars which followed.<sup>9</sup>

Much of Napoleon's earlier success can be attributed to his use of small columns of infantry for maneuver and assault, and of deployed lines for firing. It is hard for us today, thinking in terms of modern weapons and modern tactics, to understand the persistence of the column as an attack formation, until we visualize the moral effect it must have had on the defense. It provided an almost irresistible impulse, and if it broke the enemy line, the column divided, faced outward, and rolled up the defense in both directions. Losses at the head of the column were inevitable, but replacements were immediately behind them. We read of a column 24 ranks deep at Waterloo; of Pakenham's columns—one of them 60 men front and 50 men deep—at the Battle of New Orleans; of the penetrating attack at Wagram, where men were formed 72 ranks deep. We must remember, too, how limited were still the reliability, range, rate of sustained fire, and ac-

firing as they went. By this time 20% of the men of an attacking unit were often deployed as skirmishers. But the shock of assault was delivered by the bayonets of the line of battle which followed them.

The growing effect of artillery fire, and the improved range, accuracy, and rate of fire of musketry inflicted ever-increasing losses on all dense formations.<sup>10</sup> A reduction in the number of ranks from three to two came about somewhat gradually. It is said that in 1759

"That from 24 to 36 cartridges was the ordinary issue to an infantry soldier in any army of the 18th Century is eloquent in itself. By the time of the Napoleonic Wars, the French carried 80 rounds.

The fact that with the flint-lock some surprisingly rapid firing has been recorded should not be taken to indicate that fire could long be sustained at any such mad rate. The vent frequently had to be cleaned, the pan wiped out, a fouled barrel would prevent reloading, and after a certain number of rounds (averaging perhaps 20, but varying widely from one flint to another) the dulled flint had to be removed from its clamp on the "cock" or hammer, and replaced by another. (The soldier usually carried in his pouch some spare flints for this purpose, as the dulled flint had to be "knapped," or chipped to a new striking edge, before it could again be used.) Misfires were still frequent, and if the soldier failed to recognize one, loaded again, and succeeded in firing his piece on a subsequent attempt, the barrel not infrequently burst.

Nor does it seem to have been wholly a question of the low rate of sustained fire; military writers of extended battle experience speak disparagingly of the limited effect of fire upon the enemy—volleys by battalion causing the enemy the loss of only a very few men.

"As the quality of French troops declined, and skilled leadership became increasingly rare, the French had employed heavier columns as a matter of necessity. The inevitable consequence was evidenced by the loss of three quarters of MacDonald's 10,000 men in his famous column at Wagram.

In 1805 the Austrians, and in 1806 the Prussians, having each in turn been defeated by the French Infantry, adopted combat formations copied from the French: skirmishing, and the use of columns of attack, were among these.

Wolfe formed his men in double rank<sup>11</sup> at Quebec, but there is no record of his example being followed abroad. So far as I can learn, the double-rank was standard practice for American troops from the first momentous encounter at Lexington, and it was definitely prescribed for our army by von Steuben's regulations of 1779. During the Revolutionary War, the British troops in North America also came to make use of it, even though this change was bitterly criticized by many of their own officers.<sup>12</sup> Columns were still retained for maneuver and approach, but they were often separated by such intervals that they could deploy into line for firing before coming within effective range. Where the main blow of an attack was to fall, each regiment was usually formed two companies abreast, and four or five companies deep, to insure that the assault with the bayonet would drive home.

The introduction of percussion-lock muskets, about 1840, increased the rapidity and improved the accuracy of infantry fire, lessened recoil, and reduced the proportion of misfires. Some ten years later the elongated bullet, with a hollow expandable base, rendered it possible to employ rifling in military arms.<sup>13</sup> This greatly improved the accuracy of fire. The next decade witnessed the introduction of rifled artillery, and of a breech-loading military small-arm (the Prussian needle-gun).

In our Civil War, where rifled muskets effective up to 500 yards were used on both sides, dense formations became impossible. The alternation of fire and movement—advancing the attack by a rush and then pausing to fire—was introduced. The attack learned to beat down the fire of the defense; if it succeeded in

gaining fire superiority it could advance with but small losses until the defense could recover enough to get their heads up, and aim.

Where depth was essential, successive lines (each in double-rank) came into use, but with a distance of 200 or 300 yards between them, instead of being jammed together in a compact column. The trajectory of the Civil War musket was so curved that the danger-space of its bullet was small; fire directed at one of these lines was unlikely to hit another line 200 yards or more away. Perhaps the most important tactical development of our Civil War was the heavy skirmish line preceding the attack; not merely a thin line of scouts, but a line of such density that it could, by its fire, materially further the progress of the assault. In Sherman's army, half the men of an assault regiment were sometimes deployed as skirmishers. This scheme marks the dawn of the combat formations of today. Skirmish lines of varying density have been used in all subsequent wars, with intervals varying from half a pace up to 10 paces, followed by supports either in line or small columns.

The Germans meanwhile reasoned out that it is preferable to form each unit down to the company in depth, so that as supports go forward to replace casualties in the firing line, they will find themselves among friends, and under leaders whom they know. Men also have greater pride, and fight better, among those who know them. "Mixing of units" always leads to confusion and to consequent loss of control; to avoid this, it is desirable for each unit to replace losses in its assaulting elements. Our present organization provides for each unit, down to include even a platoon, being deployed in depth.

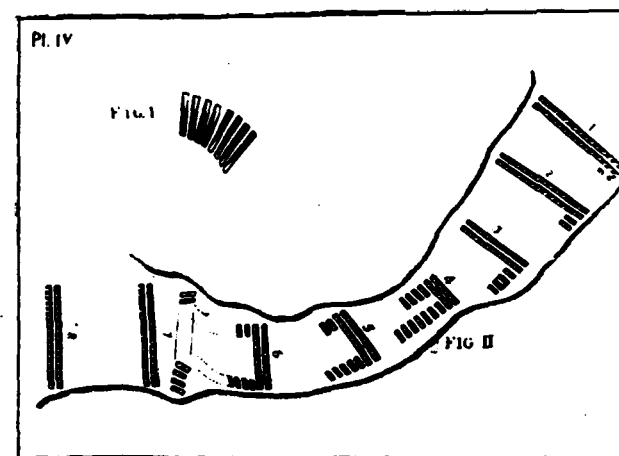


Figure 4.

From the "Regulations for the Order and Discipline of the Troops of the United States," by Baron de Steuben (sic), printed at Boston, 1794. Fig. II in the above cut shows the method of "breaking off." Plate as numbered 6 and 5 show successive stages of diminishing front to pass a defile; No. 4 has been reduced to a frontage of but five files; 3, 2, and 1 show how the platoon front was restored.

The subsequent development of weapons is sufficiently familiar to most readers to make it unnecessary to pursue this subject further, and a resume of our drill regulations will now be undertaken. Baron von Steuben's Infantry Drill, authorized by an Act of

Congress in 1779, and authenticated by John Jay as President of the Second Continental Congress, forms our starting point. (See Fig. 3.) It would be interesting to know why von Steuben prescribed a double-rank when every army in Europe used at least three, and when he himself had grown up in an army so definitely wedded to the triple-rank that even a century after his time the use of three ranks was continued, for sentimental reasons, at ceremonies. It is possible that he was a man ahead of his time; it is possible that he crudely estimated the formation best adapted to our national traits; it is possible that he merely codified what he found already in use.<sup>14</sup>

Von Steuben makes no mention of skirmishers, which seems strange in view of the important influence which the humble woodsmen exerted in developing the subsequent combat formation of every army in the world. I suspect that the old gentleman may have been something of a military pedant. Very possibly his reaction was like that of an elderly retired general with whom I was talking years ago, just after the present short rifle had been issued. I said I thought it was a splendid arm. The old general scornfully replied, "Yes, but a goddamned undignified-looking gun!" Possibly von Steuben felt the same way about our skirmishers.

I was curious to see how the formation of a road column was executed in those days. Oddly enough, the column of platoons (about 10 to 15 men front) seemed the only provision for a column of route. Of course even today there are not so many roads that will accommodate so great a frontage; during the Revolution there could have been very few. The method provided for passing defiles was called "breaking off": the excess overlapping files on one or both flanks dropped back in rear of such part of the platoon as could still march abreast, until the platoon front was sufficiently diminished. (See Fig. 4.) A more flexible arrangement represents the first approach to our present method, although it did not definitely form part of our drill until 75 years later. Von Steuben says:

"The roads being two (sic) narrow to admit the front of a platoon, and the troops being continually obliged to 'break off,' which fatigues the men: to prevent this, where the road is not sufficiently wide throughout, each platoon is to be told off into sections of four files. . . . They wheel by fours and march." Strangely enough, this very practical suggestion appears over in the back of the book, long after he got through discussing infantry drill, and is found near "Instructions for the Commanders of Regiments" and a passage entitled "Care of the Sick." As to why so practical and so eminently necessary a movement was not included in the routine company drill, I can offer

no suggestion: the frequent need for some such movement is apparent. Although I can find nothing to indicate that the triple-rank was ever actually used by American troops, its ghost continued to haunt our drill regulations for nearly 60 years after this, though often coupled with collateral comment which indicates that the triple-rank was theory, rather than practice. The last apparition appears in Scott's Tactics of 1835, where he prescribed that the formation would be in 3 ranks if 72 or more men of the company were present; otherwise in 2 ranks. The Secretary of War (Cass) approved this text for use, except as regards the third rank, the provisions of which are suspended. Possibly the General would regard our 1932 drill as a vindication of his principles.

no suggestion: the frequent need for some such movement is apparent.

In the 1805 system, route column was formed by sections of one-half a platoon.<sup>15</sup> Also, of course, the line could simply be faced to one flank, thus forming column of twos, but without comfortable marching distance between the men. Such a column must have straggled badly, and been slow in forming line to the front or flank.<sup>16</sup>

The regulations of 1835 (Scott) were based on the French drill of 1831. They present nothing of especial

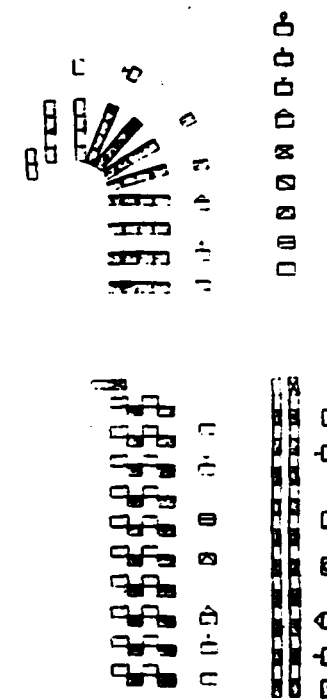


Figure 5.

Lower figure shows Hardee's method of forming a column of fours by "doubling." All this was executed at the simple commands: 1. Company, right—Face. 2. Forward. 3. MARCH. Upper cut shows Hardee's equivalent of our present "Column left." Then executed at the command, "By file, left. MARCH."

interest, except that skirmishers are provided for, at an interval of 10 paces. No convenient and adequate method of forming a column of route had yet been incorporated in our company drill.

Hardee's Tactics of 1855, based on the French drill of 1845, is the earliest one I have found in which a

"One must remember that the companies of those days were very small—often only 40 to 60 men even on paper, and much reduced by details, by sickness, by absence without leave or desertion, and by battle casualties. There was no proper system of replacing such losses. Hence a platoon of 10 files could break into sections of five files front, and thus form a practicable road column.

The British companies at Lexington and Concord averaged only 32 enlisted men each.

"Many of the old regulations prescribe a 'lock-step,' which was designed to permit a command to be marched by the flank with the very minimum of elongation. It is surprising to learn that the lock-step, which we now associate with penal institutions, was of military origin and was prescribed for a very definite and useful tactical purpose.

column of fours was formed by "doubling" as I believe the British now do it; that is, by the rear rank dropping back, all men facing to the right, and the even-numbered men stepping up abreast of the odd-numbered men. (See Fig. 5.) This same method was used in the Casey system (during the Civil War) and until the issue of Upton's Tactics in 1867. Deployment was apparently so regulated that one company, as skirmishers, could cover the entire regimental front.

In none of these regulations were the corporals assigned to command squads; their posts were on the flanks of each platoon, in the front rank, next the sergeants who acted as right and left guides of the platoon or company. The usual interval between skirmishers was about five paces; the men were instructed to keep in touch by groups of four, called "comrades in battle," but, with true American democracy, no leaders for these groups were provided, and it is to be inferred that whatever the "comrades" did was decided after debate, "three-fourths of the members present concurring therein."

In 1867 came the first approach to our present close-order drill; wheeling by fours to form column from line, or line from column. The close-order drill, from that time on, was quite similar to what we use today, but the extended order appears awkward and not well organized. We find no conception of the need for platoon-, section-, or squad-leaders; corporals were not assigned to squads; (their chief function in those days, I believe, was mainly to command reliefs of the guard, and to act as substitutes for the guides). Thus when the company deployed, the captain handled the entire line of skirmishers as a unit.

The 1891 drill regulations show the first real squad organization, with a corporal posted as No. 4 in the front rank in close order, and leading the squad in extended order. The platoons were nominally divided into sections for extended order only, but the arrangement was clumsy, an extemporized force of one section from each platoon forming the assault echelon. The interval between skirmishers was two paces, and under heavy fire the advance was made by alternate rushes of half the line, its movement being covered by the "fire and smoke" of the other half. (This, of course, was written when the old .45 Springfield, firing black powder, was the standard arm.)

The 1904 regulations were generally similar, except that the squad was accepted whole-heartedly as a unit for both close and extended order. The company acting alone held out a support and a reserve, but if it formed part of a battalion it deployed in a single line, and was led by the captain as a single platoon—a most undesirable arrangement. Also, when a battalion deployed, any reinforcement of the firing line involved a mixing of units.

The 1911 drill was based largely upon the formations employed by the Japanese in their war with Russia, which in turn followed the German tactics of the "gay nineties." The normal interval between skirmishers was reduced to half a pace. This radical change was based on the theory that a line could advance only

when fire superiority had been attained, and to gain this superiority of fire a great number of rifles in the firing line would be required from the very start. The Japanese accepted the losses incurred by this more vulnerable target as a lesser evil than mixing of units, which otherwise would result from efforts to build up the firing line to adequate strength during the attack.

In our 1911 drill the company, when in battalion, still deployed in a single line—too wide a front to be controlled by a single leader. The war strength company was accordingly divided into four (instead of two) platoons, but these platoons were of only three squads each—what today we would call a "section." Of course there were then but two lieutenants per company, so two of the platoons were commanded by officers, and the other two by sergeants. At last our system provided for direct leadership of elements of a size capable of being controlled by a single individual. Another innovation was the provision of "platoon guides," whose tactical function was to act as battle police, to prevent straggling, skulking, or panic, and to maintain fire discipline—a system which subsequent regulations have extended down to include the squad. A further improvement is found in the provision for "squad columns" and "platoon columns"—the former then prescribed mainly for crossing difficult ground, and the latter for passing through the zone of artillery fire while advancing to the attack. (The use of columns by supports was revived for several reasons previously indicated: better control; better opportunity to gain cover in ravines; less exhaustion to the men; less confusion than a deployed line. The interval between columns was great enough so that not more than one group would be included in the burst of a single shrapnel. Finally, an irregular line of columns—staggered, checkerboard fashion—formed a target on which it was very difficult for hostile artillery to range. A formation for infiltration, advancing by thin lines (one man per squad) was also added. These formations proved their worth in France.

Our present regulations were based largely upon experience of the World War, and upon the larger company organizations now recognized as essential to avoid mixing of units in combat. The three platoons are separated, even in close order drill, as definite combat groups; each platoon is given an officer; each platoon may be deployed in depth (that is, with one section in support of the other). The method of deployment, and that of replacing casualties, were somewhat simplified. The interval between skirmishers went back to five paces, both because of the unprecedentedly destructive effect of machine gun fire, and because the deployment in depth made less necessary so great an initial density in the firing line.

By an odd coincidence, the 1932 drill prescribe a normal formation which resembles strikingly the order of battle of about two centuries ago: the men are in three ranks, and at about the same wide interval then used. Each squad forms in single rank; the three squads of a section form one behind the other; the intervals are such that by facing to the right the men

find themselves at 40 inches distance, thus forming a route column of threes in the simplest possible manner. Each squad normally marches in column of files, and deployment is easy since the flank squads can run immediately to their places without interference. Against attack aviation, a simple and systematic plan for scattering is prescribed. The arrangements for control of the men are admirably worked out, and the drill is simplicity itself.

Summing up what we have learned about the origin of our drill, the case can be stated this way:

First: The double-rank was the normal formation of the line of battle from the Revolution to the Civil War. It was used because it gave the most compact formation in which all the men could use their pieces. Compactness was desired both for control and for the final bayonet charge. Since the early battles of the Civil War, the double-rank has been constantly declining in importance as a combat formation, but has been perpetuated by tradition, as a formal drill of disciplinary and parade purposes. Even were such a formation not prohibitively vulnerable, double-rank formation would now have no practical reason for existence, since the short rifle of today cannot well be used except in a single rank, even when the men are standing erect.

Second: The column of fours originated from necessity; ordinary country roads will seldom accommodate more than about four men abreast. (In some of the very old regulations, I find columns of threes and columns of sixes mentioned.) Beginning about 1855 we find that the normal marching column was formed by "doubling" in the British manner. (Shown in lower part, Fig. 5.) This placed the men at easy marching distance apart, thus avoiding the lock-step effect of a line merely faced to either flank. It made the column no longer than the line, so as to avoid straggling of the column when in march, and a necessity for closing it up after halting, and before facing into line. Upton (1867) accomplished the same result more simply when he

gave us the "fours right" equivalent of our present "squads right"), which von Steuben had suggested in the previous century, and which is still in use today. The method of "doubling" gave us a column of fours simply because each rank consisted of two front-rank men and two rear-rank men. When Upton prescribed "fours right," he doubtless did so from observation of the fact that this frontage was about the maximum for use in campaign.

If (as is often the case) half the road must be kept clear for the passage of staff officers, mounted messengers, and motorcycle orderlies, we must now come down to a column of twos. Also, since the column of fours is a somewhat thick formation, we may also have to pass to a column of twos to diminish losses from distant artillery fire, or from attack aviation. Now, under our present regulations, deployment as skirmishers from column of twos is somewhat awkward, and column of twos also demands excessive road-space. A column of threes would make a fair compromise.

Third: All our drill regulations from the Civil War until the current Training Regulations were apparently written on the basis of close-order drill, with extended order as an after-thought—combat deployment had to be adapted to the close-order drill. In the 1932 regulations, for the first time, the problem has been approached from the extended-order angle, and close-order formations have been made to conform thereto. In this way, the utmost simplicity has been attained, and the task of training recruits at the outbreak of war has been correspondingly minimized. The loss of the spectacular aspect of our present close-order drill is regrettable, but the gain in efficiency warrants the sacrifice. The new drill makes it possible to pass from close to extended order—from column of route to a dispersed formation—with the speed demanded by the ever-growing threat of air attack. There is nothing sacrosanct about either the double-rank or the column of fours: if both disappear, nothing but an ephemeral tradition will suffer.





# Counsel for the Defense

By Lieutenant Colonel Joseph W. Stilwell, Infantry

**T**O ATTEMPT a defense of anything at all debatable will probably be considered a faux pas for a man whose first case as counsel resulted in a sentence of four years in jail for his client. However, as I remember it, the defendant, far from being griped, even thanked me cordially for my perspiring if ineffectual oratory before a somnolent court. Anyway, there isn't anything debatable to be brought up here, and if angels fear to tread, somebody has to rush in.

In inviting a scrutiny of the generally accepted methods of conducting the defense, I want to start by recalling certain things that presumably we all agree on. First, let us examine the basic idea of defending along one long line. If we could make our single line strong enough to resist successfully everywhere, the defense would win, and everything would be very pleasant for the rear echelons. But we know that the attacker can mass enough means at any given point to break in. Besides, if we pack our strength forward, we merely increase our casualties without doing compensating damage. Everybody knows this, of course. A defense along one long line is inherently weak,—we cannot possibly make it strong enough to hold everywhere. Let us form two lines, then, one behind the other,—or three,—or four. This was the development at the outset of the World War, and it gave greatly increased resisting power to the defense.

But with such a defense, what happens? The enemy selects a point of attack, breaks down the first line, as we admit he can, and pours through the hole. The rupture causes the breakdown of the whole line for a considerable distance on either side of the penetration. The elements stationed on either side are taken in flank or rear and fall back on the second line. If the enemy is determined, the same operation is repeated on the second line, and so on. The first line broken, the only opposition now is the fire of the second, aided by a few elements in rear. But if the remnants of the first line do not stand, they will largely mask the fire of their comrades in falling back. And if these comrades insist on firing anyway, there will be a lot of hard feeling aroused. If the first-line warriors reach the second line at all, there will be confusion and mixing of units. Also, subordinate commanders on the first line are left in doubt as to whether to go back or stay where they are. The parts of the line not ruptured cannot help the units that are broken. The artillery can only continue to shoot ahead of the so-called main line of resistance. We are opposing to the enemy's blow a series of obstacles which he can crash successively. This is about what we are in practice doing, and as usually

performed, our defense is thus a rather stubborn delaying action. And it is based on the naive hope that the direction of the enemy attack will be perpendicular to our front.

The Germans found out, beginning with the Somme battle, that this kind of a defense was not so good, and they developed the idea of a defense in depth, so arranged that the attack, although it would probably meet with initial success, would gradually be disrupted and brought to a stop by increasing resistance towards the rear. This was accomplished by placing defensive elements at irregular intervals through a greatly deepened defensive zone. These elements were organized for all around defense and were thicker and stronger around the vital points to be held. The holding of a few yards of ground was considered of no consequence, if a proper toll could be taken and the push finally brought to a standstill before the key-points were captured. The difference between the two ideas is roughly indicated by comparing the gradual compression of a spring and the rupture of a series of light boards.

Well, but didn't our people learn that, and isn't it all in the Training Regulations? Yes, it's all there, mixed up with a lot of other things, to all of which we must assign their proper emphasis or else we'll go astray. Experience with several classes at The Infantry School shows that somehow this emphasis has shifted too far, and it would be well to look things over and see why.

In the first place, we have the main line of resistance. We are told that it is the front edge of the combat elements. If you will put yourself in the shoes of the emergency officer earnestly struggling in a limited time to learn a mass of things entirely strange to him, I believe you will agree that the term "main line of resistance" will mean to him the line of main resistance. He will want to make his best fight along it, and he will push up to it for this purpose all his available means. Just what we don't want him to do. It is queer that we make such a point of being unmistakably clear in orders and yet retain in general use terms which can easily lead a man astray. As a matter of fact the main line of resistance at the beginning of a fight is the line of elements first struck, but immediately afterwards it is something else, and from then on it is always in a different location. At any given time it is the irregular line where the enemy is being opposed. We would be better off if we said nothing about it, or else used some other term that would not confuse the boys.

In this connection, are we not looking at the defense almost entirely from the viewpoint of the higher com-

mand? Of course the corps commander and the division commander will draw a line on the map or designate two or more terrain features and say "That is the main line of resistance." Of course. But as we go farther down and finally reach the battalion and company, conditions change. Take that line that the



An Approved Solution—Old Style.

corps commander draws across his map with a pencil and put it under a microscope. It is no longer a continuous line of little breadth. It is now a wide series of smears and blotches irregularly disposed, with numerous intervals here and there. These smears and blotches are the dispositions of the junior commanders, and it is the resultant of them all that makes up the main line of resistance that the higher commander is thinking about. The piece of the corps commander's line that the battalion commander gets to defend is from the viewpoint of the latter an area. It will usually be an area for the regimental commander too. When the higher commander assigns the line he may also amplify his instructions by saying that this or that terrain feature is important or must be held. If he does not, then farther down the line some one must. It is the ground itself that determines the dispositions of the smaller units, and based on an evaluation of the ground the junior picks out the important features and arranges for their defense. After his dispositions are made, the so-called main line of resistance becomes apparent,—it is a line tangent to the fronts of forward combat groups. But in these small units it results from his dispositions,—his dispositions do grow from it.

There is another idea firmly implanted in our minds about the necessity of a continuous band of fire across our front. Certainly we should like to have it, and with the enormous concentrations of artillery we saw in the World War, with the adoption and issue of a suitable light machine gun, and with a big increase in our mortars, we might be able to get it, but as things stand, with one mortar per battalion, with no good substitute for a light machine gun, and with only three batteries backing up a regiment, it is simply out of the question without packing most of our weapons close to the front. And the more we close them up, the more we favor a quick rupture by the attack. Our elements up front are those most surely located by the attacker, and we must not forget that at any given point he can get superiority of fire. In the great majority of cases, a little ground gained or lost is of no consequence. What we want is to disrupt and disorganize the attack, keep it constantly under pressure, and finally, by getting at it from unexpected directions, bring it to a stop. We want to gain time enough to be sure we have located the main thrust and get reserves back of that point. We should be willing to bend if we can keep from breaking. This requires that we establish points all the way back around which the attack will drape itself but beyond which it cannot pass except at a price. We want a series of snags to break the control and cohesion of the assault. Thereupon, when it halts, we can counterattack. The necessity of giving the assault no rest requires that our weapons be disposed in depth, and that enfilade fire of machine guns and the prepared fires of light artillery be utilized to the greatest advantage. We should be able to fire within the position as well as in front of it.

This matter of artillery fire is important. Where now do we plan our artillery fires except in advance of the position? We cannot fire within it without endangering our own people, who may be moving back anywhere in the area. To get the most of our support, we should prepare for fires within our position and arrange so that our own troops will stay out of such locations. The artillery fire can then be brought down on them,—the areas, not the troops,—at any time, and what is now the artillery defense of the main line of resistance will be continued back through the position. If it is claimed that this is being taken care of, I plead ignorance and lack of experience with units so well instructed. I have never seen it.

Again, by occupying a line we face in one direction, and although we are well disposed if the attack comes in as expected, we are greatly handicapped if it develops in another direction. The organization of switches helps us somewhat, but we are always exposed to the danger of infiltration, and any line is then subject to attack from the rear. If the attack is at an angle to our line then surely the continuous band of fire idea will not be effective, and surely also, the effect of a rupture will be to add materially to the probability that the line will be rolled up. If we could jump around like ants on a hot rock and readjust our dispositions during the assault, it would not be so bad.



but no one will question the statement that a realignment in a defensive position while under fire is a very difficult if not impossible operation. What we want is to make such dispositions that we cannot be badly hurt if the direction of attack is unexpected.

Assuming the patience of the reader up to this point, just what is it we do want? First, something simple, easy to teach a big emergency force. Second, something based on an evaluation of the ground. Third, something that will allow the maximum effective use of supporting fires. Fourth, something that will stand up if we guess wrong about the direction of attack. Fifth, something that gives definite missions to every unit down to the smallest.

We will get a simple solution as soon as we approach the problem in a reasonable way,—by adjusting our means to the ground itself. Only a trial will convince you, but it appears to work at Benning. The fundamental decision is, "In my area what are the vital points that I must hold?" The answer to that question determines the dispositions. It relieves the natural anxiety of the commander to cover everything, and allows him to use scanty means to the best advantage.

If enemy action dictates our dispositions, we have nothing to worry about. But if we have a choice, it must be based on what he may be able to do, and that depends on the ground,—where and what the cover is, what the favorable approaches are, where the best fields of fire are, what is the best observation, etc. Since we do not know how his attack may develop, we plan against probabilities, but we must be prepared for all contingencies. Our defense of the main approaches may be successful and yet a penetration may occur elsewhere. Such a contingency must not break down our whole plan. The direction of attack may be unexpected,—this must not necessitate a rearrangement of our dispositions. The enemy may make considerable progress somewhere. Our supporting weapons must still be able to work on him. Our artillery particularly must be prepared to put down fire anywhere the attack is threatening.

And all concerned must know exactly what to do. Units in the front-line battalions must give up any idea of moving around. They must give one another mutual support. They must expect that the attack will get by them and they must therefore be ready to resist from flank and rear. The loss of an adjacent combat group should not break down their own resistance. There is no question of their withdrawing; they must fight in place.

These things are all provided for in our regulations. Read the following quotations from Training Regulations 195-5 with this general plan in mind, and see whether or not they fit the case. (The italics are mine.)

"A defensive position consists of a system of mutually supporting defensive areas or tactical localities of varying size each with a definite assignment of troops and mission."

"Troops assigned to the defense of a position do not occupy the entire width of a sector but are

disposed laterally and in depth, in groups occupying tactical localities of natural defensive strength from which the entire front of the sector can be defended by fire and counterattack."

"The organization and occupation of tactical localities of limited area instead of continuous lines leaves unoccupied intervals of greater or less extent between the organized localities. These intervals, though unorganized, are defended by fire from adjacent tactical localities including those in rear and where of sufficient width to permit may be defended in part by the fire of artillery."

"All portions of a sector should be definitely assigned to some subordinate unit."

"In each case" (deployed, position, and zone defense) "the defense consists of a system of mutually supporting tactical localities."

"Each unit on the defensive must also be given the definite mission of covering the front of adjacent units by flanking fire in close defense, especially at those points where the terrain within the adjacent sector cannot be reached by the fire of the unit occupying the sector."

"The combat group is the smallest tactical locality. All other tactical localities are made up of combat groups. It is occupied by a force vary-



An Approved Solution—New Style.

ing from a squad to a platoon, disposed in groups of from four to eight men, to cover by fire a definite portion of the terrain. It is ultimately organized for all-around defense. Unity of control and command indicate the platoon as the normal garrison for a combat group, but in broken terrain the

necessity for covering by fire the sector assigned to a platoon for defense frequently requires it to garrison more than one combat group."

"The fundamental principle of the defensive tactics of the combat groups is that each combat group should be able to cover by fire its own front, the fronts of the adjacent combat groups of the same echelon, and the unoccupied intervals between it and these adjacent combat groups."

"Combat groups are inclosed by obstacles so located as to be effectively covered by the fire of the group."

"When fully organized a combat group should be capable of a protracted all-around defense."

A consideration of the above quotations leaves you convinced that the principles of the defense are defi-

nitely understood and thoroughly applied in our service, you have been wasting time reading thus far. If however you agree that perhaps the emphasis has been misplaced and that we might well ponder the subject further, that will be a step forward.

Of course, if the very idea of defense is obnoxious to all of us free and hardy Americans, what our doctrine is on the question doesn't matter much. We preach the offensive,—we're going to attack and let the other fellow defend. That's what we did in the World War. But somebody did a lot of defending before we got in, and perhaps the next time, it will be on us quickly and we won't have a year to get ready to attack. If we accept the idea that somebody may attack us, then we had better clarify our ideas so that we understand what we are trying to do and can give definite and simple missions to all concerned.



## An Old Regiment of Field Artillery Records Its History

IF YOU, Mr. Veteran, are formerly of Battery K, First Artillery, or Battery B, Fourth Artillery prior to February 13, 1901, or of the 2d, 7th, 20th, 21st, 22d, or the 25th separate batteries of the Field Artillery prior to June, 1907, or of the Sixth Field Artillery Regular Army, the following will be of vital interest.

From time to time there have been written short histories and sketches dealing with the participation of military units in the history of the United States; especially was this true for a period of years immediately following the World War. Most of these writings covered the activities of units in a particular war or sometimes confined themselves to a particular phase of a single campaign.

The Sixth Field Artillery (Regular Army) is now about to present to those interested in military history, and especially to its veterans, a complete history of its career.

The story of this famous regiment commences at West Point, New York in 1798. It is as fascinating a tale as one reads in a book of adventure or romance; it includes both. Old Fort Trumbull—the delta "old man river"—with Jackson at New Orleans, the Seminole war, Taylor's Army in northern Mexico,

the capture of Mexico City, the Utah expedition, Indian Troubles, four long years of Civil War, more Indian campaigns, the Cuban and Porto Rican expedition, "Civilizing with a Krag" in the Islands, separation of the coast from the field, Pancho Villa, the punitive expedition, across the pond, the never-to-be-forgotten winter of '17, the "big push" of '18, the watch on the Rhine, one and all stirring events of history, pass in review as the pages are turned.

An officer and a non-commissioned officer have devoted several years to the assembling, correlating, checking and compiling the data which have gone into this work. It is as authentic as the war department and other official records and documents from which it was created.

The manuscript is now in typewritten form. Before it can go to press the publishers must know the number of copies to be run in order that the lowest possible price per copy may be fixed. The history will not go on the public market, but will be sold to interested individuals and organizations at absolute cost.

For benefit of those interested it is suggested that they communicate with the Adjutant, Sixth Field Artillery, Fort Hoyle, Maryland.

# National Convention of the Reserve Officers Association

**D**ELEGATES and visitors to the National Convention of the Reserve Officers Association to be held in Chicago, June 3-7, 1933, will have the opportunity of witnessing the opening ceremonies of Chicago's Century of Progress Exposition, which has been fitly named. The last century is the one in which man made his greatest progress in developing and utilizing the energies of nature for his own purposes. That period of time coincides exactly with the period of Chicago's civic life.

Of particular interest to military men will be the replica of Old Fort Dearborn, reconstructed from the original specifications of the War Department and bringing back the atmosphere of the days when Fort Dearborn and a half dozen buildings outside its stockade were all there was to Chicago.

In the medical exhibits a visitor will see the great discoveries of Pasteur, Koch, Lister, and others who have revolutionized medical practice and paved the way for modern preventive measures, hygiene, public health and safety in surgical operations.

At night Chicago's World Fair of 1933 will be a veritable fairyland. New history in the science of lighting will be written, and the foremost illumination experts of the United States are collaborating to make this Exposition a great illumination spectacle. There will be new and mystical lighting effects including flaming ladder arcs, illuminated cascades, etc.

The site of the Fair is superb. In its magnificent lake front under the shadow of the Field Museum, the Shedd Aquarium, the Adler Planetarium, and the majestic Stadium of Soldiers Field, the spirit of Chicago, "I will," is personified. The audacity of building islands in the Lake upon which to construct a World's Fair, the determination to press on despite the years of depression through which we have been passing, challenges the imagination.

Col. Gilbert Fitz-Patrick, Med. Res., President of Cook County Chapter, has enlisted to the support of Col. Matheny and his Staff a group of Chicago civic and social leaders. Col. Fitz-Patrick occupies an enviable position in the medical and military world. Under the able leadership of this forceful exponent of military preparedness, Cook County Chapter is planning to make attendance at the National Convention an unforgettable experience, not alone because of the Century of Progress Exposition but because of the program prepared for the Convention.

Outstanding national military and civic leaders have been invited to participate in symposium of topics of vital interest to every right-thinking American. "National Defense from a Citizen's Viewpoint," "R. O. T. C. from an Educational Standpoint," "The Value of a Military Education" are some of the topics

to be discussed by leaders well qualified to voice their opinions. Of particular interest to the Reserve Officers will be addresses by chiefs of various Branches and Arms of the Service.

It was decided that the committee to handle the arrangements should take on a military complexion in its activities, as well as in personnel. In developing the plans it was found that the natural subdivision of convention activity follow very definitely the four staff functions. G-1 (Personnel) is looking after delegates. G-2 (Intelligence) is charged with publicity transportation and contact. G-3 (Plans and Training) is shaping up the program. G-4 (Supply) is charged with the responsibility for hotel accommodations.

The selection of Lt. Col. Willard R. Matheny as Chief of Staff has been a happy one. Aside from his military experience on the staff of the 56th Division, he has been an active force in the military, civic and social life of Chicago. He has surrounded himself with a staff of officers qualified by experience to handle each of the Convention activities.

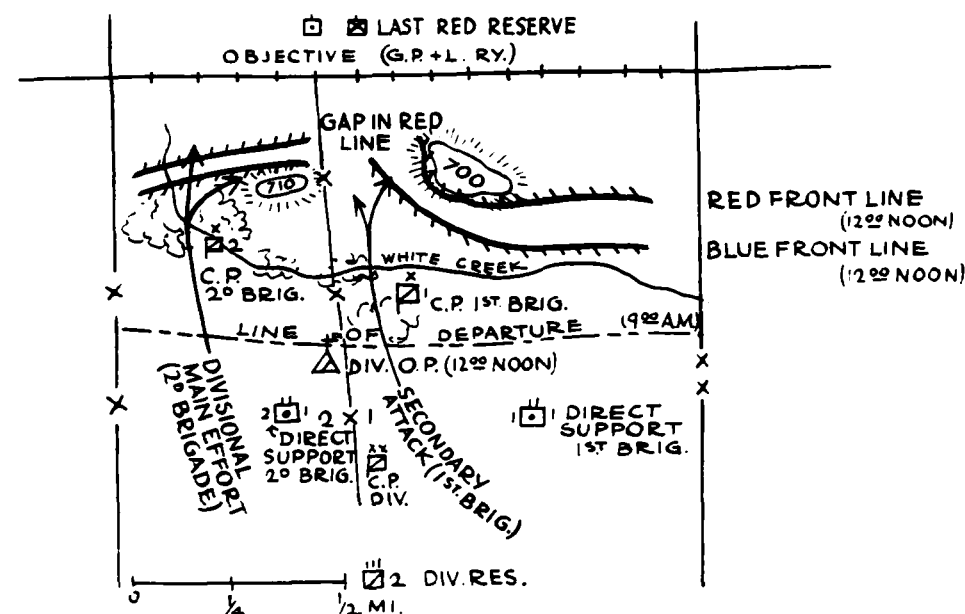
For those who have the competitive spirit, a pistol competition has been arranged. One of the high points of the Convention will be a military ball to be given in the largest ballroom in the world.

Cook County Chapter extends an invitation to all of the officers of all the Services. The Stevens Hotel in Chicago will be Convention Headquarters, and the dates of the National Convention will be June 3rd to 7th. This will be preceded by the Convention of the Illinois Department of the Reserve Officers' Association to be held at the same hotel June 1st and 2nd, 1933.

Following is the Convention Staff: Chief of Staff Lt. Col. W. R. Matheny, Sig.-Res.; Assistants to C. of S., Capt. H. J. Beggins, Inf.-Res., Lt. C. F. Bernier, Cav.-Res.; Finance Section, Col. Gilbert Fitz-Patrick, Med.-Res.; Finance Officer, Capt. Charles Z. Meyer, Fin.-Res.; G-1 Delegates, Maj. F. N. Wildish, Eng.-Res.; G-2A Contact, Lt. Col. L. L. Falk, FA-Res.; Capt. Graham Aldis, Inf.-Res.; G-2 B Publicity, Maj. Benj. Getzoff, Inf.-Res., Lt. H. A. Twedt, Inf.-Res.; G-2 C Transportation, Lt. Col. Wm. G. Arn, Eng.-Res.; G-3 A Program, Maj. F. L. Starbuck, FA-Res.; G-3 B Military Demonstration, Col. Edw. N. Wentworth, FA-Res.; Capt. E. J. Teberg, Eng.-Res.; G-3 C Competition, Lt. Col. Calvin Goddard, Ord.-Res., Capt. Serf Wiard, Ord.-Res., Lt. J. C. Wilimovsky, Jr., Inf.-I. N. G.; G-4, Hotel Accommodations, Lt. Col. Neil R. Markle, QM-Res., Maj. Anatol Gollos, Aux.-Res., Capt. Edward D. Flynn, Inf.-Res., Capt. K. L. Van Sickle, QM-Res., Lt. G. E. Soderholm, QM-Res.; Surgeon, Lt. Col. George T. Jordan, Med.-Res.

## NOTES FROM THE CHIEF OF CAVALRY

### What Would You Do in a Situation Like This?



**A**T NOON, April 16th, around the 1st Cavalry Division O. P. there was that high pitch of tension which is only achieved at headquarters of larger units when the issue of battle will be decided shortly either for victory or defeat. The Divisional Operations Map was propped up against a tree. Major General Branmash stood, deep in concentration, in front of it. Grouped around him were his Chief of Staff, Colonel Windgalls, Major Synchore, the G-3, and others of the division staff. The operations map had just been corrected to show the latest developments in the dismounted attack which the division had been pushing since 9:00 A. M. A sketch of the map appears above. The sketch also shows the scheme of maneuver in which General Branmash had built the attack. The division was attacking, brigades abreast, with the main effort on the left (a wide envelopment was impossible because the division was operating in a gap and had been assigned restrictive boundaries by the army). The successive objectives were to be hills 710 and 700, the former to be taken as the primary objective from its western slope by the 2d Brigade. The 1st Brigade (less 2d Cavalry in division reserve) was making its main effort on its left to assist the 2d Brigade and was assigned hill 700 as its first objective. The divisional artillery was cooperating with a battalion in direct support of each brigade. The enemy, about one regiment of infantry with a battery, had been contesting the ground stubbornly. By noon, hill 710 had been taken, but to do so the 2d Brigade had had to use its brigade reserve. The 1st Brigade (less the 2d Cavalry) had been all the advance on its left but the right of its line was

too thin to make any progress. It, too, had no reserves left. Both brigades had just reported that their attacks were stopped on the lines shown on the sketch. Major Hunterlip, the G-2, had just posted the position of the Red front line and the location of the last known Red reserve (about one company).

General Branmash turned from the map to his assembled officers. "Gentlemen, the time has come to employ the division reserve. The 2d Cavalry, now in division reserve, will—"

A high whining noise, in sharp crescendo, ended with a bang as a shell exploded close to the O. P. A moment later the assembled officers began to rise from the prone positions they had taken when the shell was first heard. Soon all were up except General Branmash whose apparently lifeless body lay limply. The division surgeon rushed to the General and with the assistance of a solicitous staff propped the General up against a tree. After a brief examination the surgeon said, "The General is not wounded seriously. He is perfectly conscious but is suffering from a temporary paralysis which should pass off in an hour or so. Meanwhile, he cannot speak nor move."

Colonel Windgalls was the first to appreciate the perplexities of the situation. "But what about the reserve?" he cried, looking at General Branmash. The general made no move or sound but his eye caught and held those of his Chief of Staff. Clearly, the General was saying, "It's up to you, Windgalls."

If you were Colonel Windgalls,

What Would You Do?

(For Solution Turn to Next Page).

## A Solution

Colonel Windgall's orders were as follows:

"The division reserve (2d Cavalry) will move rapidly mounted to the woods immediately northeast of here, where it will pass to the control of the 1st Brigade. The 1st Brigade will renew its attack with its main effort initially along the boundary between brigades, assist the advance of the 2d Brigade, exploit the gap now existing in the Red line, and capture the division objective within its zone."

### Discussion

The sound principle of "going where the going is good" dictates the employment of the division reserve to exploit the gap in the Red line. This might be accomplished in any of three ways:

1. To attach it to the main effort (2d) brigade and move the boundary between brigades to the east so as to include the gap in the zone of the 2d Brigade.
2. To employ it as a divisional unit through the gap.
3. To attach it to the right brigade.

The first plan was not accepted by Colonel Windgall's because it would involve a complete change in the scheme of maneuver of the 2d Brigade, that is, the main effort of the brigade would be changed from the west to the east of hill 710 and the ground to the east of hill 710 was relatively unknown to the 2d Brigade Commander. Also, it would disrupt the plan of artillery support, since some artillery from the right battalion, now in direct support of the right brigade, would have to be diverted to support the 2d Brigade which, with the division reserve attached, would consist of three regiments.

The second plan Colonel Windgall's considered a good one, but after some deliberation he rejected it because it would require more specific orders from division headquarters than Colonel Windgall's felt his knowledge of the situation up front would permit him to give; because it would require a readjustment of the supporting artillery arrangements in order to get artillery fire support for the attack of the 2d Cavalry; and because the plan lacked simplicity in that it would require the division to operate three tactical units instead of two.

The third plan was decided on because it had the advantage of simplicity in that it required no changes in boundaries, schemes of maneuver or artillery fire support. It also permitted the details of the employment of the reserve to be made by the responsible commander most intimate with the situation in the area where the reserve was to be employed. Thus, the 1st Brigade Commander, upon receiving the 2d Cavalry mounted near the original line of departure, might dismount it at once, move it forward to a more advanced position before dismounting it, or, if his knowledge of the situation justified it, he might employ it mounted. (Department of Tactics, The Cavalry School).

## Cavalry Rifle Platoon Competition, '32

THIS competition was won by the composite platoon entered by Troop F, 8th Cavalry, with a score of 4228.19. First Lieutenant Philip H. Bethune was the

officer designated as commander of the platoon. The troop commander is Captain Paul J. Matte.

The Cavalry Rifle Platoon Competition is designed for those cavalry regiments and detached squadrons which were not afforded an opportunity to compete in the 1932 Leadership Test for Small Cavalry Units. Each rifle troop of such units is eligible to place in the competition a composite platoon selected by the troop commander. The selection is based solely upon individual aggregate scores made in record practice in rifle, pistol and saber during the calendar year. A composite platoon consists of one lieutenant, two sergeants, three corporals, and twenty-two privates first class and privates.

Second and third places were won respectively by composite platoons from Troop B, 8th Cavalry (the lieutenant's name given), and Troop F, 26th Cavalry (1st Lieutenant C. H. Valentine, platoon commander).

## Notes from the Cavalry Board

### New Model Cavalry Picket Line

A TEST of the New Model Cavalry Picket Line Pack developed by Colonel Albert E. Phillips, Cavalry, at the Jeffersonville Quartermaster Depot has just been completed.

This pack carries a "raised line" which has been developed in accordance with the desires of the Chief of Cavalry. Specifically, the load includes six sets of "hook and loop" type aluminum alloy bipods, three 80-foot sections of 5 16-inch plow steel running rope lines, a seven-pound sledge, six cruciform rock drill steel picket pins, 30 inches long. (The line may be set up in three platoon sections if desired). The total weight of this pack, including load, hangers and pack saddle, is 211 pounds, 3 ounces.

The line, in its present state, represents developments over a period of more than ten years by both the 1st Cavalry Division Board and the Cavalry Board.

The test, over a period of seven months, was conducted with a view to determining the points of superiority of the new model picket line and pack, if any, over the last line tested and to recommending any necessary and desirable changes in order to make the new model the best possible line and pack.

The test line was found to be superior to the old line as to strength, durability, in its absence of a tendency to absorb moisture, in its absence of tendency to stretch, as to picket pins, bipods, manner of carrying on saddle, weight of metals used, etc.

It was believed that, due to shape of picket pins, their length could be somewhat shortened without adverse effect, and that the bipods could be somewhat shortened, thus making the height of the line three feet nine inches instead of four feet.

It was recommended that the line be returned to the Jeffersonville Depot for changes deemed desirable, and then returned for final test.

## Professional Notes and Discussion

### And the Greatest of These Is Mobility

By Major Eustis L. Hubbard, Cavalry

ANYONE who has been through the Cavalry School has heard the statement that the three principal characteristics of Cavalry are "Mobility, Fire Power, and Shock."

Of these, Mobility is the outstanding and the one characteristic that has made it possible in the past and which in the future will make it possible for the Cavalry to bring the other two to bear in an effective manner.

In the middle ages Cavalry relied to a considerable extent upon the defensive power of armor, and in making this mistake sacrificed its value as a mobile arm to such an extent that it could charge at no gait faster than a trot. After the introduction of fire arms, armor became so heavy that if a knight fell off his horse he had to remain flat upon his back until someone came along to pick him up and put him back upon his feet, or what was more likely, put him out of his misery.

It is recorded that Cavalry charged at a trot, discharged their pistols and withdrew to reload. Gustavus Adolphus finally realized how ridiculous the Cavalry of the day was and took the armor away from it, trained his Cavalry to maneuver at a gallop in masses that could strike at a vulnerable point.

Since then the Cavalry has not failed to utilize its mobility, despite the power of "Modern Arms," and there were, even during the World War, plenty of instances when it was advantageously employed, and plenty of others when it could have been of value if it had been available.

There are not lacking those who claim that the failure to employ Cavalry properly lost to the Germans the chance to win the war in the first campaign. Any student of the war, and especially of the first campaign that led up to the first battle of the Marne, will admit that had the Cavalry been disposed and employed as proposed in the von Schlieffen plan, matters would have taken a different turn.

Today it appears we are again trending toward the use of armor in our scheme of motorization.

Heavy, powerful motor vehicles will unquestionably be associated with both the Infantry and the Cavalry, and there is no doubt that each arm will develop the vehicles best suited to its own use. Cavalry cooperating with tactical units composed of tanks and armored cars will not depart from the role it has always played, but tanks can be stopped, as can armored cars.

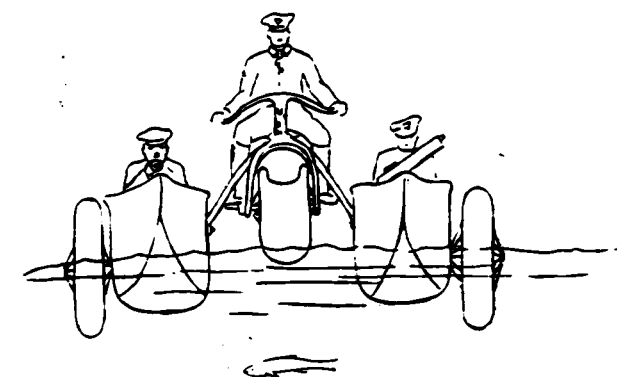
Further, heavy vehicles capable of carrying armor and heavy ordnance and with high mobility, are expensive, and to motorize the Cavalry with them will

entail a cost so excessive that, if we limit ourselves to them, we shall soon have a certain well-known writer explaining in the weekly magazines that tanks and armored cars can be bombed from the air as well as battleships and we shall face the barrage of criticism now directed at the proponents of the capital ship. (Be they right or wrong.)

It may and probably will be necessary by reason of the cost of specially designed armored vehicles, as well as by reason of the time required to build them in sufficient quantities, to adapt to our use existing commercial vehicles, if we are to take the field early and strike before stabilization again robs us of the right to take part as Cavalry in future conflicts. No Cavalryman can contemplate such a state of affairs with equanimity, nor will he cheerfully submit to the loss of that mobility both mental and physical that has always characterized the American variety.

It is therefore important, even though we may be furnished later with fast, powerful and flexible units, to be prepared to insist that at the very outset we have all that is needed to make our branch so indispensable that no commander can afford to do without us.

Before going further let it be said that the foregoing is not intended as a criticism of all that has been done and is being done to solve this difficult



problem of mechanization. It merely intends to lead up to a suggestion which seems to be worthy of thought.

The ideal vehicle for certain missions typically of a cavalry nature would be one which combines to the greatest extent the strategic mobility necessary to fit it for use as mobile reserve for a large force and a tactical mobility necessary on the battlefield.

Combined with such mobility there must be the ability to carry a fire power sufficient to strike a de-

cisive blow when it arrives at its objective. If the ability to close with the enemy, hold ground, and perform other missions now pertaining to Cavalry can be provided, so much the better.

A vehicle similar to the one described below may furnish the answer. A light motorcycle equipped with two side cars will possess plenty of strategic mobility. It can travel over roads at speeds up to sixty miles an hour. It can carry a crew of three men and an armament of two light machine guns which can be so mounted on the side cars that they can be fired without being dismounted, or if occasion requires, can be lifted out of the sockets in which they are carried and employed as other light machine guns now are, on the ground where a maximum degree of concealment is possible. A flexible arrangement.

If tanks or armored cars are to be encountered there is no insurmountable obstacle to mounting a 37 mm gun in one of the side cars. If the unit gets into country where the going is bad and becomes mired or loses traction in the sand, the crew of three men can get it out. Especially designed wheels with oversize tires in which the pressure can be varied would be useful in sand or soft going, while higher tire pressures would enhance the speeds on hard roads. That is more than could be done with a tank. Anyone who has driven a car knows that if you get stuck with it you can put it in low gear, and often with the assistance of a push from one or two men get out with very little trouble. Imagine pushing a tank whose weight is computed in tons where that of a motorcycle is reckoned at the worst in hundreds of pounds!

Mounted troops dismounting to fight on foot lose the fire power of one man in three. A crew of three men in our proposed light cavalry vehicle can bring the fire of two machine guns to bear by merely stop-

ping. If it is necessary to dismount, the mechanized unit can be concealed without the loss of mobility (Led horses are less mobile than the same horses when the whole command is mounted.)

If it is deemed advisable to employ mechanized and mounted troops in cooperation, there can be no doubt that the mechanized unit can keep up with the troops on the road, and though unquestionably less flexible (across country) than the mounted command, the motor unit (as described) can certainly cooperate to advantage over broken terrain.

If there are streams to cross, the Cavalry can swim its horses or ford. The motorcycle unit can jack itself up on its (watertight) side cars, built for the purpose, and paddle across below the swimming horses.

The fuel question need not be discussed. The comparison between the fuel consumed by a motorcycle engine and that of an armored car is obvious.

"Ah," says someone, "but can such an outfit deploy and charge cross country?" The obvious answer to such a question is, "Why not try it once and see? It does not seem so impossible."

"But how about a defensive situation?" The answer would seem to be similar. An outfit equipped with machine guns should be pretty useful in organizing the ground, and motorcycles and side cars might be capable of concealment not too far from the front lines in much the same manner in which we conceal our led horses.

To summarize:

Armor is heavy, and we don't need it.

Weight reduces mobility, which we do need.

A ton of armor can be replaced with a ton of ammunition.

No mobility, no Cavalry.

Mobility, Fire Power, and Shock, and the greatest of these is Mobility.

## A Few Observations

By 1st Lieut. Joseph M. Williams, 2nd Cavalry

**P**AIN'T brushes have a habit of collecting paint, and most any organization has several that are not serviceable. They can be made good as new by the following method, which, I understand, is used by the Engineers: Put a block of wood in the bottom of a No. 2 or a gallon can. Fill with vinegar only to cover the bristles (more than this amount will loosen them). Place on stove and boil until clean. The block of wood in the can is to prevent burning the brush. When cleaned, the brushes should be kept suspended in water.

• • •

Some organizations use discarded oil or gasoline drums for garbage or ash containers. By cutting out the head and applying a little paint they are made quite satisfactory. Oil companies will not buy the con-

tainers back, and they are usually discarded. Many dollars could be saved the government each year if the \$2.35 issue cans were replaced with such cans as far as possible. Reduces the memo receipts, too.

• • •

Issue clipper shafts are not strong enough to work satisfactorily on power clippers. For all service, however, the length of the life of the shaft can be more than doubled by having a covering of leather sewed on. This will prevent bending of the shaft sharply enough to kink or break. A good grade of mica and grease should be used on the chain.

• • •

Occasionally it is necessary, or at least advantageous, to put in manholes along sewer lines where tree roots have reached the sewer. To make them of brick or

cement is slow and expensive. A very satisfactory manhole can be made by using discarded rims from solid tire trucks. Such rims are thirty-six inches in diameter and made of a very heavy malleable iron. By placing one on top of another a manhole is quickly made. Furthermore, buyers of salvage will not bid on this type of old iron.

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In passing through military posts one is frequently impressed that so little thought has been given to post beautification considering the number of years the post has been in existence. This matter was given consideration by Major General McCoy while in command of the 4th Corps Area during a conference of post commanders in 1931, the results of which were quite noticeable. Fort Oglethorpe, Georgia, under the com-

mand of Colonel Gordon Johnston, Cavalry, is now one of the show places of that part of the South. Such improvements as were made were not permitted to interfere with usual garrison duties.

The U. S. Department of Agriculture has made a study of suitable trees and shrubs for shade or landscaping different parts of the country, as have the various state agricultural colleges. It takes no longer to plant a useful and beautiful tree or shrub than the common varieties usually stuck in promiscuously around army posts. With very little effort the appearance of the average army post could be improved fifty per cent. Probably the reason so little thought has been given to what types or kinds of trees and shrubs to plant is the fact that the information regarding it is free!

## Umpiring Field Maneuvers

By Major Wilfrid M. Blunt, Cavalry

**T**HERE are few jobs more thankless than that of an umpire, whether on the baseball diamond or in the maneuver area, and none more important to the successful conduct of either game. In each case he must know the rules and render prompt decisions, though the baseball umpire's job is a sinecure by comparison. He is concerned with fixed rules governing constant quantities as to size and space, whereas an umpire for field maneuvers has to apply a sliding scale of rules to constantly changing factors in size of forces and varied terrain. While soldiers are professionals just as ball-players are, their umpires are not, and the recent publication of the Manual for Umpires of Field Maneuvers fills a long-felt want, the provisions of which if intelligently applied should do much to increase the instructional value of our maneuvers.

Since no publication of broad scope can cover all details, it is desired to consider certain features in connection with umpiring ground troops. Regardless of the object of the maneuvers, the gaining of contact is a phase almost invariably included. It is in this phase that judicious umpiring can assure the logical development of the maneuvers precluding the necessity for later arbitrary decisions. The logical development of this phase is of special interest to the smaller Infantry units, and particularly to the Cavalry whose subsequent action depends to such a large extent on the information gained and the results of early contacts.

Owing to limitations of maneuver space available, the missions assigned the opposing forces are designed to have the action develop in a selected maneuver area. Normally each commander submits his initial plan sufficiently in advance for the senior umpires to assure themselves that the maneuver will develop in the selected area, or for the chief umpire to give out such additional information as may be necessary. The

execution of these plans having once commenced, the development of the maneuver should be based on information gained. In the higher echelons of command this information will come from a variety of sources, being supplied by the senior umpire, when necessary, if actual means fail. In the lower echelons information is gained, through patrols, adjacent units, or the next senior commander, and exceptionally from the umpire with the unit.

Despite the cry after all maneuvers, "more and better umpires," there are never enough for all units; and it always comes down to a question of where those with a battalion or squadron should place themselves. If an umpire remains with the unit headquarters, he is familiar with all the orders issued and received and is usually pretty comfortable. If, on the other hand, he is with the most advanced element; while he may miss a meal or have to sleep out, he is in a position to umpire the actions of the advanced element and control the information sent back. Before gaining contact there can be little or no change in the initial plans in larger units, and consequently no necessity for umpires with them, except to rule on air attacks. After making contact the development of the forces is a process of building up on the leading units, or acting on information received from them. Since it is impossible to predict the exact time and place of making contact, all assistant umpires should go forward one or two echelons of commands after the approval of the initial plans; so that in the early stages umpires will be available to accompany the smallest leading units and in the developments of the forces make their rulings with accurate knowledge of the enemy situation.

Such a disposition of umpires would go far toward removing the necessity for arbitrary decisions so disheartening to the smaller units of ground troops.



## BOOK REVIEWS

**INEVITABLE WAR**, by Lieut. Colonel Richard Stockton, 6th. Published by Perth Company, 393 7th Avenue, New York. 873 pages, 112 chapters, 51 illustrations, fully indexed and annotated. Price \$7.50. Service discount, ordered through the JOURNAL, 35%.

Lieutenant Colonel Stockton, in writing this book, has rendered a distinguished service to his country. The result of five years research and consultation with competent authority, it makes available to all intelligent readers a clear account of the conflict between adverse legislation and sensible military policy which has continued in this country for 150 years. The real meaning of our military history has never reached either our political representatives, as a body, or our people as a whole. School histories are but narratives of success. No attempt is made to point out failures of policies or the causes of disaster. Colonel Stockton, from established historical facts, has assembled evidence which, duly evaluated, makes clear the lessons which history contains. He shows the reader that the military policies of our thirty Presidents have been consistently sound and in accord. He further shows that these policies have been consistently rendered ineffectual by the legislative branches of the government, with the result that our national defense at the present time exists only in paper plans and theoretical training, insofar as the army is concerned, and has resulted in a navy which, for no good reason, now occupies third place among the navies of the world. With pitiless logic Colonel Stockton answers the arguments of the pacifists and by historical examples shows that the centuries prove them to be wrong. Also, in the last analysis, that the successful pacifist is more destructive of life and wasteful of money than any amount of prepared defense has ever been. With figures checked by professional accountants and economists, the author furnishes sound criticism on actual cost of purely military and naval defense as contrasted with the expenses brought on by wasteful unpreparedness, which are carried by legislative camouflage to the minds of the people as charges against the military establishment.

Colonel Stockton develops the theory that, inasmuch as centuries of constant effort have failed to produce lasting peace, there must be a basic and deep-rooted cause of war. This basic cause of war he explains and defines; shows that it has always existed; that the present plight of China is due, in part, to this basic cause of war plus the result of pacifism. He makes clear that all conditions at the present time point to the continued existence of that type of political disagreement which is called war.

If it is granted that the unchanging characteristics of the human race are the basic cause of war, then

future war is inevitable and Colonel Stockton describes the armies of the future. With sound common sense and wide knowledge he clips the imaginative wings of the ignorant, the faddist and military technocrat. Machines and gas are given their proper places as component parts of future fighting teams and are not credited with powers which practical men already recognize as dreams, fostered by selfish propaganda and fear, but refuted by field test and experiment.

Since the days when the musket obliterated the armored knight, the cheap gun and inexpensive bullet have neutralized the expensive armored fighting unit, and modern development indicates no change in the outcome of this ancient race.

By the aid of men like Colonel Stockton the fog is cleared away from current events, and the citizens of this country are enabled to see where the present course is leading. Colonel Stockton brings home to the nation that its losses at disarmament conferences have been greater than the losses that could reasonably have been expected from a major war. He shows that future security and low taxation depend upon measures taken by peace time administrations and that frenzied effort when an emergency arises always results in great expense and long continued taxation.

The writer shows that when national defense is handled in a business-like way, that then, and only then, will the United States become the great and stable country which its geographical position and its natural resources enable it to be.

From Washington to Hoover, from Von Steuben to General MacArthur, from the Continental Army to the new Four Army Plan, this volume is complete and up to date. Nor has the Navy been forgotten. The soldier will derive as much benefit from the author's treatment of the Navy as the sailor will from the broad view given of the Army.

By means of an excellent index and bibliography, data on all the specific subjects which the book contains are made readily available to the reader and to the military student.

The man in public office, the intelligent citizen and the army and navy officer now have available a source of information which none of them can afford to be without.

**FEAR AND BE SLAIN**, by General J. E. B. Seely, C.B., C.M.G., D.S.O. Hodder & Stoughton, Warwick Square, E.C.4. London. Publishers.

Few men who have actually done most of the things that all of us long to do can write about them as well as does General Seely in this fascinating book. To

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ride, shoot, sail, fly, and swim with him through his manifold dangers and adventures is a rare privilege. The author appears as the principal actor in many of the episodes; but the frankness and modesty of his account serve to disarm the critic who might otherwise take exception to rather generous use of the pronoun "I."

The disconnected incidents related in this book all have one element in common—they illustrate the folly of fear. Early in life, the author resolved never to desert, no matter how desperate the situation might appear to be; and in the course of an extremely active and adventurous career, he gradually evolved the philosophy that every peril has its providence; that in some mysterious way what appears to be a disaster may well prove to be a blessing, and over and over again things which seem hopeless come right in the end. The fact that he is still alive is probably due to his steadfast belief in this philosophy.

Among the many interesting episodes, there are two that have an exceptional appeal. Both deal with high courage on the part of mere lads. In the first, the author, as the organizer and leader of the little fellows, "new boys," in an old fashioned preparatory school, metes out drastic justice to four bullies who were tormenting the new arrivals in brutal fashion. Knowing that failure meant misery for months to come, the little boys planned a revolt which they ruthlessly carried out. Upon the prearranged signal, "Flight," they fell upon their tormentors, threw them to the floor, and banged their heads upon the concrete until the bullies cried for mercy. It took nerve to conceive the revolt and more to execute it; but when they did it, the lads made a big step towards the conquest of fear. The second incident occurred during the Boer War. The twelve year old son of a Boer leader unflinchingly faced a firing squad rather than tell his captors where to find his father's command. The author concludes this story—"As long as I live I shall never forget that wonderful moment when love of father, home, and country triumphed over imminent and apparently certain death; nor shall I forget the look in the face of that boy, as with head erect and glistening eyes he said: 'Ich sall ne sag'." The command to fire was not given.

The author might well have taken his text from Proverbs, XXIX—25, "The fear of man bringeth a snare; but whoso putteth his trust in the Lord shall be safe." His preface supplies, as a corollary to "Fear, and Be Slain," the admonition, "Believe, and Live." Because of its interest and professional value, we unhesitatingly recommend this book to our readers.

C. C. BENSON,  
Major, Cavalry, D.O.L.

**THE DESERT COLUMN**, by Ion L. Idriess; foreword by Lieut. Gen. Sir Harry Chauvel. Angus & Robertson, Sydney, Australia, 1932. 6 shillings. (\$1.00).  
**THE BELLS AND MADMOISELLES**, by Lieut. J. Maxwell, V.C., M.C., D.C.M.; foreword by Lieut. Col.

G. F. Murphy, C.M.G., D.S.O. Angus & Robertson, Sydney, Australia, 1932. 6 shillings.

It is worthy of a young, vigorous country like Australia that the two personal war narratives whose titles are stated above should be a refreshing contrast to the neurotic pessimism which is hailed by so many of our own "intellectuals" as realism. Not that either of these volumes makes the slightest attempt to paint war as anything pleasant. Far from it. Both authors recount sufficient of the ghastliness and horror of war to make the reader feel that almost any sacrifice to prevent war is well worth while. But both authors also make the reader understand that the soldier lives and enjoys life—that the average soldier was not oppressed and cramped into utter loss of individuality by the military machine.

The two authors, Mr. Ion L. Idriess and Lieut. Joe Maxwell both served at Gallipoli—Lieut. Murphy as a private in the Australian infantry, Mr. Idriess as a private in the Australian Light Horse. From Gallipoli on, the two narratives drift apart. Maxwell served the remainder of the war on the Western Front, and his account covers familiar ground in its descriptions of mud and blood. In spite of the horrors which he recounts, Lieutenant Maxwell never loses his spirit of exuberant good nature and optimism—a spirit quite different from that of several authors whose books have attained great popularity in this country.

It is to be pitied that Lieutenant Maxwell did not observe more closely the speech of Americans with whom he came in contact. Ascribing to an American officer such remarks as—"Waal, we're just a little strange to this here goldarned shootin' gallery," constitute a cause of international discord far more potent than the debt problem.

"The Desert Column" is a book which is probably of much more direct interest to cavalry officers than any narrative of life in the mud of Flanders. We have all read accounts written by officers of high rank describing operations in the Near East. It has probably occurred to most of us to wonder about the daily life of the cavalry soldier in those interesting campaigns in Sinai and Palestine, but most of the published works, valuable as they are to the student, give little idea of the problems and trials which beset the enlisted man and junior officer. Hence, "The Desert Column" fills a long-felt need.

Mr. Idriess fought with his regiment, the 5th Light Horse, at Gallipoli, where he was wounded, took part in the fierce fighting in Sinai and was wounded again shortly before the capture of Jerusalem.

His narrative, which he states was kept originally as a diary during his life as a soldier, gives an unusually vivid picture of the hardships and joys of the cavalry soldier in active operations against a brave and skilful enemy. His description of the attack on Beersheba gives an inkling of the style in which the book was finally published and an unforgettable picture of one of the most important episodes of the war in the East.

"Then someone shouted, pointing through the sunset towards invisible headquarters. There, at the steady trot, was regiment after regiment, squadron after squadron, coming, coming, coming! It was just half light, they were distinct yet indistinct. The Turkish guns blazed at those hazy horsemen but they came steadily on. At two miles distant they emerged from clouds of dust, squadrons of men and horses taking shape. All the Turkish guns around Beersheba must have been directed at the menace then . . . At a mile distant their thousand hooves were stuttering thunder, coming at a rate that frightened a man—they were an awe-inspiring sight, galloping through the red haze . . ."

In these days of gasoline and oil, the thought of squadrons galloping into the red haze of the evening must send a thrill down the spine of every cavalryman.

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**COMMANDO.** By Deney's Reitz. 5 in. x 7 1/4 in. 328 pp. (Faber, 3s. 6d.) Memories of the South African War, reprinted by permission from the *Army, Navy and Air Force Gazette*, Cannon House, Pilgrim Street, London. E.C.4., issue of December 8, 1932.

A new edition of this remarkable book is very welcome. The author was the son of the President of the Orange Free State, and was 17 years old in 1899 when the Boer War began. He at once joined the Boer Army, and fought as a private all through the war. He was present at the final peace negotiations in May, 1902, but refused to live under the British Flag and went into voluntary exile in Madagascar, where he earned his living as an ox-driver—and wrote this book in his 21st year. After a time he returned home and, like his old Commander, General Smuts, he worked hard for the Union of South Africa as a Dominion of the British Empire. When the Great War began in 1914, General de Wet and many of his old friends took the field again to fight for Boer independence, but Deney's Reitz helped Botha and Smuts to suppress their rebellion, fought against Germany in Africa and in France, and was wounded early in 1918, but recovered in time to take part in the final victory as Colonel of the 1st Royal Scots Fusiliers.

The book is written in admirable English, a plain, soldierlike account of what the author saw himself, and in the preface General Smuts vouches for its absolute accuracy. It is a book of great human interest, but to a soldier has a special appeal, for it helps to explain one of the puzzles of military history. The world has never ceased to wonder how so few thousand farmers could carry on a war for nearly three years against the largest and best equipped army that had ever crossed the seas; when, moreover, those farmers had, in the first nine months of the war, lost all their large towns, all their railways, most of their guns and all bases of supply, so that for all replacement of rifles and cartridges, and even of clothes, they had to depend on what they could capture from

the enemy, or on picking up what some careless British column had dropped on the veldt. This book goes a long way to supply the answer.

South Africa in 1900 was the ideal field and the ideal time for Mounted Infantry, and the Boer farmer was the perfect material for the Mounted Infantryman. At that time the horse was still the fastest conveyance outside the railway train. The Mounted Infantryman rode lighter than the British Cavalryman, and therefore faster and farther, especially when the rider had lived in the saddle and rode a light African mount, while his enemy had had to ship heavy "remounts" from all quarters of the globe. The fastest means of communication were the telegraph wire and the heliograph. Once he was out of range, no British force could ride him down, and once he was out of sight no one could locate him until he again chose to come in contact with British troops, for the country people were all his friends, and the distances were too great for any encircling movement to succeed, once the enemy had adopted the sound guerilla tactic of operating in very small bodies. If in the Great War the actual field of operations had extended from the Western to the Eastern Front, and right down to Belgrade, it would have been no larger than the area over which the Boer War was fought, and within which about a quarter of a million troops had to round up their very mobile enemy. But in 1914 the task would have been done. In the twelve years between those two wars, the motor-car, aircraft and wireless had altered the whole problem. Aircraft would have found the enemy, wireless would have passed the news, motor traction would have outpaced the horse, and the armoured car would have defied the rifleman unsupported by guns. Lord Kitchener spent two years trying to catch de Wet, and never succeeded. In 1914 de Wet and other guerilla leaders of tried ability again took the field under much the same conditions, but for one exception, the existence of motor-cars on the Rand. Aircraft and field-wireless were not yet available in South Africa, but cars outpaced the horseman, and in a few weeks the campaign was over. So quickly does the art of the engineer alter the art of war.

But why had not the Mounted Infantryman come into his own before 1899? He was foreshadowed by the horse archer of the Parthians and of the late middle ages, who combined a maximum mobility with a maximum of fire-efficiency, and his more modern ancestor was the dragoon of the 17th century, when the strength of an army was counted in "Horse, Foot and Dragoons," who rode on horses, but used the firearms of a foot soldier. In our own days Sir Garnet Wolseley (as he then was) improvised a small force of real Mounted Infantry for his short sharp campaign in Egypt, and after the victory of Tel-el-Kebir their mobility enabled them to reach Cairo on the heels of the defeated Egyptians, and to save the white population there from a massacre which had already been ordered. Why, then, did neither the horse archer

nor the dragoon astonish the world as the Boer farmer did. There seem to be three sufficient reasons.

Firstly, no people has ever been better suited than the Boers for waging a guerilla warfare in small bands of mounted riflemen. They had lived from childhood in scattered farms, a small race of conquerors among a host of subjected natives, ever on horseback and trained in the management of horses, constantly using the rifle against big game that was still abundant, and ready to use it at any moment against a native raid or rising. Dependent upon themselves to supply most of their needs, they had to possess both self-reliance and resourcefulness. And the stock on which these qualities was grafted was the old Dutch race, long famous for patriotic courage and dour tenacity of purpose, and fortified by the stern religion that in all countries has bred more lions than lambs.

Secondly, there are only three places in the world to compare with South Africa as a battleground for horsemen, tracts of grassland with plenty of forage, many free from forests to stop the horse's progress, and vast as to leave unlimited room for retreat and maneuver. Of these, the North American prairies have never seen a war in which Red Indians were not one of the parties. In the pampas of South America the fighting has been between men of the same race and similar equipment. The steppes of Russia have never bred a race of marksmen possessed of the individual initiative and other qualities needed to make the first-class Mounted Infantryman.

The third reason is that only towards the end of the 19th century did the rifle become so good a weapon as to give a great advantage to the defending force, who had no better cover than a natural rock or a tree, dug in a few hours. It was the rapidity and accuracy of rifle fire that enabled a few marksmen to hold up a frontal attack or to hold up pursuit in a rear-guard action in a way that would have been impossible in earlier days; and the recent invention of smokeless powder was, in itself, no small protection to the defending force. At Waterloo the sabre and lance had only been repelled by solid squares of highly disciplined troops, preserving perfect fire control, but in 1900 the *arme blanche*, including the bayonet, was crushed by the fire of undisciplined marksmen, using only their own common sense and the skill that they had learned as civilians. These three causes, aggregated at one place and time, make it possible to understand the strength of the Boer resistance, though they in no way diminish the admiration with which it must always be regarded. It was the golden age of Mounted Infantry, and an age that is never likely to return, but if the Boer farmers had not been themselves of the finest metal, its golden quality might never have made itself seen.

The problem we have discussed is only one among many of the subjects on which Colonel Reitz gives us food for thought. He sets his readers thinking on the causes of wars, the foundations of peace, the proper treatment of non-combatants, the need for wearing

uniform, and the limits within which an army can or cannot be efficient without discipline, and in which generals can command without military training. His picture of the British troops is always fair and never contemptuous. His one bitter complaint is against the burning of farms and the removal of non-combatants to concentration camps, but we venture to think that the later chapters of the book themselves provide a good answer to these complaints. His own personal exploits and adventures are told with a modesty and candour which would carry conviction even without the confirmation of General Smuts' preface. It is a book to be read by everyone who cares for either the art of war or the story of heroic deeds and hair-breadth escapes.

If a fox had been hunted for three seasons by a first-class pack of hounds, and had raided a well-guarded farmyard once a week throughout that time, and had lived to publish his own account of the events of each day and night, the members of the hunt might read that book with as much pleasure and interest as the veterans of the Boer War may feel when they read "Commando" and learn how General Smuts, with a force of from 300 to 400 men, carried on a five months' campaign in Cape Colony, winning many successes and never suffering defeat. From start to finish Colonel Reitz was an enemy to be proud of, and a friend to be loved.

Editor's Note.—This book review was written by Sir Alexander W. Lawrence, Bart., a grandson of Sir Henry Lawrence of Lucknow.

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**HORSE SENSE FOR AMATEURS.** By Major C. E. King. R.A. The Times-Mirror Press, Los Angeles. Price, \$1.50.

Although Major King emphasizes the fact, in the foreword of this book, that it is written for amateurs and not intended for men or women who have a thorough knowledge of horses, we are sure that there are a great many good horsemen who would increase their knowledge by reading it.

The author deals with three subjects—teeth, sore backs and galls, and feet.

The horse's mouth is usually a "mystery" to amateurs. In these chapters devoted to teeth, Major King has explained in simple language the names and uses of the teeth, the changes which occur from the time a horse is foaled until old age, and how these changes and markings indicate the age of the horse.

If we followed the good advice given us in the section on sore backs and galls, much of this trouble would be prevented. It is explained how the proper adjustment of equipment and the well-balanced seat of the rider can do much to save the horse great discomfort and pain.

This is a very short manual, but well written and covering the three subjects thoroughly, with the aid of several excellent diagrams. It is recommended to horse owners, as well as students, as a text and reference book.

# SPORTS

## The Dressage Contest at the Olympic Games

Translated from the French "Revue de Cavalerie," November-December, 1932.

THE event was contested, August 10, on the grounds of the Santa Monica Country Club. Its material organization was perfect.

In line, in the order determined by drawing lots, were: 1st, United States; 2nd, Mexico; 3rd, Sweden; 4th, France.

A single Mexican, Lieutenant Gracida, appeared. His horse, rather small, compact and very elastic, was far from being prepared for a competition of this order.

The United States put in line three pure-blooded horses. Each of these three horses performed well. Not natural enough and too evidently schooled, more held in than *ramenés* (fault which was manifested especially with the second horse—Captain Kitts—too severely bitted), ridden by horsemen insufficiently seated but sober in their movements, they worked in an equilibrium based more on the shoulders than on the haunches: nevertheless, obedient and attentive, they executed the movements exactly and correctly. Brilliant and free in their gaits, they showed sufficient ease in their two-track work. If their *passage* was correct and elastic, with hocks remaining, however, a little behind the mass, they had no *piaffer*; still fewer transitions between their attempts at that movement and the *passage* and inversely. Their changes of lead, easy and forward for all three, were executed without error by the last two.

In this group of three horses, the mare *Olympic* appeared to present the qualities of a school horse.

The Swedish team seemed likely to be dangerous. The secretiveness of the daily work of the three officers composing it, the insistent rumors about their quality and the training of their horses, the criticisms which spread about the defects of the French horses, all combined to create an atmosphere favorable to them.

In fact, the Swedes presented three very beautiful horses, which gave evidence of work; but their training was so far from being perfect that each of them showed grave lacks and even real resistances: the first, by escaping brusquely in the haunches at each halt and in his close two-track work; the second, by executing, in the halt, veritable forward thrusts which it was impossible to confound with the graceful raising of the forehand of the Spanish school; the third, by manifestly struggling against the hand of his rider.

Such as they were, they made a great impression by their noble bearing, the exceptional brilliancy of their trot and the finished execution of many movements.

The defects for which one has the right to reprimand them are: first, that the correct position of their heads is accompanied by no jaw mobility and, then, their *rassembler* is often exaggerated, to the point that, crushed back on their haunches, they no longer handle, except with difficulty, hind-quarters that seem riveted to the ground. It is especially in the two-track work on short diagonals, the *pirouettes* and *demi-pirouettes*, the successive changes of lead, that these defects showed up. They were particularly visible in the mare *Kresta* (ridden by Captain Sandstrom), an animal whose incomparable brilliancy found itself brusquely reduced to the play of the forehand while the haunches could not be budged from the ground.

An incident arose in the course of the work of this magnificent mare: Captain Sandstrom, who was riding her, having, in the *piaffer*, made use of clucking with his tongue, was the object of a forfeit imposed by the Jury of Appeal. From second, which he was with 321 points, he was placed last in the individual contest. His points having been retained in the team score, his team kept second place with 267 points 50 against 281 points 18 of the French team, first.

The French horses were very different from one another. They are well enough known for it to be unnecessary to introduce them.

The mare *Sorella*, ridden by Captain Jousseau, seemed the most likely to come out first. This charming mare could not be saddled for several days on account of an eruption on her back, perhaps caused by change of climate and too large a proportion of oats in her feed. The fact that her back was still sensitive on the day of the test must have had something to do with her slips that day. Enervated and inattentive, she showed bad submission of the haunches, which too frequently escaped from the control of her rider especially in the halts. While her *piaffer* had in Paris drawn the attention of spectators qualified to judge she was able to show only a few correct steps of this movement, and these in very disorderly fashion. Besides, she made mistakes in her successive changes of lead. It seems, nevertheless, that her grace and vivacity brought her the favor of the judges, whose attention was not retained so much by her errors as by those of the movements which she executed very brilliantly and correctly. She was classed fifth.

Under the action of Commandant Marion, the horse *Linon*, justifying the hopes based on him, performed with perfect correctness and exactness. It seems impossible to be more precise than he was. His *piaffer* was the best, and so were his transitions from the *passage* to this movement and *vice versa*. Moreover, it should be noted that alone the two French horses *Linon* and *Taine* were able to execute these transitions.

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they were also the only ones to give a regular and correct *piaffer*.

Unfortunately, *Linon* gave the impression of a worn-out horse: it cannot be doubted that the absolute lack of brilliancy of his short trot furnished the judges a pretext to mark him less well than he would have deserved otherwise. Three hundred and fifty points classed him third; profiting by the disqualification of a Swede, he was announced second.

Ridden by Commandant Lesage, the horse *Taine* was, in the eyes of the crowd as well as in the eyes of the connoisseurs, the event of the day. His performance, in spite of two or three little faults, presented a grace, a brilliancy, a lightness, and an ease, which made it a remarkable demonstration of the French school. According to the opinion expressed by the competitors, his was the real triumph of this contest. The classing by the judges confirmed this judgment. *Taine* was proclaimed first with 343 points 75.

On the closing day of the Games, the exhibition with Commandant Lesage made him execute alone in the Olympic Stadium was the occasion of an enthusiastic demonstration by the 110,000 spectators present. His rider, rid of all worry about competition, showed him off most harmoniously and, at the same time, most precisely. Numerous American personalities think that this performance was magnificent propaganda for our school and our breeding.

### The Other Contests

The American officers presented, in the other two equestrian events, *concours complet* and *prix des nations*, teams of very handsome horses in a magnificent state of preparation. A group of fifty horses had been detached for eight months in California for the purpose of training and selection. The twelve horses chosen, all thoroughbreds, we believe, were in splendid condition. They were ridden by skilled and vigorous riders, in fine form and animated with the ardent desire to win. That these horses did not have better success is because, in our opinion, they still lack blood and initiative.

The Americans won as a team the *concours complet*, which was won as an individual by the Dutch Lieutenant de Mortanges, riding *Marcroir*.

No team could be classed in the *Prix des Nations*, which was won as an individual by the Japanese Lieutenant Nishi, riding *Uranus*.

We have the impression that one of our international horse-show teams would have won this contest easily, to the great advantage of our methods and of our breeding.

In this stadium continually vibrating with the enthusiasm of 110,000 spectators, we observed again to what point the crowd, including thousands of perfectly intelligent individuals mixed in, to what point the crowd is sensitive to manifestations of physical skill and strength. There is in that a powerful means of propaganda which should not be neglected.

One may well regret that reasons of economy prevented France from being represented in the *Prix des*

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*Nations* and in the *Concours complet d'Equitation*, in which her teams could not have failed to achieve such fine successes. However, it is appropriate to note that the horses ridden by the winners of these two contests are French horses. Lieutenant de Mortanges (Holland), who was classed first in the *Concours complet d'Equitation*, rode the horse *Marcroir*, son of *Marsan* (thoroughbred) and of *Coquette* (half-bred), born in 1919 at the stables of the Marquis de Croix at Genélard (Saône-et-Loire). In the *Prix des Nations*, the first place went to the Japanese Lieutenant Nishi, who likewise rode a French horse *Uranus*. It was thus a double victory for French breeding.

Editor's Note: This article is evidently written by an enthusiast for French breeding.

## The Middleburg Hunt Hunter Trials

THE third annual Middleburg Hunt Hunter Trials were held at "Glenwood," the estate of Daniel C. Sands, M. F. H., on Wednesday, February 22nd, at 1 o'clock. A record number of ninety-eight entries drew a crowd of about eight hundred enthusiasts, and the weatherman cooperated in sending an unusually fine winter's day for the occasion.

The new course built on the Race Tract property is about two miles, with nine obstacles natural to a hunting country, such as stone walls, chicken coops, post and rail fences, a gate to be opened and closed, etc. Spectators occupied the boxes and grandstand built for the race meeting from which every jump could be clearly seen. The contestants declared the course a good stiff one, but since there was only one fall during the afternoon the entries and their riders were well prepared for it.

The Trials began promptly at one o'clock with Messrs. William DuPont, Jr., and John R. McComb of Wilmington, Delaware, and James C. Butler, Jr., of New York judging. Class A, the first on the program, was open only to horses that had hunted regularly with the Middleburg hounds. Mrs. John Hay Whitney's brown gelding, *Knight of the Galtors*, ridden by George Roberts Slater of Upperville, put up an excellent performance and was awarded first place, receiving The Master's Plate, presented by Daniel C. Sands, M. F. H. Robert B. Young on his own gray gelding *Annapolitan* was second and Mrs. Whitney, riding her favorite veteran, *Thornbrack*, was third.

John Hay Whitney rode Mrs. Whitney's gray gelding, *Bon Diable*, to victory in The Virginia Plate. This sturdy gray has an enviable record for the past season in the horse show circuits and put up an almost faultless performance, fencing brilliantly under the heavy impost of 235 pounds, at which Mr. Whitney rides. Second was Mrs. Robert C. Winmill on her *Flaming Hawk* and Miss Belle Baruch of New York, riding her own French-Arabian *Souriant 3rd*, was third.

In The Master's Plate, presented by Miss Charlotte H. Noland, M. F. H., the two gray geldings, *Yolk* and *Bigtop*, owned by Arnold Hanger of New York and



Kentucky, and ridden by Mr. and Mrs. Charles D. Sabia, took first place, with two pairs from the Winmill stables placing second and third, Mrs. Winmill and William B. Street riding.

The triumph of *Bon Diable* in the Virginia Plate gave the coveted Middleburg Bowl, one of the most valuable hunting trophies in America, to Mrs. John Hay Whitney for the third consecutive time, to be held by her until the Trials next year, it being a perpetual challenge trophy. Mrs. Whitney's *What'll I Do* twice won this bowl in 1931 and 1932 but refused at the first fence this year with Mrs. Whitney in the saddle, after which he put up an excellent performance.

## Chargers in the Show Ring

By Major Wüfrid M. Blunt, Cavalry.

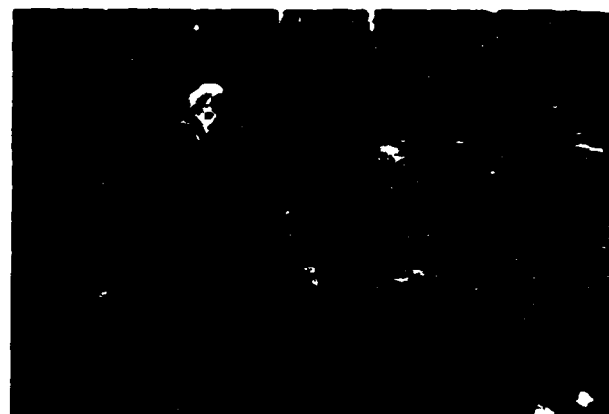
WHILE the standards by which most types of horses are judged are fairly uniform and generally understood, this is far from the case with Officers' Chargers, the requirements for which vary in almost every show. Glancing over a group of horse show prize lists selected at random, the requirements for charger classes seem as varied as the cover designs. While in one show they are judged for performance only over four and one-half foot jumps, in another jumping counts 10%. Again, where one show requires individual demonstrations of school movements, the requirements of another will closely resemble a three-gaited saddle class. Were our knowledge of chargers limited to what appears in prize lists and performances given in the ring, one could not help wondering just what a charger should be. Despite the fact that some few are treated as hot house plants, a charger is a horse intended primarily for field service; and to justify the name of chargers they should fulfill those requirements useful in war. Some of these requirements are inherent in the animal while others are the result of training, some being more easily demonstrated than others.

Let us consider for a moment the qualifications of the charger we would select for a campaign.

It goes without saying that he must be serviceably sound.

To withstand the hardships of reduced forage and standing out, without clothing or bedding, he should be a good keeper; a quality usually found in the type known as big little horses. His size should be in proportion to that of the rider, and should be a question of weight and bone, rather than hands and inches. What is more ludicrous than the sight of Lieutenant Steeplechase in full equipment clambering up and down off a gangling horse to reset his saddle which started slipping the second day out.

Besides being a contributory factor making for a good keeper, calmness is one of the principal qualities that go to make a good war horse. He must not only stand firing, but should go as pleasantly at the rear of a troop as in the front. He should stand quietly when being mounted or dismounted, and be able to



Top: Mrs. John Hay Whitney's "Bon Diable," Grand Champion and Winner of Virginia Plate.  
Center: General View at Hunter Trials Showing the Grandstand and Paddock.  
Bottom: Mrs. R. C. Winmill's "Flying Hawk."

differentiate between a map and a starter's flag. Contrast Major Sobersides walking along on a loose rein studying his map with Lieutenant Dashabout handling able to enter the time of the last trot on his time at for the jigging of his horse.

In view of the varied demands which may be laid upon him, an officer's mount should have well balanced elastic gaits combined with the ability to negotiate reasonable obstacles. Imagine the discomfiture of Captain Hotshot, who, after a rough five miles carrying an important message from the regimental command, could not get his horse over the low stone wall separating him from a rapidly vanishing squadron.

Last but not least is the question of handiness which should include the ability to gallop on a small circle, change leads, two track and stop readily.

Returning for a moment to the prize lists, the fault is not altogether with horse show officials. Their problem is to make their show a success, which involves pleasing the public as well as the exhibitors. They are willing to put on what the exhibitors wish, provided it will interest the spectators. The conditions for all civilian classes have been fairly well standardized by the competitors and those of International Classes by the International Equestrian Federation. However, evidence indicates that the phrase "or what has you" probably originated in connection with charger classes.

Admitting the need of a yardstick for measuring chargers, let us now consider what tests are desirable and practicable for the show ring.

Assuming that we have agreed on the essential qualifications of a charger, the tests should be designed to demonstrate those qualifications rather than the training means by which those qualifications were developed. This would exclude school movements which are in fact more suited to determining the proficiency of riders than the suitability of horses.

The horses under consideration can be judged for type just as any other class is judged for conformation, though instead of being rated 1st, 2nd, 3rd, etc., each horse should be awarded a definite mark as in some cases there will be little choice in this matter. If horses are judged for conformation first, these marks cannot be influenced by their performance.

For the other tests horses and riders should turn out in full field equipment, less sword, and be checked as appointments are in a Corinthian class. A complete check would never be necessary as the competitors would never know just what the judges would look for.

Now for tests to demonstrate his gaits, calmness, handiness and ability to negotiate obstacles.

Any competent judge can get a good idea of the gaits of the class by having them move around the ring in single file at the walk, trot and gallop. The horses might then be brought to a walk and asked to go on a loose rein while the rider flourishes a piece of paper in lieu of a map.

Following this, competitors might be called out individually and handed a pistol containing three rounds of blank ammunition which he should fire standing still.

On handing back the pistol he might then move off on two tracks at a walk. After a few steps the horse should be put into a gallop and execute a small figure of eight, changing leads in the center and terminating at a halt.

His ability to negotiate obstacles could be well demonstrated over jumps between three feet and three feet six inches, without wings.

As a basis for argument, weight might be assigned tests somewhat as follows:

Conformation	40%
Equipment	10%
Gaits	10%
Loose rein test	10%
Pistol test	10%
Handiness	10%
Jumping	10%

While it is hardly expected that these thoughts will meet with universal approval, the wide variation in conditions of charger classes indicates that some effort should be made, in justice to both exhibitors and spectators, to standardize the requirements of charger classes.

Since military personnel constitutes the exhibitors, the responsibility for prize list conditions rests largely with them. If officers' jumping classes or schooling contests are wanted, well and good, name them accordingly. If, on the other hand, there is such an animal as an officer's charger, let us come to some agreement as to what he should be asked to do.

## The Corozal Horse Show

By Capt. Maurice Rose, Cavalry (DOL).

IN a horse show ring, erected on the main parade ground of the post of Corozal, Panama Canal Zone, surrounded by towering palm trees and cooled by breezes which came in from the Bay of Panama, the second annual horse show of Corozal took place on Saturday March 11th, 1933. The Corozal show which has now become an established institution, was started last year by Colonel George Williams, Cavalry, who is in command of the post, and has become so popular with Army, Navy and Civilian residents of Panama and the Canal Zone that its repetition was a foregone conclusion.

Promptly at eight o'clock the first class entered the ring to be shown in the ladies three-gaited class. In spite of the early hour the grandstand and the grounds surrounding the horse show ring were nearly filled with the spectators who had been invited to witness the performance. Two rear Admirals and their staffs, General officers of the army and all of the Post Commanders of the Pacific side of the Canal Zone were present to lend a picturesque atmosphere and to prove that interest in horse activities was not confined to the Cavalry Branch of the service. The setting and weather could not have been improved upon, and those present who spared a thought for the blizzards of northern clime and the sand storms of the border were forgiven their complacency in basking in the mellow warmth of the Panamanian sun, as the cooling breezes fanned their cheeks.

Entrants for the show came largely from the officers and men of the 11th Engineers and the staff of the Post of Corozal, but the ladies classes were recruited from the Infantry at Fort Clayton and the Coast Artillery at Fort Amador, both of these garrisons swelled the attendance of spectators during the show.



One of the most interesting and spectacular features of the show was the outdoor hunt course, over which were shown individual hunters and hunt teams. The course was erected over an area about one mile long over uneven ground and included ten jumps in addition to a bank jump; the entire course could be seen by all of the spectators, and the exhibition of riding over this course brought forth the exclamations of awe and delight which always mark the enthusiastic horseman, on the sidelines.

The Officials for the show were as follows, Captain Maurice Rose, Cav., in charge of the show; 1st Lieut. R. C. Smith, C. E., in charge of Paddock; 1st Lieut. A. M. Pigg, S. C., Announcer; Captain E. P. Ketchum, C. E., Clerk; Chaplain Wachter, in charge of Trophies. Judges: Colonel Conrad S. Babcock, GSC (Cav.), Major J. S. Winslow, F. A., Lieut. B. L. Hamilton, QMC (Cav.), 1st Lieut. Edwin Seibert, ADC (FA).

Winners in the various classes were as follows:

Class I. Ladies' three-gaited saddle class.

Mrs. Landis, Miss Williams, Mrs. Hedekin.

Class II. Children's saddle class.

Miss Mac Gregor, Miss Wilde, Miss Landis.

Class III. Enlisted Men's Mounts.

Corporal Czarnecki, Pvt. Townsend, Private Hillman.

Class IV. Officers Chargers.

Lieut. Kirchhoff, Captain Rose, Lieut. Watts.

Class V. Enlisted Mens jumping.

Cpl. Czarnecki, Private Cornell, Sgt. Bosque.

Class VI. Woman's Jumping.

Miss Williams, Mrs. Hedekin, Mrs. Landis.

Class VII. Handy Hunter.

Lieut. Watt, Miss Williams, Miss Reeder.

Class VIII. Hunters.

Miss Williams, Private Newsome, Sergeant Bosque.

Class IX. Touch and Out.

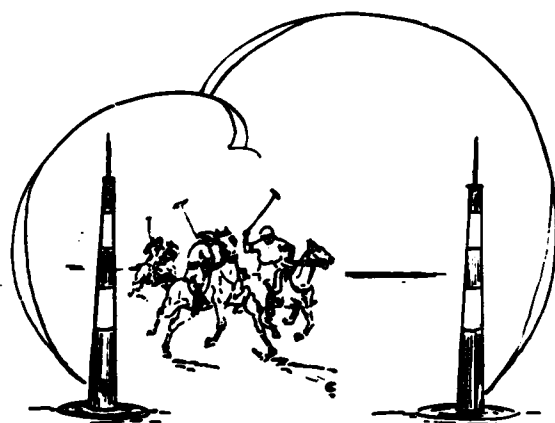
Lieutenant Watt, Miss Williams, Miss Reeder.

Class X. Hunt Teams.

Lieutenant Kirchhoff, Lieut. Watt, Sgt. Hastings, Mrs. Landis, Mrs. Hedekin, Miss Reeder.

In the men's jumping classes and the open jumping classes the jumps averaged in height three feet, nine inches. In the ladies' classes the jumps averaged three feet, six inches.

The winners of the Corozal Show are all entered as contestants in the horse show to be conducted by the Panama Canal Department on March 21st, at Fort Clayton.



## The Foreign Military Press

Reviewed by Major Alexander L. P. Johnson, Infantry

CANADA—*Canadian Defense Quarterly*—January, 1933. "Military Education," by W. R. P. Bridger, M.A.

The author, professor of modern languages and history at the Royal Military College at Kingston, Ontario, refutes some of the pet arguments advanced by pacifists against military training in colleges and universities. The idea often expressed by that ilk, that military training is bound to make the pupil militaristic, the author states, is entirely erroneous, even misleading. Were war to be abolished, he writes, some species of international police force would still be necessary. He observes that throughout Canada there are a great many more men being put through a semi-military course of training for police duty, yet the complaint is still to be heard that such training has a militarizing effect.

The pacifist charge, that military training turns out men of one stamp, the author brushes aside with the remark, that the same holds true of all great colleges and universities, but as long as the stamp is good, there is no harm done. Contrary to pacifistic belief, the author states, individuality and initiative are not only cultivated by military training, but these qualities possess far greater value in military life than in any other calling. The charge of subserviency to superiors often alleged by those opposed to military training the author dismisses by pointing out the fact, that subserviency is of no avail to the soldier who lacks in the ability to think on his feet and think quickly. On the other hand, he adds, a little subserviency to superiors is not harmful in an age when boys who respect and obey their elders are a rarity.

After dilating upon the curricula of military colleges and the advantages of military training, the author concludes, that military training is not only of great educational value, but necessary for the safety of the country. "It serves . . . many and distinct purposes . . . lays a solid foundation of health and knowledge on which a boy can safely build a future career . . . finally it trains together the mind and body so that they may be used to the fullest extent and in perfect unison."

AUSTRIA — *Militärwissenschaftliche Mitteilungen* — November-December, 1932.

"The Infantry Journal," by Lieut. Col. Lothar von Rendulic.

A very flattering review of the July-August number of the *Infantry Journal*. Commenting upon the fact that while there is an abundance of periodicals serving the interests and needs of the artillery, cavalry and the technical branches of the military profession, the author points out that only France and the United States produce military periodicals worthy of the importance of the infantry arm. In the author's opinion,

the *Infantry Journal* deserves particular attention because of the great wealth and high professional standard of its contents. "Its recent development is remarkable," he adds, "and it has become a veritable storehouse for infantry knowledge." General Fuqua's review of the varied activities of the infantry; Lieutenant Kent's suggestions as to the use of the sand table for the training of troops; Colonel Shartle's study of "Forts and Fortresses" in the light of war experiences; Captain Hildring's essay, "Four Days of Infantry Combat"; Lieutenant "Merriweather's" skit "Khan Dhu" all come in for favorable comment. Colonel Vestal's historical essay, "Frederick William von Steuben," the author comments, evinces gratitude and appreciation for the German drillmaster.

We appreciate the compliments, but do hope that the reviewer will not make the mistake of taking "General Abner Zilch," whose "photograph" and pointed comments appeared in a subsequent issue of the *Infantry Journal* as an officer of the U. S. Army. Be it said for the benefit of our reviewers abroad, that the good General like Lieut. "Merriweather" are but pseudonyms.

FRANCE—*La Revue d'Infanterie*—October, 1932.

"Organic Cavalry of Infantry Commands," by Lieut. Raymond Sereau, Cavalry.

The resumption of the war of movement in 1918, the author writes, demonstrated the fact that the divisional cavalry troop was too weak, and that given increased strength and fire power, these cavalry units might have obtained important results. The author believes that the infantry needs an organic medium of reconnaissance capable of functioning. Aviation can supply general and positive information only. It can determine that the enemy is in a given locality, but cannot say that he is not there. The presence of small bodies of hostile troops frequently escape aerial observation altogether. Not only does the infantry need a dependable agent to secure the detailed information that is essential for the conduct of its operations, but the added security provided by the presence of such reconnaissance elements to its front and flanks, especially in the absence of large bodies of screening cavalry, is of inestimable value. Intelligence and security thus became interdependent.

The author visualizes a divisional reconnaissance squadron consisting of a field officer of cavalry with staff; one cavalry troop of two platoons of two sections each, plus one squad of scouts and a machine gun group with pack animals; one cyclist (or motorcyclist) troop comprising a headquarters platoon, three combat platoons of three sections each, and one motorized machine gun platoon of two sections; one automobile platoon consisting of four semi-armed touring

cars each armed with a machine gun capable of being operated from the car or the ground; four motorcycles with side cars armed with automatic rifles; a small radio truck; and the necessary field and combat train. This reconnaissance force, according to the author, will consist of 15 officers, 454 men, 268 horses, 175 bicycles, 21 motorcycles, 22 autos, 16 animal drawn vehicles. The fire power of this force would amount to 190-208 rifles, 22 automatic rifles, 10 machine guns and 2 anti-aircraft machine guns.

The cavalry troops, the author writes, serves as the agent of reconnaissance. On horseback or on foot, the troopers comb the terrain, avoid hostile centers of resistance they cannot overcome, in order to secure for the infantry the needed vital information. The cyclist unit with 9 automatic rifles and 4 machine guns possesses the bulk of the fire power and can effectively support the horsemen in the execution of their mission. The automobile unit with its machine guns is essentially a medium of transportation for the reserve fire power. It can be employed on rapid reconnaissance missions over short distances before contact is made with the enemy. The motorcycles armed with automatic rifles, the author considers as media of liaison and eventually as a reserve of fire power.

Discussing the tactical employment of this cavalry force, the author emphasizes the necessity of close cooperation with the divisional infantry. In order to attain the highest degree of efficiency in this respect, the author believes joint training in time of peace is essential. He concludes his interesting study with a few remarks regarding the desirability of incorporating a cavalry reconnaissance unit in each regiment of infantry. This regimental cavalry platoon consisting of 1 officer, 6 N C O's and 19 privates would be charged with distant reconnaissance missions, security for the infantry on the march and in case of need might be employed as mounted messengers.

GERMANY—*Deutsche Wehr*—December 2, 1932.

"French Policy of Alliances and the League Covenant."

The anonymous author cites Premier Herriot's stirring address before the League of Nations Assembly on October 29, 1932, in which the latter declared that "the Covenant, nothing but the Covenant, the whole Covenant is our Law." Herriot, the author states, further declared, that the termination of secret diplomacy and the old system of the balance of power must be the principal goal of the League of Nations. "All states, big and small, must be accorded complete equality; they must cooperate in the creation of a new kind of public opinion, which must be free of all thought of hegemony." With these high ideals expressed by M. Herriot as a background, the author undertakes to analyze actualities in the French foreign policy which is indicated by the following facts:

On September 7, 1920, France and Belgium concluded a treaty of alliance in which the signatories pledge mutual armed support. It required reorganization of the Belgian Army which in the case of war becomes a part of the French military forces in the field.

Since October 18, 1918, there is in existence a treaty between France and Czechoslovakia pledging mutual support in the event of political difficulties. A secret clause added in 1921 obligates Czechoslovakia and Poland to act in concert against Germany "whenever in the judgment of France the peace of Central Europe is in danger." A further convention entered into on January 25, 1924, provides for full military cooperation against Germany between France, Czechoslovakia and Poland.

On September 15, 1922, France concluded an alliance with Poland against Germany and Russia. This treaty was renewed in 1926 and 1932. The military clauses cover all details of armed cooperation and provide for a French military mission in Poland and the training of Polish officers in France.

A treaty of alliance between France and Roumania concluded on August 28, 1926, provides for military cooperation against any third party. It is primarily directed against Germany and Russia. It obligates Roumania to obtain 75% of all her military equipment and armament from French sources.

On November 28, 1927, France concluded a treaty of alliance with Yugoslavia primarily against Italy.

In addition, the author notes, these alliances are supplemented by a series of treaties between the several allies of France. As a practical result of these alliances, the peace strength of the French army of 650,000 is augmented by the combined peace strength of her allies amounting to some 850,000 men. The combined war strength of France and her allies the author estimates at 13,300,000. Of these, ten million men are mustered in territories contiguous to Germany.

—*Militär Wochenblatt*—January 11, 1933.

"Review of the Military-Political Situation," by N. 64.

The *Little Entente*, the author writes, manifests increased activity. The Chiefs of Staff of these states comprised by the Little Entente held a conference at Belgrade last November. A month later the several ministers of foreign affairs met at the same place for an extraordinary conclave. The fear of an impending attempt to secure revision of the Paris peace treaties, the author believes, motivated these conferences. Possibly difficulties, which have arisen between some of the member-states of the Little Entente, the author thinks, might have been an additional motive. He also notes a distinct feeling of resentment in these countries against the Great Powers because of their exclusion of the Little Entente from the international conversations regarding equal rights demanded by Germany and the other defeated nations in the matter of armament. The French and Polish non-aggression pact with Soviet Russia evoked strong resentment in Roumania. The periodic attempts to reconcile France-Italian difficulties, and the tightening of French credits are equally fruitful causes for anxiety in the chancelleries of the Little Entente states. Hence, the author concludes, the cementing of the bonds that unite the nations of the Little Entente seems to have been the principal object of the recent Belgrade conference. With that end in view, they created a permanent com-

mittee consisting of the several ministers of foreign affairs of the Little Entente states, which is to meet three times annually. The new accord also establishes a permanent Secretariat at Geneva. "Matin," great French daily, considers the new arrangement as a definite alliance with unity of command.

The author points out, that the states of the Little Entente are in thorough accord as to the preservation of the peace treaties and the resulting territorial arrangements. They are also in complete accord as to the necessity of suppressing Hungarian revisionist aspirations. They are likewise in agreement as to their own inability or, as the author observes, unwillingness to disarm, and in their opposition to the granting of equal rights to the defeated nations. Furthermore, the author notes, Little Entente statesmen are unanimous in the opinion, that their respective countries should pay as little as possible on their own war and liberation debts, but collect to the last cent the debts owed them, especially from Hungary.

As to existing military agreements, the author states, France insisted that Yugoslavia and Roumania make provisions for sufficiently large forces to operate against Hungary to relieve Czechoslovakia and leave the latter free to throw her entire strength against Germany. Similarly Roumania is to relieve Yugoslavia's rear, in case of a conflict with Italy, against Hungary and Bulgaria. The author believes that Roumania rejected this demand on the ground that the French and Polish non-aggression pacts with Soviet Russia leave her own rear exposed to grave danger, and neither Czechoslovakia nor Yugoslavia are said to be willing to support Roumania against Russian aggression. Czechoslovakia, military appropriations for 1933, the author writes, amount to one and a quarter billion crowns, a reduction of 57 million crowns of the preceding year's appropriations. The bulk of this saving was effected by furloughing to the reserves the class of 1931 about the middle of January instead of the end of March, 1933.

The Czechoslovak Army is in course of reorganization. Each of the 48 infantry regiments will consist of two full strength battalions and one cadre battalion. The latter will furnish the nuclei for 12 reserve divisions in case of mobilization. This, the author observes, is represented abroad as a 25% reduction of the military establishment. Actually, the author notes, the 12 infantry brigade headquarters, which have become surplus as a result of this reorganization, will, nevertheless, most likely be continued in existence in some other form, possibly as headquarters for the 12 reserve divisions. The Czechoslovak high command has been reorganized along French lines.

Yugoslavia, the author writes, appropriated for military purposes during the fiscal year 1933-1934 two billion dinars, which represents about 21% of all budgetary appropriations. Fortifications along the Italian frontier are being feverishly pushed to completion. Two frontier regiments of infantry have been converted into alpine troops.

Roumania, the author writes, is gravely disappointed because of the Polish and French non-aggression pacts

with Soviet Russia. The author believes he discerns signs of possible rapprochement between Roumania and Italy, encouraged by recent reassurances given by Mussolini regarding treaty revision.

Hungary, under the leadership of General Gombos, premier and minister of defense, follows a foreign policy of definite Italian orientation. There were rumors of secret conferences of the general staffs of Italy, Hungary, Albania and Bulgaria for the discussion of war plans against Yugoslavia. The author believes, that General Gombos is too good a soldier to commit his country to a path of adventure knowing, as he does, Hungary's present military impotence.

Hungarian military appropriations for 1933-1934 were materially reduced. The sum appropriated amounts to 96 million pengo, representing about 7% of all budgetary appropriations.

Austria, the author writes, owing to the economic situation allowed the actual strength of her army to drop to 17,000, from a maximum of 30,000 authorized by the terms of the treaty of St. Germain. The military budget amounts to 80 million shillings, or 4% of all appropriations. Recruiting to full strength, the author states, has begun in anticipation of the funds appropriated. It is noteworthy that there were 27,000 applicants to fill 4,500 vacancies, notwithstanding the substantial reduction of army pay.

Italy, on the tenth anniversary of the Fascist march on Rome, the author notes, occupies a leading place among the great powers. Italy has felt the economic depression less than any other country. Her military establishment is maintained at a high degree of efficiency, while the record of achievements of the Royal Italian Air Force is indeed notable. The Black-shirt militia likewise attained a high degree of efficiency and effectiveness. The author believes, it will prove a valuable adjunct to the army in case of war. The principal value of the Fascist organization, the author believes, is its sponsorship of physical and moral development of the nation, and its fostering of a spirit of national consciousness.

Switzerland, the author states, as a result of the recent riots at Geneva, has had a valuable object lesson regarding the usefulness of troops in active service to meet sudden emergencies. The Swiss Federation, the author believes, will sooner or later have to reorganize her military establishment which is now based upon a purely militia plan. In fact, various reorganization plans are said to be actually under consideration.

GREAT BRITAIN—*Journal of the Royal United Service Institution*—February, 1933.

"The Japanese Army," by Lieut. Col. J. W. Marsden.

Organized in 1875 on the basis of compulsory service, the Japanese Army was modelled along German pattern which imprint it still bears. The Emperor is the supreme commander. He is assisted by an advisory board of marshals and admirals who are personally selected by him. The Supreme War Council includes the advisory board, the ministers of war and the navy, the chiefs of their respective general staffs, and

a number of distinguished army and naval officers chosen by the Emperor.

The Army at present consists of approximately 15,500 officers and 200,000 men. The organization of divisions varies. In general, the division consists of two brigades of two regiments each; a cavalry brigade of two regiments; one artillery brigade of three or more regiments; heavy, light or mixed according to circumstances; one battalion of engineers and one commissariat battalion (supply troops). The infantry regiments consist of three battalions of 600 men each. The cavalry regiment consists of three or four squadrons (troops) of 100 sabres each. The field artillery regiment contains six batteries of four pieces; the engineer battalion has three companies of 150 men each. The supply battalion comprises 300 men. Telegraph, railway, aviation, antiaircraft units, mountain and coast artillery units are distributed among the various divisions. There are, in addition, two tank regiments, one attached to a line division, the other to the infantry school. The Military Gendarmerie is organized as a separate corps.

Infantry service with the colors was reduced in 1925 to eighteen months. This reduction was compensated by compulsory cadet training at secondary and high schools under the supervision of regular army officers. The service is intensive. Passes are granted only on Sundays and holidays. Officers are particularly hard worked. A feature of the soldier's so-called hardening process is the "snow march," carried out annually in mid-winter, when troops spend a week marching, bivouacking and engaging in tactical exercises in the nearest mountain districts.

Military education under control of a special department covers the entire scope of training from the preparatory schools for boys intending to become officers, up to the general staff college. In 1930, the latter listed 56 instructors, 160 students and 560 graduates.

The air service developed on a French model under French and British tutelage, played an important role in recent military operations. The principal achievements of the Japanese air service include a 700 mile night flight over Japan and a non-stop flight of 1,800 miles to Formosa. Others, overshadowing these, are said to be in contemplation.

**HUNGARY—Magyar Katonai Szemle—January, 1933.**

"The Political-Military Situation of the Central Powers at the Close of 1915," by General vitez Louis Nemeth, ret.

A very interesting historical discussion, in which the author undertakes to show that the ultimate outcome of the World War was actually decided at the close of 1915. Although the second year of the World War brought a series of important victories to the Central Powers, they were unable to secure a decisive victory anywhere, such as might have induced even but one of their enemies to the conclusion of separate peace. The Allied plans for 1916 contemplated, the author writes, a general offensive on all fronts, but they found it impossible to agree as to the time of the at-

tack. Unified command, although recognized by all, was highly desirable for the success of Allied arms, had not yet become a pressing issue.

In the camp of the Central Powers, Germany and Austria-Hungary, the author states, shared political as well as military leadership. Turkey and Bulgaria followed their lead. There was, however, a growing disagreement between the German Chief of Staff and his Austro-Hungarian colleague. The author believes that after the disasters of 1915 Russia was actually inclined to make peace. That this failed to materialize, the author attributes to the bungling of German diplomacy. He points out that in the summer of 1915, even before the recapture of Lemberg, General Falkenhayn, German Chief of Staff, was reluctant to continue military operations against Russia on the ground that a decisive victory would be wholly out of question. Later, however, after the fall of Warsaw, Brest-Litovsk and other important Russian fortresses, Falkenhayn hesitated in bringing the Russian campaign to a close. As a result, the author writes, the Austro-Hungarian armies penetrated Russia too far and caused the Serbian campaign to be initiated too late.

When, upon Italy's entry into the war, General Conrad insisted upon offensive action against that country, Falkenhayn opposed the plan for political reasons. Italy had not yet declared war on Germany. Falkenhayn would neither furnish troops to assist in such offensive, nor would he relieve Austro-Hungarian forces from the Russian front for that purpose. The author blames General Falkenhayn also for the escape of the Serbian army. Conrad had planned a campaign of annihilation against the Serbo-Montenegrin armies with a view of securing the Albanian coast and Saloniki. Falkenhayn opposed this plan, because he felt that success would unduly enlarge Austro-Hungarian prestige. Believing the rupture of the Western front to be impossible, General Falkenhayn favored offensives with limited objectives, and committed the German army to the abortive Verdun operations. Conrad took a chance at Asiago with inadequate strength at his disposal. The friction between the two leaders not only emphasized the necessity of unity of command, but in the author's opinion, it was responsible for ultimate defeat of the Central Powers.

#### General Information

**SPAIN—The Madrid newspaper *Haralde* reports a sensational invention in the field of camouflage, which achieves the complete invisibility of troops and materiel. The inventor, Hilario Omedes, calls it "invisible armor." The newspaper reveals only the general nature of the invention, which was acquired by the Spanish Government.**

According to this report, the "invisible armor" consists of smooth, unbreakable particles of mirror. In time of war, it is proposed to provide all personnel and materiel with this mirror-armor which, by reflecting the surrounding terrain, is said to reduce everything to absolute invisibility at a distance of 200 paces. Masking of big guns becomes wholly unnecessary. (*Post-Vaple*, Dec. 3, 1932.)



# Organization Activities

## Third Cavalry (Less 1st Squadron)

Fort Myer, Virginia

Fort Myer continued its series of winter Exhibition Rides on Feb. 17 with a performance for the Secretary of War, The Honorable Patrick J. Hurley, and members of the War Department General Staff. The series ended a week later with the Secretary of State, The Honorable Henry L. Stimson, as the honor guest and many members of the Diplomatic Corps present. The rides have enjoyed an unprecedented popularity this year, due to the unceasing efforts of all members of the command to make each performance more finished and spectacular than the last.

The 2d Squadron commanded by Maj. A. D. Surles acted on March 4th as the Presidential Escort for the journey from the White House to the Capitol and return from the ceremonies incident to the New President taking the Oath of Office. The Squadron marched in column of Platoons at a trot which made a very effective formation. Machine Gun Troop, 3d Cavalry, with Machine Gun Troop, 10th Cavalry, made up a Squadron, commanded by Captain Clyde D. Garrison, which formed the Cavalry component of the Inaugural Parade later in the afternoon.

## 305th Cavalry

Philadelphia, Pa.

Approved schedules and programs for active duty training have been received and the Regiment is now engaged in efforts to prepare along the lines laid down in these documents. The training this year offers some radical departures from that of previous years. It is considered under this new system that officers will have a chance to engage in study and practice of responsibilities and duties as applied to their own particular grades. The schedule divides all reserve officers into three groups—A, B and C. Officers of appropriate grades and experience will be assigned to each group, and the work of each group will be distinct from the work of other groups in general. On only a few occasions will duties cause the separate groups to work together. The new schedule does away with mass lectures and replaces these with actual demonstrations by regular army personnel. This schedule tends to reduce study of theory and to give actual practical work to all officers.

Two officers of the Regiment have been receiving congratulations on their recent promotions: 1st Lieut. Wm. J. Taylor, Jr. to Captain, Cav-Res., and 2nd Lieut. George B. Knabb to 1st Lieut. Cav-Res.

A committee has started making preparations for the annual celebration of Regimental Day, April 17th.

## 306th Cavalry

Baltimore, Md.

Major Harley C. Dagley, the Unit Instructor, 2nd Squadron, 306th Cavalry, left Washington, D. C., the middle of January for the Army and Navy General Hospital, Hot Springs National Park, Arkansas, for examination and treatment. He reports favorable progress and hopes to return to the regiment in April.

This regiment will attend active duty training at Fort Myer, Virginia, August 13-26, 1933.

## 307th Cavalry

Richmond, Virginia

The following promotion and assignments have been made in this regiment:

2nd Lt. Frederick Sale, 307th Cavalry, to First Lieutenant.

New Assignments:

2nd Lt. Henry W. Morgan, Jr., Cav-Res., P. O. Box 152, Christiansburg, Va.

2nd Lt. Charles L. Wills, Cav-Res., 11 S. Adams St., Petersburg, Va.

2nd Lt. Samuel C. Wolfe, Cav-Res., Marion, Va.

2nd Lt. Cary H. Cocke, Jr., Cav-Res., 902 Graydon Ave., Norfolk, Va.

1st Lt. Dan H. Pletta, Cav-Res., Box 417, Blacksburg, Va.

## 3d Squadron, 307th Cavalry

Norfolk, Virginia

A series of continuing map problems has been presented at the school for officers of the squadron covering Reconnaissance, Offensive and Defensive Combat. These problems have involved small units and have been well received by the junior officers of the squadron.

The use of reserve officers as instructors at the troop schools has been started with excellent results. On January 12, Major James R. Mullen, The Squadron Commander, gave an excellent discussion of the principles governing Reconnaissance. On February 9, Lieutenant William A. Trolan, discussed Offensive Combat, and on March 9, Lieutenant Charles E. Gifford, discussed Defensive Combat. These discussions preceded the map problems and were of great assistance to the officers solving the various requirements.

Interest in extension courses has picked up materially since February 1st, and indications are that a majority of the officers of the squadron will complete the minimum requirements prior to June 30.

Lieutenant Cary H. Cocke, Jr., was assigned to the

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squadron on January 27th, and the assignment of Lieutenant John F. George, Jr., is expected at an early date. Both these officers graduated from Virginia Military Institute in June, 1932.

## 308th Cavalry

Pittsburgh, Pa.

The 308th Cavalry celebrated the Fifteenth Anniversary of its Organization on February 24, 1933, with a Dinner and Dance at the Keystone Athletic Club in Pittsburgh, Pa.

Sixty-five officers and ladies of the regiment with the guests of honor were present, and the celebration was in every way a success.

The speaker of the evening was Colonel George T. Bowman, Cavalry (DOL), the Chief of Staff of the 62nd Cavalry Division. Colonel and Mrs. Charles C. McIlver of Pittsburgh were also present. Colonel McIlver spoke.

After dinner the tables were cleared away, and an excellent orchestra played for the dancing which continued till one o'clock.

The National and Regimental Standards were displayed behind the Speaker's table, while an enlargement of the Regimental Coat of Arms prepared by Lieutenant S. K. Humphreys was hung between the colors behind the principal speaker.

Rotation of the officers attending the riding classes in the duties of Platoon Commanders, file closers and instructors is furnishing good training in command.

The 308th Cavalry Indoor Polo Team, composed of Lieutenants Perritt, Linton and Young, has played good polo this year in the several games scheduled in the Pittsburgh Indoor Polo League. They also recently made a trip to Culver as guests of the Culver Polo Team, playing two games in which they made a creditable showing despite their defeat.

## 862nd Field Artillery (Horse)

Baltimore, Md.

Everything indicates a successful and interesting period of active duty at the Citizens' Military Training Camp at Fort Hoyle, Maryland, this summer. Lt. Colonel Roger S. B. Hartz, the Regimental Commander, has prepared an inactive duty training schedule of four conferences a month for April, May and June to prepare his officers for their duties at the camp. In spite of these additional demands on them, a large majority of the officers have already expressed their desire to attend.

After a lapse of about two years due to lack of facilities, pistol practice has been resumed, the gallery in the New Post Office Building having been recently completed. Practice is held for the regiment once a month. It is our ambition to prepare our adepts for qualification and also to bring in some medals from the matches.

Also our horse lovers are having an eye on the

weather for the first indications of spring, when our fortnightly rides at Fort Hoyle, Maryland, will be resumed.

## The Cavalry Reserve Section of the Kansas City Chapter, Reserve Officers Association

The Cavalry Reserve Section of the Kansas City Chapter, Reserve Officers Association of the United States, has progressed steadily and firmly since the Chapter was organized in 1922 and with a start of approximately 8 active officers the Cavalry Reserve of Kansas City now numbers 44 active reserve officers in that branch of the service, 3 attached and 23 civilian candidates studying for commissions. This progress has not been achieved overnight but, as above stated, has been slow but sure and has continued through the regimes of several cavalry officers of the regular service, namely Major Henry W. Baird, Maj. James Schwenck, Maj. Otto Wagner, and the present regular army instructor, Maj. D. G. Richart.

The section includes Reserve Officers of the 4th, 14th, 15th, inactive Regular Army, 321st Cavalry, and the 466th Armed Car Squadron. Organized Reserves and since the first of the year the division headquarters of the 66th Cavalry Division, under command of Col. J. E. Gaujot, U. S. A. Chief of Staff of the Division.

The section meets every Wednesday night for instruction conducted for the first hour by officers from the Command and General Staff School at Ft. Leavenworth, Kans., and for the second hour by the cavalry instructor assigned to our city, Maj. D. G. Richart, under whose leadership these lectures have improved the efficiency of the officers and the correspondence courses completed have not heretofore been surpassed. As the Cavalry Section has its permanent room in the Reserve Officers building, these lectures have not only been lectures, but map problems enabling the extensive use of the sand table have been permitted.

Major Richart also conducts on Sunday morning at Ft. Leavenworth a class in equitation for the cavalry reserve officers and civilian candidates. Other activities are a cavalry reserve officer pistol team, which for several years were the winners in the interbranch military league of the Kansas City Chapter, and have always proved a serious contender for the championship; a small arms school is conducted by Major Richart every Saturday afternoon at the indoor range in the basement of the Reserve Officers' Armory. Cavalry reserve officers and candidates have carried their spirit of comradeship further and meet every Monday from 12 to 2 for lunch at the Baltimore Hotel, located at 11th and Baltimore Avenue, and a cordial invitation is extended to all who are passing through or in our city to visit and attend these luncheons.

In January of this year Kansas City was honored by being selected as the headquarters of the 66th Cavalry Division, and Col. J. E. Gaujot, Chief of Staff



of this division and his personnel were transferred from Omaha to our city to continue their activities along this line. Col. Gaujot also becomes the co-ordinator of all the reserve activities at Kansas City.

The Annual Banquet of the Cavalry was held Saturday evening, February 4th, at the Mission Valley Hunt Club. Not only did the Cavalry Reserve Officers and the civilian candidates turn out in force, but a distinguished list of civilian guests. National Guard Off-

cers, and other Reserve Officers attended, as this was not only the annual banquet but also the Cavalry Reserve's welcome to Col. Gaujot.

Cavalry Reserve Section is one of the most active sections of the reserve activities at Kansas City and can always be found leading the way for any activity for the further advancement of the Organized Reserves and for the national defense of the United States.

## Officers of the 61st and 62nd Cavalry Divisions Organized Reserve

### 61st CAVALRY DIVISION, Army Building, 25 Whitehall Street, New York City

**COLONEL**  
Connell, Wm. M.,  
Cav. Chief of Staff, New York City

**Unit Instructors of Divisions**

**Lt. COLONELS**  
Smalley, Howard R.,  
Cav. Rochester

**MAJORS**  
Whitney, Frederic W.,  
Cav. Albany

**MAJORS**  
Cooksey, Richard W.,  
Cav. New York

**MAJORS**  
Dobyns, Thomas A.,  
Cav. New York City

**MAJORS**  
Beach, Lindsay D.,  
Cav. Buffalo

**MAJORS**  
McDowell, James V.,  
Cav. New York City

**MAJORS**  
Anderson, W. C.,  
Cav. Albany

**MAJORS**  
Clark, R. A.,  
Cav. Albany

**MAJORS**  
Lillyman, F. G.,  
Cav. Albany

**MAJORS**  
Smith, E. L.,  
Cav. Albany

**MAJORS**  
Wilkinson, H. S.,  
Cav. Albany

**MAJORS**  
Hale, H. C.,  
Cav. Albany

**MAJORS**  
Klopstock, A.,  
Cav. Albany

**MAJORS**  
Matz, A.,  
Cav. Albany

**MAJORS**  
Swank, O. D.,  
Cav. Albany

**1st LIEUTENANTS**  
LaPointe, J. T.,  
Cav. Albany

**1st LIEUTENANTS**  
Lee, B. H.,  
Cav. Albany

**1st LIEUTENANTS**  
Meagley, A. O.,  
Cav. Albany

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Weg, H. F.,  
Cav. Albany

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Kennedy, E. B.,  
Cav. Albany

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Lockwood, C. H.,  
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Case, W. C.,  
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Coleman, C. W.,  
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Goodwin, F. B.,  
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Marvin, J. G.,  
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Partridge, R. P.,  
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Temple, H. C.,  
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Patterson, A. S.,  
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Alford, D. C.,  
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Anderson, A. E.,  
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Baker, C. A.,  
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Bartlett, H. F.,  
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Bettette, P. F.,  
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Beard, D. A.,  
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Caine, A. F.,  
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Carpenter, C. M.,  
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Cazier, C. W.,  
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Chimes, T. D.,  
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Chrysler, M. A.,  
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Coffey, T. J.,  
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Evans, W. P.,  
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Floyd, D. J.,  
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Freer, L. B.,  
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Hourin, A. B. P.,  
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## Mar.-Apr., 1902

Morris, W. L.  
 Steinruck, A. L.  
 402nd ENGINEER  
 SQUADRON  
 Baltimore, Md.  
*All Engines*  
 LT. COLONEL  
 Doyle, J. S.  
 Commander  
 MAJOR  
 Anderson, S. H.  
 CAPTAINS  
 Elliott, C. E.  
 Killough, E. M.  
 Needham, A.  
 1ST LIEUTENANTS  
 Houghton, H. H.  
 Scott, F. E.  
 Vivell, Allen E.  
 2D LIEUTENANTS  
 Devereux, A.  
 Fowble, A.  
 Hoffman, G. L.  
 Hughes, D. A.  
 Kuhn, J. B.  
 Midding, G. A.  
 Murbach, J. F.  
 Plummer, W. E.  
 Ruark, E. G.  
 Weisengott, P. F.  
 362nd MEDICAL  
 SQUADRON  
 Baltimore, Md.  
 MAJOR  
 Schramm, F. M.  
*Med-Res.* Commanding  
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*Vet-Res.*  
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*Med-Res.*  
 Decker, W. A.  
*Med-Res.*  
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*Med-Res.*  
 Reeves, D. L.  
*Med-Res.*  
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*Med-Res.*  
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*Dent-Res.*  
 62nd CAVALRY DIVI-  
 SION QUARTERMASTER  
 TRAIN  
 Winchester, Va.  
 MAJOR  
 Brown, W. F.  
 Commanding  
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 Murr, R. D.  
 1ST LIEUTENANTS  
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 2D LIEUTENANTS  
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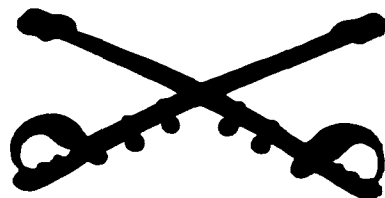
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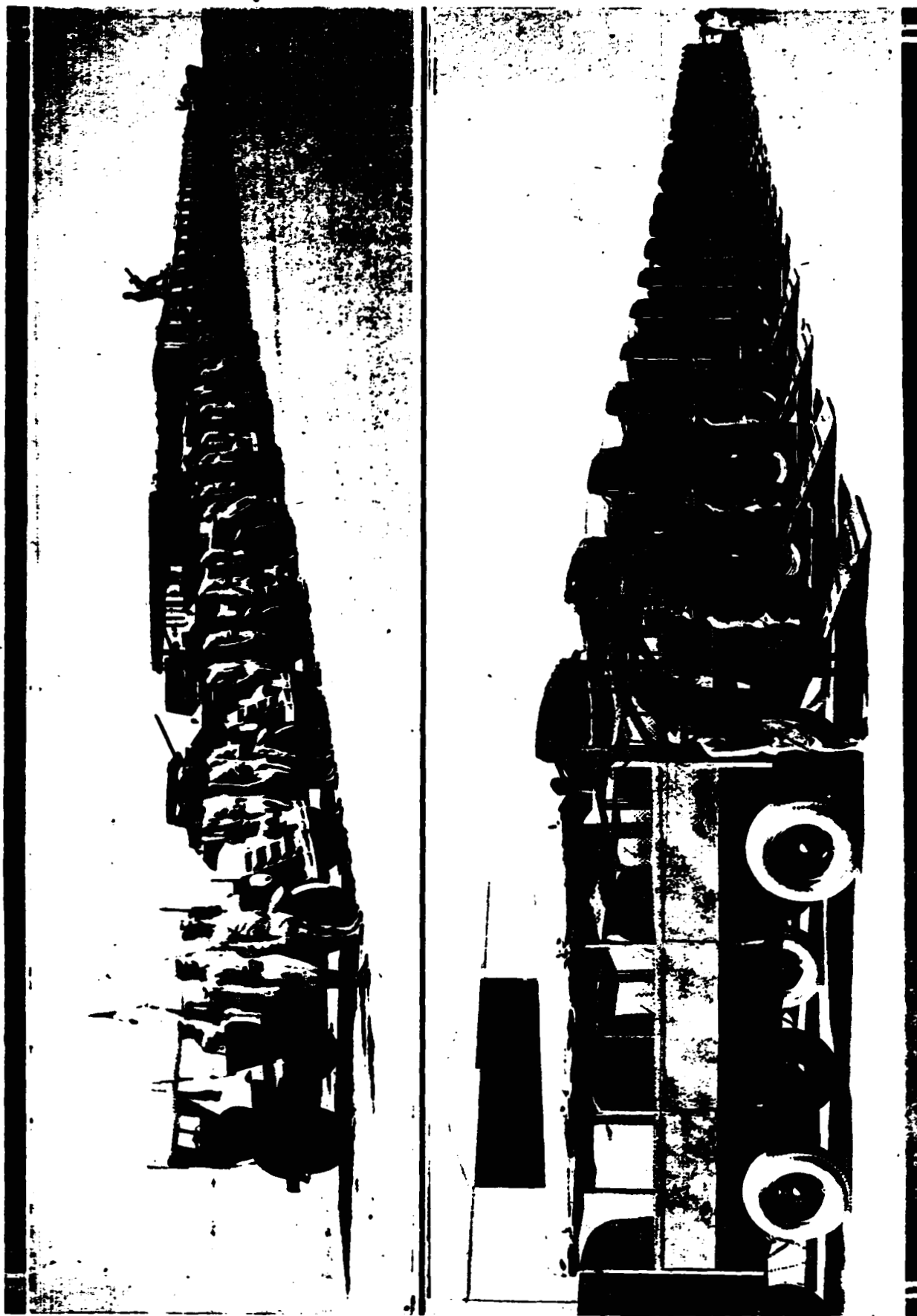
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# Cavalry in Future War

By Colonel George Grunert, Cavalry

TO ENVISAGE cavalry of the future involves a study of its past, a knowledge of the trend of its present development and a picture of its role in future warfare.

It is not my aim to justify the continued existence of horse cavalry nor to advance arguments for or against mechanized cavalry. Both have their powers and limitations, and I am firmly convinced that the future will afford ample opportunity for the employment of both, singly or in combination.

## What Is Cavalry?

To most laymen the term means "horse cavalry," while to the initiated it means "mounted troops possessing great mobility, varying degrees of dismounted firepower, and varying degrees of ability and tradition in the use of its mounts and weapons in mounted action." In the past, cavalry of European nations was developed for mounted action, depending principally upon stock in the employment of the horse, saber and lance, and had but little dismounted firepower. Our cavalry depended primarily upon its heavy dismounted firepower. Since the World War the trend of development is toward greater dismounted firepower without loss of mobility. Mechanization has added a new type of mount and the extent to which cavalry will become mechanized depends upon the extent to which machines can be utilized in the performance of cavalry missions. Thus, we may see that the term cavalry applies more to missions than to mounts and denotes mounted troops possessing great mobility, heavy dismounted firepower and ability to wage mounted combat under favorable conditions.

## Summary of Cavalry History Prior to World War

2400 years ago, Philip of Macedon laid down principles that apply to warfare today: find your enemy, fix him, disrupt and demoralize him, and then annihilate him. His tactics were simple. The infantry Phalanx engaged and held the enemy, whilst the cavalry suppressed all resistance. Prior to his time, the tactical organization of military troops was based on the nature of the country rather than on any idea of weapon cooperation or the combined use of the various arms.

Philip's tactics were proved out and developed by his son, Alexander the Great. Under him cavalry became the decisive arm, and we find it so employed through succeeding centuries by such great leaders as Hannibal, Scipio, Gustavus Adolphus, Marlborough, Frederick the Great, Seydlitz, and Napoleon. At times its growth and progress were temporarily interrupted by its attempts to carry protective armour to withstand the improved bow and cross-bow, by the introduction of bombards and by the improvement in infantry and artillery weapons and tactics.

After the Napoleonic wars the development of small arms and artillery affected adversely the mounted assault of large bodies of cavalry against unshaken infantry, unless surprise was possible. The trend was shown in our Civil War, which introduced to the world what the Europeans called "mounted infantry," on account of its fire power: it was, however, real cavalry, modernized to meet changing conditions.

The cavalry lessons of this war should have prevented the disasters of the Austrian-Prussian War of 1866 and of the Franco-Prussian War of 1870-71.

In the years immediately preceding the World War, only the United States and Great Britain appear to have realized that the mobile fire power of the breech-loading rifle had now given the cavalry an effective arm of protection and thus extended its field of activity. French and German cavalry training was devoted mainly to reconnaissance duties and mounted action. Neither nation had fully realized the limitations imposed by the breech-loading rifle and the machine gun upon the possibilities of mounted assault against a dismounted enemy nor had recognized that, unless surprise and a short distance to cover were obtainable, he had first to be disorganized and demoralized by fire.

## Cavalry During the World War

Mobile troops have great opportunities in the opening phase of any war. The consensus of opinion is that cavalry might have been more profitably employed by both sides on the Western Front prior to, and during, the Battle of the Marne.

Both Germany and France employed ten cavalry divisions without decisive results. The Germans placed five of their divisions in their center and left, where there were no flanks and the country was unfavorable for cavalry action. Except in covering the concentration they were ineffective and soon became intermingled with foot troops. The remaining five were employed with their offensive right wing where there was an open flank and where the proper employment of all ten divisions might have changed the result of the whole campaign, but the faulty distribution of these five divisions and their subsequent poor tactics and lack of fire power caused them to miss many opportunities that might have contributed to decisive results, and on the whole their operations were ineffective. The expected inter-cavalry struggle never came about and after the failure of two of their divisions to over-run the Belgians at Haelen they seldom again attempted mounted assaults. At Le Cateau three divisions engaged in dismounted frontal assaults against the British II Corps thus sacrificing their mobility and failing to discover the Corps' exposed flanks and isolated position.



The initial disposition of the French cavalry was equally faulty. Only three divisions were placed on the exposed flank, where the terrain favored cavalry action, and these divisions soon became exhausted in the execution of minor, ineffective missions. The remaining seven divisions were distributed to armies operating on fronts where there were no flanks and where the terrain was not suited to mounted action. Not having been trained in dismounted action, they were ineffective and their mounted attacks, which they attempted regardless of the terrain and against unshaken opponents, proved futile and costly.

The British cavalry, having been trained for both mounted and dismounted action and having considerable dismounted fire power, was more effective, as was shown in their gallant and successful covering of the British advance to and withdrawal from Mons.

All three combatants utilized divisional cavalry and found it of great value.

Now as to questions. First take the German side.

1. Knowing the topography of the country, knowing that German cavalry had been trained to consider mounted action as its primary role; knowing that the main effort of the offensive was to be undertaken by the right wing; knowing that the main forces should be concentrated opposite the key point where the decision was to be sought; and knowing the difficulty of moving large masses of cavalry across Army areas: was the bulk of the German Cavalry concentrated in the proper area?

2. Knowing the foregoing and in addition thereto that Corps and Divisions had organic cavalry of its own (an average of 8 squadrons to a corps), was it necessary to attach cavalry divisions to armies of the center and the left wing?

3. Was not the initial concentration of the cavalry faulty?

4. Does it not appear logical to have concentrated the entire independent cavalry in the zone of the right wing (First, Second and Third Armies) and then to have employed it under one commander?

5. Could not such a cavalry mass with the available Jager battalions and cyclist companies and possibly some mobile long-range artillery have been employed as follows:

a. To cut the Belgians off from Antwerp? The available weak 2d German Cavalry Division couldn't do it.

b. By extension well to the right, to have struck the British Army at Mons in flank and rear and made its effect felt to the rear of the Fifth French Army?

c. For extended pursuit and to have made the stand of the Allied forces short of the river Seine impossible and jeopardized their stands on the Aisne and the Marne?

d. To have ridden around Paris and raided the S. O. S.?

e. To have kept the Sixth French Army from entering the Battle of the Marne? Only one weak cavalry division was available to attempt this.

Even the necessity of utilizing 4 cavalry divisions to fill the gap between the First and Second German

Armies would have left 6 divisions to strike the Sixth French Army in flank.

6. Does it not appear as though the German High Command failed to employ its cavalry to the best advantage and frittered away its strength and substance?

Now let us take the Allied side.

1. Was its cavalry properly concentrated strategically?

2. Was it properly employed?

3. With a proper knowledge of the terrain, the training of its cavalry, the principles governing concentrations, etc., should the French cavalry have been parceled out to the various armies? French corps and divisions had ample organic cavalry (6 squadrons per corps).

4. Would it not have been possible for the French after they were convinced that the Germans were coming in force through Belgium, to have massed the bulk of their independent cavalry northeast of the Antwerp-Lille and attacked the German right flank?

5. Again, in preparation to resume the offensive, could not the Allies have created a mass of French and British cavalry in the vicinity of Compiègne and in conjunction with the attack of the Sixth French Army, have overrun the Landwehr and S. O. S. troops of the First German Army and continued on in the direction of Reims?

Now, in place of horse cavalry, substitute mechanized cavalry, or a combination of horse and mechanized cavalry, in the picture, and you can understand why I believe that cavalry has a most alluring future.

If space permitted I would picture to you similar examples of faulty concentration and employment of cavalry during the frontier battles on the Eastern Front and point out to you wherein the high command failed to make use of the terrain: failed to appreciate the powers of cavalry masses, when disposed opposite the point where a decision was sought; and frittered away cavalry strength by detachments and slow moving commands where cavalry lost its mobility and performed missions of divisional and corps cavalry, thus losing grand opportunities of a decisive nature.

On the other hand, I invite your study of the Roumanian Campaign, of the latter stages of the campaigns in Palestine and Mesopotamia, and of the Battle of Vittorio-Veneto; where you will find excellent examples of proper high command direction of cavalry and excellent leadership in the field.

The Trend of Cavalry Development Since the World War

The aftermath of the World War brought forth various opinions on the future of cavalry, but without exception, all the great leaders have expressed their confidence in the future of cavalry in uncertain terms.

All nations having come to the conclusion that cavalry is not obsolete and realizing that its future missions will demand greater fire power, have sought to increase its fire power without a sacrifice of mobility. Some have added to the armament carried

the horse, while others have provided additional fire power by means of accompanying mobile vehicles.

With the improvement in the cross-country maneuverability of the light tank, in the speed and dependability of the armored car and the progress made in perfecting a cross-country carrier, the leading nations, to varying degrees, have either incorporated them in their cavalry, or are experimenting with mechanized forces for ultimate use in conjunction with cavalry.

As we see history repeating itself in an attempt by mounted forces to protect themselves from the increased dismounted fire power and we must guard against the loss of mobility through too great a desire for protection.

Of the leading nations of the world only Great Britain and France have conducted and are continuing to conduct extensive experiments in motorization and mechanization.

Some of Great Britain's tank enthusiasts brought on extensive experiments in mechanization, and for a time they predicted the abolition of horse cavalry and of infantry and envisaged huge land fleets of heavy tanks followed by infantry in lorries and by self-propelled cross-country artillery and supported by light tank and armored car cavalry. Experiments, experience and expense brought them to a saner view, so now they have but 2 regiments of armored car cavalry and envisage the future of mechanization in the terms of light armored brigades working with the cavalry and medium armored brigades working with the infantry.

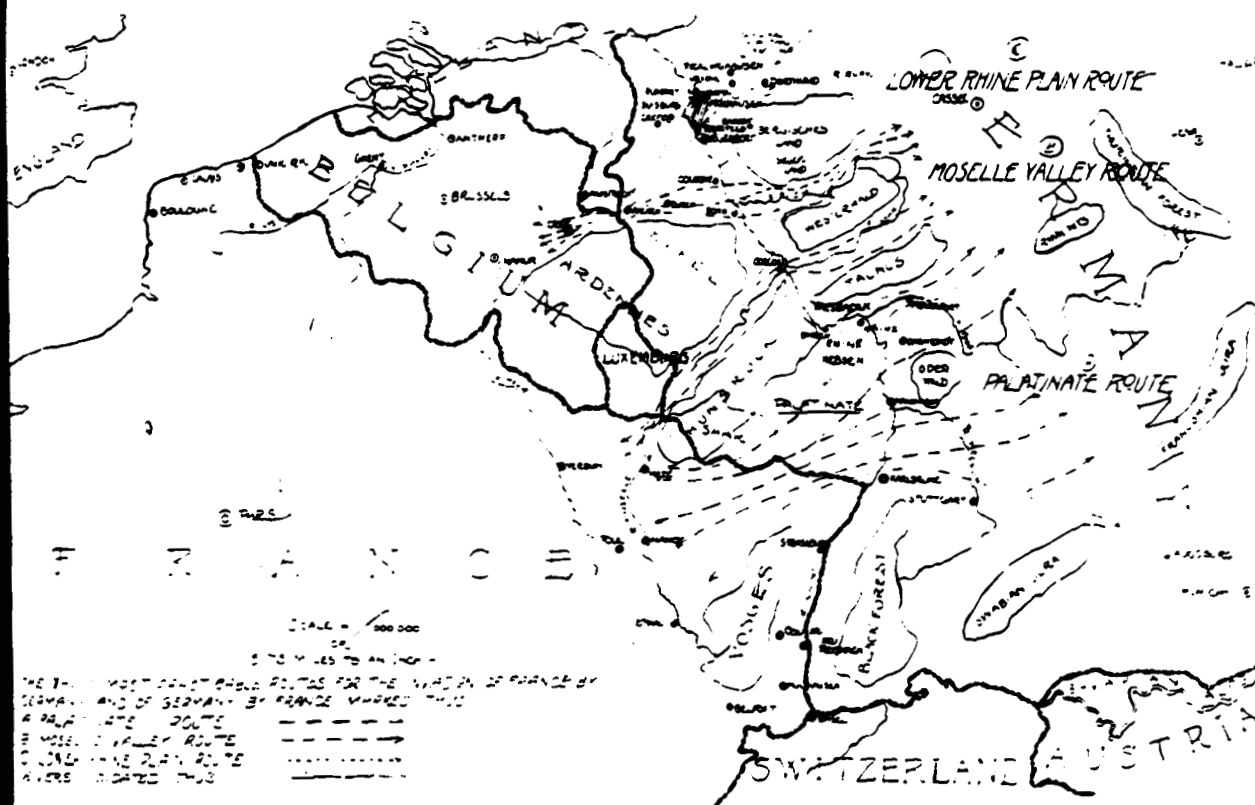
The French are now experimenting with mixed motorized and horse units. Their future program includes the motorization of certain cavalry regiments and of supporting arms, then the organization of a mechanized combat unit, and ultimately the mechanization of five cavalry divisions. The expense of their experiments and the rapid obsolescence of their vehicles may bring a downward revision of this ambitious program.

In our Army one cavalry regiment is being converted into a mechanized regiment, and the program calls for the mechanization of a second regiment with the object of eventually forming a mechanized brigade. However, at an initial cost of \$1,500,000.00 to mechanize a cavalry regiment, it is highly probable that our cavalry mechanization will be limited to that brigade for some time to come.

Our Cavalry carries with it, without loss of mobility, more actual fire power than does the cavalry of any other nation. France, the greatest advocate of fire power of all foreign nations, supplements the fire power of its horse cavalry by that of its *Dragons Portés*, but the combined fire power of its horse cavalry plus its *Dragons Portés* falls short of that of the American horse cavalry. Further, we carry 1,048 rifles per regiment to their 931 carbines per regiment.

Great Britain is the only other nation whose cavalry is armed with the rifle. The cavalry of other nations is armed with the carbine.

The United States and France, in their desire to give their cavalry the greatest fire power it can carry, or have transported for use with it, are seeking to



equip cavalry personnel with semi-automatic shoulder weapons. For the United States, this appears to be its next step in keeping ahead of the cavalry of other nations.

From the foregoing we see that the trend of cavalry development has been towards increased fire power, motorization and mechanization; all with the view to greater mobility and ability to protect itself and hold its own with the fire power and shock it may be subjected to.

From what we have seen there is every reason to conclude that cavalry of the future will be of two types—horse and mechanized, and that all the larger echelons of horse cavalry will have their motorized supply columns and a proportion of armored cars. Differences of opinion exist as to mixed formations of horse and mechanized cavalry and as to the eventual size of strictly mechanized cavalry formations.

#### Cavalry in Future Wars

1. The foregoing brief view of the present trend in the development of cavalry gives us an outline for our picture of its future. However, before coming to a conclusion as to cavalry in future wars, let us consider its powers and limitations and, by an analysis of its role, determine the kind of cavalry that would stand the best chance of successfully accomplishing its missions.

There is no need of my going into the powers and limitations of horse cavalry. History is replete with examples. On the other hand, a concise exposition of the powers and limitations of mechanized cavalry may assist us in keeping our feet on the ground, when we consider its future development and figure on its future employment. Let us carefully calculate future risks and not allow the imponderables to unduly sway our judgment, at least until we have exhaustively surveyed the field of ponderables.

Mobility, fire power and shock have ever been our cavalry's watchwords. Modern warfare demands of the cavalry increased mobility, increased fire power and shock action under favorable conditions. Our cavalry has greatly increased its fire power, without impairment of its mobility, but its shock action is now limited to its smaller formations. Mechanized cavalry should make for increased mobility and firepower and to a limited extent restore shock action. However, mere speed is not mobility, and no matter how rapidly a force may be able to arrive on the scene of action, it is of little value if it cannot maneuver and sustain itself.

The proposed mechanized cavalry regiment, consisting of a headquarters and a headquarters troop, a covering squadron (1 Armored Car troop and 1 Scout troop), a Combat Car squadron (2 Combat Car troops), and a Machine Gun troop, is a powerful organization with its 6 1.85 guns, its 155 cal. .30 machine guns, its 53 cal. .50 machine guns, and its 198 rifles.

Armored car squadrons are separate and distinct organizations. They consist of a headquarters and three troops. Each troop has three platoons, each of

which consists of 4 armored cars (each with a cal. .30 machine gun) and 1 cross-country car.

The favorable and unfavorable characteristics of armored and combat cars may be summed up as follows:

*Favorable*—Mobility, fire power, invulnerability, morale effect, and for combat cars—shock.

*Unfavorable*—Limited observation, easily discovered, draw fire, weight, breakdowns, fatigue of crews, difficulty of control (combat cars), and restricted mobility of armored cars, if wheeled.

To the unfavorable characteristics of both these classes of vehicles and applicable to mechanized units as a whole, the following may be added:

Length of road columns, difficulty of concealment, lack of suitable cover make them particularly vulnerable to air attacks.

A recent German invention of a small caliber armor piercing bullet with a tremendous increase in muzzle velocity, may demand thicker armor and more weight in future mechanized vehicles.

The physical discomfort, fatigue and lack of vision react on crews and tend to make them timid.

The close support of armed men will usually be necessary to extend the field of action of mechanized vehicles, on account of the accidents of terrain and enemy obstacles, and to consolidate positions, mop up and exploit their successes.

Further, there will be restrictions due to mechanical and supply difficulties. Machines will be immobilized on account of breakdowns, accidents and lack of fuel, and their ability to "push on smartly" will have definite limitations, regardless of the morale of their crews or the determination of leaders.

Mechanized vehicles are complicated machines of special manufacture, with no commercial application. Their procurement will be slow and costly, and the spare parts supply a problem. Due to the rapid obsolescence of this costly equipment, peace-time assembly of large quantities thereof cannot be depended upon.

Considering these limitations: i.e., restricted tactical application, need for close ground support, and lack of mechanical ruggedness and dependability, precludes the organization of large units, wholly mechanized for the execution of independent missions or for the playing of separate combat roles.

Mechanized cavalry can supplement but not supplant horse cavalry.

Now let us consider the employment of cavalry and determine what kind of cavalry is best suited to the effect.

We must always consider the cavalry of our possible enemies, its composition, organization and armament and, in connection therewith, the probable theaters of operations. Picture to yourself the difficult terrain in our own theaters: limited road nets, extensive wooded, watered and mountainous areas, sand, mud, etc. Then size up the theaters outside our borders and determine the kind of cavalry best suited to successfully accomplish cavalry missions. I have no doubt that you will arrive at the same conclusion that I reached, viz., that, with but few exceptions, the

theaters favor the employment of horse cavalry, supplemented by mechanized cavalry.

Generally, what are the missions of cavalry?

Now, as in the past, they are:

#### Before Battle:

Long-distance strategical reconnaissance.

Covering mobilization and concentration.

Interrupting enemy's mobilization and concentration.

Fighting for control of the theater of reconnaissance.

Seizing points of strategical and tactical importance.

Screening the advance of our own forces.

Delaying the enemy's advance.

Tactical reconnaissance.

#### During Battle:

Cooperation in battle.

Continued tactical reconnaissance.

As an exploitation force, to take advantage of any break or weakened part in the hostile battle line.

As a strategical or tactical reserve.

#### After Battle:

Exploitation and pursuit.

Cover a withdrawal.

Continued tactical reconnaissance.

Maintenance of contact with the enemy.

Generally, cavalry is employed as divisional, corps, and army cavalry.

*Divisional cavalry* should be attached only when and where needed, and then only in such formations as are absolutely necessary. In the past it was considered wasteful of cavalry strength to include a portion in the organic set-up of infantry divisions, although most foreign divisions included a squadron (corresponding to our troop) or more in their war organization, and their present peace organizations continue to include cavalry. The future will undoubtedly demand more active close-in reconnaissance to prevent surprise attacks by highly mobile forces, hence the increased necessity for divisional cavalry.

A squadron of horse cavalry, equipped with semi-automatic shoulder rifles, a platoon of machine guns and armed with weapons for defense against armored cars and light tanks, would seem most suitable as divisional cavalry to perform the required missions of close-in detailed reconnaissance and security, and at the same time constitute a mobile reserve for emergency use in closing small gaps, etc.

Mechanized cavalry is unable to properly comb the divisional zone because of the usually limited road net, and such use thereof would be a waste of its mobility and fire power.

*Corps cavalry* in its missions must cover a wider and deeper area; there is less need for a detailed reconnaissance of difficult terrain; and there usually is a better road net available. Further, it oftentimes must remain out of contact with supporting troops for a day or more. Hence, mechanized cavalry would appear to be more suitable than horse cavalry.

*Army Cavalry.* Most nations are now in accord with the view that the bulk of the cavalry should be kept together in independent mobile formations and that infantry corps and divisions should be given only so much cavalry as they absolutely need for their purposes.

Army cavalry should be organized into division and corps. Only strong formations can meet the operative problems connected with reconnaissance, security and actions against enemy flanks and rear.

The assignment of cavalry formations to armies should be predicated on a careful study of the terrain over which an army is to operate and its mission in the entire force employed.

In no other arm of the service does the error of splitting up a force manifest itself so much as in Army cavalry. The distribution everywhere of small cavalry formations gives up the initiative and from the start makes cavalry action dependent upon the enemy's action.

When cavalry corps are organized, the necessary auxiliaries for the performance of the missions assigned must be attached. These practically always include additional artillery and at times infantry in trucks. Every cavalry corps needs a motorized train.

Whether horse or mechanized cavalry or a combination thereof will be used depends primarily upon the terrain over which it is to operate and the availability of each.

#### Command and Leadership

Just a word as to the responsibility of high commands and staffs, which have so much to do with the success or failure of cavalry.

History is replete with examples of the misuse of cavalry; of a lack of understanding of its role and how to properly employ it, usually resulting in its distribution to subordinate commands; of its employment over unsuitable terrain or upon missions which can have no decisive results or which place it where it cannot later be used when badly needed; of the exhaustion of cavalry on minor missions, without a realization of its limitations; and of the failure to give it definite tasks and to keep it informed so that it may intelligently employ its means.

Commanders and staffs who fail to study their cavalry as they do their infantry and artillery, who fail to employ it to perform its allotted role, who fail to conserve its power for the opportune moment, and who fail to give it definite instructions; lose the value of one of the means furnished them with which to wage successful battle.

Now to summarize my conclusions as to cavalry in future wars.

As to our own country, I visualize our future cavalry as both horse and mechanized. At the outset, horse cavalry will predominate, and our mechanized cavalry undoubtedly will be limited to a single organized brigade, in addition to which there will be available a limited number of armored car units towards the project of furnishing each cavalry division with an armored car squadron.

Should funds be appropriated for more extensive cavalry mechanization, I would favor the organization of additional mechanized cavalry regiments at the rate of one for each cavalry division, not as an organic part of the division but available in GHQ reserve for attachment when and where needed. As such regiments become available, I would eliminate the tank company, now an organic part of the cavalry divisional organization. When not employed with cavalry divisions or cavalry corps, such regiments could be organized into mechanized cavalry brigades for employment independently, or in conjunction with horse cavalry formations.

The kind of cavalry that would be organized in any expansion of the cavalry arm, subsequent to our initial mobilization, depends upon the character of the terrain in the theater or theaters of operations. In 4 out of 5 of the most probable theaters, the demand for horse cavalry would predominate, and the proportion of horse to mechanized cavalry regiments would be at least 4 to 1.

There again, our cavalry expansion to a large extent may have to be governed by the kind and amount of cavalry which our enemy or enemies may put into the field.

Horse cavalry can be organized and trained more quickly than can mechanized cavalry.

Should we find a demand for mechanized cavalry that cannot be met by what we shall have or can produce by the time needed, we would be forced to substitute improvised motorized cavalry.

I am unable to visualize wholly mechanized or motorized armies on any future battlefields.

The employment of mechanized units and the extensive employment of armored cars in future warfare will make it necessary to provide infantry corps and divisions with adequate reconnaissance and security detachments, capable of operating at a greater distance from their main bodies than in the past. Thus the demand for divisional and corps cavalry will be insistent. When such cavalry is furnished, it is believed that a squadron of horse cavalry, with a platoon of machine guns and a platoon of antitank weapons, would most satisfactorily serve a division and that, as corps cavalry, a mechanized cavalry regiment (when available) or a horse cavalry regiment, with an armored car troop attached, would be most appropriate.

Where Army cavalry can be properly employed and the mission of the Army favors its employment, one or more cavalry divisions should be attached. The composition of such divisions to be substantially the same as now provided for, except when available and

when its proper employment can be foreseen, a mechanized regiment should be attached. When the Army cavalry missions require the employment of two or more cavalry divisions on the same mission or in the same locality, a cavalry corps should be organized.

At each Army headquarters there should be a small cavalry staff which normally would look after the cavalry with the Army, conserve its strength and make plans for its most profitable future employment. At all times this staff should be ready to expand and function as a Cavalry Corps Staff in the event a cavalry corps is formed. If the command of such a Cavalry Corps is given to one of the Army cavalry division commanders, he should be physically separated from his division and not be permitted to occupy the dual position as a corps and a division commander. In organizing such a corps from cavalry divisions to which mechanized cavalry regiments are attached, the terrain or the mission of the corps might make it advisable to detach the mechanized regiments from the divisions and organize them into a mechanized brigade, or a separate mechanized brigade might be attached to the corps from GHQ reserve.

Similarly at GHQ, to whose reserve the bulk of the cavalry pertains until its most advantageous employment can be determined, there should be an organized cavalry staff available for assignment to a cavalry corps or a cavalry army, when large cavalry formations are to be employed independently, or are attached to other large formations. To command such large cavalry formations a major general should be available at GHQ.

The organization of such staffs at army and general headquarters would give commanders concerned the assistance so badly needed in conserving cavalry strength, keeping it well posted, in giving it adequate and definite instructions, and in planning ahead for its most profitable employment.

Cavalry missions have not changed, nor do I foresee any change in the future. The means at the cavalry's disposal for the accomplishment of such missions have changed and are subject to future changes. Greater mobility (limited at times by the terrain and road nets), a large increase in fire power, and the combat car as a shock weapon, have given the cavalry added means with which to accomplish its missions.

The terrain and, at times, the necessity for speed will govern the kind of cavalry to be employed. However, as a rule the best results will be obtained by the judicious employment of combined horse and mechanized cavalry in such formations as the magnitude of the task demands.



## The Employment of the Light Machine Gun

By Captain Thomas J. Heavey, Second Cavalry

IN the January-February, 1933, issue of the CAVALRY JOURNAL, there appeared an article on the Light Machine Gun that invites discussion.

In warfare between armies equipped with small arms, the successful combatant has discovered that he won the decision, in most cases, for the reason that he was able to deliver a greater number of effective bullets at the crisis of the attack than this opponent. Military scientists dress up this simple thought by talking about "fire superiority."

History furnishes excellent examples of armies with better weapons suffering defeat. But the better weapon and its proper employment give the less efficiently equipped opponent a very slim chance of success, if we can discount the intangibles of morale, leadership and mere luck or chance.

To deliver a certain number of bullets per minute on an objective, we must have a weapons firing a bullets per minute. It is clear that, if the number of weapons is decreased, the rate of fire must be stepped up accordingly. All armies have been interested in decreasing the number of weapons and increasing the rate of fire. This has unquestionable advantages but unfortunately, if carried to extremes, meets an *impasse*. A given number of soldiers can transport only so much dead weight in weapons and ammunition therefore. Eventually, there must be a reasonable compromise between the weapon and its ammunition supply. In any case, to obtain the most efficient re-

turn from the compromise, there is a best way to employ the particular weapon.

All modern armies are agreed upon the desirability of a light quick-firing weapon within the smallest integral unit both for attack and defense. The tank machine gun was in existence in this country in sufficient numbers to equip the cavalry. It was comparatively light and seemed to meet many requirements of the ideal weapon. The Tables of Organization prescribe how many light machine guns a cavalry regiment shall have; they further prescribe where they are and how they are organized. Within the rifle troop they are grouped in a separate platoon for administrative and drill purposes. In action they normally accompany rifle squads. The new weapon replaces the machine rifle.

The light machine gun is intended for use with the firing line. Sometimes a comparison brings out a point emphatically: here is one that may give the reader a mental picture of the gun's tactical employment. Mr. Smith, residing in Toonerville, received unexpectedly a large fortune as a bequest from a relative. He had always wished to climb mountains in Europe and welcomed the opportunity now afforded by his newly acquired wealth. As for equipment, he found two items in particular to be invaluable, a good stout pick mattock and a tough rope. The pick had to be light enough to be carried with ease but still must never break; same with rope. At first he found these implements



Left: Normal Method of Moving Gun in Dismounted Man euver. Gun Not Unloaded, Immediately Available for Fire.  
Right: Assault Fire.

a nuisance to carry and very awkward to use. But he improved with practice and soon had great confidence in the pick and the rope. When the going was easy, he used the pick as a walking stick and carried the rope coiled around his shoulder. When it got fairly bad, he would reach up ahead, drive the pick in solidly and pull himself up from that support. When it was real tough going, he used the rope to hook on to the pick and hauled himself along. Later he



Top: The Approach March. Center: Method of Moving Gun and Ammunition to Take Advantage of All Cover. Bottom: Method of Moving Gun in High Woods, Brush, etc. (Grease-wood Like That on the Border).

joined a party, and picks plus ropes got them all nicely. The strange part of his progress was that he *learned no rules* but just used initiative and common sense in employing the two items of equipment he depended upon.

This fable covers the proper employment of the light machine gun in a fairly thorough manner. The pick is the gun; the rope is what the military scientists call "liaison." Mr. Smith and his equipment are you and I and the cavalry platoon. An attack is directed on an objective. We get there by using the light machine gun as a roving peg to drive in and pull ourselves up with it and the rope. If the pick does not hold when we pull, we shift it over till it gets a good hold. In other words we move it to a better position. And we maneuver, taking all possible advantage of cover and get there with the minimum expenditure of effort (casualties). If the rope breaks, Mr. Smith will probably need a new seat in the old trousers. The same remark applies to Lieutenant B, platoon leader. Have your guns in proper condition and your gunners properly trained beforehand.

With Mr. Smith's party, the tougher the going, the more picks were stuck in before the advance continued. So with our cavalry in larger units. Maneuver forward, as the difficulty of advance increases, must be assisted by fire of more guns, constantly.

Unquestionably, the light machine gun is properly placed when it is with the firing line. It is an assisting weapon, *not* a supporting weapon. The grouping of guns as a separate platoon is only for administrative and drill purposes. Habitually in any action in which they may be used, they belong with the squads. With our present organization this permits two guns per platoon. Normally they go with flank squads, and squad leaders are trained to use them properly. In an advance they follow the scouts as closely as possible, take advantage of all possible cover, distribute their ammunition, maneuver as the terrain demands, and actually function as the *primary* weapon of a dismounted attack.

As to any other method of employing the guns, member Mr. Smith. When a higher commander takes the guns away from the rifle squads and platoons, responsibility is his. Take away from the platoon leader the principal means of accomplishing the mission, and you leave him as helpless as Mr. Smith's party would be without their picks.

The article upon which I am commenting relates to comparative values of machine rifle and light machine gun. It is averred that the machine rifle is highly mobile, and at the same time nearly all available cover could be taken advantage of. Admitted, but does not the same remark apply equally to the light machine gun? And may I bring out one or two points further? The machine rifle with bipod and stock rest weighs 24 pounds, the light machine gun on the later type tripods from 43 to 38 pounds. The machine rifle is fed with 20-round clips, weighs one pound and ten ounces full, and eight ounces empty. If our machine rifle gunner and assistant carry 900 rounds in a scrap, they carry 45 clips each weighing

ing one-half pound, plus the weight of the ammunition itself, (54 pounds and 14 ounces), or 77 pounds and 14 ounces. The total weight to move is then 101 pounds, 14 ounces. The same crew using a light machine gun will carry 38 pounds, gun and mount

Naturally I take the lighter tripod for the comparison, and but 56 pounds 6 ounces of ammunition in clips, a total of 84 pounds, 6 ounces. How can the machine rifle be very much more "highly mobile?" It is longer, has the bipod hanging on front, and the stock rest dangling in rear, gets just as hot or hotter, and the two men must move considerably more weight. Whereas the light machine gun is all in one piece with the mount and can certainly take advantage of cover, there is any. It gets hot, but only a moron will insist on grabbing the hot barrel jacket. The front leg of the tripod may be grasped, the tripod being mounted, and the whole mount and gun dragged forward, if it is desired to take advantage of cover. Or, carried in a standing position, the same front leg grasped in the left hand, the right hand on the traversing bar, always furnishes a "cool" grasp. For a long advance, the gunner may place the whole tripod and gun on his back, the front leg resting over either shoulder, and get along with comfort. Or two men may carry the mount, one by the front leg, the other by the two rear legs.

The question of the height of the mount is open to very candid discussion. No data are available on how many times out of 100 actions the prone position will not be habitual, in using this weapon. Personally, I believe that it will be unusual to encounter terrain where this is absolutely prohibited. But even so, if this situation is encountered, I venture that as frequently as not such a condition will be a *trifling disadvantage*. Written words as to what may be done with this gun on the type mounts developed for it since we have received it do not carry much weight. However, it was my privilege to deliver fire on ten silhouettes at Fort Bliss some months ago with this weapon, in the presence of the officers of the Division, the targets being so located that they were visible from the gun position only when the gunner was kneeling. The gun was fired in its normal position, for a duration of 60 seconds, fire directed by an observer near the gun, the gunner manipulating the elevating and traversing mechanism as directed by the observer. All targets received two or more hits. In place of light high grass obscuring these targets, fire was delivered through the greasewood bushes so prevalent in this locality, frequently reaching four feet in height. The "enemy" could not possibly have located the gun. I have no confidence in my own personal ability to hit anything with a machine rifle, if I am forced to stand and rest the muzzle on a bush or tree. Nor have I any great confidence in delivering any accurate fire in a sitting position, with a machine rifle. But I have the utmost confidence in the capabilities of the light machine gun delivering effective fire at any range, when fired as indicated above. In place of the personal equation of each individual firer entering the probability of obtaining hits on sitting or

standing positions with the machine rifle, we contend only with the degree of training of the observer. It takes very little training for the man of average intelligence to adjust fire of the light machine gun accurately at any range on a target that cannot be seen by the gunner. The present elevating gears are not perfect. They are modified from existing material, and the click assembly thereof gives a four mil change



Top: Normal Prone Position of Gunner, "Command" Limited to Height of Gunner's Eye. Center: Free Gun, "Command" About 18 to 20 Inches. Bottom: Firing with Assistance.



of elevation approximately. These elevating gears can, and no doubt will be, further modified to incorporate a mil click. Such firing, using "indirect methods," on certain types of terrain, is admittedly impossible without the use of some tracer ammunition. But I certainly anticipate that it will be within the realm of possibilities to have some tracer.

A possible assistance to this problem of the low mounting is also furnished in the existence of ammunition chests that will be, with certainly reasonable certainty, at the gun position. The front leg may be propped up on an ammunition chest, increasing the height of command materially, and the gun fired by use of the sights, using single shot fire, with satisfactory results. Height of command, when the terrain calls for it, may be further artificially increased by having the assistant gunner hold the tripod head on his right knee, left hand securely holding down the front leg, and the gunner fire with the sights, single shot fire.

There is also no sound reason against placing the whole gun and mount in a suitable low shrub or possibly a tree, if this made to order support happens to exist. And my personal opinion is that it is a far easier task to do this with the light machine gun than with the machine rifle.

Experiments are being conducted locally in the incorporation of an extension front leg for the tripod. It is not my position to state the advisability of such a device, but it appears to me that it is merely a question for higher authority to decide. It means additional weight, that may occasionally be of advantage. But there is a practical limit to incorporating improvements on a mount for this gun.

To go on further with the machine rifle. It is averred that the majority of jams were easily reduced, and broken parts few. Does not this apply to the light machine gun as well? I have personally fired over 8,000 rounds of ammunition with a light machine gun in one afternoon and encountered one malfunction. Machine rifle jams, in my opinion, were to a great extent due to damaged clips. They are light, fragile, and do not stand the wear and tear of pack transportation well. And they collect sand and grit very efficiently. Whereas the light machine gun, if we ever use it in combat, will be fed belts that are freshly taken from sealed containers, already loaded at the arsenals. Is this an advantage over clips?

It is averred that the machine rifle's ability to sustain fire is good. At the Cavalry School, this has not been verified, and it is probable that more sustained fire has been fired here than anywhere else in the Cavalry. I witnessed one particular firing of the machine rifle, when the gun ceased functioning entirely, in spite of attempts to adjust the gas port, after 300 rounds fired full automatic as rapidly as possible. I have fired over 750 rounds continuous fire with the light machine gun, and the gun still was functioning mechanically. And I have seen several thousand rounds fired at rates from 60 to 100 rounds a minute with no malfunction of the gun. In other words,

to be candid, there is no comparison between the sustained fire ability of the two weapons. The light machine gun, changing barrels at the proper times, can continue to fire indefinitely. No gas-operated weapon can be expected to do this.

As to accuracy, again there is no comparison. The accuracy of the machine rifle is dependent upon the personal equation of the firer. When the trigger is pulled, the mechanism crashes forward, and in spite of the bipod and stock rest, the aim is disturbed to some degree. A good gunner will neutralize this to a great extent by assuming the proper firing position, when prone. But he cannot neutralize it sitting, kneeling or offhand. He can make allowances for this jump of the gun, but it takes a good man to estimate uniformly the jump. Whereas the light gun, particularly when fired single shot fire, due to being mounted on a stable mount, and the only moving part being a little firing pin springing forward upon the release of the sear, for all practical purposes completely neutralizes the personal equation of the gunner. In automatic fire, the light machine gun has proved to be as accurate, if not more accurate, than any other similar weapon fired here. With the machine rifle, automatic fire, except when delivered on a suitable target, is very inefficient. The writer submitted an article to the CAVALRY JOURNAL last year\* summarizing the results of comparative firing of the light machine gun and the machine rifle, in a series of combat problems. This firing was done by the 2d Cavalry, during their field firing training, at the conclusion of the target season. The results were overwhelmingly in favor of the light machine gun. There is no possible argument here.

Coming to the summary of the previous article on this subject, three "plans," all involving a complete change of organization, a complete revision of tactics of our Cavalry, are submitted.

Plan one suggests a tripod of higher command, and all light guns organized into independent troops within the squadron, the line troops to retain their machine rifles. I have mentioned the higher tripod. May I refer to operations report submitted to GHQ Chaumont in 1918. Col. X was detailed to observe and report on the attack of the... Div., in the offensive of..., 1918. This is on file in the Department of Weapons. Col. X apparently was an enthusiastic machine gunner. He reports that all machine guns were in position on time and executed the prescribed fires as ordered. But that after the jump off (and he apparently was in the right place to see what happened), no machine guns were noted in position or firing, at any time thereafter. A number of guns were observed going into action well in advance of the jump off, but in every case observed, the guns were neutralized by hostile fire prior to firing a single shot. Why? The answer—they were using tripods with high command. The Roche had learned his lesson very well by this time. A machine gun located in an attack is a machine gun lost, when the enemy is alert.

As to an additional machine gun troop within the

\*Appeared in the July-August, 1932, issue.

squadron, are we not loading up Mr. Smith's party with lots of pick mattocks—but forgetting the rope? And where do we want the heavy machine guns, and why? There is a false idea prevalent as to what this light machine gun is. The sobriquet, machine gun, to a technical expert, which I do not pretend to be, so I have been told, infers that the weapon is capable of accurate, long range sustained fire. The light gun is not in actuality a machine gun. It is not capable of the degree of sustained fire demanded for a heavy machine gun. The gun will function for a considerable length of time at high rates of fire, but inherent with any air-cooled weapon, excessive heating of the barrel results in erratic fire. If this gun were on such a type tripod as suggested, there would be great temptation to many to consider it as a supporting weapon. This interferes with overhead fire, long range work, and incidentally with such missions, long periods of fire. It is not suitable for such missions. It may deliver overhead fire, within reasonable limits, as at present mounted. And with any further complications of the mount, may be so positioned as to get reasonable command, deliver accurate and effective fire as a free mount, employing single shot fire. It is needed in the firing line. It is far superior to the machine rifle as an accompanying weapon on such a mission. It is where it belongs now.

Plan two suggests arming each trooper with a suitable automatic rifle and organizing the light machine guns separately. This has some merits, in theory, but let's keep both feet on the ground. Such a weapon as is dreamed of here is possible to produce, but do not overlook the practical side of the question. Too many such rifles mean ammunition paucity, to begin with. There must be a limit somewhere. And if we get such a weapon, we have no further need of the light guns. This organization might function with automatic rifles in numbers limited to the ammunition demand, and heavy water-cooled guns as supporting weapons. But this means scrapping too much useful war materiel now on hand—and economic conditions preclude this. It may eventually occur, but not soon enough to cause any great excitement. Such a scheme is for study of higher commanders. Our job just at present is to use what we have to the greatest advantage.

Plan three suggests the adoption of the light machine gun in place of the machine rifle, but mounting it on a higher tripod, so as not to reduce its "field of fire" to its present state, and attach the guns to the rifle platoon. Part of this plan seems to have already been prescribed by proper authority, some time since. As to the higher tripod, let us not forget Col. X's report.

Antiaircraft fire is unfortunately one of the phases of Cavalry action on which we must theorize to a great extent. But I am in possession of one set of facts that seem to confirm that our theories are not all incorrect. Recently in the disturbance in Cuba, the revolutionists downed four of nine attacking planes in a much heralded attack by the Federal army aviation. How well trained the revolutionists were in

this phase of warfare can be but a surmise. But there is no surmise as to the planes being out of the picture. Our doctrines are simple, workable, and if ever put to the test will certainly accomplish something. In the latest School pamphlets on this subject appears a very trite and direct statement. It is: "The best means available for Cavalry for defense against hostile attack



Top: Gunner Fires Continuous Fire, Using Tracer Control. Center: Higher Elevation Obtained by Assistant Gunner Holding Tripod. Continuous Fire, Tracer Control. Bottom: Antiaircraft Fire Using Sights.

aviation is the maximum concentration of the fire of all available weapons." The light machine gun, as at present packed and mounted may be mounted for anti-aircraft fire very quickly. The effectiveness of such fire is primarily a function of the state of training of the gun crews. Test firing at towed targets at the Cavalry School has indicated that, even with very limited training, this fire is effective. Considerable time, study, experiment, test and practical firing will be devoted to this phase of training in the future, and the effectiveness of such fire will no doubt increase as experience is gained. If four planes out of nine attacking a comparatively untrained group have been knocked down by fire from ground troops, it does not appear to be a sound doctrine to give up our tactics of meeting attack with attack. "Dispersion," as ordinarily thought of, precludes any fire. It further means delay, confusion, loss of control, and can easily result in even demoralization. It is by no means an assured method of reducing casualties, in fact as often as not will furnish the attacking planes with a more favorable target. Present attack aviation doctrines contemplate attacks in flights of three planes coming in toward the target so as to enfilade it. Planes will strive to execute a shallow dive as they approach the target, dropping from an elevation of 200 feet to not less than 100 feet, firing as they dive, so as to rake the target from head to tail, and bombing as they pass over. A narrow target, such as a column, unless the planes come on in column, will not be as good a target as a dispersed unit. If the planes come in column, they are themselves in their most vulnerable formation for suffering casualties from ground fire. Dispersion should be only to such a distance as to permit use of weapons. It may be three yards to 20 yards, that is, the dismounted men clearing the column this much.

The light machine gun as at present mounted and packed may be placed in action for anti-aircraft fire very rapidly from pack. Test firings have indicated that anti-aircraft fire with these guns is effective, at least on towed targets. As with any type firing, the degree of effectiveness is a function of the state of training of the gun crews. But it is not essential to fire at towed targets to train gun crews. Training regulations on this type of preliminary training have been prepared at the Cavalry School for all weapons of the Cavalry. Completion of the preliminary firing therein prescribed has indicated by test that the light machine gunner is reasonably well trained. No ornate installation of equipment is necessary.

Several methods of mounting the gun may be used in such firing. The tripod may be elevated on an ammunition box, the elevating gear released, the gun used as a "free" gun. If tracer ammunition be available, the gunner then sits down behind the gun and adjusts his fire by delivering continuous fire, manipulating the gun so as to place the cone of fire on the target. Greater elevations may be obtained by supporting the tripod on the assistant gunner's knee. In case tracer ammunition is not available, the gunner must refer to sights. Anti-aircraft sights are adaptable

to the gun, but in their absence the gun is directed, as the rifleman fires, namely by maintaining a linear lead, of the prescribed number of target lengths ahead of the target. This requires that the gunner be precise and is not an ideal solution as there is only a portion of the flight of the target where fire may be delivered. However, a reasonable percentage of hits have been obtained in such firings at the Cavalry School. With the great number of these weapons within the Cavalry regiment, there is no doubt that such a concentration of fire as is possible will be effective.

The question of ammunition expenditure is not a bugbear it may seem. The duration of an attack is very brief, probably less than thirty seconds. It is not possible to deliver any too great an amount of fire if our doctrines are correct. The possibility, or probability, of repeated attacks is remote, particularly if each attack is met with our own vicious fire attack. Ammunition so expended is well invested.

There is one item in comparing our present weapon with the machine rifle that I would like to include and that is the effectiveness of the light machine gun in firing on rapidly moving ground targets. The machine rifleman is here at a tremendous difficulty. If he fires semi-automatic fire, the movement of his body in scrambling around to follow the target precludes any fast rate of fire. If he uses the stock rest, it is just so much more difficulty to overcome. If he fires full automatic fire, he hits all over the landscape. By the light gunner may manipulate his gun smoothly and if he is trained to use the same principles of firing continuous fire, maintaining the laying of the gun by the use of sights a "linear lead" ahead of the target, the target certainly is in a tough spot. Again a few rounds of tracer are a tremendous assistance. In the firing done by the 2d Cavalry referred to above, in four problems involving the fire on moving targets, the ratio of hits was 4.8 to 1 in favor of the light machine gun. At this time, the gunner was an experienced machine rifleman but had never previously fired the light machine gun. Since then I have seen courses of fire on targets moving at speeds of 20 to 30 miles per hour at ranges of 600 to 350 yards, with over 40% hits obtained, the light gun being handled as I described. This day and age, this one characteristic alone would make the light gun far preferable to the clip fed, slowly manipulated machine rifle.

In conclusion, let us not repeat deliberately the mistakes of the past in attempting to fit the tactics of old to our new weapon. With all due respect to the individual rifleman, it is high time we realize that he will sooner or later have to drop to the subsidiary position of escort to the automatic weapon. This is our mainstay particularly in the small units in attack or defense. And if our higher commander sees fit to borrow our picks, remember it is his responsibility. Let us thank our stars we are lucky enough to have the most efficient weapon of its type in existence. It is just that, and our mission is to educate ourselves up to its capabilities.

## Reserve Officer Active Duty Training

By Major Edwin O'Connor, Cavalry, Unit Instructor, 312th Cavalry

IN PLANNING the active duty training of reserve officers during their fourteen day periods, there are several vital considerations which enter into the problem. One of the more important of these has been that of providing for the individual officer a progressive practical training. While the military art may be involved with a high degree of theoretical knowledge, the application is essentially a very practical matter; thus, the efficacy of training rests largely upon its practicality. A reserve officer may attain a satisfactory degree of theoretical knowledge of the subjects pertinent to his arm and grade pursuing the appropriate extension courses, but this gives him no practical experience in applying this knowledge, so that it falls to his periods of active duty training to give him the very maximum of application.

In visualizing the training period of a reserve cavalry regiment immediately after mobilization, one of the first problems confronting the colonel would be the availability of qualified instructors for the various subjects pertinent to his arm. He would note that many of his officers had completed the extension courses of the Cavalry School and that many had received a considerable number of periods of active duty training. But he would have no means of knowing who were especially qualified to instruct in specific subjects.

As a matter of fact he would probably find that practically all of his officers have a smattering of knowledge of all the subjects but that none have a thorough knowledge of any one subject even to the extent of being qualified to instruct soundly.

There is noted, in the schedules of training for the past ten years at various camps, a good deal of sameness in the instruction covered; that the trainee is subjected year after year to a little dab of training in this and that and in most cases seldom advances beyond the rudiments in any one subject. Thus, in tactics, he has probably worked out an advance guard problem each year—and more frequently than not as an observer, due to the lack of troops; or with the machine gun, he has probably observed some firing, or may even have pulled the trigger for a few bursts, but knows nothing of the practical duties and difficulties of the machine gun officer or those of his subordinates. Similarly with the rest of the subjects of his arm.

In each group of officers attending a camp few will have any uniform degree of training or preparation: some will require the very basic rudiments, and others will be in varying degree prepared for advancement in their training. Thus the schedule is usually prepared to benefit those with the least advancement, with the result that the others are called on for undesirable repetition, when there is so much to learn.

A solution to the above problem—both as to progress in training from year to year and as to the qualification of individuals in the practical training in specific subjects—is presented in the following plan.

Each reserve officer will be provided with a Qualification Card to be kept with his records. Thereon will be listed all the practical subjects of training (and only pertaining to practical work) appropriate to his arm and grade, or next higher grade. Thus, some of the practical subjects of the Cavalry Officer would be: Minor tactics, communications, musketry, machine gun (light and heavy), pistol, saber, rifle, care of animals and shoeing, mess management, etc., etc. The requirements for qualification in each of these subjects to be specified in detail, preferably by the Chief of Branch. This to assure that the subjects be covered in a uniformly comprehensive way. It might be well to include on this card a reference to the degree of qualification attained; i. e., a statement that the trainee is qualified to conduct the training of his troop or platoon in this particular subject or that he has shown such aptitude as to especially qualify him for a regimental instructor.

When the reserve officer reports at camp with the designated regiment he does not participate in the general schedule of training prepared for the beginner and lightly touching on all subjects pertaining to his branch training but he will participate in a practical school prepared in a specific subject and his two weeks training will be devoted almost entirely to that subject, which might be termed his "major" subject for that year's training. The training in this subject will be designed to meet the requirements, as specified, for that subject and would normally result in his qualification in that subject with the appropriate notation on his "Qualification Card."

Thus, the commanding officer of the Nth Cavalry has been directed to receive for training for two weeks fifty reserve officers. It will not be attempted to prepare a general schedule for all of these officers regardless of preparation; but the Commanding officer of this regiment will, in coordination with the Unit Instructor of the reserve unit, as to the needs, organize within his regiment the necessary schools in the required subjects. The number of schools to be increased so as not to require too large a number of reserve officers to attend the school in one subject—say not to exceed eight officers. The keynote of the instruction to be practical work; to learn by doing. The Colonel utilizes the facilities of his regiment in organizing these schools: the Commanding officer of his machine gun troop prepares and conducts the school for machine gun officers; the commanding officer of Troop A conducts schools for other weapons; the commanding officer of Troop B conducts a school in musketry;

the commanding officer, Troop E, conducts a school in minor tactics; the commanding officer, Hq. Troop, conducts a school in communications; each using his own troop for the purpose. A squadron commander might be designated to conduct a tactical school for the field officers. It would probably appear desirable to conduct certain training as a group, such as calisthenics, an hour's equitation in the morning, a ceremony in the late afternoon, and a two or three days' march with maneuvers at the end of camp.

At the end of camp Lt. John Doe would be able to say to himself: "I now have a definite practical working knowledge of musketry." Colonel Blank, commanding the 3—th Cavalry, would be able to say: "I now have officers who have a fair grounding in specific cavalry subjects, and they will be of great value to me in case of mobilization to help instruct my regiment." Captain A, Commanding Troop A, Nth Cavalry, would be able to say: "My troop now knows more about minor tactics than they did before." The Colonel of the Nth Cavalry would not be wrong in assuming that the training of his regiment had been advanced rather than retarded.

The theory that reserve officers go to training with

a regular regiment and receive a considerable experience in command functions is impractical (under present conditions) and largely a fiction. This theory was no doubt an underlying principle in the scheme of training reserve officers as promulgated, but it lacks practicality. With the skeletonized regiments we have the overhead utilized at most posts and the large number of reserve officers attending each camp so limit the opportunities for the direct exercise of command as to render the scheme futile.

In every group of reserve officers there are a few (though perhaps a very few) who have taken full advantage of their opportunities for advancement in their qualifications as officers: by completing all the extension courses, by strict application during active-duty training, and by reading and study otherwise. These officers particularly would benefit by a thorough grounding in specific subjects such as a two weeks' practical course under competent instructors would afford.

With such a scheme of training in force a reserve officer would have a more definite objective for his active duty training and would acquire more detail which he now skims over.

## International Small-Bore Rifle Competition

THE small-bore rifle competitions this year will see Germany entering into competition with the United States and Great Britain in a triangular international match which is destined to bring about the same close relationship and amicable rivalry among the three nations that for years has existed between the United States and Great Britain and various of its possessions for years through the Dewar trophy match, which was started in 1909, and the international railwaymen's match, which was started in 1927. Another international match, the Fidac, has been bringing the inter-allied nations into competition since 1930.

The new international event will be fired by the contending teams in their own countries on dates announced in advance, following the principle adhered to in the firing of the already established international competitions. The United States team will fire its scores on the closing day of the Camp Perry small-bore meet, the same day on which the American Dewar and railwaymen's teams will shoot. The firing of the Fidac match is fixed for the preceding day.

In the new United States-Great Britain-German event, teams of 10 men will fire. The conditions call

for 40 shots per man at 50 meters on the international 50-meter target, small-bore rifles with metallic sights. A permanent trophy is being provided by the Rheinische-Westfälische Explosives Company, of Nuremberg, Germany. The team to represent the United States will be selected by the National Rifle Association, the British team will be named by the Society of Miniature Rifle Clubs of Great Britain, and the German representatives in the match will be decided upon by the German Association for Hunters and Sportsmen.

The entire arrangements which have been lined up by the National Rifle Association have met with general satisfaction among the shooters of the country in respect both to the one big small-bore meet and the state and regional high-powered rifle and pistol tournaments. Every shooter will get a chance for the different trophies and the championships which they represent and it can be confidently predicted that a very many more men of all groups of marksmen, military and civilian, will be on the N. R. A. 1933 peace-time firing line this year than last year. (From Official Release, National Rifle Association.)

## General Casimir Pulaski

### The First Chief of American Cavalry

By Victor L. Alski, Editor and Publisher of the "Pittsburgh Daily,"  
Pittsburgh, Pa.

October 11, 1929, marked the 150th anniversary of the death of Brigadier General Casimir Pulaski, Revolutionary War hero, on whom historians justly conferred the title of the "Father of American cavalry." In the annals of this romantic branch of national defense the name of Brigadier General Pulaski is inseparably united with the organization and institution of it, and he bears the distinction of being the first chief of American cavalry. Like that other brilliant soldier, Thaddeus Kosciuszko, General Pulaski came to America, animated only by pure idealism. Unfortunate in his endeavors to free his own Poland, he wanted to fight for the liberty of the New World.

Writing to Col. R. H. Lee, August 13, 1778, General Pulaski stated: "Honor and a true desire of distinguishing myself in defense of Liberty was the only motive which fired my breast for the cause of the United States." The fame of his name and the greatness of his achievements were reflected in a letter of introduction which Franklin wrote to Washington, May 29, 1777, who spoke of Pulaski as "an officer famous throughout Europe for his bravery and conduct in defense of the liberties of his country."

General Pulaski first met Washington at his headquarters at Nesquehanna Falls, Pa., and after interviewing the Polish officer, Washington recommended Pulaski to Congress. Unwilling to remain idle until the commission should reach him, General Pulaski joined the army which was at that time opposing General Howe's advance on Philadelphia. At Brandywine, September 11, 1777, while still only a volunteer, he "greatly signalized himself" saving by a dashing attack with a handful of men the retreating American army from being cut off by the British, thus "fully sustaining, by his conduct and courage, the reputation for which the world had given him credit." It was here that General Pulaski rendered great and invaluable services to the cause of the colonies, since by his dauntless courage, fortitude and devotion, he saved the whole army of George Washington from total destruction and disaster.

Not long thereafter, "it was again through his intelligence and activity" that the army of Washington was saved from a surprise attack of the British at Warren Tavern.

Appreciating Pulaski's services Congress rewarded his bravery by commissioning him, at the instance of Washington, the first commander of the American cavalry with the rank of Brigadier General, September 15, 1777. General Washington, in his letter to Congress recommending Pulaski for this place, said:

"This gentleman has been, like us, engaged in defending the liberty and independence of his country

and has sacrificed his fortune to his zeal for these objects. He derives hence a title to our respect that ought to operate in his favor as far as the good of the service will permit."

Shortly after this followed the battle of Germantown, where nearly all the cavalry had been divided for special services. Pulaski again displayed his bravery, and following this engagement he covered the retreat of the divisions of Greene and Stephen.

When Washington went into winter quarters at Valley Forge, Pulaski was sent to Trenton, N. J., with his cavalry where forage for the horses was easier to procure. There he displayed his untiring energy for the betterment of that branch of service which hitherto had received little attention in the Continental army. His many memorials and letters to Washington and Congress, preserved in the historical archives and written by him in the character of Commander of Cavalry, reflect great credit on his talents, his patriotic zeal and his sedulous care of the soldiers. During the winter he reorganized the existing regiments of dragoons, formed a new detachment of horse armed with the famous Polish lances—a new weapon on this continent—and this detachment he personally "undertook to train and perfect in their exercises." He supplied the cavalry with its first set of service regulations and tried to inspire his soldiers with discipline and martial spirit on every occasion.

"He was an expert horseman, and not the most trivial among his contributions to the efficiency of Washington's cavalry was the knowledge of equestrianism which he imparted to it." "General Pulaski was thought to be the best and most expert horseman in the American service."

Acting upon orders received from Washington in February, 1778, General Pulaski joined General Wayne. Their combined forces defeated the British at Haddonfield, near Camden, N. J., and in reporting to Washington Wayne stated that "General Pulaski behaved with the usual bravery, having his own horse wounded."

In the dark days that followed, conditions in the cavalry perplexed Pulaski very much. There was a steady dearth of everything. Some of the officers of higher rank were dissatisfied because they had to obey the orders of a foreigner, however distinguished. Unwilling to be the cause of disharmony in the ranks in those crucial moments, Pulaski resigned his commission of Commander of the Cavalry in March, 1778. Having returned to Valley Forge, Pulaski presented to Washington a plan of raising an independent corps, consisting of cavalymen and infantrymen. In accepting the plan and recommending it to Congress Washington paid this tribute to Pulaski: "Pulaski's



valor and active zeal on all occasions have indeed done him great honor."<sup>11</sup>

On March 19th, Congress sanctioned the formation of the corps which is known in American history as the celebrated Pulaski Legion. It was one of the few detachments of the Revolutionary army predominantly foreign in its composition. During the recruiting of the Legion, Pulaski visited Bethlehem, Pennsylvania, where he ordered from the Moravian Nuns a banner for his Legion. This incident served as a theme for Longfellow's beautiful and well-known poem. For this banner, now preserved by the Maryland Historical Society of Baltimore, Pulaski paid out of his own funds just as he gladly bore many other costs of the equipment and sustenance of his beloved Legion. Captain Baldeski, paymaster of the Legion, stated that "General Pulaski has laid out for the Legion at least \$50,000. of his own money" without any expectation of a refund.<sup>12</sup>

By the end of September, 1778, Washington sent Pulaski to New Jersey, where through the treason of a Hessian deserter the infantry of the Legion was surprised by 400 British under Capt. Ferguson at Egg Harbor. October 15, and only the prompt arrival of Pulaski with the cavalry prevented the annihilation of the infantry and forced Ferguson to flight with heavy losses.

In February, 1779, on orders of the Congress, having strengthened the Legion with new recruits, Pulaski set out on his way and in spring "reached Charleston, S. C., at the very time when the British General Prevost suddenly appeared before that city, in the confident expectation that it would surrender to him on the first summons. The unlooked-for arrival of Pulaski baffled his hopes. Already had the Governor and

the Council agreed on terms of capitulation, when General Pulaski, accompanied by the brave Colonel Laurens, repaired to the Council Chamber to protest against that precipitate measure, declaring that, as a Continental officer, he would defend the city for the United States. In order to revive the drooping spirits of the inhabitants, Pulaski sallied on with the Legion and by a display of bravery dispelled the general panic and introduced military sentiments into the minds of the citizens. This sortie of Pulaski caused Prevost to retire from the city."<sup>13</sup>

From the moment that the British forces started their retreat from the attempt to capture Charleston until their arrival in Savannah, Georgia, Pulaski, although suffering from frequent attacks of climate fever, pursued the enemy, dealing them a blow whenever possible. In the ill-fated assault upon Savannah, October 9, 1779, Pulaski was wounded in the thigh and two days later he died on board of the ship *Wasp*. His companions "consigned his corpse to a watery grave." His death was lamented universally by the patriots of the Revolution.

Note: The author is particularly indebted to M. Haiman, "Poland and the American Revolutionary War," Chicago, Ill. 1932, for much of the material presented in this sketch.

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- <sup>4</sup>Sparks, American Biographies, 2nd ser., vol. IV, p. 415.
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- <sup>7</sup>Pulaski to Washington, Nov. 23, 1777; Griffin, III. 26.
- <sup>8</sup>J. Gurn, "Why We Honor General Casimir Pulaski," Columbia Oct. 1929.
- <sup>9</sup>Eager, History of Orange Co., N. Y., p. 337.
- <sup>10</sup>Griffin, III. 56.
- <sup>11</sup>Griffin, III. 56.
- <sup>12</sup>Saffell, Records of the Revolutionary War, pp. 30-36.
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General Casimir Pulaski

## Tactical Mobility of Cavalry

By Colonel M. von Wiktorin, Austrian Army

EVERY country endeavors to lend her Cavalry as modern a shape as possible. However, in doing this, one must always consider certain basic principles which will remain essential as long as Cavalry exists; otherwise this evolution cannot fulfill its purpose.

As the first and most important principle, the Cavalry must retain its true nature, great tactical mobility. The medium for this characteristic is the horse, with which the Cavalry can move across country in large or small groups or even as single riders; and so mounted Cavalry can get as near the enemy as possible with a minimum percentage of casualties before being forced to dismount and continue fighting on foot.

This explains the second basic principle, that the main body of every large Cavalry force must consist, as it always has, of horse troops. Cavalry and Horse Artillery.

Therefore, and this is the third principle, this mounted main body must continue to constitute the chief combat factor and possess a fighting power which measures up to the problems usually confronting the Cavalry. These problems may consist of a quick obliteration of local resistance by bold attack, mounted if possible and enveloping the enemy, as may happen on missions of reconnaissance, interference with the enemy's contact between his own troops, pursuit, etc.; or they may consist of long drawn out engagements on a broad front, as may be the case during border service, screening missions, holding of a sector until the arrival of the Infantry, retreat, etc.

All these problems are not to be solved, however, by long and bitter fighting, but by clever employment of great tactical mobility. For these problems, the fighting power of a normal Cavalry division is generally sufficient, the main body comprising 6 Cavalry regiments and 1 to 2 Artillery detachments.

In spite of this, it is only a natural desire to develop the fighting power of the Cavalry as highly as tactical mobility permits. This can be achieved either by increasing the fighting power of the mounted units or by attachments of other troops, particularly mechanized units.

How is a further increase in fighting power for the mounted units possible? By an increase in the number of the Cavalry units, and by an increase, or improvement of, the firearms, particularly of the automatic weapons.

Increasing the strength of a modern Cavalry regiment on 4 rifle troops, 2 machine gun troops, and 1 headquarters troop, as I described it in the *CAVALRY JOURNAL* of April, 1929, one may easily see that neither the number of Cavalry regiments of the division nor that of troops of the regiment can be increased. A gain in size would mean a loss in tactical mobility. Although permissible, a strengthening of the squads and platoons

in the mounted troops would be of little value to the whole.

This leaves only an increase in, or improvement of, the firearms. The number of rifles in a troop is 60 to 70 or 80 at the most, discounting those of patrols and horseholders. However, the fighting power of the mounted troops can be raised considerably by giving each troop 8, instead of 6, light machine guns and several automatic rifles, as soon as tests of the latter have been found satisfactory in every respect. Perhaps the automatic rifles may replace the light machine guns later on altogether, whereas a general armament of the entire Cavalry with this weapon can never be considered. Aside from many other objections, such an armament of all troops would lead to an expenditure of ammunition which no country could afford.

In regard to the heavy machine guns of the machine gun troops, I believe 6 is the correct number to keep the troop as mobile as possible and to give it sufficient fire power. This puts at the disposal of the regiment a total of over 12 heavy machine guns. It is far better to carry these guns on pack horses than on four-wheel carriages drawn by six horses; the guns remain tactically highly mobile, the principal consideration for Cavalry.

2 platoons of super-heavy machine guns and Cavalry field pieces per regiment are sufficient. It remains only to decide whether these guns, too, should be carried on pack horses rather than by automotive transportation, in order to be able to follow the Cavalry quickly in any terrain. Again I am in favor of horse transportation.

A further increase in the fighting power of a Cavalry division is the independent Cavalry machine gun detachments. These units constitute a reserve at the disposal of the division commander, who will employ them at points where he wishes to furnish additional fire power to a brigade or regiment. Since it is the primary mission of these machine gun detachments to cooperate closely with the Cavalry, they must possess an equal tactical mobility, that is, they, too, must rely on horse transportation. The machine guns, however, may be carried on caissons drawn by six horses; this will result in a considerable lengthening of the column of march, but will also be less fatiguing on men and animals. In my opinion, the number of machine guns in such a detachment should be and can be larger than that of the machine gun troops of the regiments. Instead of 6 guns, there should be either 4 platoons of 2 guns each, viz 8 guns, or 3 platoons of 3 guns each, viz 9 guns. A rather respectable fire power.

To increase the fighting power of the Cavalry main body of a division beyond the point mentioned in the foregoing would impair the tactical mobility, which must remain all important. Nevertheless, the rifle troops will gain several automatic rifles and light machine guns, and the independent Cavalry machine gun



detachments will increase their fire power by several heavy machine guns.

The second part of the mounted main body of a Cavalry division is the Horse Artillery. It must, of course, be strong enough to render the Cavalry sufficient assistance. Therefore, a detachment of 3 to 4 batteries would be insufficient. The Artillery should consist of a regiment of 6 batteries of field guns and field howitzers; field guns alone are inadequate today.

A question for the Cavalry arises here, whether to introduce also mountain horse batteries, that is, mountain Artillery transported on pack animals and led by mounted men. During the World War the Russians had several such batteries with their Caucasian Cavalry divisions and they are reputed to have given good results. The Yugoslavs have added such a battery to each of their Cavalry divisions.

From the standpoint of tactical mobility alone, mounted mountain batteries and mounted machine gun troops would be preferable to those which employ horse drawn transportation. There will always be enough pack horses sufficiently strong to trot or even gallop at times under their heavy loads. I should doubt, however, if these pack horses would stand up under increased gaits for an extended length of time. One must consider, too, that such a battery becomes a large body; one field piece alone and its necessary ammunition need 15 to 20 pack horses and as many mounted leaders. Another point to be considered is that the pieces must be unloaded and assembled before firing, which will take considerably more time than an ordinary battery requires to unlimber. Time, always an important factor in the Cavalry, is even more so in certain circumstances today. I do not believe, therefore, that such mountain batteries would be suitable for Cavalry; although practical tests with such batteries would be advisable.

The foregoing observations lead to the conclusion that the main mounted force of a Cavalry division should consist of 6 Cavalry regiments, 2 Artillery detachments of 3 batteries each, and 2 to 3 independent machine gun detachments. The next question is that of a suitable organization; that is, whether to form 3 Cavalry brigades of 2 regiments each with the Artillery and the independent machine gun detachments as divisional troops, or to form 2 brigades of 3 Cavalry regiments each with 1 Artillery detachment and 1 independent machine gun detachment permanently attached to each of the 2 brigades.

This calls for the following consideration: 3 brigades of 2 regiments each will leave often not much more than one regiment in one or the other brigade after a deduction of reconnaissance parties, reserves, special assignments, etc. This means, that at least one brigade command is then superfluous. Therefore, I think it would be better to organize only 2, but strong, brigades, which may detach several troops and still remain a large and effective body.

A further examination of the entire character of the tactical employment of the Cavalry shows in most cases that the brigade is an independently operating unit which should have the permanent assistance of Artillery.

This is another point in favor of only 2 strong brigades, with independent machine gun detachments and Artillery permanently attached.

Having covered all points concerning the main mounted body of the Cavalry division, we ask next what other troops a Cavalry division needs. The question, however, deals only with such troops as are a permanent and organic part of a Cavalry division. Of course, more troops of the various branches of the service may be attached temporarily to a Cavalry division.

We have the bicycle battalion which most armies assign to the Cavalry division. The experiences of the War, however, have taught that the bicyclists are not suited for assignment to the Cavalry, particularly in hilly terrain or where the roads are bad. In such cases the bicyclists will have to push or carry their bicycles and are, naturally, very tired when they enter the actual combat zone, while they may be intended to carry the brunt of the battle.

Moreover, the tactical mobility of these bicycle battalions is very limited. The bicycles cannot be left very far behind the zone of fighting, and the battalions are, therefore, forced to remain in the vicinity of roads or to cover a long march back on foot after the battle in order to reach their bicycles. Lately, several trucks have been attached to the bicycle battalions to transport the wheels when necessary; even this can be considered only a last resort. Therefore, bicyclists of a Cavalry division may be looked upon as a fighting force only in a theater of action with a predominately level topography and with many and good roads. On the other hand, bicyclists are very suitable for employment as messengers.

Mechanized units are best fitted to reinforce and to supplement a Cavalry division. Care must be taken, however, that the Cavalry does not lose her true nature by the amalgamation with mechanized units; that is, the horse must remain the predominant element in the Cavalry division. The Cavalry will lose its tactical mobility if too much attention is paid to the mechanized units, while it cannot possibly keep up with the motors on roads. If, however, the mounted and mechanized units are left to operate individually and separate from each other, it would be useless to combine these two forces into one division.

The object is to find the true relationship between horse and machine, to determine what type and how many mechanized troops the Cavalry needs and this is consistent.

Since the bicycle battalion generally has no suitable place in a Cavalry division, it has been suggested that this battalion be equipped with motorcycles. This is a apparently has many points in its favor; closer observation, however, shows here, too, that a motorcycle battalion is not suitable. The increased speed on roads and the fact that this medium of transportation is less fatiguing are admitted. However, again tactical mobility is lacking. The battalion cannot advance across country, and, after having dismounted to go into action, the men are just as dependent on their motorcycles as the bicyclists are on their bicycles. Further disadvantages are, particularly, the noise of the motors

and the clouds of dust which easily betray the march of the column and greatly handicap observation and reconnaissance during the march. Another disadvantage is the greater length of the column on the march; while bicyclists can travel by keeping an approximate distance of 10 m. between men, motorcycleists require a minimum distance of 30 m. between men. Finally, motorcycles are expensive, considering the initial cost plus upkeep and the number of soldiers they will carry. Because of all these reasons entire motorcycle battalions are not advisable; a Cavalry division should not have more than one company. However, motorcycleists are indispensable for messenger services of all kinds, and every modern unit today must have several motorcycles at its disposal. These men are of particular importance for relaying of messages from reconnaissance parties, inasmuch as a horseman nearly always would arrive too late if he had to cover great distances. The reinforcement of Infantry troops, which is given every Cavalry division, is an independent battalion of Infantry carried on motor vehicles, and these cars should be constructed so as to be able to progress across country. This battalion, of course, must have, in addition to the 3 rifle companies and 1 machine gun company, a gun platoon and a platoon of super-heavy machine guns for antiaircraft firing, a pioneer section, a communication section and a supply section. Its tactical mobility must be increased by horses carried on portable trucks (for the use of commanding officers and for reconnaissance parties), by machine guns, etc. These horses will be used when the battalion has unloaded near the enemy.

Such a battalion forms quite a large body; it uses 60 to 70 trucks and 20 to 30 motorcycles, but it also possesses a considerable fighting power, which compares with that of a Cavalry regiment. One may easily see that a Cavalry division does not need and cannot employ more than one such battalion.

However, what the Cavalry division needs further is a battalion of special troops, consisting of an armored car company, if possible, with a platoon of tankettes (Martel-Morris or Carden-Loyd); the previously mentioned motorcycle company, plus one company for the protection of the trains in the rear, which in an independently operating Cavalry division are exposed very often to considerable danger; and, finally, one company which is charged with the maintenance of traffic and march order, so particularly necessary when mounted and mechanized units travel together, and the posting of "traffic policemen" to keep the troops on the right road. The larger part of these last two companies is carried in automobiles; the remainder uses motorcycles.

Of motorized Artillery the Cavalry division needs, primarily, a battery of long range guns, the so-called "long arm," next 1 to 2 batteries of field howitzers, and, finally, a battery of antiaircraft guns for the protection of especially important points, such as bridges and defiles. For the defense against low flying planes, which for example may attack the horses in rear of the dismounted Cavalry, the Cavalry regiments are equipped with super-heavy machine guns.

The pioneer sections of a Cavalry division must also be carried by automobile, and the signal troop must be partly mounted and partly motorized. Finally, every Cavalry division should have its own Air Squadron.

I do not believe that mechanized troops, in excess of those mentioned above, are compatible with a Cavalry division. So organized, horses and machines of the combat units compare as about 3 to 1; the horse remains the predominant element, and so tactical mobility is safeguarded.

The trains, however, will replace the horse by the motor as far as possible; a reversed rate of 1 to 3 would be appropriate. Vehicles and combat trains of the mounted units must remain horse-drawn; four horses per wagon, or six for heavier transportation.

The topographical conditions of the terrain of the probable theater of a war are of principal importance, of course, in determining whether to furnish a Cavalry division with more or fewer mechanized units and to what degree the trains should be motorized.

The total organization of a Cavalry division is then as follows: 2 Cavalry brigades of the previously mentioned composition, the mechanized units as divisional troops and to be employed as shock troops, and the already greatly motorized trains. On the march the two Cavalry brigades and the mechanized parts of the division should move over separate roads to permit smooth moving of traffic.

As a final consideration for the tactical mobility of the Cavalry, the school of equitation is of vital importance. The fact still stands that the horse is a combat factor of the Cavalry. While the horse, in days gone by, had his greatest effect in the shock attack, his principal mission now is to carry the rider with his weapons across country and as fast and as near the enemy as possible, even though fired upon, and to carry the rider again after the combat.

Equitation in the open country still is very important, even more so now that the effect of modern firearms has rendered safe and fast riding across country more difficult than ever. There should be training especially in riding with led horses; the horses should grow accustomed to long wear of the gasmask, while the first training of the horse should include lying down upon command as a protective measure against observation and fire. Furthermore, all Cavalry horses should become acquainted with the noises of warfare—firing, motors, etc.—to avoid shying and runaways on every occasion.

A very important help for the promotion of the training of man and horse are the so-called Militaries (*dressage*, jumping, steeplechases). Unfortunately, most countries pay far too little attention to these training methods. Neither a *dressage* nor a jumping horse alone meets the requirements of the Cavalry horse; however, the horse must be trained in all branches that come into consideration for the Cavalry.

Tactical mobility is, and will remain, the first and principal demand upon modern Cavalry. If it does not meet this requirement, its role is finished in this age of motors and rapid firing arms.

# Men Make War; Men Must Fight It

By Lieutenant Colonel Bernard Lentz, Infantry

**T**HAT men make war needs no discussion. It is universally accepted as a fact.

Men must fight the wars they make. This is a subject that enlists our interest and may, perhaps, be discussed with profit in connection with various schools of thought of which one hears from time to time. It is a subject that is as old as war itself. Time and time again as we scan the pages of history we find man, who makes the war, trying to discover some substitute for the human being in prosecuting the war but up-to-date it has always failed.

Let me cite an example to make clear what I have in mind. The great wall of China was built at enormous effort, the builders thereof having in mind that it would keep out the barbarian hordes from the North but it failed to do so because the men behind the wall failed.

A volume would be needed to express all the thoughts that have come down to us from men who knew war and who concluded that man must ever fight the wars that he makes. In a recent World War book, *The Storm of Steel*, by Ernest Junger, a man who was wounded many times, we read: "The security of a position depends on the freshness of its defenders and the fighting spirit, not on the length of the communication trenches, and the depth of the firing line." The same author also quotes: "Battles are won by iron hearts in wooden ships." During the war with Spain, we had a popular song entitled, "It's the man behind the gun that does the work."

Most of the talking and much of the teaching has been along the lines indicated above but some of the peace-time thinking has from time to time relegated man to "second fiddle," until war was again at hand and then the old truth, that man must fight the war, has always asserted itself with a vengeance.

Our own General Forrest said "War means fighting and fighting means killing." It is not a pleasant thought that war must ever take its toll of human life. Hope has sprung eternal in the human (but combative) breast that some day, somehow, great walls, catapults, elephants, tanks, airplanes and what-not would take the place of the human being. Under the "what-not" we may even include "speech making" for does not history record (I use the words of Guedalla) "What befell Athens when she could put forward no surer defense against Philip of Macedon than the most brilliant orations ever written in praise of freedom?"

At this time, I shall introduce, what I choose to call my text, taken from Byron's *Don Juan*. It will be recalled that at a certain point in the story, Don Juan, having escaped from the Turks with an Englishman as companion, applied for service with the Russians.

The Englishman being known to the Russian General had no difficulty in joining up but when it came to Don Juan the Russian General asked: "But, what can this young man do?" And the Englishman emphatically and ardently replied: "Why, General, if he hath no greater fault, in war, than love, he had better lead the assault."

With this fine recommendation Don Juan was readily accepted and he proved to be a great assaulter. He and some worthy comrades having used the bayonet with tremendous success during ensuing battles, Byron agreed that the Don Juan way was the correct way to win battles and added—to show how battles are often lost—the couplet of philosophy which shall constitute my text:

"They sometimes with a hankering for existence,  
Keep merely firing at a foolish distance."

Quite recently there came to my attention some observations on war in the future, that fit into the discussion. To quote: "Military strength no longer depends directly on man power actually in training or of the trained reserve. Until quite recently the most sturdy and reliable soldiers were drawn from the agricultural population. However, if not today, at least in the near future, all civilians connected during peace times with machines and more particularly with such as can be immediately used in war—motor cars—trucks—busses—tractors—will form the main recruiting ground for armies."

I am inclined to agree with the above quoted observations "in principle" and in so doing I shall be more reciprocal than was Lloyd George of whom the late President Wilson said: "Lloyd George accepted, 'in principle,' everything that I advocated and then challenged every particular instance."

I shall simply make some reservations, for no thinking person could possibly be against great walls, catapults, elephants, trucks, busses, tractors, et cetera, (all in their proper period in history) as aids in fighting battles and in preserving human life. We need all the latest and best engines and accessories of war in abundance. The nation which neglects to keep abreast of the times with regard to inventions deserves to be defeated. There may, however, be danger that over-enthusiasm for first-rate implements and engines of war may bring about, as has been the case in the past, an under-supply of first-rate fighting men. This may result in the situation where second rate fighters (though they may be first rate technicians) "with a hankering for existence," will "keep merely firing at a foolish distance," and battles will be lost.

Here a reservation is appropriate to the effect that in wars, ten, a hundred or a thousand years hence not

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only will the factories have to be combed for Don Juans but the agricultural population, as well, will have to be drawn upon for sufficient men who with or without all the latest machinery will subdue "a hankering for existence" in order that airplanes may not be "zooming," tanks may not be "grouching," and men in hob-nailed shoes, may not be firing "at a foolish distance."

And even when we have first-rate fighters manning first-rate tools, over-enthusiasm for the tools coupled with over-estimation of their powers, and great assiduity on the part of manufacturers to make profitable sales, may cause an over-supply of impedimenta—more than the first-rate fighter can handle—and that too may cause disaster.

Don Quixote de la Mancha was as valiant a fighter as has ever been brought to fame in prose or rhyme but he over-loaded himself with arms and armament. By way of description of one of Don Quixote's many encounters (always without the least hankering for existence) we read: "Rosenante (his horse) fell and his Master lay rolling about the field for sometime endeavoring to rise, but in vain, so encumbered was he with his lance, target, spurs and helmet, added to the weight of his antiquated armor. A muleteer coming to him took the lance, which having broken to pieces, and applied one of the splinters with such agility upon Don Quixote that in spite of his armor he was threshed like wheat."

Here I make another reservation to the effect that over-loading even brave men is bad enough on the offensive but when it comes to a retreat it is worse.

Armies do or must retreat sometimes. Washington retreated most of the time and he became the father of his country.

Wellington said, "The best test of a great general is to know when to retreat and to dare to do it" and following his own advice he defeated Napoleon. The Duke remained all the while suspicious of new inventions (except his own—a combination sword—umbrella) alleged to revolutionize warfare. At one time, so Philip Guedalla recounts in a recent biography on Wellington, the Duke was persuaded to look at some new devices. One man had a new bayonet drill which, its author said, would make one Englishman the equal of twelve Frenchmen. Then there was an artificial hill to facilitate reconnaissance and a lens which would use the sun's rays to burn up the enemy. The Duke, "after having looked and listened with some impatience gave his orders for the day to the Adjutant General, mounted his horse and galloped to the trenches." This demonstration took place in the Peninsula. Some years later when it was learned that Napoleon had escaped from Elba, the Duke quickly rejoined the Army in Belgium. During his absence at Vienna, a rocket troop had been organized. The Duke saw it and "ordered the rocket troop to store its cherished weapons and use ordinary guns instead and when someone urged that the change would break the captain's heart the implacable reply was 'Damn his heart, let my order be obeyed.'"

The Duke of Wellington was always a man to see for himself, which often involved danger to himself and his deep aversion to new inventions of war was, in all likelihood, due to his belief that gadgets might tend too much towards "firing at a foolish distance."

Was the Duke right? My answer is "Yes and No," which simply means that we should put our best thought on the acquisition of the latest, but useful, arms and armament remembering all the time that we must still have the right kind of human being lest, "with a hankering for existence," there be too much activity "at a foolish distance."

I think it is appropriate to inject a remark about cavalry. No matter how many kinds of mechanization we may develop and adopt, I consider the trained trooper, on and with his mount, constitutes an individual much like an infantryman on foot who can fight in places where nothing else can operate. Furthermore in a pinch the trooper can get off his horse and fight on foot. If we abandon the horse entirely we may in case of war, encounter terrain, situations and phases of battle where "for the want of a horse (other transportation being unable to get close enough) the battle was lost" because of too much "firing at a foolish distance." We may in the near future develop transportation that will go *everywhere* the horse, and even the man on foot, can go but until that happens, I think we should continue to be "from Missouri."

We come now to the matter of leadership in battle. Will personal leadership still be necessary in wars of the future? Will it be still advisable to keep everyone from general to private on the "expendable" roster even though we employ every modern means of communication?

Thomas G. Frothingham, in his *Washington; Commander-in-Chief*, gives us a good illustration of personal leadership which, with a little imagination, we may use to illustrate a point.

We all know that on the night of December 25, 1776, Washington crossed the Delaware. Frothingham tells us that with Washington were such men as Generals Green, Mercer, Stirling, Sullivan, Stark and Knox. Other lower ranking officers were James Monroe and Alexander Hamilton. The plan had been that three detachments should cross the Delaware, at different points, but two of them presumably because of the snow and the ice and also lacking a Washington, never got started. Not so with Washington's band of 2,400 men. This force crossed in spite of snow and ice, surprised the Hessians at Trenton and won a victory of which Lord Germaine said: "All our hopes were blasted by the unhappy affair at Trenton."

Speaking of this affair, Frothingham says: "It would be difficult to find a parallel to this list of distinguished names in the roster of any military expedition of equal force." Is this not an illustration of the before-mentioned: "Battles are won by iron hearts in wooden ships?" I think it is.

Now let us assume the same situation and let us imagine that Washington on the morning of Decem-

ber 25, 1776, had been supplied with some up-to-date radio sets and that furthermore Washington had decided to exercise personal leadership by going "on the air." In line with other modern methods, we may imagine that Washington established his Command Post on the Pennsylvania side of the river, keeping a good share of the aforesaid distinguished men as staff officers. We can easily imagine a radio broadcast as follows:

"Stand by: General Washington speaking at C. P. (372.6—428.5, Penn.) I urge you forward with all haste. In spite of snow and ice; and cold and freezing; it is the earnest wish of the Commander-in-Chief and the Continental Congress that you take Trenton this night or I had rather that Martha Washington become a widow. General Washington signing off."

Does anyone believe that Trenton would have been taken? I don't.

I have let my imagination stretch pretty far, not to condemn modern means of communication, but to point out that personal leadership will probably still be needed in future wars. Wire lines and radio nets are important but too much exercising of leadership "over the wire" or "through the ether" may be like "sending a kiss by wire"—not very potent—and may engender too much activity, "at a foolish distance."

In this age of the specialist, who as some wit put it, "knows more and more about less and less," the military has also been motivated to fall into line. With all our arms, branches, bureaus and services we have been compelled to organize more or less into compartments and this is liable to make our thinking compartmental.

No matter how much the specialist tries to view a problem objectively, unwittingly he will act as did the forbear of a friend of mine. This friend visited the village of his ancestors in Canada. He went to the old churchyard where his great grandfather was buried between his two wives who had preceded him to the grave. This great grandfather according to family lore, when he was about to die requested: "Bury me between my two beloved wives Rachel and Anna, with my head leaning just a wee bit toward Rachel." In the same way, the specialist's Rachel is usually his own specialty.

Take for example the method—"indirect laying." A specialist may become so "hipped" about indirect laying that the result in war may be too much indirect laying—down on the job—which is the same thing as too much, "firing at a foolish distance." The consequence might be as suggested by a Chinese student at the Infantry School who having had an indirect laying chart explained to him observed: "By the time I get all this done a great big Jap he standing on top of me."

Perhaps I can elucidate further by telling of an informal visit I was directed to make to certain stations shortly after the World War, with a view to finding out how everybody was getting along. I began my visit at Department Headquarters. Here everything

was clicking, G's, technical and administrative staffs, clerks, orderlies, typewriters, ticklers on desks, rows of buzzer buttons, mimeographs, stacks of papers coming to the "in" baskets and other stacks being periodically removed from the "out" baskets. Everybody fully occupied. Morale excellent.

Next I went to the Camp Headquarters located in a large temporary building of a war-time cantonment. Here, too, I found everything going full steam ahead. Doing fine. They were so wrapped up in their work.

Then I proceeded in turn to a Brigade Headquarters and a Regimental Headquarters and I found full forces keeping busy and cheerful. Lastly, I went to a Battalion Headquarters where I found the battalion commander and his adjutant not doing much. They had plenty of time to talk to me. I finally asked the major: "How many men do you turn out for drill?" and he replied: "Why, we don't drill at all; by the time we get through furnishing men for clerks, orderlies and fatigue, there is nobody left for drill."

As explained above, this was shortly after the war: the outfit had recently returned from overseas and large numbers of men were being discharged. The situation was self-explanatory. We were demobilizing. But the incident does illustrate how *not* to organize for battle lest (and this may not be with a hankering for existence) there be too much activity "at a foolish distance."

It has at times been argued that it takes more ability to do staff work than it does to lead troops in battle. I shouldn't want to argue either way. I don't know enough about it. Both, I should say, require the best we can find. I do not believe, however, that staff work, even if it is more important, should be overglorified or the trend of the best ability may be too much toward command posts and tactical, technical and administrative over-staffing, with its attendant specialization, may result in too much ability functioning "at a foolish distance."

Specialization, to which I have directly and indirectly devoted several paragraphs, does not help us toward what is needed more than anything else, viz: viewing problems as a whole—integrated thinking. Dr. John Dewey, our well known philosopher says on this score: "It is daily more evident that unless some *integration* can be attained, the always increasing isolations and oppositions consequent upon the growth of specialization in all fields, will in the end disrupt our civilization."

So I say, integrated military thinking (the kind of thinking that is done by "Generalists") which uses, but controls, specialization and which is ever directed towards subduing "a hankering for existence" and discouraging, "firing at a foolish distance", will, as it has always done, go far by way of preparing us for future battles.

And finally, through integrated thinking, I feel, we are bound to conclude, as long as men persist in making war, that men, as always, will have to fight it.

## An American Military History Foundation

By Lieutenant Colonel Joseph M. Scammell, Infantry, California National Guard

"An American Military History Foundation offers important advantages to our country through the sound military history it will produce or encourage. Military history is valuable not alone for professional soldiers, but for citizen soldiers, our statesmen and the public who, in the final analysis, determine our national policies in war and peace."

—Maj.-Gen. George E. Leach

TWENTY years ago there appeared in the *Infantry Journal* an article by Professor R. M. Johnston of Harvard University entitled "What can be done for our military history?" As a result of this article and the discussion that followed it, Professor Johnston secured from the American Historical Association an invitation to the War Department to send delegates to its annual meeting at Boston in 1912. Major James W. McAndrew from the Army War College, Major George H. Shelton, the editor of the *INFANTRY JOURNAL*, and Captain Arthur L. Conger, from the General Service Schools, were selected as War Department representatives. A special conference, presided over by Professor Albert Bushnell Hart, was devoted to a discussion of military history. Theodore Roosevelt was among the most forceful speakers.

Both General McAndrew and Professor Johnston died shortly after the war; but the committee on military history appointed by the American Historical Association continued its existence. No other significant developments took place; so that Professor Charles F. Haskins, in his opening address to the American Historical Association during its meetings at New Haven in 1922, stated in summing up the trend of American historical scholarship, that military history was still in its infancy.<sup>2</sup> Two years later the Committee on Military History passed out of existence.<sup>3</sup>

During the ten years that have elapsed since this committee disbanded, the Army has renewed its interest in the study of military history. All elements of the Army school system are now devoting more time and effort to this phase of military training than ever before. With this revival of interest has come a truer appreciation of the difficulties involved in securing historical evidence upon which sound conclusions can be based. The need for an organization to overcome these difficulties is well stated in an article by Major C. C. Benson on *American Military History* which appeared recently in several of our military magazines. His article concludes with a proposal that there be established an American Military History Foundation—a timely and important revival of an idea that has been gaining momentum for many years. There is a vital need

for some organization able to supply both civilians and military men with accurately and intelligently recorded military history. The purpose of military history is to establish the facts of war, to analyze the facts thus established, and to interpret them so that the lessons of past experience may form a guide for future conduct. Wars may be studied from two general points of view: that of the statesman and that of the soldier. The former is concerned primarily with the political aspect; for war is a political act. It may profitably be studied to determine how wars may be prevented, or, failing in that, to learn how to conduct wars successfully, to the end that the conflict may be made short and peace restored with the least cost in casualties, destruction, suffering and material resources.

Those pacifists who view war through the mists of their preconceptions and hopes are often hostile to the study of military history, failing to appreciate the value of the accurate recording of the facts of war as a means of preventing it. But there are those who make no such mistake. At the conference on military history in 1912 Theodore Roosevelt was pointed out by Professor Johnston as a practical man of peace who had been instrumental in bringing the Russo-Japanese War to an end. Major McAndrew protested against the type of "history" which conceals mistakes and their terrible consequences. "The education of our people in our military history will be the best guaranty of continued peace," he said, pointing out how in 1898 an uninformed popular clamor drove an unwilling administration to declare war against Spain contrary to the advice of our military and naval advisers. Professor Johnston challenged those pacifists who opposed the study of military history, in these words: "If you wish to put down war, surely you would wish to ascertain what are the facts of war, otherwise how can you present a case?" Mr. Oswald Garrison Villard who attended the conference as a former militiaman, and who described himself as "a peace man and almost a peace-at-any-price man" stated in his third capacity, as a scholar:

"I sincerely hope that out of this conference there will grow a civilian national society for the study of military history, free from any violence, from any prejudice."

This study of national policy through military history has been neglected, especially by statesmen who, dealing with a multitude of immediate problems, are generally only remotely, incidentally or occasionally

<sup>1</sup> Annual report of the American Historical Association for 1912. H. R. Doc. No. 933, 63d Cong., 2d sess. Washington, 1914. pp. 157-197.

<sup>2</sup> American Historical Review, Vol. XXVIII (Jan. 1923) p. 223. At that time it was composed of the following membership: Brig. Gen. Eben Swift, Col. Oliver L. Spaulding, Allen R. Boyd of the Library of Congress, Thomas R. Hay, Eben Putnam and Lieut. Col. Jennings C. Wise.



concerned with wars or the possibility of wars; whereas these subjects are always present in the minds of soldiers. The consequences are that soldiers generally know a great deal more than statesmen about the relation between wars and policy. The world knows more about how to end wars than how to prevent them, and therefore, while in former times wars were practically continuous, they have since become of comparatively short duration.

The "Hundred Years' War" was followed by a "Thirty Years' War," and that by a "Seven Years' War." In the last century we had a "Seven Weeks' War" in which the Prussian Army, without war experience but soundly schooled by means of military history, defeated the veteran Austrian Army in one great decisive battle. In 1870 it defeated the French Army which had neglected to keep alive the lessons of its past experience. About the same time there were two great wars being fought on other continents by improvised armies ignorant of military history; that in America lasted four years; the Taiping Rebellion in China lasted fifteen years and cost twenty million lives. Examples could be multiplied. In this connection Woods and Baltzly's "*Is war diminishing?*" and the Carnegie Endowment's study on *Losses of life in modern wars* are worth looking into.

In 1903 the military correspondent of the *London Times*, Colonel Repington, wrote:

"The price we pay for this penny-wise and pound-foolish abstention from historical research is written large in letters of blood across the report of the Commission on the War in South Africa, which showed up in lurid colors the apothecy of ignorance, naked and unashamed. Our system has been to remain ignorant of all the lessons of the past, and then to learn them over again with each succeeding war, at huge and needless cost."

Major General Sir Frederick Maurice in commenting on his history of the Egyptian Campaign of 1882, prophetically stated:

"I believe that the fate of the next expedition which leaves the shores of England may be seriously affected by my success or failure to bring home to the great body of our people the experiences of the 1882 campaign."

The history of the Dardanelles expedition is sufficient commentary on this. During the World War, Lord Sydenham wrote in the *London Times*:

"Mistakes are always made in war; but we have made no mistakes, naval or military, in the past two and a half years which the study of naval and military history might not have averted. Sound knowledge is the most important requirement of Governments."

Although the value of military history is recognized in our country as never before, there are some aspects of it that may be emphasized with profit. The first is that an agency of some sort is needed to raise our standards so that we may not fall into the error made by the French Army prior to the World War:

"In the highest military circles there was no idea that history had its rules and methods and required systematic training; the Ecole de Guerre based its strategical and tactical doctrine on an historical documentation disconcertingly fantastic; we were incapable of differentiating a serious scientific work from one without value."

The use of military history as a source for the derivation of doctrine is of great importance. Military history, the great repository of human experience in war, is analyzed to discover what factors have contributed to success and what things have led to failure. The conclusions are summarized and serve as a guide. The resulting hypothesis is called doctrine. A team uniformly trained in a sound doctrine enjoys powerful advantages. A leader knows what he may expect of his superiors, his equals or his subordinates; he can cooperate with them automatically and intelligently. Time, the essence of victory, is saved. It serves the purpose of pre-arranged plays and signals on the football field. Through this use of military history armies are taught to act in harmony as a team.

The individual leader or soldier profits from military history in a variety of ways. He expands his limited experience by adding that of others. Even if a soldier were to fight all his life in the wars of his country, he would know less than can be learned from the experience of others. The horizon of the student of military history is enlarged; his tactical judgment is developed; he gains understanding of the art of war as a whole; he grows in wisdom as a soldier, fortifies himself against tactical surprise and prepares himself for higher command. This professional culture, useful to any leader, is of especial value to those who have had no combat experience. Military history is the only substitute for reality in war.

In our service schools military history is used to illustrate and emphasize tactical principles and usages. Indirectly some of this instruction reaches the troops through graduates, mailing lists and articles in service magazines. Much of it is lost for want of an agency to perpetuate it in print. Much of it is prepared by officers unfamiliar with the technique of the historian. If all the effort now being put upon the study of military history in our Army, could be coordinated and directed into the most profitable channels, through the influence of the proposed Military History Foundation, great benefit to the Service would result. Admiral Vesey Hamilton, a British naval officer, remarked<sup>1</sup> that he learned more about military institutions and administrative methods from a study of how they came about than from years of practical experience. From a casual bit of historical research the evacuation system devised by Surgeon Letterman in the American Civil War was resurrected to serve our army in the World War. By historical research an officer may receive that kind of training which fits him for certain kinds of staff work, such as collecting

<sup>1</sup>Rene Tournes *L'histoire Militaire*. Paris, 1922.  
<sup>2</sup>The necessity for a compilation of a naval staff history. In the Journal of the Royal United Service Institution. Vol. LXVI (Aug. 1921) pp. 369-378.

evaluating and presenting military intelligence. It is the basis for all sound training for war.

What should be the role of the proposed foundation? What should be its functions? In *The University and Study of War*<sup>2</sup> Spenser Wilkinson said:

"If we are to turn out citizens and statesmen equipped for their functions in the actual state, we are bound to teach the nature of war," pointing out that "A study of the state or of states that should only to examine war must needs be crippled and defective. It would be like a study of the ship which should take no account of the sea." By now it ought to be plain that the superficial and emotional devices invented by the theorists have had their chance and have broken down. It is time that the universities, applying the scientific method to the study of war, were given a chance to discover what are the actual facts of war, to develop in our future political leaders and makers of public opinion the power to see things as they are, to understand and teach what war is and what it means: so that our statesmen and voters may know how best to avoid wars or at least how best to restore peace. An American Military History Foundation might take as one objective the development of a school of American military historians and critics, competent to create sound public opinion. In view of the mistrust with which the American people regard the advice of the military, considering them to have the exaggerated point of view of all specialists, we need civilian military experts. In the United States we have never developed civilian writers on military subjects of the calibre of Delbrück and Pfungk-Hartung

<sup>2</sup>Inaugural lecture delivered before the University of Oxford Nov. 27, 1909. Oxford. At the Clarendon Press, 1909.

in Germany, Houssaye and Reinach in France, or Spenser Wilkinson, Sir Charles Oman and Sir Julian Corbett in England. Except Admiral Mahan and Admiral Bradley Fiske we have had no outstanding military or naval scholars equal to Generals Camon, Colin and Bonnal in France, or Generals Sir Frederick Maurice, Colonel Sir Ernest Swinton and Admiral Aston. American soldiers read of our great commanders in the works of such British soldiers as Henderson, Maurice, Fuller and Liddell Hart. We have no group of military scholars laboring to establish an American theory of war. We need to encourage the study of military history among civilians as well as among our soldiers. The cooperation of both is necessary to produce the best results. Military history embraces three processes: The evaluation of evidence, the exercise of military judgment and the exercise of military criticism. For the first a sound training in the mechanics of historical research is necessary and, to assess the value of evidence, the scholar needs a considerable knowledge of military conditions. For the second, to determine the motives and intentions of a leader, military experience or the assistance of military men is essential. The same is true of military criticism of the decisions and actions of a commander. Today we have a studious corps of officers: hard workers, who appreciate the importance of military history. The time has come to organize this field of military culture. We can not start this organization too soon: from the moment it is organized, it will exert a powerful influence to strengthen the basis of American security.

<sup>3</sup>Best known in the U. S. Army as the author of "*The Battle of Duffer's Drift*" and now successor to Spenser Wilkinson as Chichele Professor of Military History. All Souls' College, Oxford.

## ERRATA

THE following typographical errors are noted in "The Evolution of Infantry Drill" as printed in the Infantry, Coast Artillery and Cavalry Journals. Each is material, and I should appreciate it if you would insert an errata slip, or notice, in your next issue, correcting them.

Page 29: Legend, Figure 1, 5th line—Change "1916" to read "1616"

Page 29: 2nd Column, last line of leading paragraph—Sentence beginning "Firepower was . . .", change "not" to read "now"

Page 33: 2nd Column, next to last line—Change "155" to read "155"



# Jaroslavice, 1914

## Observations and Deductions of an Infantry Officer

By Beda von Berchem\*

**D**URING the summer of 1928, accompanied by a former officer of the 1st Austrian Uhlans (the regiment still exists, incorporated in the Polish Army; it fought valiantly against the Red Russians in 1921), I followed the path of von Mackensen's victorious armies, from Gorlice to the Eastern Galician border. I had supplied myself with the excellent Austrian staff maps, and my guide's thorough knowledge of the campaign helped me to understand the various tactical and strategical problems which von Mackensen and his subordinates had to solve in 1915.

After having spent a night at Tarnopol, Rittmeister von R. suggested a visit to the village of Jaroslavice, where he had witnessed what he termed the last cavalry fight in the history of war. His regiment, the 1st Uhlans, had not participated in the short engagement between parts of the Austrian 4th and the Russian 9th and 10th Cavalry Divisions, but my guide had at his fingertips all the details of that much written-about action. Personally, I had read various accounts of that action, in many languages, including several versions published in *THE CAVALRY JOURNAL*, and, although I do not adhere to the common belief that it was the "last" cavalry action fought (there were others during the World War and later during the Polish-Russian War), the Jaroslavice action, from beginning to end, presents such a chain of errors and omission by both Austrian and Russian leaders that I came to the conclusion that an entirely different action might have been fought there, had certain principles of combat been strictly adhered to, especially by the Austrian commander.

My personal observations on the actual scene of the 1914 combat, while listening to my guide's explanations and while going over the ground, convinced me that General von Zarembo and Count Keller had violated most of the combat principles which had been taught me, an American Infantry Officer, in ten years of active service.

When I returned to Vienna, I spent some time in gathering more material, in talking to several officers who had participated in the action at Jaroslavice (Russian sources term the action that of Wolczkowce, a hamlet nearby) and, together with my notes, I began an outline of this article.

The 4th Austro-Hungarian Cavalry Division, Generalmajor (Brigadier General) Edmund von Zarembo commanding, was a part of the advanced cavalry screen, which, in August, 1914 had been charged with

the prevention of a Russian invasion into Galicia. It belonged to the Lemberg defensive sector and operated in its own sub-sector, northeast of Tarnopol. During the first weeks of August, the Division, or parts of it, had marched and countermarched, in response to many false alarms referring to Cossack invasions. Excepting one minor brush with Cossack patrols, no enemy troops had been met with. Men and horses were tired; the majority of the mounts were saddle-sore in addition.

On August 20, 1914, General von Zarembo received intelligence that a reinforced Russian Cavalry Division had invaded Galicia near the city of Zolozee. Without convincing himself of the truth of this report, von Zarembo immediately issued orders which indicated his decision to meet the enemy. The 4th Cav. Div., in bivouac in and around the town of Suchowola, was set in motion toward Podkamien. Arriving there, the troops took up positions.

At Podkamien, von Zarembo received further intelligence. The Russian forces were definitely identified as the 9th Russian Cav. Div. under the command of Prince Begildejeff, supported by considerable infantry and artillery. The report stated that the Russians had marched via Olejow toward Zborow. General von Zarembo thereupon continued his march in a southwesterly direction in two columns. The two battalions of the 35th Landwehr Infantry Regt., attached to the 4th Cav. Div., were ordered to Harbuzow, while the mounted troops' destination was Kruhov, 40 kilometers distant. The 4th Cav. Div. arrived there late at night. General von Zarembo intended to attack the enemy early in the morning (August 21, 1914).

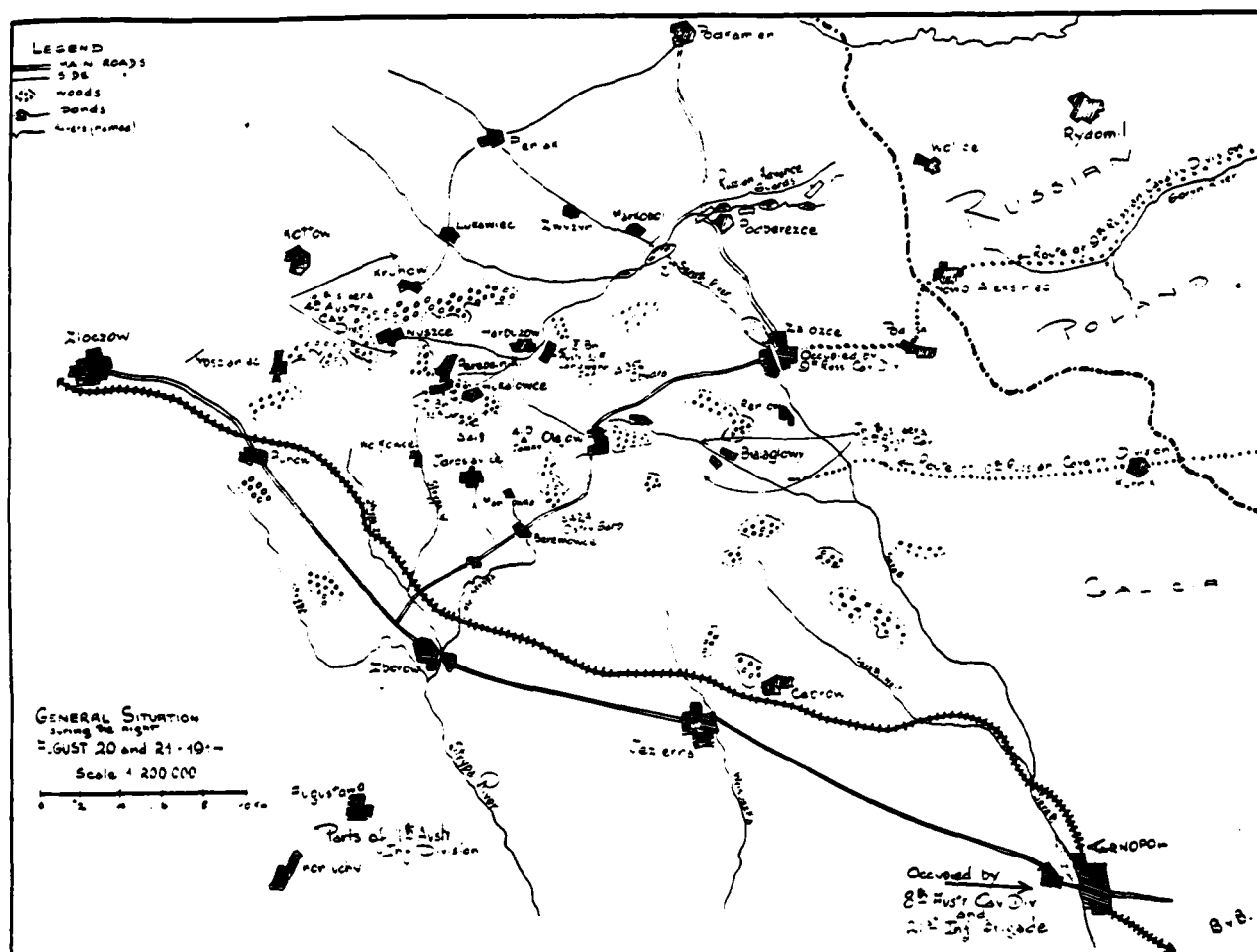
In order to present a clear picture of the situation, it is necessary to consider a field order, originating at headquarters of the Austrian IXth Corps, which indicated that the Corps Commander planned a concerted, cleverly thought-out, enveloping action which was to be executed by the 4th Cav. Div. in conjunction with the 8th Cav. Div. and the 11th Inf. Division. For reasons which are outside the scope and purpose of this article this enveloping action was never carried out, although it could have been brought about, had von Zarembo's leadership come up to a different standard. The order is mentioned here because the belief that either of these divisions might come to his assistance influenced von Zarembo in his disposition, although he alone is to blame for not establishing proper liaison with the other Austrian troops. Had he done so, he would have become aware of the pres-

\*The first reports were incorrect.

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ence of the 10th Russian Cav. Div. (Lt. General Count Keller) on his right flank. As it was, von Zarembo knew nothing of Keller's whereabouts—and neither did Count Keller have definite news about von Zarembo's forces. He only had "felt" the vicinity of Austrians. His numerous patrols had failed to locate them. He, so to say, stumbled upon the 4th Cav. Div. when he had reached the Berimowka Heights!!!

For later purposes let us keep in mind the strength and positions of the other Austrian units on the morning of August 21, 1914. The available strength of the 11th Infantry Division, 5 battalions, 6 batteries and two troops of cavalry had arrived at a point 5 km south of Zborow. Only the 11th Inf. Div. and the 8th Cav. Div. had had an opportunity to discuss the action planned by the IXth Corps' commander; the 4th Cav. Div. had not. Thus, the three groups, with orders for a joint action, passed the night from the 20th to the 21st of August, 1914, as follows: The 4th Cav. Division 10 km northeast, the 11th Inf. Div. 30 km southwest and the 8th Cav. Div. 30 km southeast of Olejow.

In accordance with von Zarembo's orders, the 4th Cav. Division, at 4:00 A. M., August 21st, stood ready

to advance, southeast of the hamlet of Nuszee. Two officers' patrols were sent out toward Olejow and Zolozee. A platoon of the 15th Dragoons was dispatched toward Zborow to establish contact with parts of the 11th Inf. Div. However, von Zarembo neglected to send out reconnaissance patrols toward the southeast from where Count Keller's regiments were approaching.

At 5:00 A. M. the main column started southward, to gain the commanding height, Hill 415. The two battalions of the 35th Landwehr were ordered to occupy Hill 416, near Jamny. I have been unable to ascertain whether or not the march was carried out with the usual precautions. My guide believed that only points and advance guards preceded the main column, but that the hilly terrain forbade flankers.

Von Zarembo believes the enemy to be far away. (But Count Keller's troops have already passed Jezierna, between the 4th Cav. Div. and the 8th Cav. Div.). The 15th Dragoons are in the van of the marching column, one platoon of the regiment covers the left flank. It has been so disposed by the regimental commander!

Hill 418 is reached.

\*A pseudonym.

The reader will permit a digression here. The view is too vivid in my mind, and the detailed map will aid in visualizing the scene:

Hill 418 affords a splendid view of the country. Olejow, to the east and directly in front, cannot be seen. It is hidden by a chain of low hills, stretching from Jamny to the Berimowka, a wooded, round hill-top. Directly in front of the onlooker on Hill 418, about 3500 yards away, on a plateau, lies the village of Jaroslavice; to the right, in the swampy valley of the Strypa River, is the small hamlet of Wolczkowce. A large farm, Bezdonie, is just outside of the village. Zborow, invisible, is to the south. On the left of the onlooker is another large estate: Lipnik.

Hill 418 is the hub from which three chains of hills radiate. The one to the east is narrow, wooded. Its main elevations are Jamny (416 m), Berimowka (428 m) and Ostry Garb (424 m). This chain dominates the central main chain of rolling hills. Jaroslavice is situated on this main chain. Behind Jaroslavice (westward) is the Strypa River, winding its sluggish way through a swampy defile, which is cut, diagonally, by erosions in the soil and several deep ditches. A stone quarry is between the village and the narrow road to Wolczkowce. Westward, beyond the river, is another chain of hills, partly wooded, partly planted.

The woods on these hills are not always of the same variety. Coniferous trees alternate with thickly grown patches of maples, oaks, birches and dense undergrowth. The slopes of the hills, when not wooded, are a patchwork of small, planted acres. Some of those already show stacks of grain sheaves.

Rittmeister von R. told me that the topography had not changed in the 14 years which had passed since the action took place. He even led me to the swamp behind Jaroslavice where 8 Austrian guns had been lost, and we still were able to find relics of those unfortunate batteries, salvaged, after the action, by the Russians.

This, then, was the view which confronted von Zarembo and his staff.

While impatiently waiting for his reconnaissance patrols to return, von Zarembo gave credence to one of his staff officers who believed he heard gunfire from the direction of Zborow. (There actually had been two detonations. Keller had sent 4 sotnias of Orenburg Cossacks toward Zborow, on his left flank, and one of those sotnias had set off two charges to destroy the railroad.)

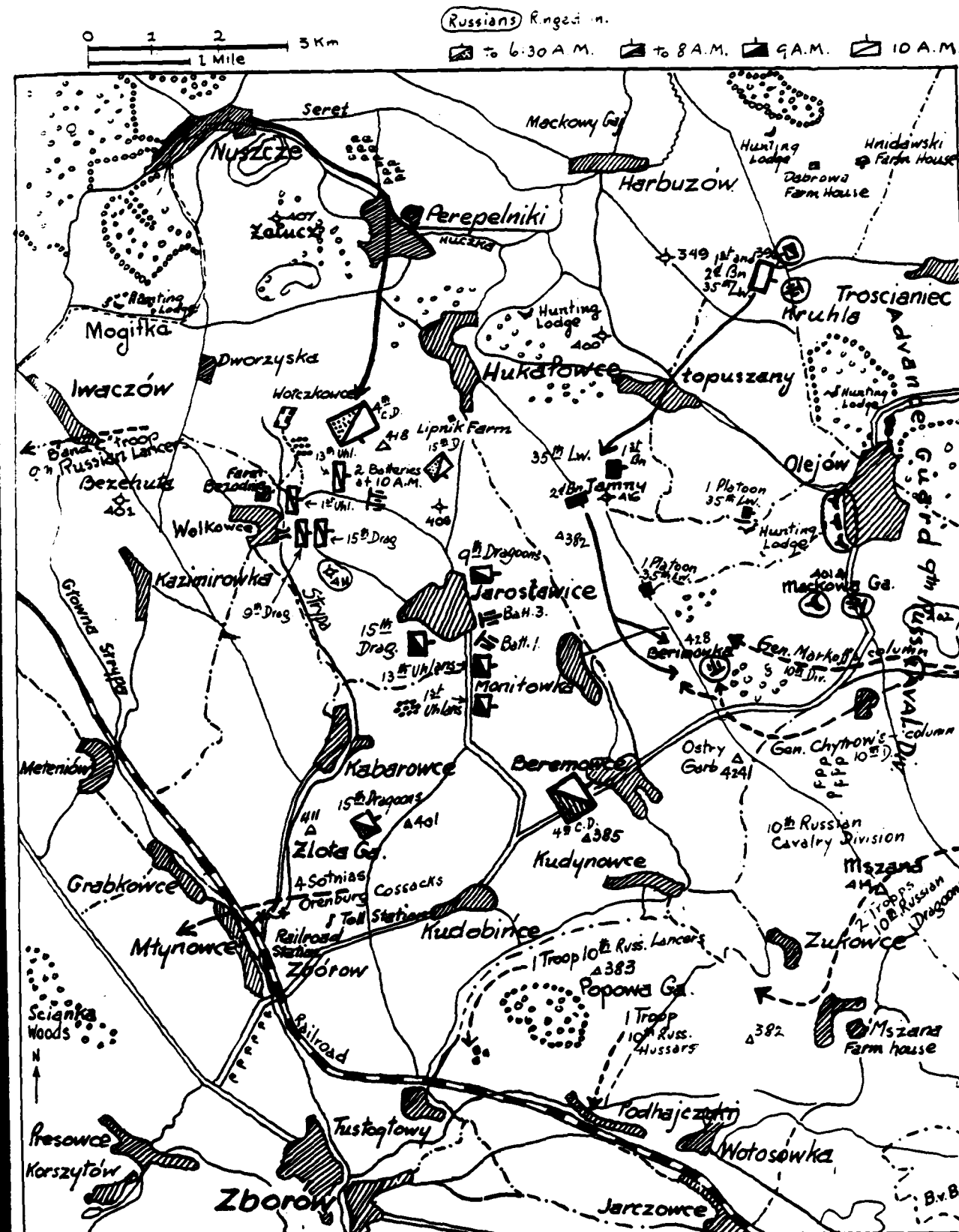
Without checking up or making sure, von Zarembo immediately concluded that either the 11th Inf. Div. or the 8th Cav. Div., or both, had encountered the enemy and that he would come too late to participate in the action. The fact that he supposed gunfire could not be heard any longer does not seem to have had any importance whatsoever. Now comes the first unbelievable fact: Without awaiting the results of his reconnaissance, he sets his division in motion toward Zborow. (It is equally important to note that no orders for the march were issued, nor had he given any

dispositions, in case of an emergency, to his brigadiers!) The Division passed Jaroslavice at or about 7:00 A. M. Von Zarembo had not the slightest idea of the actual whereabouts of the 9th Russian Cav. Div. and he was in blissful ignorance of Count Keller's (10th Russ. Cav. Div.) immediate vicinity. Count Keller was equally unaware of Austrians in force in front of him. Leisurely, in the brilliant sun of an August morning, a dust cloud high over their heads, (seen by Keller) the division moved on. Two regiments in front, one each, in echelon, on the right and left, the mounted batteries in the center (how they could have got out quickly in case of an attack, is another point which I failed to have explained) the column passed Manilowka. The 2000 infantrymen of the 35th Landwehr are marching on the left flank. At this moment the officers' patrols return with important news: Russians in force, cavalry with strong artillery, are reported east and north of Olejow. The advance of Russians, via the Berimowka heights, is also reported. Zborow is free of Russians, but neither have elements of the 11th Inf. Div. reached that town. Now von Zarembo realizes that he has advanced too far. While he is still considering the reports, another one reaches him to the effect that Russian cavalry and artillery have already occupied the Berimowka Hill and that the guns may be expected to open fire at any moment.

Imagine the situation:

The 4th Cav. Div. is out in the open, in anything but a favorable place for either defense or attack. Hills 418 and 416 have been left behind, cover is not available and, in column on the open plateau, the Austrians must be seen by the Russians on the Berimowka. Von Zarembo is now forced to invert his front, a very difficult and dangerous maneuver in the face of the enemy. However, his troops are well trained, and his orders are carried out with precision. The batteries take up the indicated positions and, in doing so offer splendid targets to the Russians. The four cavalry regiments are still wheeling about when the last of the reconnaissance patrols arrives with the dire news that Russian gunfire may be expected any minute. The time is now 9:00 A. M.

Von Zarembo must have wished that he had never left Hill 418. He now issues orders to reoccupy it and orders the 35th Landwehr to that hill and to also occupy the Lipnik farm. The infantry falls in, ready to move back. The cavalry and artillery are disposed about the village of Jaroslavice. The guns are posted about 550 yards south of the village, east of the highway. On the right, in echelon, are the Uhlan regiments. On the left, behind the batteries, in double column, with sufficient intervals for rapid deployment, are the 15th Dragoons. The 9th Dragoons are on the march toward the eastern end of Jaroslavice. Everything is moving, except the infantry which has just fallen in. It is a veritable beehive of activity, right under the eyes and noses of the Russian batteries on the Berimowka heights. And, naturally, at this moment the storm breaks.



Not only from the Berimowka heights, but also from the wooded heights east of Olejow, Russian guns begin to thunder. From the woods north of Olejow and from the direction of the Berimowka chain of hills sounds the staccato of Russian machine guns. Caught under a hail of machine gun bullets and shrapnel, the men of the 35th Landwehr break. Troops which have fought valiantly before and which are to fight bravely later during the war, now run like frightened rabbits, discarding their equipment. Only the advance guard, taking cover, engages advancing units of the 9th Russian Cav. Division. Most of the advance guard either die where they stand or are taken prisoners; none come back.

Although the Russians' gunfire was shifted to bear on the cavalry units, the losses of the mounted men were only slight. The discipline of the cavalrymen was far superior to that of the infantry. They did not break. Runaway led-horses of the M. G. Det., 1st Uhlans, caused a slight panic which was quickly subdued, and soon the four regiments were reassembled in the valley of the Strypa, east of Wolezkowce, where cover was available. The batteries had been able to exchange a few shots with the Russians. (Austrian batteries had only 4 guns, the Russians 6.)

The guns now had taken up positions on a low hill, southeast of Wolezkowce, and with their 8 guns took up an unequal duel with 18 to 24 Russian pieces. The well executed Russian surprise attack had forced von Zarembo into a position which proved his undoing. To the left he had the swampy lowlands of the Strypa, to his right were the hills, containing Hill 418; beyond that was the narrow plateau which, unknown to him, the head of Count Keller's 10th Cav. Div. was about to enter, approaching through the various folds in the undulating terrain.

Those readers who are familiar with the topography of the terrain north of the Kaw River, where Camp Funston stood in 1917-19, can easily picture the scene of the conflict. The hills about Jaroslavice were about twice as high as the knolls north of Camp Funston. But—the same folds in the terrain, as there, are typical of the country about Jaroslavice.

Incredible as it may sound, during the following maneuver of his 4 cavalry regiments, both Brigade Commanders, with their staffs, were with the general commanding the division. The regimental commanders were left to their own resources and, as we shall see later, did not exactly act in a manner which would have coordinated their movements.

As stated before, von Zarembo had issued (verbal) orders to reoccupy Hill 418, also Jamny Hill. With him, the saving of the mounts was always paramount. For this reason his order included an admonition to "take care of the horses." The 1st Uhlans were now moving northward. The difficult terrain brought this regiment not, as intended, directly behind Hill 418, but to a large farm, situated about 2000 yards northeast of Wolezkowce. The Uhlans lined up, facing east. The 9th Dragoons joined them there, lining up behind the 1st Uhlans, also facing east. The 15th Dragoons

had, at first, followed the 1st Uhlans, using a narrow country road which was teeming with infantrymen in the process of reorganization. This road leads directly to the crest of Hill 418. I walked the whole length of it and wondered how it was possible to use it in the manner described. It is very narrow, and a column of infantry, in column of squads, would fill its width. The dragoons got as far as the bottom of Hill 418. There, the infantry blocked further progress. A detachment of the 35th Landwehr was dispatched toward Lipnik, thus making room for the Dragoons, who now began to wheel into line and ascended the slopes. At that moment the 13th Uhlans galloped past. Relieved as artillery support (the guns were changing positions once more) the Colonel of the 13th Uhlans, without direct orders and probably acting on intelligence received that strong enemy cavalry was moving on Wolezkowce, intended to gain the Russian right flank by a gallop to the north. The intelligence was wrong. (Another case of insufficient reconnaissance and acting on hearsay without checking up. As we shall see, this Colonel's unpremeditated action contributed to the loss of the engagement.) The first squadron, emerging on the plateau east of Jaroslavice, saw no Russians and galloped on, northward. The second squadron, commanded by Major Vidale, troops C and A, perceived the main column of the Russians 10th Cav. Div. (10th Dragoons, 10th Lancers) emerging from a fold in the terrain. Major Vidale immediately attacked, hitting the Russians in the left flank.

The Austrian Division Commander with his staff (both Brigadiers with their respective staffs were still with him!) also caught sight of the Russians at that very moment. In fact, he had just received the news of their immediate vicinity. Von Zarembo caused his staff trumpeter to sound the call "To the attack!" Behind him, the 15th Dragoons were coming up the wooded slopes. The troops' trumpeters took up the call (Austrian regulations) and, with Troops A, D and F in line, Troops B and E in echelon on the right and left, the 15th Dragoons got over the crest onto the plateau. At the head of the Dragoons, two Brigadier Generals and one Colonel Brigadier, with their staffs, rode, with drawn sabres, to attack the Russians. Not one of those staff officers ever thought of advising or sending word to the other regiments of the impending action. Von Zarembo had believed that his bugler's high-pitched trumpet would be heard by the 1st Uhlans and the 9th Dragoons, and, very likely, his staff officers shared his belief. At any rate, 12 troops were kept idle within striking distance, and nobody ever thought of issuing the absolutely necessary orders. However, the other two regiments did not participate, because they could not hear nor see from where they stood.

Both parties, after the clash, retreated, after a flank attack by superior Russian forces had caused the Austrians to leave the field with the loss of their guns, mired in the swamp. On retreating, von Zarembo tried to rally his division but was prevented from doing so by the Russian artillery which had been brought forward. On the morning of the 22d of Au-

gust the 4th Cavalry Division was assembled again behind the Bug River and two days later, near Krasne, was ready for renewed action. The Austrian losses were considerable.

The movements of Count Keller must be cited here. Count Keller had crossed the Galician border, marching south of and parallel to the 9th Russian Cav. Div., near Kurniki and Wertelka, on the 20th of August, 1914. His men bivouacked during the night in an about Bialaglowy. Count Keller had orders to make a reconnaissance toward Zborow. His own orders were to that effect, and so he leisurely proceeded westward. Knowing that the 9th Russian Cav. Div. was on his right, he did not send out combat patrols. Of his Brigadiers, General Markoff also failed to send out patrols. The other Brigadier, Gen. Chytrow, dispatched two troops of the 10th Dragoons toward Zukowce, one troop each of the 10th Lancers and 10th Hussars toward the railroad and 4 sotnias of the Orenburg Cossacks had orders to conduct a reconnaissance toward Zborow (where the Russians believed the 4th Cav. Div. to be) and to destroy the railroad. If we consider these dispositions in their true light, the Russian General was just as negligent as his Austrian opponent. None of the Russian patrols found nor located the 4th Cav. Div.

When the Russian column neared the Beremowka heights, it was Markoff who sent out patrols. These also failed to see or hear the Austrians. The dust cloud above von Zarembo's marching column disclosed the presence of Austrian troops to Markoff. Naturally, when the Russians gained the heights, they could see the Austrians before them. After that, it was easy to make the necessary preparations. And still—when Vidale attacked, Count Keller was just as surprised as von Zarembo. The rifle fire which Count Keller had heard gave him the impression that Prince Begildejef's column had met the Austrians. For this reason the direction of Count Keller's march was changed to the northward. It is more likely that, had Count Keller marched further westward, Austrians and Russians would have passed one another, not knowing about the close proximity of the enemy.

However, the negligence of Count Keller, expressed by the absence of combat and reconnaissance patrols, his personal conduct during the night of August 20th at Bialaglowy, is a sufficient reason to conclude that his success in the action was more due to luck than to good management.

Let us return to the morning of the 21st of August, 1914. Let us assume that the 4th Austrian Cavalry Division is commanded by a General who has learned somewhere those principles of command which subjugate tradition to ordinary common sense. Let us also presume that the Brigade Commanders and the staff officers operate in accordance with the same military doctrine.

My guide, once an Austrian officer, told me that von Zarembo's and the other officers' action in placing themselves at the head of the attacking 15th Dragoons

was actuated not only by Austrian tradition but also by an assumed effect on the troopers' morale. Be that as it may, Austrian officers, as military history recounts, have always been noted for personal bravery. But personal bravery must take a backseat when the success of an action depends on the issuance of proper orders for that action and personal and direct supervision of the Commanding General of all troops at his disposal.

All elements for a tactical and strategical success were given, yet von Zarembo missed a decisive victory because

- he failed to await the results of his reconnaissance which, in itself, was not very well planned.
- he failed to estimate the situation before making his dispositions, which, as we have seen, were really made on the spur of the moment and as the result of faulty intelligence.
- he failed to issue the necessary orders which would have led to proper liaison between all of his units.
- he permitted his personal desire to take part in the action to cloud his judgment and
- because he took too much for granted and paid too little attention to facts as they were.

What he should have done was to make sure of liaison with the 5th Cav. Div. and the 11th Inf. Div. The sum-total of his information would have told him that the troops of the 11th Inf. Div. were far too tired to reach a point from where they would have been able to participate in the originally planned enveloping action. He would have made allowance for the slower moving infantry, and his own advance or actions would have been governed accordingly.

He would have, likewise, obtained information about the 5th Cav. Division's movements and whereabouts, which information would have served a twofold purpose. An attempted liaison with the 5th Cav. Div. (the one platoon, 15th Dragoons, never got there) would have disclosed to von Zarembo the approach of the 10th Russian Cavalry Division under Count Keller. A look at the accompanying map will justify this assumption. The 5th Cav. Div. was at Tarnopol. The shortest route lay through territory through which the Russians were advancing. It is obvious that combat patrols, sent out, would have either encountered the above mentioned patrols from Gen. Chytrow's column or would have ascertained the presence of Russians southeast of von Zarembo's position.

In fact, von Zarembo did not even attempt to establish liaison. He merely sent out officers' patrols into directions where he believed the Russians to be and that belief, in itself, was founded on wrong information which he permitted to stand, unchecked and unverified. Had von Zarembo kept in mind the field orders of the IXth Corps, he would have, at least, issued, (assuming, of course, that he had no other alternative), orders for the march, clear cut orders covering all eventualities and leaving no room for his subordi-



nates to guess at the intentions. Even that he failed to do. On the other hand, the intentions of the IXth Corps Commander were clear, and the hilly terrain about Jaroslavice offered the best possible opportunity to trap the Russians. Von Zarembo, awaiting the results of his reconnaissance, should have remained, under cover, at Hill 418. His mission, really one to attack the enemy, called for dispositions which are almost the same as for a counterreconnaissance. At any rate there should have been strong combat patrols on all highways and the country roads. The same goes for Count Keller. It is difficult to say which of the two was the greater sinner.

There are many lessons to be drawn from the Jaroslavice action. To me, the most poignant are these:

1. Proper reconnaissance and the establishing of liaison with units operating under the same orders are of paramount importance.
2. The results of reconnaissance must frequently be awaited. This does not necessarily mean "awaiting at a halt." If proper security measures are taken, the command may get ahead in the desired direction. It is largely a question of the commander not making any unjustifiable detachment of troops on missions of imagined importance nor making any unwarranted assumptions about an enemy of whose movements or whereabouts he knows nothing.
3. The Division Commander's place is at his post of command, whether in the saddle or dismounted. He has no business at the head of charging troops.
4. Proper orders must be given to all units of the command, which must not be left in ignorance of the situation. Since orders covering all eventualities cannot be given in advance, the best order, in case of insufficient information, is a march order, withouts "ifs," "buts" or "ands."



5. Reconnaissance, when carried out, should be in the hands of reliable and able scout officers or non-coms. The ill-effects of poor reconnaissance cannot be removed by subsequent assumptions.
6. Never take anything for granted. If in doubt, stay where you are until the enemy is definitely located or move with security elements properly disposed.

In conclusion, I wish to say a word about brave soldiers, who had the misfortune, at least in 1914, to be led by officers above the rank of Captain, who did not always come up to a higher standard. In the Austrian Army, the rank and file believed that the taking cover was a sign of cowardice. That no steps were taken by the Austrian staff to correct this mistaken idea of valor accounted for the tremendous losses suffered during the first months of warfare. In the Austrian Cavalry, there had always been a tendency to save the horses. Von Zarembo was one of the Division Commanders who saw red when one of his subordinates taxed the full strength of his mounts.

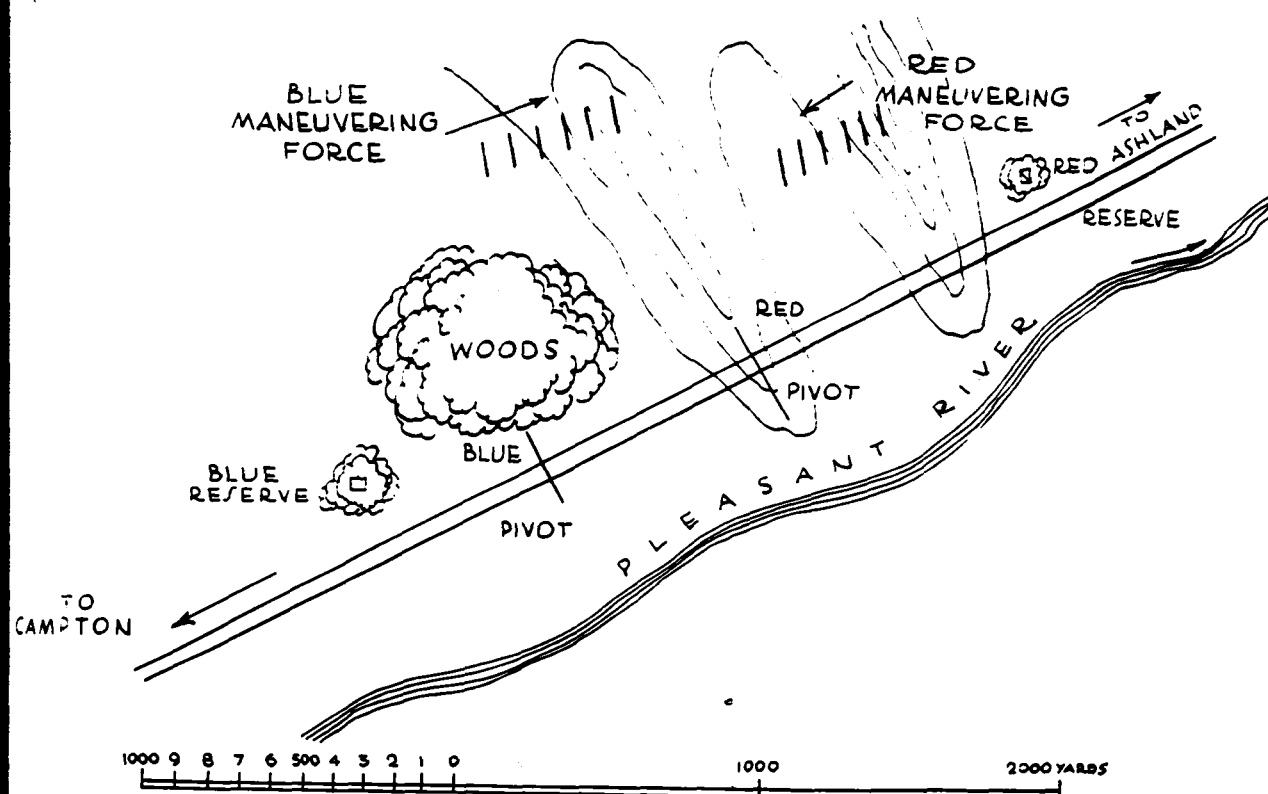
The Austrian cavalry, after Jaroslavice, did not have another chance to prove its mettle as such. Dismounted and used as infantry, they fought heroically and what Cavalryman's heart does not swell with pride when he reads of the spirited charge of the Hungarian Hussars at Limanova which decided the day in favor of the Austrians. And—this charge was delivered on foot, with the butts of the carbines used as clubs!

Of such men (so my guide insisted, and so regimental histories tell me), the 4th Austrian Cavalry Division was composed. That it met with an adverse fate at Jaroslavice was not the fault of the subaltern and the trooper. The blame rests squarely on the shoulders of General von Zarembo and his staff officers.

Jaroslavice is a glaring example of faulty leadership and a most striking exposé of a combination of errors by two opposing Generals of Cavalry.

## NOTES FROM THE CHIEF OF CAVALRY

### What Would You Do in a Situation Like This?



A BLUE regiment of cavalry is proceeding north-east towards an expected contact along the Camp-ton-Ashland Road. The maneuvering flank is predetermined, since there is not sufficient room between the road and the river. The ground on the other side of the road is a fairly flat plain with occasional ridges and isolated hills.

Contact is established. Colonel O. Howe Mobile reinforces the advance guard troop with the machine gun troop and thus builds up a very satisfactory pivot of maneuver. He retains a troop of the leading squadron as reserve.

Colonel Mobile does not devote a great deal of time to personal reconnaissance. The enemy's right is, of course, indicated as the objective of any turning movement. He has even been tempted to have the maneuvering force detach itself from the column as soon as firing might be heard to the front. However, he has compromised by having the commander of the squadron already designated as the maneuvering force with him during the march towards contact. A glance to his left now satisfies him that there is sufficient cover to screen the movements of the maneuvering force from enemy observation.

Colonel Mobile now turns to Major Marshal Ney Whitney and orders him to move out with his squadron against the enemy right. He tells him to make

a considerable detour, disregarding the dismounted pivot, and to attack the supporting troops. The Red force is known to be composed of a regiment of cavalry.

Major Whitney moves off to carry out the familiar maneuver. He decides to proceed across country in column of platoons as foragers, with increased platoon distances. The squadron moves at a sharp trot, with a covering force of scouts well in advance. The ground is fairly open; at least, it gives the general impression of a plain. This is rather deceptive, however, because at a distance horsemen can hardly be distinguished on account of brush and folds of the ground.

Suddenly, as Major Whitney is topping a rise, he sees several of his scouts galloping back from the front in great haste. They had evidently met the enemy at the top of a ridge about 1000 yards distant. Enemy cavalry is now pouring down the slope in a formation that appears to Major Whitney to be similar to that of his own force, except that the enemy front is not covered by scouts. The leading elements are at a distance which Major Whitney estimates to be 600 yards.

Without a moment's hesitation, Major Whitney gives the command, "to fight on foot."

Would you have done the same? And, if not, why not?

(For Discussion, Turn to Next Page)



## Solution

Major Whinney should keep his command mounted. He could take a brief moment to allow his command to close up and to see whether the enemy column alters its direction. If it does not, the advantage will be Major Whinney's, of course, since he can then fall on the enemy's flank. In any case, he should be able to make a successful mounted charge, because the downward slope will favor him. The ground, being rough and obstructed by bushes, is not adapted to a charge in close order with the saber. So, Major Whinney would do well to retain the dispersion as foragers and to attack with the pistol.

## Discussion

Six hundred yards is about one-third of a mile. If the enemy changes direction upon seeing the head of the Blue force and moves upon it at the extended gallop (16 miles an hour) at once, the leading horses will cover the distance in a minute and three-quarters. This is too short a time for the Blues to dismount and form an effective firing line. The enemy will be on them before a large proportion of the riflemen are in position to fire. The light machine guns will not have a chance to get settled and functioning smoothly.

The formation (column of platoons as foragers) is a very good one for advancing across country, but it is not favorable to dismounting to fight on foot. In fact, before giving this command (assuming that the situation had favored dismounted action), the major should have caused his command to form line of troop columns, or of platoon columns, since column of fours is the normal formation for dismounting to fight on foot. One may conclude that it would have been better if Major Whinney's squadron had already been in line of troop columns or of platoon columns; many prefer this formation of a maneuvering force as being most adaptable to any contingency, since the men can dismount to fight on foot without preliminaries and since column of platoons can be formed from it in a short space of time, if mounted action is indicated. Of course, under modern conditions, this formation would not be the line of troop columns of the drill ground but would be opened out so as to be of slight vulnerability to surprise fire and attack from the air; that is, there might be 25 yards distance between fours and 5 yards interval between troopers.

But, even if the squadron had been moving in line of troop columns, there would not have been enough time to form an effective firing line before the arrival of the enemy, in case he moved aggressively. And the only safe assumption is that he will so act. In any event, it is best to stay mounted when in such close proximity to a mounted enemy.

## Carry On

ON account of the personnel requirements of the Civilian Conservation Corps, the classes at the Cavalry School were graduated on May 22, 1933. The Chief of Cavalry, who was unable to be present at the graduation exercises, sent the following letter to the Commandant and a message to the graduates:

WAR DEPARTMENT  
Office of the Chief of Cavalry  
Washington, D. C.

May 17, 1933.

Brigadier General A. G. Lott, U. S. A.,  
Commandant, The Cavalry School,  
Fort Riley, Kansas.

My dear General Lott:

I am inclosing herewith a couple of copies of marks I would like you to please bring to the attention of the command at the Graduation Exercises, by any other means that you consider proper. Many things, such as the reduction of pay, rumors of officers, failure of banks and general depression have done much to undermine the morale of the Army. From reports which have reached me I am of the opinion that the Cavalry has been less affected than the rest of the Army as a whole. I believe that this is due to our high basic esprit and the activity and leadership of our senior officers.

However, a word of encouragement from the Chief of Cavalry to the members of your command, and especially the junior officers and married enlisted men so harassed by financial difficulties, I believe will do no harm. All of this class must do double duty if they remain at home and strange and very difficult duty with separation from their families, if they go with the C.C.C. Duty with the C.C.C. will require the highest type of manliness and leadership, separation from families and frequently living in isolated places. The duties will be hard and the trials many. Little will be seen of the great staff and supply problems with which the Army is confronted in its recruitment, organization and transportation of 275,000 men between now and July first. This requires the receipt at the rate of 8,500 per day which is greater than the combined average of the Army and Navy during the World War—and this all done with little preliminary planning and under many difficulties, making it truly unequalled but in few military campaigns.

Wishing you all the greatest success and expressing my thanks for the excellent work done by the school during the past year, I remain

Yours very sincerely,

GUY V. HENRY,  
Major General, U.S.A.,  
Chief of Cavalry.

I have asked the Commandant the Cavalry School to express to you my disappointment at not attending your Graduation Exercises. The date of these exercises has been advanced because of certain duties delegated to the Army by the President as a result of a serious national emergency—an emergency far reaching and much harder for the soldier to face than that of war. The Cavalry has always been proud of its esprit, loyalty and courage, and I have never yet come in contact with a Cavalry command where these virtues were not outstanding. Let's keep them so, you men and women of the Cavalry, during these difficult days and their many depressing and oftentimes unfounded rumors.

May-June, 1933

May-June, 1933

Notes from the Chief of Cavalry

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go to your new stations—and for many of you to your strange and untried duties—with the courage, stamina and determination of the Thoroughbred horse we all love so well. Let him be your example in the days ahead; if you do, it will make a hard road easier. You will not join the ranks of the "complainers"; you will retain your self respect and show the spirit of true Cavalry leadership so well exemplified in the mottoes of the 9th and 13th Cavalries—"WE CAN—WE WILL" and "IT SHALL BE DONE."

The spirit of these mottoes the Cavalry relies on you to follow and the best wishes of the Chief of Cavalry go with you.

GUY V. HENRY,  
Major General, U.S.A.,  
Chief of Cavalry.

## State and Regional Small Arms Competitions, National Rifle Association

ALTHOUGH confronted with the loss of the Camp Perry National Rifle and Pistol Matches for the second consecutive year as a consequence of the government's farflung economy program, the rifle and pistol shots of the Regular Services, National Guard, Reserves and other units of the national defense, as well as the shooters from civilian ranks, will not be deprived of their annual battle for the national championships and trophies of the National Rifle Association.

The rifle association will in a sense bring Camp Perry to the door of those shooters whose penchant is for .30-caliber rifle and pistol and revolver competition. This will be accomplished by the holding of state and regional meets, now in process of organization, which will eliminate long miles of travel by the contestants.

All the N. R. A. championship trophies, rated as the finest collection of trophies of any sport in intrinsic, historic and artistic value, will be placed in competition from the Wimbledon and Leech cups, which have been contended for annually since 1875, down to the latest of awards. The championships and winners of the trophies will be determined on the basis of scores fired at all the regional and state tournaments. This plan differs materially from the system followed last year when the government's pruning axe first nipped off the Camp Perry matches. That year the National Rifle Association sponsored regional matches but assigned certain of the trophies for exclusive competition at certain of the shoots. The Wimbledon cup, for instance, was assigned the Sixth Corps Area shoot, and only those marksmen who competed at that meet were eligible to win the trophy even though others of the sectional shoots included the firing of the Wimbledon cup course on their program.

Only the small-bore rifle shooters will have one central tournament all their own. The small-bore championship matches will be a complete national affair and will be held at Camp Perry from Monday, August 28, to Labor Day, September 4. The rifle association has awarded all its trophies in this field of marksmanship contests to the Camp Perry meet and all aspirants to the honors in the .22-caliber competitions will have to

fire their scores at that shoot. Prospects are that virtually every state of the country will be represented in the matches.

The high-powered rifle ranges at Camp Perry will also see much action, for one of the state .30-caliber championship meets has been slated for there beginning August 26 and continuing through August 28, the day on which the small-bore activities will get under way.

No complete national shoot was held at all last year. A small-bore shoot was held at Camp Perry, but it was strictly a regional shoot, and only a portion of the small-bore trophies were allotted it, the others being apportioned among other regional tournaments.

The President's Match will undoubtedly be the most popular match in the state and regional .30-caliber rifle meets. It is the richest of all American matches in point of awards and it determines the makeup of the "President's Hundred," a group that all shooters are zealous to attain. The 100 high riflemen in this event comprise the "President's Hundred," and each is presented with a distinguishing insignia which every winner finds cause to cherish.

The oldest of the trophies for which the marksmen of the country will battle is the famous Leech cup, competed for at 800, 900 and 1,000 yards.

Next in point of age and historic interest is the Wimbledon Cup. The course of fire for this trophy is 20 shots at 1,000 yards.

Other .30-caliber rifle and pistol trophies which will claim the attention of the contenders this year are:

Maj. Lee O. Wright statue, presented in 1925 by Maj. K. K. V. Casey in memory of Major Wright and awarded in the N. R. A. grand aggregate.

Camp Perry Instructors' trophy, presented in 1918 by the Camp Perry Instructors' Association.

Coast Guard trophy, presented in 1930 by the Coast Guard and awarded to the winner of the Coast Guard rapid-fire match.

The Crowell trophy, presented in 1925 by Benedict Crowell, a past president of the National Rifle Association and a former assistant secretary of war.

The Marine Corps Cup, presented in 1909 by the officers of the Marine Corps.

The Scott trophy, presented in 1925 by Col. Frank A. Scott.

The Navy Cup, presented in 1923 by the U. S. Navy.

The Herriek trophy, presented in 1907 by the late Myron T. Herriek, a former governor of Ohio and ambassador to France.

The Infantry trophy, presented in 1922 by the U. S. Infantry.

The Enlisted Men's team trophy, presented in 1910 by the enlisted men of the Marine Corps.

The Rumbold trophy, presented in 1910 by Brig. Gen. Frank M. Rumbold.

The A. E. F. Roumanian trophy, presented in 1919 by the Roumanian government at the inter-allied rifle competition in France.

The Col. Gilliard H. Clarke pistol trophy, purchased in 1928 in accordance with a bequest of Capt. Edwin H. Clarke. (From Official Release, National Rifle Association.)

**Tschiffely's Ride**—A. F. Tschiffely—Simon & Schuster (\$3.00).

This is the story of a ride on horseback from Buenos Aires to Washington, D. C.—probably the longest journey of the kind ever made. It is a modern Odyssey that far outshadows some of the classic adventure of earlier times.

For nine years Tschiffely was a schoolmaster in an Anglo-American school in the Argentine. During this period he developed a profound admiration for the native Creole horse, and soon the idea of testing his courage and endurance was born. This idea developed into a determination to attempt to ride from the capital of the Argentine to New York City. Such an experience would also give relief from the long months of monotonous schoolroom duties.

Tschiffely's only companions on this adventure were two sturdy Argentine Creole horses—*Gato* (the Cat) and *Mancha* (the Stained One)—“thoroughbred in nothing except courage.” They were 16 years old when they started,—almost 19 when they finished.

Tschiffely's trail took him through the Argentine, three times across the Andes, through Bolivia, Peru, Ecuador, Colombia, Panama, Costa Rica, San Salvador, Guatemala, Mexico, across the Rio Grande at Laredo, thence to St. Louis and, finally, to Washington. His original plan of finishing his ride in New York City was abandoned after two fairly serious accidents with motor cars. These decided him not to further expose his horses to such danger. In this long trip two short stretches were necessarily made by boat,—one from Cartagena to Colon, because of impassable swamps; and the other to sidestep a revolution in Nicaragua.

Tschiffely and his two pals travelled 10,000 miles over every conceivable kind of terrain: thrice across the Andes, sometimes on narrow ridges three miles high; over swamps and deserts and through tropical jungles. For thirty long months they worked their way northward. Once mistaking the trail in the dark, he unwittingly tried to force his mount over a precipice. Dismounting and striking a match to see why the animal would not go forward, a ripple went down his spine when he discovered that the animal had saved him from a fall of hundreds of feet. On another occasion, while crossing Ecuador, he heard that part of the trail had been swept away by a landslide and was warned that a man and his mule had fallen down trying to cross. A detour would have taken two or three long days and as he had some doubts about the truth of the report, he decided to go and see for himself. When he reached the spot a glance at the broken off rock, some eight feet, convinced him that it would be running too big a risk to try to jump the gap. There was no alternative but to return and make the de-

tour. *Mancha* was the saddle horse that day and was in front. *Gato*'s pack needed adjusting and Tschiffely was working on this when he noticed *Mancha* moving toward the spot where the trail was missing. Before he could stop him *Mancha* jumped and landed safely on the other side. “My joy,” writes Tschiffely, “at this ticklish feat soon changed into consternation when I realized our real situation. Here was I on one side with *Gato* while *Mancha* was on the other as unconcerned as if nothing had happened: as if he had only jumped across an arroyo in the pampas and not across a gap where he would have fallen down several hundred feet if he hesitated or slipped. We all know that an eight-foot jump is not much for a horse; but then the place and uneven nature of the trail had to be considered—not to mention one's nerves—and there was no time for much thinking; so I tied the pack horse to a loose rock and jumped across to do the same with the other lest he continue his dangerous wanderings. Now the question was as to whether it would be safer to bring back one animal or to cross the other. After a good look at the trail I thought the latter way would be the safer. I unsaddled *Gato* who jumped across like a goat, after which I brought the pack and saddle over by means of a rope, having to cross from side to side several times to accomplish this primitive and ticklish piece of engineering. Another fright, a good lesson and many miles saved.”

After resting some time in the United States, Tschiffely returned by sea to Buenos Aires with *Gato* and *Mancha*, who are now enjoying old age on their native Argentine pampas.

The book is written with natural modesty and without attempt at literary style, but is gripping from start to finish.

**RIDING REFLECTIONS** by Piero Santini, Captain, Italian Reserve, The Derrydale Press, New York. Price \$10.00.

*Riding Reflections* by Captain Piero Santini will be welcomed by horsemen who desire an accurate description of the Italian riding seat. While the Italian method has had a decided influence on our form in jumping and cross country riding, this, we believe, is the only book published in this country giving a complete description of the Italian seat.

In his preface, the author says, “all I have attempted is to jot down certain reflections—based on principles of equitation that have by now stood the test for years—for the correction of current defects and misconceptions regarding riding position in those past the type stage and therefore not in need of primary instruction.”

In the opening chapter the author traces briefly the origin of the forward seat and its influence on riding methods throughout the equestrian world. He then

in a chapter on the Geometry of the Forward Seat, gives “a clear conception of what the forward seat really consists in.” He describes the rider's position in every detail: first ankle, knee, loins, shoulder blades, then arms, fingers and wrists. He very properly lays great stress on proper position of the knee as the basis of a good seat. The reader easily understands the clear concise description given. Simple diagrams are used to “explain mechanically the gist of theories difficult to make clear without practical demonstrations.” These, together with numerous excellent and well chosen photographs, give the reader an exact knowledge of what the Italian seat really is. The author points out common errors in form committed, either through misconception or lack of proper training, and uses illustrations to show these faults. Instructors in equitation can learn much from this part of the book that will assist them in imparting instruction.

According to Santini, contact with the horse's mouth should be “continuous, not intermittent.” He believes that all jumping should be done without wings, because the rider is obliged to maintain contact or suffer a possible runout.

The use of hands and legs to best assist the horse in jumping is discussed very carefully. During one stage of the jump he advises “increasing the contact over so lightly.” Maintaining light contact during this stage of the jump would be better for most of us, we believe.

Captain Santini gives his ideas on biting, bridles and martingales and describes the saddle suited to the forward seat. He discusses horseshows, steeplechasing and hunting.

*Riding Reflections* is especially well written, interesting, easy to read, and most instructive. It is very highly recommended to those who are interested in cross country riding, jumping or hunting.

A. P. THAYER,  
Major, Cavalry

**THE HORSE AND HIS SCHOOLING**, Lieutenant Colonel M. F. McTaggart, D. S. O., Charles Scribner's Sons. Price \$2.50.

To make a good hunter or hack is Colonel McTaggart's object, his contention being that a systematic training or schooling produces a softer, more elastic horse than the haphazard methods generally employed. The correctness of this is axiomatic, but it is equally an axiom that incorrect school work will make the horse a fussy, unpleasant ride.

The author has rightfully started by taking advantage of the horse's natural characteristics; by requiring the horse to do only those things that his physical development allows him to do easily; to proceed from the simple to the complex. Two excellent points often overlooked or neglected by so-called experienced trainers: never work a horse when he shows the least indication of unsoundness; never proceed with a lesson under excitement but restore calm and give him a chance to think it over. Stable hints and many schooling axioms are excellent.

Colonel McTaggart has over-emphasized “the balanced position.” He has required the horse to go into

an attitude for schooling which is correct for collection and the balance of slow gaits, but he has apparently left the horse there for his habitual carriage. This is quite wrong, as it destroys the vital function of extension and flexibility. In other words, the moment a horse loses the desire to extend and lower his head and neck (softly to the give of the rider's hand), his efficiency in increasing his stride is greatly diminished; he does indeed become a hobby horse unfit for free elastic galloping. Again the use of the spur has been called useless in schooling and an abomination in jumping. In all of his reference to leg Colonel McTaggart contemplates use thereof too far to the rear. In so doing he would irritate and close up his horse. Correctly used, however, the spur is a necessary adjunct, not for habitual use but to be called upon for brilliance or obedience when the horse fails to respond to the leg.

In his chapter on jumping a species of hand riding has been advocated. For years this has been a basis for argument. Whenever great horses have been assembled, free galloping relaxed horses have generally won, whether it be the show ring, hunter trial or hunters in the field. The hand ridden horse either becomes too dependent on his rider, learns to stiffen or fails to respond when response means a great deal. The free going, soft horse on the other hand nearly always works out his own problem better and, when the emergency occurs, is more apt to pay attention to his rider's indication and accept the help that his rare mistake has made necessary.

To utilize this work as any guide for *dressage* competition would be useless. For helpful hints for softening and rendering obedient a hunter or hack it has merit, remembering always that a vital principle of extension has been intentionally or accidentally neglected.

JOHN T. COLE,  
Major, 9th Cavalry

**CROSS SADDLE AND SIDE SADDLE**, by E. V. A. Christy, J. B. Lippincott Co., \$5.00.

This is essentially a book for the beginner, but it may be read with interest and profit by the horseman or horsewoman of experience.

The author has observed that the art of riding is no longer taught by one generation to another as it was to such a great extent before the war. Social and political changes have made riding a much more incidental recreation, and, accordingly, the beginning rider gleans his knowledge of the sport from very casual sources, a situation which the author greatly deplures.—hence “Cross Saddle and Side Saddle.”

Beginning with an interesting chapter on “Character Building By Horsemanship,” the book carries the reader through the entire field of beginner's horsemanship. The cross saddle, the side saddle, the common types of bridles are explained and the novice is shown how to put this equipment on the horse. The meat of the book is contained in the five chapters on horsemanship proper. In these the author shows a very sympathetic understanding of the problems confronting the beginning rider, an understanding undoubtedly

based on a wide experience as an instructor. The chapters on "Horse Psychology" and "Personality (Rider's) and Hands" are particularly interesting.

Throughout the book the author has considered the cross saddle and the side saddle in relation to each of the problems of horsemanship. This is done by enclosing those parts of the text which apply to the side saddle rider in black horseshoes. The side saddle rider will find the book an excellent text on this method of riding, particularly in the chapter written on the comparison between the cross seat and the side seat.

In keeping with the idea of covering the entire field of beginner's horsemanship, the author has covered such incidental subjects as riding clothes, rules of the road, opening and closing gates while mounted, etc. The work is concluded with a glossary of technical terms.

"Cross Saddle and Side Saddle" is profusely illustrated with excellent photographs. It contains a foreword by Sir Charles Frederick, Bt., sometime Master of the Pytchley. While in no sense a text for the advanced student of horsemanship, and in some particulars differing from the accepted schools of equitation, this work is well worth while and fills a definite need, particularly with the cross saddle rider.

KRAMER THOMAS,  
Major, Cavalry

AN EYE FOR A HORSE, by Lt. Col. Sidney G. Goldschmidt. Charles Scribner's Sons. \$2.75.

Lt. Col. Sidney G. Goldschmidt has succeeded in his latest book, "An Eye for a Horse," in placing before horsemen information of considerable value and interest. Although most any author might in his enthusiasm to present the facts to his readers have written an instructive but uninteresting text, Col. Goldschmidt has steered a far different course, for he has adopted a pleasing style and included many anecdotes and stories pertinent to the point involved. The result is a book extremely easy to read, in which the reader absorbs many important facts without realizing it.

From "Some Experiences of an Irish R. M." by E. E. Somerville and Martin Ross, Col. Goldschmidt in the front of his book quotes: "Bernard stared at the horse in silence; not the pregnant and intimidating silence of the connoisseur, but the tongue-tied muteness of helpless ignorance." I doubt very much that there exists any person who flatters himself or is flattered by the name horseman who did not at some time in his career find himself embarrassed in a predicament similar to Bernard's. This condition Goldschmidt is endeavoring to correct, for it is to the young and inexperienced horseman that this book is mainly addressed, although the most experienced will find a point here and there to add to his knowledge.

The book in reality is a guide for buying and judging saddle horses, and to the author, for saddle purposes, there is only one horse—the thoroughbred. That there may be no misunderstanding here, he tells us early in his book that, "We must therefore consider

a broad definition of a horse best suited to his task and for saddle purposes, this is the Thoroughbred and the more weight his make and shape fit him to carry, the better." Again, "The thoroughbred is the Race Horse, the Hurdler and the Steeplechaser. He also makes the best Hunter, the best Polo Pony, Hack and, when not too big, Charger also. As said before, he should be the only animal used for saddle work."

From a chapter on the history of the Thoroughbred horse which the interested reader will find all too short, the author deals with the following subjects: Factors that govern temperament; Quality and Material; Leverage and the bony frame; General survey of the horse from five points, a view from both sides from the front, from the rear, and a trial in the saddle, called by the author a "cold ride" or trial where the purchaser cannot ride the prospect to hounds or play a period or two of polo; Survey of the horse in movement and the final procedure in closing the deal. In addition, there are two appendices, one devoted to the foot and the other to the age of the horse indicated by the teeth.

This should be a book of particular interest and value to our young officers of the mounted services, for, in order to be good all around horsemen, they should be able to judge horses as well as ride, care for and condition them. C. DEW.

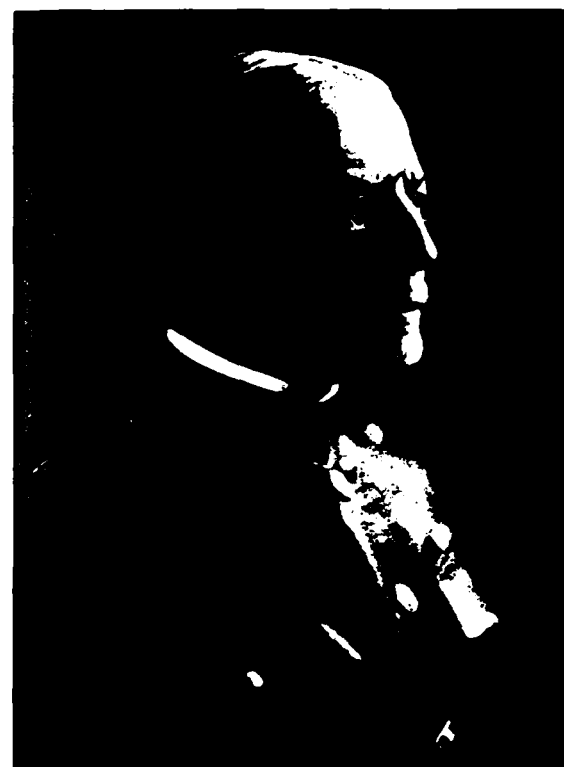
A MACHINE GUNNER'S NOTEBOOK, by 1st Lieutenant William P. Campbell, 14th Cavalry, \$1.00.

Every machine gun officer and noncommissioned officer has felt the need of a machine gun notebook. Such a book is extremely useful as a handy reference in the troop N. C. O. school, on the drill ground and during field exercises and maneuvers. If the N. C. O.'s of machine gun troops are furnished individually with pocket size notebooks, it is surprising how quickly they become thoroughly familiar with the art and science of machine gunnery.

The notebook has been revised, and the following items added:

Table of Organization, Machine Gun Troop, Cavalry Regiment  
Machine Gun Troop Echelons (Forward, Rear, Road Spaces)  
Machine Gun Drill and Combat Signals  
Antiaircraft Data  
Machine Gun Position Requirements  
Work Sheets for Indirect Laying  
Searching Reverse Slopes  
Description of Parts, B. M. G. Tripod  
Mechanism in Rear Position  
Diagrams of Assemblies  
Table of Range Equivalents  
Parts Carried in Spare Parts Chest, B. M. G.  
Tools and Accessories Carried in Spare Parts Roll, B. M. G.  
Ammunition Allowance—C. of C. Table  
Plate—Phillips Pack Saddle  
Special Equipment Carried by M. G. N. C. O.  
Fire Control Equipment  
Plate—Basic Individual Equipment

## A Tribute to General Charles King



Gen. Charles King was buried with military honors, state troops escorting his body to St. Paul's Episcopal Church, in Milwaukee, where services were held on March 20. Gen. Albert G. Schmedeman, of Wisconsin, was present. Maj. Gen. Frank Parker, Commanding the 6th Corps Area, and members of his staff; Col. James M. Graham, Chief of Staff; Lieut. Col. Fred W. Boschen, Corps Area Finance Officer; Lieut. Col. Joseph J. Grace, Corps Area Signal Officer, and 1st Lieut. George S. Smith, Aide, represented the Army.

The Navy was represented by Rear Admiral Wat T. Chambers, U. S. Navy; Comdr. William H. Lee, U. S. Navy, and Lieut. E. F. Kiefer, U. S. Naval Reserve.

On March 17 papers throughout the land bore the brief announcement "General King is dead." This statement deserves more than passing notice, for he wielded a influence which, in the days of long ago, brought pleasure to countless thousands by his delightful stories of frontier Army life. In these he presented to the public in a way in which they would be read and appreciated, the struggles and hardships of the Regular Army in winning the West in the seventies.

He gave the public over fifty volumes of these, exclusive of hundreds of newspaper and magazine articles. Some of them were historical, such as Campaigning With Crook (1890), Famous and Decisive Battles (1884), Between The Lines (1889) and The Iron Brigade (1902). His most widely read novels were perhaps The Colonel's Daughter (1883) and its sequel, Marion's Faith (1885). In these the hero "Jack Truscott" was in flesh and blood Lieut. George O. Eaton, 5th Cavalry, a U. S. Military Academy graduate of 1873.

In action with Apaches at Sunset Pass, Ariz., King had his right arm badly smashed by a hostile bullet and was carried from the field by Serg. Bernard Taylor, Co. A, 5th Cavalry whose gallantry brought the award of a Medal of Honor. The official report reads: "Bravery in rescuing Lieut. King, 5th U. S. Cavalry from Indians."

The situation here was extremely critical and King ordered Taylor to leave him and save himself. Taylor refused and stuck to his job, the under heavy fire, while Lieut. Eaton sprinted up the mountainside with a small detachment, drove the Apaches back, and completed the rescue.

King never forgot this service and in describing it in his stories immortalized the sterling qualities of his two gallant friends.

Among King's other novels may be mentioned Captain Blake 1892 and Medal of Honor (1905). His wife and wives are often an author's best critics. regarded his short story Captain Santa Claus as the prettiest he ever wrote. It was in 1905 incorporated by Harpers in Campaigning With Crook, but deserves a frame of its own.

General King was born October 12, 1844, in Albany, N. Y., and if there be merit in heredity he had an unusually good start in life.

His great, great grandfather, Capt. Richard King, 1718-75, was a commissary in the colonial wars at the siege of Louisbourg, 1758; his great grandfather Maj. Rufus King, (1755-1827) served in the Revolutionary War, sat in the confederation Congress; was a member of the Constitutional Convention; assisted in the final draft of the Constitution of the United States; was U. S. Senator from N. Y. for 20 years; twice Minister to England, and candidate for President in 1816 against James Monroe.

His grandfather, Colonel Charles King served in the War of 1812, was a journalist, and later President of Columbia College. His father, Gen. Rufus King was a U. S. M. A. graduate, class of 1833, resigned from the Army in 1836, became a journalist, was Adjutant General of New York; Brigade Commander during the early years of the Civil War; later Division Commander, and later Minister to the Papal States, Rome.

King's military career had an early beginning, for in official orders the Adjutant General of Wisconsin credits him as being marker in his father's regiment, 1st Wisconsin state militia, in 1856; drummer for the Milwaukee Light Guard in 1859-60, and mounted orderly in King's Iron Brigade, Army of the Potomac in 1861. For this latter service he was subsequently awarded the Civil War Medal.

He has often told the writer of having acted as guide for General Hancock's brigade in accompanying it from Washington across Long Bridge to its camp in Virginia. In 1858 he matriculated at Columbia University.

He received an "at large" appointment to the Military Academy from President Lincoln, was admitted July 1, 1862, and graduated June 18, 1866. As a cadet his military bearing won for him the chevrons of corporal in 1863, first sergeant in 1864 and cadet adjutant in 1865, this last being one of the most prized positions in the Corps of Cadets. Upon graduation he was assigned to the 1st Artillery and retained at West Point as instructor in artillery tactics during the summer encampment immediately following his graduation.

He commanded the Gatling platoon light battery K, 1st Artillery, in the New Orleans riots of 1868. He was a "Tat." officially described as assistant instructor of infantry, artillery and cavalry tactics, at West Point, 1869-71. He was promoted first lieutenant in 1869.

Yielding to a craving for more active service he transferred in January, 1871, to the 5th U. S. Cavalry, which he joined on the plains of the Platte Valley, and the service was ushered in with a glorious hunt or two with their chief scout Buffalo Bill. His new Colonel W. H. Emory, having been ordered to New Orleans to command the Department of the Gulf, he took King with him as aide. He served in that capacity from Nov. 18, 1871, to January 31, 1874. While on this duty he was liaison officer between General Emory and the famous former Confederate General Longstreet, who by that time was wearing the uniform of a Major General, U. S. Army, and commanding the Louisiana militia.

In November, 1872, he married a famous old sea captain's only daughter, Adelaide L. Yorke by whom he had four children—Adelaide Patton (deceased); Mrs. Carolyn Merritt MacIntyre, wife of Dr. Donald R. Mac-



Intyre; Mrs. Elinor Yorke Simeon, wife of Charles J. Simeon, and Comdr. Rufus King, U. S. Navy, now Executive Officer, U. S. S. Wyoming. Gen. King's wife died October 22, 1928.

The Tonto Apaches in Arizona about 1874 were raising mischief and his troop was in the thick of the fighting. King hurried to join it, and for the next five years it was Indian campaigning or fighting, much of which was described in his Army stories written in later years. This Arizona service, much of the time as troop commander, brought actions to his credit at Diamond Butte, Black Mesa and Sunset Pass. The latter (November 1, 1874) proved to be his last fight in Arizona, for an arrow nearly ripped out the left eye, and, as previously stated, a bullet smashed the saber arm close to the shoulder and sent him to recuperate on sick leave. An open suppurating wound for eight long years was one of the results of this Arizona service. Subsequently this service was acknowledged by his appointment as brevet captain for "gallant and distinguished services in action against Indians near Diamond Butte, Ariz., May 21, 1874" (declined). The matter in 1924 was, in a measure at least adjusted by the award of a Silver Star Medal.

In 1876 we find him again in the field with the 5th Cavalry on the Big Horn and Yellowstone expedition participating (July 17) in the much-advertised affair on War Bonnet or Hat Creek, in northwestern Nebraska, and September 9 at Slim Buttes, S. D. On October 5 he was appointed Regimental Adjutant, holding that position until January 28, 1878; promoted Captain May 1, 1879; Major May 14, 1898, and Lieutenant Colonel January 14, 1902.

Others have written of the Big Horn and Yellowstone expedition of 1876, but King's account given in his "Campaigning with Crook," which passed through several editions, will doubtless always be the accepted history. This was supplemented (1930) by King, who traced on an out-of-print Reynolds map of that area the route followed by Crook. An abstract from his 1876 diary was also incorporated. We thus find King then 86 years of age engaged in recording data pertaining to the history of our Indian Wars.

He was retired June 14, 1879, for disability from wounds received in action. In 1880 he was again on active duty, this time as professor of military science and tactics in the State University of Wisconsin. In 1882 he was appointed assistant inspector general, Wisconsin National Guard, with rank of Colonel. In 1889 he was a member of the board of visitors to the Military Academy. From 1895 to 1897 he was Adjutant General, Wisconsin National Guard.

In the Spanish-American War of 1898 he was again to see war service.

Maj. Gen. Wesley Merritt was in San Francisco organizing a corps of 20,000 men for service in the Philippines and asked for the services of his former adjutant, King, who was appointed Brigadier General of volunteers, May 27, 1898.

He arrived in Manila, November 28 and was assigned to command of the 1st Brigade, 1st Division, 8th Corps, then engaged in defenses of Manila. He was in command at the Battle of Santa Anna February 5, 1899, and in frequent skirmishes in pursuit of insurgents to February 14, as well as during the attack on his line at San Pedro Macati, February 14-16. Later he commanded an expedition to Santa Cruz.

He was recommended by General Anderson for Major General of Volunteers in February, 1899, for "bravery, energy and efficiency" in battle. General Otis in forwarding this refers to a movement, suggested by General King, and later authorized, resulting in the overwhelming defeat of the insurgents with loss to them of many men, all their artillery and quantities of war supplies. General Otis adds that King in person led the movement, "showing conspicuous gallantry and efficiency." He is entitled to special recognition for this affair.

Maj. Gen. Lloyd Wheaton wrote King: "... you have established a reputation for bravery, ability and skill that will make you honored by Americans while you live..."

Maj. Gen. Lawton wrote King, saying: "... you are the only general officer whom I know who possesses that peculiar faculty or that magnetism which attracts men to him; you are the only one of all the general officers who

has excited among the men of his command any great amount of enthusiasm... and you seem to possess that peculiar dash and spirit which carries men who follow you along with you with enthusiasm..."

General King was honorably discharged from the volunteer service, August 2, 1899. From that time until August 1932, he was almost continuously on duty at some military schools as that at Orchard Lake, Mich., and at John's Military Academy at Delafield, Wis., which was his last assignment and from which he was relieved in August, 1932, as the Army appropriation act failed to provide for any retired officers engaged in such duties.

His military activities therefore cover the period from 1856 to 1932—76 years! Even deducting from this short periods when on inactive duty status it is believed that he had a record of years of active service never equalled.

In 1924 he learned from the Inspector General of the Army (Helmick) that the Adjutant General (Wahl) reported that King was the only officer in the Army who had been authorized and issued badges for: 1, Civil War; 2, Indian Wars; 3, Spanish War; 4, Philippine Insurrection; and 5, World War.

Of his service, General Harbord in 1921 said: "I read General King's books before I came into the service. My first commission was in the 5th Cavalry. General King's name was a household word in that regiment, and his influence was still potent to work up enthusiasm among the youngsters in the regiment... General King has ceased to be an officer, he is an institution."

Of the numerous clubs and patriotic societies to which Gen. King belonged probably the "Order of Indian Wars" held first place in his affections, on the roll of membership in which as hereditary companions are his son, Commander King, and his grandson and namesake, Charles King.

The foregoing is a brief summary of the salient points in the official record left by Gen. Charles King (Lieutenant Colonel, U. S. Army, retired), whose passing will be received in the Army with keen regret. Sorrow quite as deep also, will be experienced in literally tens of thousands of homes of those who have read with joy, laughter and tears the clean, wholesome frontier Army stories by the facile writer affectionately known among his intimate Army associates as Charlie King.

W. C. BROWN.

Brigadier General, U. S. A. Retired.

General Philip H. Sheridan, who died August 5, 1893, was interred at Arlington.

His passing was made the subject of a brief biographical sketch of Sheridan's career by the late General Charles King, published in the U. S. Cavalry Journal for November, 1888, and its author is identified only by the initials "W. C. B."

The last portion of this is so characteristic of the beauty and grace of King's literary style and breathes a spirit of such devoted loyalty to the Cavalry and admiration of its great leader that it is here reproduced at the suggestion of General Brown.

Late in the month that followed, when the armies of the Union passed in final review at Washington and shared a triumph such as Caesar might have envied, when the broad avenues rang with martial music, the blare of bugles and the tramp of serried columns, when all the Capital was fluttering with the colors of the flag, and joy and thanksgiving beamed on every face, when many a noted General was greeted with acclamations from every side, there was still two circumstances that tempered the universal jubilation. The people could not forget—could not but miss the kindly, homely, patient and pathetic face of him whom God had spared only long enough to guide the nation through a storm such as it had never yet encountered, and then stricken down at the very entrance of the harbor where all was peace and safety. They mourned the absence of that tall, commanding form of him who, having been "constant in our ill," could not now be with them, "joyous in our joy." They looked with eager eyes, but all in vain, for another form—for the keen black eyes and the bronzed, swarthy features of the greatest Cavalry leader of the age, the soldier whose deeds had aroused the whole nation from its despond and kindled a flame of enthusiastic hope in every heart. "Where is Sheridan?" "When will we

see him?" "Why is he not here?" These were the cries on every side.

No triumph for him when stern duty called from afar. Even as his great commander and his comrades of the East and West were receiving the acclamations of hoarse-throated throngs in Washington, turning his back on all the sweet reward of soldierly achievement, Sheridan was speeding to the Rio Grande. Not until the last armed foe was conquered could our leader rest. Not until long years afterward, not until he had reached the pinnacle of his ambition—the highest rank in the army—the very zenith of his fame; not until his name had been carved enduringly on the lasting monuments of the ages and spoken in praise by soldier tongue in every land; not until as citizen and as a man he had developed those traits which won him honor and esteem from a people who glorified in his battle deeds; not until he had still further strengthened the ties that bound him to the cavalry—sharing danger and privation with us in the snows of wintry campaigns, joining us in march and bivouac in the heat and thirst of summer days, guiding us in many a stirring gallop on the Indian trail, showing by word and deed his faith in the corps he led to victory; not until throughout the length and breadth of the land no name was better known than his, and spoken by no loyal voice except in honor; not until the hearts of all our people were drawn to him through the brave and patient abiding of a mortal struggle, and the old admiration of his soldier pluck and spirit kindled anew at the heroic fight he made against the only foe that ever downed him; not until all this and far, far more had been achieved, did Sheridan come for his triumph to the Nation's Capital.

Fairer day sun never blessed; clearer skies or bluer waters never smiled above or reflected back the white walls of the thronging city. Under the deep foliage of the fringing trees, bare-headed, silent, reverent thousands lined the broad avenues along which he rode. All the great dignitaries of the State were in his train; all the great soldiers of the nation followed the wheels of his triumphal car—that sombre, flag draped caisson. Guidons of his faithful horsemen, banners of the red artillery, crape-wreathed, bowed above the helmets of his escort, solemn strains of martial music rose and fell in mournful cadence as with muffled tread we bore him on. Up the broad thoroughfare with its bordering ranks of sorrowing faces, white and black, over the graceful arches that span the blue Potomac, through the winding aisles to Arlington we followed our old commander, halting at last where the declining sunlight slanted down that beautiful green slope.

At its crest the stately portico of the old Virginian mansion, and the roadway, ranked with silent troopers; at its base the fringe of thick leaving trees, through whose foliage came the glint of arms and the scarlet colors of the batteries; beyond them the broad, peaceful valley, the winding sweep of noble river; beyond them all the gleaming white shaft of the distant monument, the shimmering dome of the Capitol, all bathed in August sunshine. Near at hand a silent, reverent group of uncovered heads, from whence there rises presently the chanting ritual of the Church of Rome. The solemn service is soon complete; the reverend clergy fall slowly back, the Loyal Legion sadly take their last look upon the shrouded form of their honored Chief, and then—then tears gush forth from eyes long unaccustomed, and strong men bow their heads or turn aside as, with tender care, a soldier's daughter, a sorrowing woman, is led away from the grave of him who was her hero and her pride. Down beyond the trees there is a quick, yet noiseless movement, then the earth trembles with the sudden concussion; gun after gun the battery booms its parting salute to the General-in-Chief. A few low-spoken words from the aides-de-camp and the throng falls back to the very crest; the smooth green carpet of the slope is now one great unbroken square, save for that narrow cleft in its fair surface, bordered by those ridges of new-turned clouds. Another stir and rattle down beyond the trees and then as suddenly the leaves all leap and quiver as a flashing volley shoots aloft—another—another, and the pale blue clouds come drifting slowly up above the foliage, and then—last scene of all—there appears at the head of the grave one silent, statuesque, solitary form, clad in the full dress uniform of the trooper. A moment's pause until the echo of the final volley has died away in the distance and then he raises the trumpet to his lips. Soft, tremulous and low as we have heard it many a time in windy nights on the far frontier, and in mountain bivouac in the old campaigns, the first notes of "taps" float out upon the hushed and pulseless air; then louder, throbbing, wailing, well-nigh passionate, it thrills through every heart—a sobbing requiem, the trooper's one adieu to cherished comrade, then, sinking, fading, falling, it slowly dies away and all is done.

Aye, though statesmen, soldiers, priests and delegates thronged to take their part in the mournful ceremonies of the day; though from far and near were gathered the nation's highest names, the closing rite of all is paid by the hands of those whose sabres he had led to fame and victory: the cavalry bade the last good night to Sheridan.

C. K.





# PROFESSIONAL NOTES and DISCUSSION

## Swimming Horses

May 20, 1933.

The Editor, CAVALRY JOURNAL,  
1624 H Street,  
Washington, D. C.

Dear Sir:

In the March-April, 1933, copy of the JOURNAL was an interesting article on swimming horses by Major O. I. Holman. In the article he gives several methods for training horses to swim.

There is one method, which I believe would have proved most valuable, that he did not use, and as I have never seen it in print, I am giving it to you for what it is worth.

Generally speaking, any horse will enter the water willingly and will unhesitatingly go out as far as he can and still reach bottom. This assumes that the bottom is shelving and gradually deepens. When the horse gets to the point where he can reach bottom only with his hind feet, he begins to rear and plunge. At this stage he is dangerous, as he is apt to try anything to keep his hind legs down. Once these are off the bottom he must swim and but little practice is then necessary to enable the rider to control him and keep him swimming.

To accomplish this, the rider puts the horse in the water, keeping well back on the horse's rump, and remaining there until the horse has difficulty finding bottom. The rider's weight helps keep the hind legs down. As soon as the horse begins to struggle to find bottom, the rider then quickly pulls himself well up on the withers. This forces the forehead, which is by now free from the bottom, down, and floats the hind quarters. The horse must now swim and the rider is in position to control him.

There are a few horses who fight the water and will not enter it. With these the rider must stay in the saddle and work with him gently until he can be induced to go out far enough so that his forehead is floating. The method described can then be utilized.

Very truly yours,  
H. LAT. CAVENAUGH,  
Colonel, Cavalry.

## Patrolling in Wooded Terrain

By Sublieutenant de R. Julio Murillo, Cavalry Regiment "Abaroa," Bolivian Army, Translated by 1st Lieut. C. C. Clendenen, 5th Cavalry, from *Revista Militar (Bolivia)*, Nov.-Dec., 1931.

MANY of the principles brought out in our present regulations on patrolling in forested districts are inapplicable to the problems which we actually face in our service. Our regulations are based largely on European regulations, which have been deduced for

forests of a definite and particular character—like the Argonne, for example. The differences between that terrain and the terrain upon which we are required to operate are so great that it is necessary to vary somewhat the details of our present regulations.

Our forested areas present low mountains, deep glens, the beds of dry rivers, great clearings (*chacos*), alleys, etc., and are supremely adapted to a guerrilla warfare in which ambush, stratagem and surprise play the predominant part. The assault troops must comprise small bodies of troops which depend upon careful organization and great fire power, rather than numbers.

A cavalry patrol charged with the mission of determining the exact location of an enemy post, or of enemy effectives in the forest, must have, in the first place, at least an approximate idea of the lay of the land. The leader must add to this a full appreciation of the delicacy of his mission, the ability to extract the greatest possible information from his observations, rapid decision, no matter how difficult the situation, and the gift of orientation, augmented by careful training. If any lower standard is set, the patrol is condemned to destruction.

There have been, moreover, many instances in which a patrol, overcome by the fatigue of a long or difficult mission, has returned to its base with insufficient information, or information entirely unsatisfactory for the purposes of the higher command. Patrols have terminated their missions, owing to incorrect deductions or false information, when they had scarcely started.

It is a recognized fact that the employment of large cavalry patrols in the forests is attended with very definite disadvantages, even though they have been successful in certain regions. A large patrol is always exposed to the danger of discovery and attack. On the other hand, an officer's patrol of eight or ten men is easily concealed and possesses a great power of infiltration. It is this type of patrol which we will discuss in the present article.

To insure the success of a patrol operating in a forested area such as we have already mentioned, the leader must

- Consider possible sources of information.
- Make careful preparation,
- Reflect fully on the conduct of the patrol.
- Consider all available information.

### Sources of Information

An officer assigned to a unit in the forested regions of our country has ample time during his journey to acquire considerable information, such as distances between various points of military interest, the condition of roads, etc. On arriving at his organization he should study the records and archives and consider the sketches, plans and information contained there-

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in, especially those items and details of concern to a patrol leader. The higher officers of the regiment should give the newcomer full cooperation in this, and the older officers should give him the full benefit of their experience.

In his study he must not forget to note such details as the following: In what districts is he likely to suffer from lack of water? What areas are unexplored, or little known?

He should know where to obtain an Indian guide who will simplify a great part of his problem as a patrol leader. The Indian, because of his nomadic life is never entirely ignorant of any part of the forest and can give a great deal of information essential to the success of a patrol's mission, such as the entrances and exits of a forested area. But the officer must learn to evaluate an Indian's information carefully, for an Indian will give any sort of false information to earn his pay.

### Preparation

A patrol leader must pay great attention to the condition of his horses. He should avoid using animals which have just completed hard work or which are of conspicuous color. He must pay close attention to the cleanliness of the patrol's armament. He must endeavor to obtain a suitable uniform for his men—that is, a uniform which will be inconspicuous, according to the season of the year. There have been several cases in which patrols have been discovered and placed in great peril, solely because their clothing was conspicuous. Our uniform is excellent for forest service when new but fades with frequent washing and, consequently, loses its protectiveness. In such a case, it is not difficult to improvise a suitable garb. In addition, a canvas apron is useful for protection against thorns and the *cadillo* (a tiny thorn which penetrates the clothing, causing considerable injury). A leather rifle boot suspended from the pommel of the saddle facilitates the use of the rifle, even when mounted, and the soldier's equipment should include a leather hobble for the fore legs of his horse.

The desirability of taking a reliable Indian on the mission merits special consideration. His knowledge of the woods and his skill in orientation may be invaluable.

### Conduct of the Patrol

Once the patrol leader has received his orders and his hour of departure, it is generally left to his initiative to determine at what point he will begin to observe march precautions. On leaving the advanced post, the patrol leader should put out a point or observer (*vaquiano*), followed by another soldier at such a distance that he does not lose touch with the rest of the patrol, which follows in small groups, or in file.

The passage of fields or mountain clearings is a matter of peril to a patrol, since such open spaces are well adapted to ambush. The covering detachment, on arriving at a field or clearing, should halt at the exit

of the woods and let the remainder of the patrol close up. The leader should then direct the *vaquiano* to proceed alone along the trail in the direction of the march, keeping the rest in view. Meanwhile, a sufficient number of the remainder move to the right and left of the exit, at distances of five or ten paces, and skirt the edges of the clearing at the trot, without losing sight of the *vaquiano*. The latter gains the edge of the woods, penetrates some twenty paces and awaits the assembly of the patrol.

This method of passing a clearing combines the following advantages: the patrol cannot be surprised in a position where it cannot take cover, it is ready for instant combat, its retreat is assured, and the leader retains control over the direction of march. Small clearings should be avoided. Funnel-shaped clearings or alleys should be avoided if possible. If they must be crossed, it should be at the gallop, the troopers crossing one at a time. In very large clearings the distances should be increased to about twenty paces, and the leader should ride at the head with the Indian guide. If the leader rides at the head of the patrol, he is able to observe personally and to avoid the inconvenience of small visibility and false alarms, which are the great peril inherent in large clearings.

A patrol should avoid night marches as much as possible, except on nights of bright moonlight and in terrain which is well known. The peril of night marches lies chiefly in the noise made by the animals and the ease with which a patrol is ambushed from the side of the road.

A patrol should make its bivouac on the mountain to one side of the road or trail, at a distance of at least one hundred meters. There the patrol can rest quietly, after making a small clearing for the herd and an exit trail. A sentinel should be posted at the entrance trail. It is inadvisable to bivouac near an Indian village.

### Information

On the termination of his mission, the patrol leader should report promptly in writing, so that his superiors may benefit immediately by the information he has gained. He should include in his report a sketch of the route he has followed, indicating thereon the important features of the terrain and any new discoveries he has made. He should give a tactical appreciation according to his own observations and he should consider the *morale* and condition of his troop. Nor should he forget to mention the watercourses, natural wells or difficult defiles which he may have observed, the Indian communities, the names of some of them, his investigation of designated localities, and the dialects which are there spoken.

In concluding, I would like to remind our comrades that each of them, in making his report, is adding one more grain to the mass of our knowledge. A patrol leader's report is not an isolated document but is an additional means of acquiring and divulging knowledge which will redound to our advantage and to the efficiency of our institution.

# SPORTS

## Hunter Trials—Cobbler Hunt, Virginia

By Major William M. Grimes, Cavalry

ON Saturday, March 25, 1933, the Cobbler Hunt, Delaplane, Virginia, conducted its annual hunter trials.

Hunter trials contain much to arouse the interest of the military horseman. In the first place, a really good hunter is everything that our ideal charger should be, a well-bred, sound, level-headed weight carrier, capable of prolonged cross-country galloping and of negotiating without effort or exertion the usual obstacles and difficulties encountered over varied terrain. The term "trial" is simply another name for a "test"—"charger's test" if you will.

This particular hunter trial should interest all cavalrymen, 'unting pink had a taint of Army blue. The Master of the Cobbler Hunt, Major George S. Patton, Jr., Cavalry, U. S. A., is the first regular army officer to head one of the Virginia hunts;\* the senior judge was none other than Major General Guy V. Henry, Chief of Cavalry, U. S. A., an ardent fox-hunter; lastly, nine Army officers and their mounts competed in a class arranged especially for them. This is the first time that any recognized hunt (civilian), has held such a class; let us hope it is the beginning of many similar opportunities. Friendly competition of this nature does much to bring the civilian and military horseman in close contact. Each has much to pass on to the other.

A word as to the Cobbler setting, the course was laid out on two beautiful farms skirting the foothills of the Blue Ridge, in the middle of Virginia's fairest hunting country.

The two-mile course was in full view of the spectators. It included nine fences, such as would be encountered in a day with Cobbler. First, a snake fence, topped by a locust rail, approximately three feet eight; this was followed by a gallop in plow to a stone fence with stake and rider typical of the Cobbler country; the wall on the takeoff was nearly four feet, whereas the landing was but 2 feet lower; the third fence was a stiff post and rail leading out of a narrow lane; thence a long gentle downhill gallop to a farm gate which had to be opened and closed (if you think it easy to open a farm gate from the saddle, see how many horses in your troop will stand quietly for such a test); after the gate there was another approach through plow to a three-foot chicken coop panel in a wire-fence line; thence a downhill gallop and over a

small branch (water obstacle 2½ feet wide); then came a rather long uphill pull to another post and rail; thence on through more plow to another rail fence with a trappy takeoff; thence through a farm yard and a downhill gallop to an in-and-out across a lane—this in-and-out, paced about 27 feet between post and rails which were approximately 3-10 to 4 feet high; after this an uphill gallop to the finish with one more fence, a post and rail, before crossing the line.

It may be interesting to know that between the flags on the post and rail fences the average width was three panels, each panel a ten foot rail, four rails high. The conditions of the several classes follow:

Class 1—*The Cobbler Class*—For members, landowners, subscribers or renters in Cobbler Hunt.

Class 2—*Junior Class*—For children under 16 years to ride horses they have hunted.

Class 3—*Open Class*—For members of a recognized hunt who have hunted with Cobbler.

Class 4—*United States Army Officers' Class*—Open to Army officers who have hunted with the Cobbler Hunt.

### CLASS 5—*Race for Hunters.*

The following conditions governed at Cobbler:

1. Entry fee, \$2.00.
2. Contestants were required to complete the course within seven minutes.
3. Two refusals: fall of horse or rider; and jumping any of the obstacles before the event was disqualification.
4. Judging was based on performance, form over jumps, cross country, and condition at finish. Jumping, manners, pace and style counted 90 per cent, conformation counted 10 per cent.

Only the first five were judged for conformation. In judging, no exceptions were made for hunting blemishes or technical unsoundness, provided that they did not interfere with the efficiency of the horse.

5. Horses to be shown in the bridles in which they were ridden.

6. Professional riders were not allowed to compete in any of the events.

The only thing to mar an otherwise perfect affair was the weather. The trials were run in a heavy blizzard; but in spite of the blinding snow, with difficult footing and going, there was only one spill among the sixty-odd contestants—a tribute to skillful riders and surefooted le'ppers!

Probably one of the most colorful events of the

\* Through the courtesy of the Master and members, the Cobbler Hunt has been extremely generous and liberal in extending guest privileges to the Army.

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entire day was the race for hunters. This was a truly sporting affair and one to warm the cockles of your heart. In spite of the adverse weather conditions and the going on this afternoon, eight pink-coated horsemen, raced over the hunter trial course, with a few jumps added for good measure, at a truly steeplechase pace that would have been a nice clip for the Virginia Gold Cup. Major Patton won this sporting event.

For those who may be interested further in the subject of hunter trials, I have jotted down a few observations and experiences gained in competing, conducting and judging them.

Generally speaking, a hunter trial is a test to determine the relative merits of the various horses that have regularly followed hounds.

The horses are judged solely from a hunting viewpoint; obviously, they should be judged by those who hunt. It is highly desirable that the judges walk over the course, inspect the jumps and note the condition of the takeoff and landing and going in general.

There are usually two or more classes, perhaps a green class for horses that have just completed their first season, a *qualified* class for horses that have hunted more than one season, and often we also find an *open* class.

Hunter trials are laid over typical country of the hunt in question, the courses being fairly representative of conditions as to fences, terrain, etc. Trials as a rule are from two to three miles in length, with ten to fifteen fences, and for good measure each contestant is usually required to open and close a gate.

The primary requisite for a hunter, incident to following hounds, is the ability to gallop safely cross country, negotiate without effort the usual fences and terrain, and, withal, give a pleasant ride without physical or mental discomfort to rider. In other words a hunter must first of all possess manners, must be able to fence and be a good galloper.

Details of judging include:

a. The horse's cross-country galloping ability, style, rate and way of going: does he flow along the ground with measured strides, long, easy, even, and smooth, or does he gallop in place with a sticky, jerky up and down movement as if glued to flypaper?

b. Fencing ability, form and style—does he approach and take his fences in stride—free-wheeling as it were—showing off with his hocks on a nice flat trajectory, landing well away and under way as if going somewhere; or does he approach with brakes unevenly applied, stopping and popping like a rubber ball, on a howitzer trajectory, landing on all fours close to the fence, in no hurry to get going and apparently no place to go?

c. Handiness and cleverness—does he give evidence of ability to get out of tight places at fences and where footing and going are difficult; where the takeoff is rough, uneven, or slippery, does he slow up and eagerly choose his takeoff or does he continue on irrespective of what's under foot, blindly gazing at the heavens, or is he busily occupied in scanning the takeoff?

d. Manners at, over, and between fences—as he approaches a fence, does he suddenly charge forward with

a burst of speed, pulling and shaking his head, out of hand and uncollected, or does he approach calmly in hand and collected, adjusting pace, position of head, neck and forehand to take off, obstacle and landing; does he take his fences straight on as he should in 99 cases out of 100, or does he fence obliquely?

e. Having safely negotiated his fence, does he then gallop smoothly on to the next without need of urge or restraint, but rather adjusting his pace to the terrain, slowing down a bit where the going requires it and making up time where the going permits. In other words, is he a safe, sensible, keen, alert, tireless, level-headed galloper, mindful of his "p's" and "q's"?

f. Since *condition* is such an essential requisite, each horse is carefully examined at the finish to determine his general condition and his ability for further sustained effort. A well-trained hunter, in condition, should be able to gallop on and follow hounds without any difficulty after completing the two or three mile point which the hunter trial approximates. What was his condition at the finish: was he alert, fresh, strong, capable of further effort, or did he give evidence of being blown, leg weary, tired, out of con-



Top: Mr. Roger Bayly of Upperville, Virginia. This is a good example of the Virginia hunting seat by one of its leading exponents. Mr. Bayly is an excellent cross country rider. This post and rail is about 4 feet high, the take-off being considerably lower than the landing.

Bottom: Major G. S. Patton, 3rd Cavalry, on "Wild Ben," winning the Hunt race.

\* Major Patton has had more actual hunting experience than any officer in the service; he was one of the early Masters of the old Mounted Service School Pack, and has hunted with practically every pack on the Atlantic seaboard.—Author.

dition? Had you been following hounds, with a fast run staring you in the face, would you care to keep going with this horse or would his condition cause you to pull out?

Time as a rule counts, with an overtime penalty. The usual course can be negotiated safely within the allotted time limit by galloping 12 to 16 miles per hour.

There may or may not be a percentage for conformation. Where conformation is considered, as a rule it counts little, 5 to 10%. Jacks, curbs, splints, capped hocks, etc., provided they do not impair the hunter's ability to perform, are not seriously considered. "Hunting sound" is the yardstick.

A typical example of scoring conditions:

Performance, manner and way of going and condition at finish .....	95%
Conformation .....	5%
Knock-down, front or hind .....	5 faults
Refusals or run-outs, each .....	2 faults
Three refusals or run-outs; fall of horse or rider or both, loss of course; failure to take course in proper order; cutting flags, etc...	Elimination
Contestants must complete course within .....	minutes, otherwise one point penalty for each five seconds or fraction thereof over .....
minutes is assessed.	

Officials vary with the conditions under which the trials are conducted. In general there are one or more principal judges, patrol judges, scorer, clerk of the course, timers and starters. The principal judges score each horse as to galloping and fencing ability, handiness, manners, conformation and condition. The patrol judge patrols the course and sees that the route is followed. Scorers record penalties at the fences to which they are assigned and later turn their score cards over to the clerk of the course, who consolidates them for the principal judges. The timer and the starter take their positions at the start and finish and perform their indicated duties.

In drawing up conditions for and laying out a hunter trial, a desirable consideration is that spectators see the greater portion of the fences and terrain. Otherwise, interest lags soon after the first few have started.

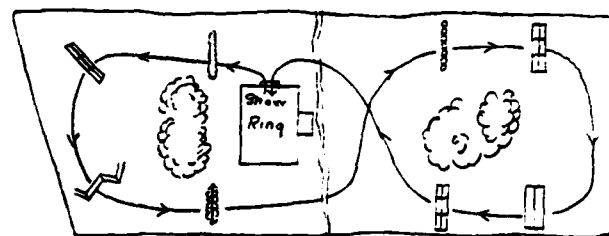
### The Army Relief Horse Show

IN spite of the competition of the Fairfax Horse Show and the Maryland Hunt Cup, both of which were held on the same date, the Fort Myer Army Relief Horse Show turned out to be one of the bright spots of the season. This show was held for the benefit of the Army Relief Society on April 29th in the new show grounds developed on the Experimental Farm near the Virginia end of the new Memorial Bridge. To Major George S. Patton and his riding family is due the entire credit, not only for a beautifully run show, but for the accumulation of five hundred and seventy dollars for the Army relief, and the introduction of several novel ideas, serious and otherwise.

The grounds mentioned are spread over a rolling tract of about twenty acres, roughly rectangular in shape, containing two small wooded knolls, separated by a flowing stream, as shown in the accompanying diagram.

The show ring is at the foot of one of the knolls, whose shady slopes provide ample space for spectators. Along the sides of the tract are the jumps of the outside course, which is acknowledged to be one of the best in the country. The jumps are those natural to this section and include a stone wall, a hedge, a worm fence, a chicken coop, a plank fence, a hitchcock, post and rail fences, and two natural ditches. All jumps are wide enough to require no wings, and the majority of them are built half, three feet six inches high, and the other half, four feet. Three very good classes were shown over the outside course in a large figure of eight, measuring about a mile.

Three classes were shown over this course, novice hunters over three foot six panels, and hunters that had been ridden with the Riding and Hunt Club Hounds over four foot panels. Lieutenant Eugene Harrison, 3d Cavalry, riding the winners of both classes. The other class shown over the outside course was



for hunt teams, which brought out seven teams, including one from Major Patton's Cobbler in Virginia, Major Blunt's Riding and Hunt Club Hounds from Maryland, and The Warrenton Hunt Club from Virginia, who proved the winner of this class.

Besides the customary hunter, jumper, and horsemanship classes shown in the ring, a class for children was shown over a small outside course, approximately half a mile in length, with three-foot jumps. Many older people could profit by the way these youngsters sailed their usual miscellaneous assortment of children's ponies up and down hill as fast as they could lay foot to the ground.

The Junior Horsemanship Class, which brought out twenty-eight entries, was decisively won by Miss Patricia Henry on General Henry's *Gray Falcon*. Had there been a family prize, this horse, a thoroughbred gray gelding, should have won it, for in addition to a nice performance with Miss Mary Henry in the Ladies' Hunters, he made one of the outstanding performances of the day when shown by General Henry over the outside course.

The championship of the show was awarded Miss Margaret Cotter's nice bay gelding, *Impulse*, on a point score, computed by giving each ribbon blue, red, etc., a numerical value. His outstanding performances were defeating twenty-eight other entries in the Junior Jumping, and taking the blue in a class of twenty ladies' hunters.

After awarding the championship, one more prize waited to be awarded—a booby prize, awarded, also, on a point score, but computed from the total number of faults made by the various horses. This valuable trophy, a large old-fashioned brass spittoon—beg pardon, cuspidor, was won by Mrs. Robert Windmill's *Waverly*.

### National Capital Horse Show

DESPITE the unfavorable weather conditions, the National Capital Horse Show was quite successful. While the attendance was not all it might have been, the efforts of the Junior League of Washington, who sponsored the show, went far toward offsetting the gloomy footing the weather man provided the first three days.

Classes were, with one or two exceptions, extremely well filled, though the appearance of many of the same horses in class after class was a source of some complaint by exhibitors. This dissatisfaction appears justified, as obviously any owner with enough good horses can monopolize a show unless some restrictions are put in the prize list. On the other hand, every-

one will agree that there was nothing to be desired in the way the show was run off.

Generally speaking, it was Mrs. John Hay Whitney's show, as her horses took most of the important classes where conformation counted. In the Open Jumping Classes entries from Fort Myer accounted for eight of the twenty-five places awarded, including the first three places in the Triple Bar Class, and winning the Open Jumping Sweepstake, as well as second place in the Pairs of Hunters.

While the horsemanship of the Army riders was outstanding, they might have won more places had their method of riding varied according to the way of going of their different horses.

The Military Classes were designed to bring out service mounts, suitable for both officers and enlisted men, and with a view to showing civilians what these horses should be able to do. Both were shown in full field equipment and, while the Enlisted Men's Class was excellent, the Officers' Class was a great disappointment, only three horses being shown.

In addition to the lessons learned by individuals, as a result of their own experiences, this show left the following general impressions:



Hunter Trials, Riding and Hunt Club, Washington, D. C. Major General Guy V. Henry, Chief of Cavalry, Riding "Big Guy," Winner of Second Place.

That, with well balanced horses, properly shown, the footing makes little difference.

That all horses cannot be ridden exactly alike.

That more attention should be given to the suitability of officers' chargers for service use.

### Hunter Trials, Riding and Hunt Club of Washington

THE Riding and Hunt Club, of which Major Wilfrid M. Blunt, Cavalry, is Master, held its first Hunter Trials at its kennels at Bradley Farms, Maryland, on April the eighth. These trials which consisted of three well filled classes were shown over a course of approximately two miles of rolling country before about fifteen hundred spectators.

The advent of Hunter Trials has introduced a new mounted sport which is insured a warm welcome, especially among the military. Hunter Trials can be held at or near almost any station, regardless of whether there is actually a hunt in the particular locality or not. They offer a combination of the best features of show ring jumping and racing, without the artificiality of the former or the extensive preparations required for the latter. They can be held at almost any time of the year, and the conditions can be varied to suit any locality. Finally they provide an excellent opportunity for contestants to demonstrate their ability to "go places and do things."

Of the three classes, in these Hunter Trials the first two called for owners to ride, the first being for members of the Riding and Hunt Club on horses that had been hunted during the past season with the Riding and Hunt Club hounds. The second class was for officers of the Army or members of any recognized hunt, and the last was an open class for any horse and any rider.

An interesting feature of these trials was the close competition in the second class between General Guy V. Henry and Major George S. Patton, Jr., the former having a total score of 97 compared to the latter's score of 99, which won this class.

### New World Record for High Jumping

By Lieut. M. F. de Barneville, QM-Res., American Embassy, Paris.

SINCE Monday, April 10, 1933, at 7 P. M., the world record for high jumping on horseback has been broken. On that day, the horse *Vol au Vent* ridden by Lieutenant Count Christian de Castries, of the 11th Regiment of Cuirassiers of the French Army, at the Grand Palais during the Paris Horse Show, made a clean jump of 2 meters, 38 centimeters (7 feet, 9 3/4 inches).

This is the first world record officially registered with the International Equestrian Federation since its foundation in 1921. The highest jump officially recorded heretofore: 2 meters 36 (7' 9") was made August 17, 1912, at the Vittel (France) horse show by two horses: *Biskra*, owned by Messrs. de Mun and Lowenstein and ridden by M. de Juge-Monspiesse and *Montjoie III*, owned by Messrs. de Rovira and Ricard and ridden by M. Ricard.

Therefore the record of 2 meters 36 established at the Vittel horse show in 1912, while not registered with any international body, as the "Fédération Equestre Internationale" was not yet in existence, had been generally conceded to be the world record until April 10, 1933, at least in the absence of any other claimant to the title. The performance of the American horse *Heatherbloom* in 1904 over 7 feet, 10 1/4 inches, is considered official, outside of the United States, is that of *Great Heart* who jumped 8 feet, 3 1/2 inches at the South Shore Country Club, June 6, 1923.

The obstacle used for the high-jumping competition consists of a set of poles 6 meters long and 12 centimeters in diameter, resting loosely on two side-posts 60 meters high, set at a 30° angle with the ground, so that the obstacle is slanting from the take-off side. Two wings about 2 meters high and 6 meters long prevent the horses from running out. The poles are bamboo wrapped around tightly with strands of wet straw and, while stiff enough not to sag in the middle, are not likely to cause any injuries to the horses in a crash. The lower part of the obstacle, to a height of about 1 meter 30, consists of brush above which the poles are placed at close intervals above each other to prevent too much daylight from showing between them. These poles are suspended at either end on iron pegs and must not be fastened to the pegs or to the side-posts. The pegs fit in holes inside the side-posts and the 2 pegs supporting the uppermost pole are fitted with a leather disc about 15 centimeters in diameter to keep the pole from slipping off.

In accordance with the regulations of the International Equestrian Federation, an affidavit recording the event was drawn up in four copies to be filed in the archives of the International Equestrian Federation, the French National Equestrian Federation and the "Société Hippique Française" under whose auspices the show was held. These affidavits were signed by the following witnesses: Baron du Teil, for the "Société Hippique Française"; General Detro, for the "Fédération Française des Sports Équestres"; Maurice F. de Barneville, as Delegate of the International Equestrian Federation, representing Major General Guy V. Henry, Chief of Cavalry, U. S. Army, President of that Federation, and by two judges of the event; Count René de Beaumont and Count Goulaine.

## The Foreign Military Press

Reviewed by Major Alexander L. P. Johnson, Infantry

BRAZIL—*Revista Militar e Naval*—September, 1932.

"The Bolivia-Paraguayan Conflict," by De Pizarro Loureiro.

The conflict between the two South American republics hinges upon the interpretation placed by them upon the "uti possidetis" agreement of 1810. Bolivia claims de jure title, and Paraguay has a de facto title to the disputed territory of the Gran Chaco, although Paraguay asserts both with equal force in support of her claim.

The origins of the conflict must be traced to the period of emancipation of South America from Spanish rule. Columbia formulated the doctrine in 1819, that the boundaries of the new republics be determined in conformity with the laws of the mother country in force in 1810. Since all latin republics assented to this principle, the author quotes the eminent Brazilian authority, Euclides da Cunha, to the effect that "de facto possession, though effective and real, is not sufficient to establish national boundaries."

The author states, that Bolivia, which constituted the Royal province of Charcas, inherited the boundaries assigned to it by the Spanish monarchs. These included all of the Chaco Borealis. Paraguay, on the other hand was formerly the province of Guayara, whose boundary in colonial times was marked by the Paraguay River. He charges, that Paraguay advanced her claims in the Chaco region at a time when Bolivia was in the throes of internal difficulties and lacked the necessary means of opposing Paraguayan aggression.

FRANCE—*Le Revue d'Infanterie*—December, 1932.

"Russian Ideas on the Employment of Modern Tanks," by Lieut. Col. Mendras.

"A good communist," the author writes, "loves everything scientific or technical, everything that is new or bears the imprint of tomorrow. The Soviet military publications indicate, that the army is no exception to this rule." It, therefore, seems natural, that the military authorities of Soviet Russia should devote much thought to mechanization, motorization and other modern means of warfare.

The author presents without comments the views expressed by Soviet military writers on the problem of rapid exploitation of a successful penetration of a hostile front by mechanical means. They visualize an attack in two principal waves, the first or assault wave, and the second or exploiting wave which is assisted by mechanized and motorized forces operating against the hostile flank. Russian military writers believe, that modern tanks, a powerful air fleet and artillery permit a complete discard of attrition warfare in favor of vigorous action which seeks to smash the entire hostile front. The following principal means of the attack are enumerated:

1. Tanks with power of long range action or heavy artillery capable of effective action against hostile rear areas, command posts, artillery, reserves and installations.

2. Tanks for infantry protection—Penetration of the hostile front and action against the enemy's main line of resistance would be their principal mission.

3. Infantry support tanks which would attack in close contact with the supported infantry.

4. Long range artillery for counter-battery to neutralize hostile artillery fire before and during the initial stages of the attack. Supporting artillery with the mission of neutralizing the hostile main line of resistance and to support the tanks during their advance.

6. Antiaircraft artillery.

7. Attack aviation with the mission of attacking hostile artillery and reserves, at the same time to keep away hostile aircraft.

5. The Infantry, which delivers the final blow against the hostile position.

The relative blindness of the tank is deemed its principal weakness. The hostile artillery is its greatest enemy, hence it is imperative that it be neutralized. On the other hand, a field artillery battery protected by a mine field could effectively resist a company of Christie tanks. Soviet experts think. They estimate, that 200 mines (10 tons) will close a front of one kilometer, and that it will take two companies about two hours to prepare such a mine field. The estimate as to the number of tanks required is high. For a corps attacking on a front of 6 to 8 kilometers, according to Soviet estimates two battalions of tanks for long range action, one battalion for infantry protection and three battalions for direct support of the infantry would be required.

For effective employment of their Air Force, Soviet military writers advocate concentrated action in time as well as in space. They estimate, that one bombing squadron would be necessary to attack effectively a battalion of field artillery in position, or a regiment of infantry in route column.

Close liaison between all elements of the attack is emphasized, hence the jump-off time of the different echelons must be carefully determined and coordinated. In the Soviet military conception the second tank wave should be timed to follow the first at an interval of five minutes; seven minutes should elapse between the jump-off of the second and third waves, while the infantry as the fourth wave should follow after a lapse of three additional minutes. This time schedule may have the inherent defect, that during the approach to the line of departure, the three tank echelons and their supporting artillery would have to



pass the infantry column, hence is liable to cause crowding, confusion and disorder.

Russian military writers apparently take issue with the view that modern tanks permit the omission of artillery preparation as a means of securing the effect of surprise. On the contrary, it is thought that where hostile defence is organized in depth, artillery preparation for an hour is indispensable in order to neutralize the enemy's strongpoints and to insure the safe arrival thereof of the attacking tanks. Moreover, they believe, that these tanks should be provided with special artillery support. The proper time for the air attack against the hostile artillery and reserves is, in the Russian view, the precise moment when the supporting artillery must lift its fire. The Soviet military experts believe that perfect coordination may be achieved by assigning to the division a definite objective which should include the hostile artillery positions, a total depth of advance of 6 to 8 kilometers. This objective the division must reach without halt or delay.

Infantry mobility on the march and in combat, the Russians believe, must correspond to the striking power of that arm. In order to achieve that end, they advocate that:

1. All infantry be motorized and that all motor transport be provided with protective armor;
2. In addition to its normal and traditional components, the infantry regiment should include a reconnaissance company consisting of three sections (light armored car section, light tank section and a very light tank section); one company of medium armored cars; a chemical warfare company, and a motorized antitank battery. The battalion should include a company of armored cars with machine guns; one company of small tanks, and one motorized artillery battery (consisting of an antitank section, an AA section and a trench mortar section);
3. The combat train should consist of armored tractors, the field train of motor vehicles on three axles;
4. The supporting artillery of the regiment should likewise be tractor-drawn and armored.

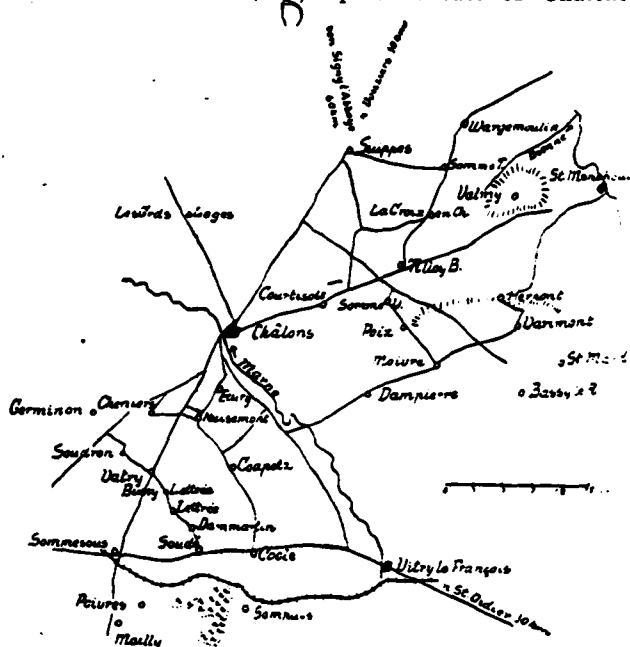
GERMANY—*Militär Wochenblatt*—November 11, 1932. "The French Manoeuvres", By No. 72.

As usual, several divisions, corps and army troops and air units participated in the last annual fall manoeuvres of the French Army. They were labeled "exercises of all arms", the author states, partly to keep away foreign military attaches and partly to mislead the public. The object of these exercises was to test new materiel and to determine the advantages which might accrue from the employment of motorized and mechanized forces in turning movements. Full secrecy was maintained even to the exclusion of press correspondents. The 15th Division comprising three infantry regiments was motorized for purposes of these exercises. In the first phase this force opposed an infantry division of four regiments, while in the second phase it operated against a reinforced cavalry division.

During the first phase (Sept. 19-22) the Blue 15th Division advancing from the north reached the area north of Chalons on Sept. 18. At the same time, the 2d Colonial Division assembled at Mailly. Both divisions represented the extreme west flank of their respective main forces. On the following day, Sept. 19th, the 15th Division was to cross the Marne. Motorized elements were to capture the bridges by surprise action and sweep aside any opposition to the crossing.

The Red air forces located the Blue Motor Column and attacked it near Les Grandes Loges. Blue aviation countered by bombing Red landing fields. The Blue Motor Column advanced rapidly, meeting weak resistance, and in four hours reached the line Germinon-Soudron-Vatry. In course of the afternoon the column pushed its advance to the vicinity of Sommesous-Cooles. The crossing of the Marne was effected under cover of darkness, the Blue commander deciding to detruck his division in the area Cheniers-Nuisement-Ecury. On the following day, about noon, Blue attacked the Red defensive position along the line Poivres-Sompuis, and penetrated the first position. On Sept. 22, Blue heavily supported by tanks, resumed the attack making the main effort on its right, captured the Red first position and broke into the second. The ease with which Blue gained success over the numerically superior Red infantry, in the author's opinion, was surprising, and he ascribes it to great artillery superiority and tank support.

During the second phase (Sept. 25-29), the motorized 15th Division (red) operated east of Chalons



against the 1st Cavalry Division (blue) consisting of two regiments and a motorized brigade. On the evening of Sept. 25, this force reached Signy L'Abbaye, while the 2d Colonial Division (red) arrived at Vitry-le-François. Both units represented the extreme western flank of their respective armies, each destined to

turn the hostile flank. On the morning, Sept. 26, the motorized elements of the cavalry division advanced in two columns on Vitry-le-François. At the same time, the 2d Colonial Division started its march on St. Menehould. At 8 a.m. advanced elements of the cavalry (dragoons and armored cars) encountered weak detachments of the Red flank guard (motorized infantry and dragoons portée) near Suippes. These were readily brushed aside and at 10 a.m. Blue reconnaissance patrols reached Dampierre and Moivre, but were repulsed and driven back. Erroneous impressions created by false reports of this action caused the Blue commander to halt his column for several hours, and consequently he did not reach Dampierre until too late to reach a favorable decision.

On September 27, heavy fog blinded aerial observation. Believing that he faced the entire 2d Colonial Division, the commander of the Blue motorized brigade decided to occupy a defensive position along the line Courtisols-Somme Vesle-Herpont, pending the arrival of the remainder of his division. Red developed in the assembly areas at Varimont, Poix, St. Mar, and Barry-le-Repos. Apparently the fog prevented a Red attack against the overextended line of the Blue motorized brigade. The latter promptly began aggressive reconnaissance until relieved by mounted troops. With the lifting of the fog, about noon, undecided frontal engagements developed. On the morning, September 29, the 2d Colonial Division launched a well-coordinated attack. Air forces on both sides participated in this action. At 9 a.m. the Blue commander launched a strong counterattack with his motorized brigade supported by attack aviation and succeeded in recapturing the heights north of Valmy. In this engagement, the author notes, contrary to customary practice, tanks attacked without accompanying infantry. By way of comment, he observed, that French military leaders, conscious of the superior strength of the French Army, are determined to capitalize this advantage to the fullest extent. It is but another proof, the author adds, of the baselessness of French fears relative to security.

Military Notes: In the July-August number of the *INFANTRY JOURNAL* of last year (1932) we reviewed the French plan for the reorganization and unification of the War, Navy and Air Ministries into a consolidated Ministry of National Defence. That change, which had been developed by M. Maginot, was put into effect by Tardieu when he assumed the premiership in the French government in February, 1932. With the advent of the Heriot cabinet, the National Defense Ministry disappeared, and the three separate ministries for the fighting services were revived. Evidently the French found that this consolidation was not productive either of economy or efficiency.

GREAT BRITAIN—*The Journal of the Royal Artillery*—October, 1932.

"A Momentous Mission," by Col. J. H. Marshall. Cornwall, C.B.E., D.S.O., M.C., etc.

An interesting study of the historic mission en-

trusted to Lieut. Col. Hentsch of the German Great General Staff by General von Moltke, in the early days of the World War. German military historians hold Colonel Hentsch responsible for ordering the retirement of the German First and Second Armies from the Marne to the Aisne in September, 1914. The author takes issue with this point of view, and endeavors to show that both General von Kluck and General von Bulow, commanders of the First and Second Armies respectively, had in fact decided upon the retirement before the arrival of Colonel Hentsch at their command posts. The author believes, that the real explanation of the "Miracle of the Marne" is that the British Expeditionary Force turned up where it was not expected, opposite the gap which had developed between von Kluck's and von Bulow's armies, and that it did so at the moment when both the German and French armies had fought themselves to a standstill. The author concludes that if Colonel Hentsch really did influence the commander of the First Army, General von Kluck, in his decision to withdraw, he probably saved that army from an even greater disaster.

—*Journal of the Royal United Service Institution*—November, 1932.

"The Development and the Future of the Fortress," by Major General Sir H. F. Thuillier, K.C.B., C.M.G.

An interesting lecture delivered before the Royal United Service Institution upon the part played by fortifications in the World War with the object of determining whether or not it is worth while to build and maintain permanent fortresses for future wars.

The author points out, that at the outbreak of the World War the Franco-German frontier, from Switzerland to Luxemburg, a distance of about 200 miles, was organized for defense by both France and Germany. The French defensive system consisted of two "fortified regions" each comprising a group of fortresses supplemented and supported by a number of smaller forts, field entrenchments and obstacles. The "fortified region of the Vosges" extended from Belfort to Epinal; the "fortified region of the Meuse Heights" extended from Toul to Verdun. Between these regions was an undefended gap, the Troué de Charmes. Between the northern fortified region and the Belgian frontier was a similar undefended gap, the Troué de Stenay. The basic idea was that the fortified regions would cover the mobilization and concentration of the French field armies and hold up any German advance on those areas, while any German attempt to push through the undefended gaps would soon expose their flanks to the fortifications and place the invaders in a very unfavorable situation. The lecturer stressed the difference between these fortifications, whose strength lay in the grouping of large fortresses and smaller forts into a connected self-supporting system covering a large area and the old time single fortresses built around towns.

The Germans had similar defensive installations around Strasbourg and around Metz and Thionville. Since none of these fortifications were attacked, the

lecturer observed, it is impossible to tell how they would have withstood the fire of the type of howitzers used by the Germans elsewhere. Their strategic importance is, however, best evidenced by the fact, that the Germans decided to make their invasion of France through Belgium because they believed that the French fortifications would cause such delays and difficulties as to preclude a swift decision.

General Thuillier estimates the approximate total cost of the French defences of the Vosges and the Meuse at about £16,000,000, an average of £400,000 a year for forty years, or the equivalent to the cost of three or four days of actual warfare. He compares this with the cost of battleships from seven to eight million pounds sterling having a life of twelve to fifteen years. He stresses the fact that the strategic effect of these fortifications was largely psychological. Their existence produced a certain idea as to their strength, yet it is impossible to say now whether this idea was true or false. The Belgian fortresses of Liège, Namur, Antwerp withstood the German attack for only a few days. Maubeuge, the only French fortress attacked in 1914, fared no better. Verdun differed from these, since it was never isolated or subject to all around investment. General Thuillier aptly calls it a strong bastion in a long battle line. Moreover, by the time the Germans began their operations against Verdun, in 1916, France had lost faith in permanent fortifications and had placed her main reliance upon field fortifications, several miles in front of the old fortress. The Germans succeeded in taking Fort Douaumont, but the operation as a whole proved one of the costliest of failures of German arms.

Among the fortresses of the East, only Przemyśl, Novo-Georgievsk and Kovno sustained attacks of importance. The first of these, as will be remembered held out for quite some time, finally surrendered when its supplies were completely exhausted and relief was not in sight.

The lecturer found that the average length of the twenty-five principal sieges during 1702-1713 was thirty-four days. They might have been prolonged had the defending garrison held out to the last. Conditions and the customs of the day, the small size and restricted mobility of armies, the hope of receiving substantial reinforcements practically nil, favored capitulation with the honors of war before the final assault. It enabled the beleaguered garrison to withdraw from the fortress, hence this was considered less of a calamity than the total loss of the command which would inevitably have resulted had they resisted to the last. It was Napoleon who first inculcated the idea that a fortress must hold out to the last man.

The development of modern weapons opened a new phase in the matter of siege operations. They enormously increased the tactical strength of the defensive. General Thuillier finds, that the most successful defences of this period were those of the second half of the XIX Century, and that the worst were those of the World War. He believes that there is nothing that permanent defences have done during this period that has not been done, and generally better done by field

fortifications. He assigns as one reason for his opinion the fact that the pre-war type of fortress embodied gross tactical defects. These fortresses were as a rule very large and conspicuous; they contained infantry as well as all types of artillery; they lacked the advantage conferred by organization in depth, and they were nearly always sited on commanding ground, hence capture gave to the attacker valuable observation and command over the interior. Moreover, they afforded the enemy an opportunity to concentrate from dispersed artillery positions an overwhelming fire upon each fort in succession. Another reason for his adverse opinion is the fact, that fortresses soon become obsolete hence failure in the face of modern weapons was inevitable.

The lecturer concluded his address by expressing the belief that modern conditions dictate the necessity of organizing the defence in depth. This depth will have to be so great that all-around defence on the lines of the old ring fortress is no longer practicable. Moreover the area required by modern defence is so great, that it requires an army to defend it. It is unthinkable, he states, to allow so large a force to be invested and isolated, and to be deprived of its mobility. He believes that permanent defences in the future will take the form of large defensive regions, organized in depth on the line of defensive zones developed during the World War. Such fortified regions may serve: first, as pivots on which field armies can operate, as were Verdun and Ypres; second, as a barrier similar to the fortified regions of the Franco-German frontier; or third, to bar a line of advance which cannot be readily turned or passed by. The defending garrison will consist of formations of the field army and not of static fortress troops of lower physical category or inferior training.

In conclusion, General Thuillier observes, that the employment of mechanized formations of considerable size may have some effect upon the question of fortifications, but he disagrees with those, who voice the opinion, that the development of mechanized forces will render defensive works unnecessary. On the contrary, he strongly believes that the more mobile the enemy's forces, the greater will be the necessity to defend important localities by means of defensive works. A study to determine the best type of defence for this purpose, he states, has not yet been undertaken, but he thinks it might take us back to a modified form of the ring fortress. This, however, he believes will be a small place, defensible by a battalion or brigade (regiment), not intended for prolonged resistance, but proof against a raiding force with armored vehicles.

—*The Army, Navy and Air Force Gazette*—March 1933.

"The Fighting Value of The Chinese Soldier", by Brigadier General C. D. Bruce, C. B. E.

Estimating China's total force now under arms at between two and three millions, the author believes that the Chinese Republic has the potential human resources for raising armies beside which the forces of

any other power or even two powers would pale into insignificance. As to the soldierly qualities of the Chinaman, the author points out that the "Chinese Regiment" at the time of the Boxer Rebellion demonstrated conclusively that the Chinese soldier efficiently led by Europeans is second to no other Oriental troops. At the same time, the Empress Dowager's troops also proved their mettle in actions against European troops. Among the chief assets possessed by the properly disciplined Chinese soldier, the author names his quite unusual marching powers; his ability to live almost solely on rice with the consequent reduction of transport requirements to an absolute minimum, the absence of drunkenness, and the capacity of the northern troops to stand almost any kind of weather. China's weakness, the author points out, is her lack of leaders. Japanese leaders are trained in the sternest school of self-denial, of Samurai faith and patriotism such as the Chinese leaders have never known. Last, but not least is the trained staff which is indispensable to the conduct of modern war. China's armies neither have such a staff, nor is it within measurable distance of being created.

IN.—*The Journal of the United States Service Institution of India*—January, 1933.

"The New Imperialism in Eastern Asia," by Major R. R. Mullaly, 10th Gurkha Rifles.

The underlying motives of Japanese action in Manchuria, the author writes, are still in many quarters imperfectly understood. He believes that the issue has been clouded by talk of oppression of a weak power by a stronger, and of an Imperialistic Militarism, which seized the world economic crisis as a favorable opportunity to further its sinister ends. In his opinion, the plain facts of strategic and economic necessity have been overlooked. The author dismisses as a myth the designs against the Philippines, Australia and New Zealand, frequently attributed to Japan. Although over-population is Japan's greatest problem, the author does not believe it incapable of solution without resort to the desperate expedient of territorial expansion. If such plans were even seriously entertained by Japan, the author finds ample evidence of it having been abandoned in favor of industrial expansion. Industries, however, require raw materials, and Japan is lacking in many of the essentials required by her rapidly expanding industries. Japanese policy in Manchuria is prompted in part by this search for raw materials. The menace of Soviet Russia is another motive behind this policy.

The Japanese fervently believe in the righteousness of their course, the author states, and they regard their country as the only bulwark against Bolshevism in the Far East. She cannot understand American and European attitude in view of all that the Powers have suffered at the hands of China for years. By forestalling Russia in Manchuria, Japan feels she is serving the true interests of civilization. They believe that a peaceful well-governed Manchuria will not only provide a check on the flow of poison which

is being poured into China, but will also prevent its spread throughout the Pacific and beyond.

Tracing the policy of imperialism of Tsarist Russia, which was prompted by the need for ice-free outlets to the sea, and the consequent development of the Russian sphere of influence in Mongolia, the author shows that Soviet Russia not only continued the Tsarist policy, but by efficient organization succeeded in adding Outer Mongolia to the wall of sovietized states, which she has built up along her Asian borders. Chinese Turkestan, farther to the west, is another great territory within the Soviet program of development. The vast natural resources of that region, according to the author, are to be exploited and made to serve the ends of the new Russian Imperialism. Whether or not Soviet Russia will succeed in Turkestan, as she did in Outer Mongolia, remains to be seen. Its importance to British interests and to China, the author observes, needs no emphasis.

Blocked by Japan in Manchuria, Russia transferred her attention to Mongolia and Chinese Turkestan, and it is there, the author believes, that she is making her preparations for the next stage in that march to the south, which was the keynote of Tsarist Imperialism, and which is the inevitable manifestation of the new imperialism of Soviet Russia. The author quotes the socialist Bertrand Russell's book, "The Problem of China," to the effect, that "the Asiatic expansion of Bolshevik influence is . . . but a continuation of the traditional Russian policy, carried on by men . . . more intelligent, and less corrupt than the officials of the Tsar's regime . . ." The added object of this expansion, the author points out, is to provide a jumping-off ground for a better dissemination of the Bolshevik tenets in the countries beyond.

Under the circumstances, the author concludes, Japan's determination to keep Bolshevism at arm's length from her shores is not at all extraordinary. It is useless, he observes, to evade the fact that Manchuria must be either Russian or Japanese. Russia, once established in that troubled province, would be in a favorable position to carry on her intensive campaign aimed at the disruption of China, and it would better enable her to exploit Japanese labor troubles which are in inevitable concomitants of intensified industrialization.

In the author's opinion, Japan has, by her determined action in Manchuria, delivered a well-timed blow at the new imperialism in Eastern Asia.

JUGOSLAVIA—*Peshadiski Glasnik*—July, August, September, 1932.

"The Military Orator," by Lieut. Col. Svetozar C. Popovitch.

Citing Napoleon's farewell address to his Old Guard, and other addresses by famous military leaders, the author gives expression to the belief, that the military orator still is indispensable, and he points out that the World War presented numerous occasions when commanders were able to influence the outcome of an action by an appropriately worded appeal to their

command. He recommends the cultivation of the art of oratory to all officers.

—*Ratnik*—November, 1932.

"Casualties of Serbia in the Wars of 1912-18", by Col. Mita Petrovich, Med. Corps.

Serbia, with a population of six million, according to the author, called to the colors in connection with the two Balkan wars and the World War not less than 2,784,000 men of whom 1,250,000 made the supreme sacrifice. The casualties in the first Balkan war amounted to 39,000 of whom 5,000 were killed in action; 16,000 more died as the result of wounds or disease. In the second Balkan war 9,000 were killed in battle, 5,000 were victims of the Cholera. The number wounded amounted to 36,000. The World War casualties reached the staggering total of 1,213,000 of whom 52,000 were killed in action, and 807,000 died of wounds or disease. The retreat from Serbia in 1915, cost 138,000 lives, and 306,000 died in Albania. 630,000 deaths are credited by the author to the civil population.

The author gives evidence of great familiarity with American journalistic methods, and a flare for the sensational. He calculates that, in the three wars, Serbia sacrificed 7,800,000 liters of blood, which he states is the equivalent of the load of a freight train 4 kilometers long, consisting of 780 cars of 10-ton (metric) capacity.

SPAIN—*Revista de Estudios Militares*—November, 1932. "The Soviet Army As I Saw It," by Enrique Diaz.

An interesting account of personal observations of the Soviet army made by the author within the year. He emphasizes the fact that Soviet Russia is a dictatorship in the fullest sense of the word, and that army bears the imprint of that system which is based upon absolute control and discipline. The author states that discipline in the Soviet army is absolute and implicit. He refutes as a myth the oft repeated allegation that there exists no distinction of rank in the Soviet army. The term "tevarish" (comrade) has completely disappeared from the Bolshevik form of address. The salute is obligatory within the barracks compound and upon all official occasions. Members of the same regiment salute at all times, superiors and subordinates doing so simultaneously.

The author writes that military horseshows are as brilliant social affairs as they were in the days of the Tsars. He notes that on one of these occasions he saw General Budeny, famous cavalry leader of the Soviet army, wearing numerous decorations, descend to the arena accompanied by officers of his staff, to felicitate the prize winners while the military band intoned the *Internationale*, Soviet Russia's official anthem. The scene, the author adds, was strangely reminiscent of another day.

The author comments upon the close relationship that exists between soldier and worker, between factory and barracks. It imposes upon the Soviet army a social character that differentiates it from all other

armies. Russia is pervaded by a military spirit, the author states, that is unknown in any other country. "Everything is dictatorized, disciplined, subjected to the unquestionable and unquestioned will of the government," the author writes. "Everything is militarized, the army, the police with its military formations (O. G. P. U. or Tcheka), the factories and civil organizations for both sexes." "Ossoaviachim" is one of these militarized civilian organizations for the promotion of military aviation and chemical warfare. It carries upon its rolls millions of members, males and females.

—*Revista de Estudios Militares*—January, 1933.

"Military Expenses of France," by Anonymous.

An analysis of data compiled by the Spanish General Staff on the subject of French military appropriations. The calculations are based upon the 1930 valuation of the French gold franc. On a comparative basis, appropriations for the land forces, expressed in millions of francs, were as follows:

Year	Homeland	Colonies	Total
1913	6,380	1,965	8,345
1922	4,600	2,296	6,896
1927	4,200	2,213	6,413
1930	5,050	2,499	7,549

The analyst observes that while the military expenses for the homeland have been reduced by 21% compared with the 1913 appropriations, those for the colonial establishment show an increase of 27%. The sharp reduction shown for 1922 and 1927, the author attributes to economies effected by the use of reserve supplies, retrenchments on repair and maintenance of buildings and installations, and a pay schedule to all ranks materially reduced by the devaluation of the gold franc. On the other hand, the increase shown between 1927 and 1930, the author believes, was due to the necessity of replenishing reserve supplies, and the readjustment of salaries to the actual cost of living. As to colonial troops, the author states increased appropriations were caused partly by the increased cost of supplies, and partly by an actual increase in the authorized strength of the colonial army. Reduction of the term of service with the colors and needs of the newly occupied territories necessitated a corresponding increase in the strength of the colonial establishment.

In 1913 France had only 14 land planes and 5 hydroplanes, hence the author disregards aviation appropriations for that year. Subsequent appropriations were as follows:

1922	1,000 million gold francs.
1927	1,400 " " "
1930	2,140 " " "

The sharp increase is largely attributed to increased cost of production and higher pay schedule for personnel compared to that of land and sea forces. The increase in the number of airplanes in active service in the homeland, the author finds, did not keep pace with the increased appropriations. In 1925, France had 1,180 land and sea planes. By 1930, their number had increased only to 1,210.

## Organization Activities

### 52nd Cavalry Brigade

Columbia, Penna.

ON the evening of March 28th, 500 officers and former officers of the National Guard of Pennsylvania, as well as many members of the Senate and House of Representatives of the Pennsylvania Legislature, Governor Gifford Pinchot, and the majority of his cabinet, and former military associates, gathered in the Penn-Harris Hotel, Harrisburg, to honor Major General Edward C. Shannon upon the occasion of his promotion to command the 28th Division, Pennsylvania National Guard.

General Shannon, who for ten years has commanded the 52nd Cavalry Brigade, is Lieutenant Governor of Pennsylvania, and is highly regarded both in public and in military circles.

Among the guests of the National Guard who attended the banquet were Major General Paul B. Mahan, Commanding General 3rd Corps Area, Major General Guy V. Henry, Chief of Cavalry, and Major George S. Patton, Jr., 3rd Cavalry, U.S.A.

### 305th Cavalry

Philadelphia, Pennsylvania

WEDNESDAY, April 19th, the 305th Cavalry added one more Organization Day to its history.

The important event of the day, an exhibition ride performed by officers of the Regiment, was a splendid commentary on the training and handling of mounts. During the greater part of an hour 16 riders guided their horses through a series of evolutions without a single command. Upon the completion of the ride, officers competed for a prize in a jumping exhibition. Officers and guests then moved to the Banquet Hall, 1st City Troop Armory, where a receiving line passed before Colonel George T. Bowman, Cav. Chief of Staff, 62nd Cavalry Division, and the field officers of the Regiment.

Captain William J. Taylor, Jr., Regimental Adjutant, then read a brief history of the Regiment recalling events that transpired since last Organization Day.

We have had brief communications from three of our officers on active duty. All are very busy but enjoying their work. Second Lieut. Robert O. Webb, Troop E, is leading a busy life at the Special Course for National Guard and Reserve Officers, Cavalry School, Fort Riley, Kansas. First Lieutenant Ernest V. McClellan, Adjutant of the 2nd Squadron, is on duty with the Civilian Conservation Corps at Fort Howard, Maryland, where he is engaged in learning the ramifications of handling, mess and supply of about 200 civilian forestry workers. Second Lieutenant Thomas L. Shelley, Troop F, on duty with the Civilian Conservation Corps at Carlisle Barracks,

Penna., is enjoying his duties but claims to be too busy to tell us much about them as yet.

In Philadelphia, officers of the Regiment are busily training every week, in preparation for the summer's active duty training period at Fort Myer, Virginia. This training includes: Conferences and Map Problems, Mounted and Dismounted Drill with practice in giving commands, Rifle and Pistol Practice, and Saber work.

### 306th Cavalry

Baltimore, Maryland

INSTRUCTION in Equitation for Reserve Officers has been resumed at Fort Hoyle, Maryland, and again the interest in this work is so great that the number of mounts available is not sufficient to accommodate all the officers desiring to attend. Sufficient progress has been made to enable instruction in jumping to be given to all officers enrolled. This phase of riding arouses more interest among Reserve Officers than any other form of riding.

Many officers of the regiment have applied for active duty with the Civilian Conservation Corps. This duty should provide very valuable experience similar to that which an officer would be called upon to perform in case of an emergency. Captain John P. Dean and 1st Lieutenant Kenneth S. White of the 306th Cavalry have already been detailed for this duty, and it is hoped others will soon be detailed.

### Second Squadron and Machine Gun Troop, 306th Cavalry

Washington, D. C.

MAJOR H. C. Dagley, Cavalry, Unit Instructor, returned on March twenty-fifth from two months spent as a patient in the Army and Navy General Hospital, Hot Springs, Arkansas.

Training designated to prepare the officers for their summer training missions is now in progress. The most of the instruction is being given by Reserve Officers, with the Unit Instructor acting as supervisor.

### 307th Cavalry

Richmond, Virginia

MANY applications are being received from officers desiring active duty with the Civilian Conservation Corps.

Lieutenants Louis B. Powell and Walter L. Renn, Jr., 307th Cavalry, have been ordered to active duty with the C. C. C.

First Lieut. Sam H. Franklin, Jr., is conducting a riding school in Lynchburg in addition to his duties



as Instructor in Equitation at Randolph-Macon College for Women.

Information from the War Department that 2nd Lt. Woods G. Taiman is now eligible for assignment in the Organized Reserves as he was honorably discharged from the Virginia National Guard, Sept. 9, 1932.

### Third Squadron and Machine Gun Troop, 307th Cavalry

Norfolk, Virginia

RESERVE activities in the Norfolk Area were inspected by Colonel George T. Bowman, Cavalry Liaison Officer for Organized Reserves, Third Corps Area, and Chief of Staff of the 62nd Cavalry Division, on April 13 and 14, 1933.

Colonel Bowman was entertained at luncheon on April 13 by the Officers of the Squadron at The American Legion Drum and Bugle Corps Club, Norfolk, Va. High ranking Reserve Officers of Norfolk and Portsmouth were present, and greetings from the City of Norfolk were extended by the Director of Public Safety, Colonel Charles B. Borland.

Squadron Headquarters was recently moved from the Armory Building on Princess Anne Road to spacious quarters on the Military Reservation, Fort Norfolk, Foot of Front Street, Norfolk, Va.

Troop Schools are progressing very satisfactorily. Conferences are now being devoted to preparation for active duty training. Instruction is being given in Minor Tactics and Cavalry Weapons.

Four Officers of the Squadron have applied for six months' active duty with the Civilian Conservation Corps, and one officer, Lieut. W. L. Renn, Jr., was ordered to Fort Washington, Md., for this work on April 22, 1933. The other officers who applied are:

- 1st Lieut. Southgate W. Taylor, 307th Cav.
- 2nd Lieut. Elijah P. Montgomery, 307th Cav.
- 2nd Lieut. Kenneth W. Chapman, 307th Cav.

### 308th Cavalry

Pittsburgh, Pennsylvania

SINCE the opening of the Civilian Conservation Corps Camps and since Active duty with these Camps has been opened up to Reserve officers, two officers from the 308th Cavalry have been ordered out.

1st Lieutenant Alexander M. Stewart from Altoona, Pa., received his orders with the first contingent to go from Western Pennsylvania.

1st Lt. Truman G. McMullan was also ordered out, and both officers write that they are finding the duty pleasant and interesting.

There were eighteen applications for this duty from this regiment, and every one hopes that more of our officers will be afforded the opportunity to go.

On Thursday, May 4th, at the Keystone Club, Pittsburgh, Pa., a luncheon was held in honor of Colonel George T. Bowman, Cavalry, Chief of Staff, 62nd Cavalry Division, and Liaison Officer for the Organized Reserves at Headquarters, Third Corps Area, who is to retire upon reaching the age of sixty-four years on

June 30, 1933. Colonel Bowman's many friends will miss him and regret his retirement.

On Thursday, April 27th, Lieutenant and Mrs. Alexander O. Froede entertained Colonel and Mrs. Harrington, Major and Mrs. Hubbard, Captain and Mrs. George W. Conner, and Lieutenant L. S. Goldworthy, at their home in Brentwood.

### 862nd Field Artillery (Horse)

Baltimore, Maryland

THE regiment is now training for the Citizens' Military Training Camp next July. We are holding four conferences a month to refresh our officers on the elementary training of recruits.

The riding classes at Fort Hoyle, suspended during the winter, have been resumed. Unfortunately there are not enough horses to mount all the officers who wish to ride, and many have to be disappointed. Major William H. Skinner, 306th Cavalry Reserve, has been doing excellent work as instructor in this class. This training is producing gratifying results both in improving the skill of reserve officers in riding and also in arousing among them interest in horses. The interest in good horses, so general in this section, is reflected in the desire of many reserve officers to ride as often as they can do so.

Also our pistol firing classes are well attended. A recent competition between the reserve officers and the employees of the Post Office Department resulted in a victory for the latter by a narrow margin. It is planned to have other competitions among these teams and also the Police Department and National Guard.

### The Cavalry Club of the Southwest

By 1st Lieutenant Basil F. Basila, 311th Cavalry, President

HORSEMANSHIP and rifle and pistol marksmanship are abilities that for many years have been marked "a Texan," and particularly that part of the State's population residing in the southwestern part of Texas. With the assignment of Colonel D. D. Tompkins at Unit Instructor of the 156th Cavalry Brigade at San Antonio, the War Department threw a "natural." It placed a horseman in his natural setting—amidst horsemen. And, to complete the joy of all concerned the rifle "bugs" and the pistol "nuts" soon discovered the Colonel to be an ardent exponent of accuracy with small arms.

Our instructor had not been long with us and it was suggested at a Cavalry Troop School held in February, 1932 that a Cavalry Club be organized. Showing evidence of our Cavalry training, action was taken immediately with the result that during that same evening four officers were elected to direct the Club's activities for the first year. Captain George M. Rogers, Cav-Res., was elected president. Captain Robert Z. Hurt, Cav-Res., vice president. 1st Lieutenant Basil F. Basila, Cav-Res., secretary, and 1st Lieutenant Allan W. Hall, Cav-Res., treasurer.

At the initial meeting of the Executive Committee held a fortnight later a constitution which had been prepared by the secretary was adopted wherein the

subject of the organization was set forth as "The aim and purpose of the CAVALRY CLUB OF THE SOUTHWEST shall be to foster the spirit of Cavalry and the love of a horse; to encourage and promote the development of bold and fearless horsemanship; to stimulate interest in military science, education, and training, and preparation for National Defense; and to further the esprit de corps of its active members. Officers of Cavalry of the Army of the United States, throughout the great Southwest—by tradition the home of the mounted soldier."

It was also decided at the initial meeting of the Executive Committee that the Club is to remain at all times non-political, and to operate as a complement to the local chapter of the Reserve Officers Association.

Starting with a charter membership of ten officers of the Cavalry Reserve, the Executive Committee soon thereafter opened the Club to all officers of the Army of the United States on the basis of three kinds of membership—active, associate, and honorary. Active membership was limited to Cavalry officers of the three components of the Army, and associate membership was opened to all other officers of the Army of the United States. Honorary membership was limited to persons of distinction who have rendered signal service to the National Defense. Honorary membership has been tendered and accepted by the Chief of Cavalry, Major General Guy V. Henry, the present Corps Area Commander, Major General Edwin B. Winans, Colonel George P. Tyner, G.S.C., Chief of Staff, Eighth Corps Area, Colonel Tommy Tompkins, Colonel D. D. Tompkins, Colonel Gordon R. Catts, Colonel David Biddle, and Colonel Innis P. Swift.

At the beginning our activities consisted of cross-country rides on alternate Sundays, and a weekly class in elementary equitation, mounts being obtained through a Club arrangement with one of the local stables. Qualified officers of the Cavalry Reserve would take turns about acting as Sunday ride leaders and class instructors. The elementary equitation class proved to be quite an attraction, for here the ladies of the membership had an opportunity to learn the rudiments of good riding under capable instructors and at no cost.

Regulations governing the Officers Reserve Corps permit Unit Instructors to requisition a number of rifles and pistols together with an allowance of ammunition for instructional purposes. This opportunity has been taken advantage of fully. Outdoor and sub-caliber gallery rifle practice go on throughout the year. Our small-bore firing is held on the ranges of the neighboring 9th Infantry at Ft. Sam Houston through the courtesy of the Regimental Commander. At first Captain T. F. Wessels and later Captain Frank W. Halsey of that regiment assisted by the crack regimental small-bore team acted as our instructors.

At our first pistol practice, we discovered a number of "top-notchers," polished experts with a handgun. This discovery led to the organization of a pistol team which subsequently challenged officers of all army regiments in and around San Antonio. Successive vic-

tories were registered over officers of the 12th Field Artillery, 15th Field Artillery, and the 23rd Infantry, all of Fort Sam Houston. Feeling our "boats" we journeyed to Fort Brown at Brownsville, Texas, 330 miles away on the Rio Grande and there lucked out over the officers of the 12th Cavalry by the extremely close score of 1302 to 1300. Next a civilian team from a nearby city was snowed under.

With five consecutive victories and no defeats behind them, the pistol team together with some 15 club members as "rooters" journeyed to Fort Clark, 136 miles away and there crossed pistols with the officers of the 5th Cavalry. Here we learned "how to take it," losing for the first time, the score being 1253 to 1275.

The Cavalry Club of the Southwest has grown rapidly since its organization some 15 months ago, the membership at present being 113. Club dues are only \$3.00 a year. Monies obtained from dues are used for general club purposes such as stationery, stamps and range necessities that cannot be requisitioned.

The present size of the Club and the manifold activities that we are engaged in have made it necessary to departmentalize each activity. This was accomplished by broadening the duties of the team captains to include complete supervision of their specialty among all club members. 1st Lieutenant Clay McFarland, 141st Infantry, Texas National Guard, is captain of the pistol team and has charge of all pistol firing. 2nd Lieutenant Meredith C. Engel, Cav-Res., 5th Cavalry, is captain of the small-bore team and has general charge of the conduct of this phase of club activity.

The rapid growth and steadily increasing interest in the Club is the outcome of following the "balanced ration" principle in arranging our activities. A pistol practice schedule mixed in with a rifle practice and riding schedule seasoned with frequent socials for members and their ladies make membership most attractive.

March 1st witnessed the passing of our first anniversary on which date the newly elected officers for the new year were installed by Colonel Tompkins. The writer was elected president, Major Henry A. Bartels, Dent-Res., vice-president, 2nd Lieutenant Robert D. Maxwell, Cav-Res., corresponding secretary, 2nd Lieutenant Edward A. Obergfell, FA-Res., recording secretary, and Captain William K. Alston, QM-Res., treasurer.

Through frequent association with one another in a semi-official capacity much of the "newness" that characterizes a reserve officer has been worn off. The many responsibilities shouldered by various of our membership as a result of the activities undertaken has given each a keener insight into what is going to be expected of him in the event of a national emergency.

### 318th Cavalry

La Grange, Illinois  
Lieut. Col. Wm. A. Peterson

THIS marks the first appearance of 318th notes in the pages of the CAVALRY JOURNAL. It's a real publication and we're glad to have a little niche in it.









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1624 H Street, N. W.

Washington, D. C.

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Organized November 9, 1885

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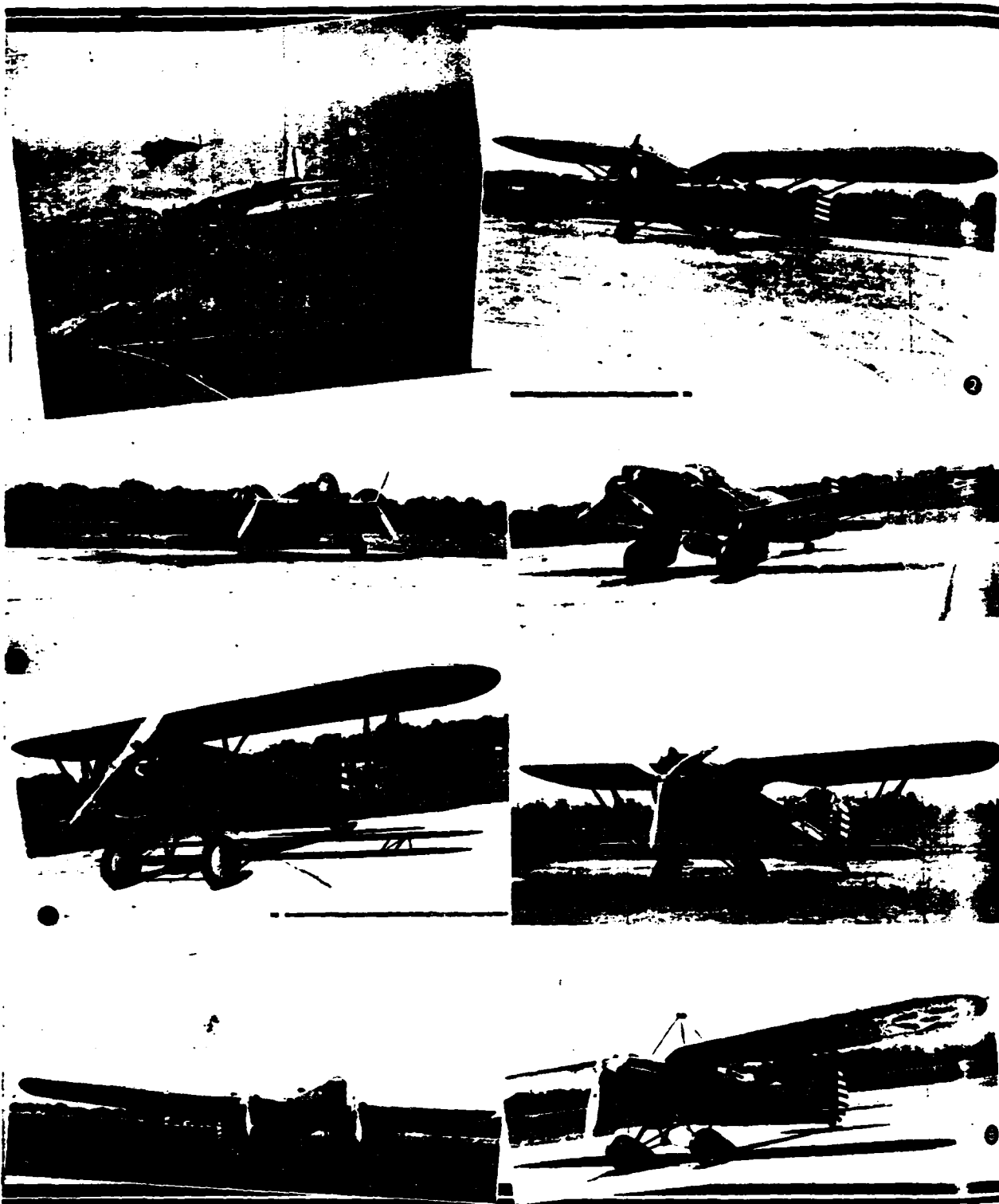
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LATEST TYPES OF ARMY AIR CORPS PLANES

1. The B-9, the first of the "super-bombers," threatened the superiority of pursuit types in speed until the P-26 demonstrated the superiority of this type of pursuit plane.
2. The Douglas B-7, Light Bomber. With slight alterations in equipment this ship becomes the O-35, a long range (Army observation) reconnaissance plane. It has retractable landing gear. The gull wing is quite noticeable here.
3. The new Army Martin X B-10 bomber now undergoing test at Wright Field. It is powered with two radial air-cooled engines and has retractable landing gear. The bombs are carried internally in a bomb bay which is closed by a trap.
4. The Curtiss A-6 attack plane. This ship carries light bombs and 6 machine guns—4 pointing forward and 2 aft. The

- attack plane will be used to first attack AA establishments immediately prior to a bombing raid.
5. Boeing P-12E. Most Army pursuit squadrons are equipped with this single seater. Speed about 190 m.p.h. at 7000 feet altitude.
6. The Berliner-Joyce two seater pursuit P-16. The upper wing is gull type, the center section being cut away for better visibility. The gunner rides in the rear seat with back to the pilot.
7. General Aviation O-27. Long distance reconnaissance plane. Note the motors faired into the wing.
8. Douglas O-31. A fast corps observation plane. The latest Douglas models are gull wing designed.

## What a Cavalryman Should Know of the Air

By Major H. A. Flint, Cav., Maxwell Field, Ala.

THIS article is based on the assumption that a cavalryman, like any other ground officer, desires knowledge of the characteristics and potentialities of aviation which can assist him in carrying out the task assigned to his command. It is hoped to direct the thought of the reader along lines which, briefly speaking, might be termed "Command Functions," the assignment of a task to an air unit that is within its power to accomplish and the accomplishment of which will materially assist in carrying out the mission of the force whose command is assumed by the reader.

The officer must clearly understand the task of his force and make a clear-cut decision as to how its mission is to be carried out. He should know certain basic facts about the Air Corps and its problems; the characteristics of the various types of aviation; their powers and limitations. Knowing these things, it will be possible for him to determine the profitable employment of the air unit that may be working with his command. Furthermore, he will know how to conduct his force to minimize effect of hostile aviation.

The converse of this is also true. The better an air element, be it simply an observer or an observation squadron, understands the problems and intentions of the ground force, the more intelligently and profitably it can cooperate. So true is this that the importance of good liaison cannot be overemphasized.

Five fundamental facts concerning aviation should be kept in mind: 1. The speed of an aircraft is greatly superior to that of ground vehicles; 2. It cannot remain in the air continuously; 3. It cannot remain stationary in the air; 4. It can pass over obstacles which would stop a ground force; 5. Areas denuded from a terrestrial observer are not from an aerial observer, who can also observe deep in enemy territory.

The Air Corps has four tactical branches: Bombardment, Pursuit, Attack, and Observation. The smallest tactical and administrative unit in each of them is the squadron, composed of a headquarters and a certain number of planes. It is commanded by a Major. Bombardment and observation squadrons have 13 airplanes each. Pursuit and attack squadrons have 25 each.

Usually three airplanes maneuvering together are called an "Element." Two or three "Elements" form a "Flight." The entire squadron may be in the air at once in a formation composed of two or more "Flights." The air is a large space, and there is no limit to the number of squadrons that can be there at the same time forming part of a still larger formation, the group, wing, division, or air force.

Three or four squadrons united with a group headquarters, a headquarters squadron, and a service squadron, constitute a group, commanded by a colonel. The headquarters squadron is concerned with administrative details, operations and certain technical matters.

The service squadron handles engineering matters, shop and repair trucks, transportation, armament and supply.

Two groups form a wing, under command of a brigadier general.

An AIR FORCE might be defined as a variable unit, but one which, in general, includes all four classes of tactical aviation and which operates under the command of one man, provided with a suitable staff. It must not be confused with the observation units that are organically a part of an Army or a Corps.

The present tables of organization prescribe only one such force, under the name of the General Headquarters Air Force. It seems reasonable to assume that there would be an air force in each theater of operations.

As a competent part of the armed forces of a nation, an air force has for its primary objective the furtherance of the task of the force to which it is assigned or attached. Its energies would be directed against those hostile agencies which were estimated to be most vital to the success of the nation.

Amongst objectives may be mentioned the disruption of enemy supply, evacuation and replacement systems; the security of corresponding friendly installations; freedom of movement on the ground and in the air; the timely removal and destruction of enemy forces. No general rule can be given for its employment.

Targets or objectives in order of priority would be assigned by the high command under which the air force was operating and would be those which it was estimated had the greatest influence or value at a definite moment in furthering the mission of the command.

It is not intended to convey the idea that the entire air force takes the air at the same time on the same mission. There might be a situation that would justify such employment, but it is far more probable that a suitable force would be constituted from its units to strike one of the designated objectives and another task force to strike another, etc. Atmospheric conditions, questions of adequate supply of appropriate material, etc., might cause deviations from the order of priority established, but it would be followed as closely as practicable.

To summarize: The strategic employment of an Air Force is a function of the Supreme Command, which assigns missions to it. The technical maintenance and the tactical employment of it, similarly to that of any force, along the lines laid down in its directive, is the function of its own immediate commander.

At the Air Corps Tactical School the Blue Air Force is organized as follows:

Blue Air Force:

3d Observation Group.

1st Pursuit Wing (3 groups)



**1st Air Division:**

- 1st Bombardment Group.
- 1st Attack Group.
- 1st Fighter Group (2 squadrons) (explained later).
- 1st Observation Group (2 squadrons).

**2d Air Division:**

- 2d Bombardment Group.
- 2d Attack Group.
- 2d Fighter Group (2 squadrons).
- 2d Observation Group (2 squadrons).

All groups contain four tactical squadrons (except where otherwise stated), a headquarters squadron and a service squadron. Each air division is thought to be a normal "task force," but from them modifications might be made, appropriate for various tasks.

**Bombardment**

Bombardment aviation is essentially a weapon for the destruction of vital material objectives on land or sea which are beyond the range of artillery.

Development of speed and weight carrying ability have eliminated day and night, heavy and light bombers from our service, which uses but one type of bombardment airplane. Its offensive weapon, the bomb, is produced in various types ranging from 100 to 2,000 pounds. Chemical bombs in these weights could be used. Airplanes are capable of carrying up to 2,400 pounds of bombs in various combinations, as one 2,000-lb. bomb; two 1,100-lb. bombs; four 600-lb. bombs; twenty 100-lb. bombs, etc.

At the Air Corps Tactical School in the solution of map problems students use a speed of 175 mph., and a total range of flight of 950 miles.

Missions may be accomplished singly or in flights of three or more airplanes, but for defensive purposes a squadron flies in a close formation which permits of mutual support from the twin machine guns carried in the bow and stern of each airplane, operated by a noncommissioned gunner. For protection and assistance a bombardment formation may or may not be accompanied by pursuit or attack, dependent on many factors: enemy air strength, antiaircraft installations, etc.

Each bombing airplane on taking off on a combat mission has a pilot and a co-pilot for his relief. Both are officers and should be qualified bombers. In addition to the two sergeant gunners spoken of above there is a radio operator.

The "route formation" deploys on signal on arrival

**A Modern Bomber**

at a designated point in the vicinity of the target. The airplanes proceed to their designated target according to a prearranged scheme of maneuver. On approaching the target the best qualified officer descends to the sighting and bomb releasing compartment and at the proper time releases the bombs. After bombs are released the formation reassembles at a designated point and returns home to prepare for another mission.

**Pursuit**

Pursuit aviation is that branch of the Air Corps which contributes to the establishment and maintenance of control of the air in the field of operations by the destruction of hostile aircraft through offensive air action.

The pursuit airplane is a small single-seater which has a high speed and great maneuverability. Speed is essential to overtake aircraft in flight and to stay with them after having intercepted them on their course. Maneuverability is essential for efficiency in combat. Only a very sturdy airplane can withstand the strain of violent combat evolutions.

Its armament is one .50. and one .30 cal. M.G. synchronized with the propeller and shooting behind its blades in their revolution. The .30 cal. carries 600 rounds in its belt and the .50 about 200. Under certain conditions it may employ fragmentation time-fuze bombs which can be released above aircraft in flight and set to detonate at the elevation of the target.

At the Air Corps Tactical School, a speed of 210 mph with a flight range of 540 miles is used in the solution of map problems.

A two-seater pursuit airplane with a speed slightly superior to that of bombardment airplanes has been developed recently. No methods of tactical employment have been developed, although it is indicated that there is a wide field for defensive employment for special support operations. This is the airplane referred to as a fighter in A.C.T.S. Air Division.

An element of three airplanes is the basic unit of all pursuit formations. Two or three of such elements form a FLIGHT, the smallest tactical unit found in the tables of organization. Three flights form a squadron, commanded by a major.

To accompany an aerial flight to prevent its molestation on the whole or a part of its mission; to clear a certain area of hostile aircraft to permit functioning of friendly observation or to deny it to the enemy; to intercept a hostile aerial flight and destroy or disorganize it to prevent its success, are among the missions that might fall to pursuit.

In the accomplishment of these missions it may be forced to fly from low altitude to 25,000 feet or over. This necessitates either two types of machines or a machine equipped with a supercharger to counteract the rarified air of the upper atmosphere. The latter method is the one used in our service.

Let it be noted that its machine guns are fixed and shoot always in the line of flight. This quality makes offensive action obligatory in combat.

Probably the point of greatest interest to the commander of ground forces is that if the observation

**A Modern Single-seater Pursuit Plane**

aviation working for him cannot gain access to a certain area on account of hostile aircraft it is to friendly pursuit that he must turn for immediate aid. Conversely, if he wishes to deny observation of a ground operation he will ask for pursuit intervention.

**Attack**

Attack aviation is that branch of aviation created to attack light materiel and personnel by means of machine gun fire, bombs, and chemicals. It would seem reasonable to envisage its employment against targets that were not subject to artillery fire. However, it is not difficult to visualize a case where its use against targets within artillery range would be justifiable. It would seem to be a question of relative values with respect to success of the forces of the nation at a definite point and time. Its strategical employment will be decided by higher authority and the tactical operation prescribed by its own commander.

Its use was rapidly growing at the end of the World War. Germany was the only nation that had a machine built especially for this task. The other nations converted other types of airplanes to the execution of attack missions. The need of a special machine was clearly indicated. Since the war in our own service there has been developed an "Attack Plane."

In considering it, three points should be kept in mind:

1. What are its powers and characteristics?
2. How can they be best utilized to aid friendly ground troops?
3. What steps can be taken to injure or minimize the action of enemy attack planes?

The present attack airplane of the United States is a two-seater monoplane with auxiliary controls for the gunner. It has a 600 horsepower engine, cooled by prestone. Its speed varies from 190 miles per hour at sea level to 173 at 15,000 feet elevation.

It is armed with 4 fixed .30-caliber, free firing, machine guns that shoot forward parallel to the axis of the plane. They fire at a rate of about 1,200 rounds per minute. When the ship takes off they are armed with 600 rounds each. In addition it has 2 flexible machine guns also of .30 cal. They carry 300 rounds each. The total number of rounds carried is 3,000. It can carry ten fragmentation or chemical bombs internally. These weigh about 30 pounds each. It can carry four 100-lb. demolition bombs externally. It can also carry, though not simultaneously with a bomb load, two chemical tanks of about 30-gallon capacity.

At the Air Corps Tactical School in the solution of map problems, students use a speed of 175 miles per hour with a total range of 300 miles, with full load, or 450 miles when equipped with no bombs and using an auxiliary tank for gasoline.

Its true offensive weapon against personnel or materiel is the bomb. Its forward machine guns are used to cover its approach to drop its bombs. In an ordinary approach they are so sighted that the bullets hit the ground about 1,200 yards ahead of the airplane. It is, of course, possible to fly so that fire can be brought to bear upon objects much closer, and much damage to personnel might be done under certain conditions. The two flexible machine guns are primarily for defense against enemy pursuit planes, though they could be used against targets of personnel on the ground.

Its fragmentation bombs can all be released in a salvo at the same time, although it is taught that their best use is when they are dropped in "trail" or successively along the line of flight. It is possible for the pilot who releases them to have them hit the ground at about 25 yards apart. The normal fuse arms itself by rotation after release of the bomb and explodes on impact. The 100-lb. bombs are prescribed to be dropped from an altitude not closer than 1,000 feet to the ground.

Smoke released from the chemical tanks is more efficacious the closer it is laid to the ground. The effect of smoke, and also of the area that would be covered by chemicals, is largely dependent on the wind velocity and direction at the time. The purpose of smoke, of course, is to cut down vision. Its use to windward of an attack favors approach. Smoke bombs could be dropped on observation posts.

With toxic chemicals that could be carried in the plane, an area 1,500 yards long and 150 or 250 yards in width could be covered densely enough so that all personnel within that area would be casualties. Wind varying from zero to 20 miles per hour represents the probable efficacious limits. The gas coming out of the tanks would be visible behind the airplane, which ought not to be over 200 feet above the ground at the time of release, and would be better at 50 feet. It is quite probable that due to the number of casualties that would take place at these low altitudes from rifle and machine gun fire that the first attack airplanes to come over would use bombs and phosphorus to create demoralization to cover the planes laying gas.

The "trio" is formed of three airplanes that fly together in a close V, and is the smallest tactical unit used by attack. Its offensive power is, of course, three times greater than that of a single airplane, and the defensive power of its mutual supporting rear guns is much greater. The leader controls it by arm signals and previous training of his pilots. Real combat efficiency is obtained by a thorough understanding of the mission and the details of its execution before taking off, coupled with a thorough training of the pilot.

Normally two or three "trios" make up a "flight," which flies in a close V of "trios," with each trio closed up. This facilitates control and offers a strong defense against aerial attack, though the formation would be more vulnerable to antiaircraft fire.



A Modern Attack Airplane

The squadron consists normally, not inflexibly, of two "flights" of three "trios" each. Except when actually assaulting a target, the squadron usually flies in echelon with a few hundred feet distance and interval between "trios."

At the assault the squadron will break up into "flights" that are each assigned an individual target. The "flight" similarly will assign to each "trio" the part it is to play in the assault on its target. The scheme of maneuver should have been clearly understood before taking off on the mission.

In attacking a column on the road, one airplane might cover the line of the road and the other two the right and left flanks.

Attack missions will usually try to approach unobserved and take full value of surprise. The amount of noise has been reduced, and also low flying planes do not seem to be so noticeable from noise as do those flying at medium altitude. This has led to the very low approaches sometimes referred to as "hedge-hopping."

Some idea as to the length of time that might intervene before the attack airplanes would be over their objective after becoming visible may be obtained by the rough rule that if the number of miles per hour at which an airplane is flying be increased by fifty per cent it will be approximately the speed in feet per second. Example: an airplane flying at 200 mph. Half of 200 is 100. 200 plus 100 equals 300. This is approximately the distance in feet covered by that airplane in a second.

The question of vulnerability from ground fire is mostly conjectural, but the opinion exists that in flying over regions heavily defended by ground fire the safest altitude is between 1,500 and 2,500 feet. At 1,500 feet the effectiveness of rifle and machine gun fire, cal. 30, is believed to be very little. Similarly, the effect of the .50 cal., is believed to be very low at 2,500. This belief is not based on effectiveness of the bullet, but rather that hits would be rare at those ranges. The antiaircraft gun could inflict damage up to the ceiling at which attack airplanes can fly. If hostile pursuit were present it is believed better to fly lower and thereby muzzle the antiaircraft which would be dangerous to its own pursuit.

At night the best altitude so far as aviation is concerned is about 1,500 feet. If caught in a searchlight of an antiaircraft organization, escape must be made by frequently changing elevation and course. Con-

sidering the speed of flight, it is believed impossible to hold a searchlight on an airplane flying erratically at 100 to 200 feet elevation. Antiaircraft and rifle machine gun fire against an unilluminated target at night is valueless, except as a chance barrage.

Missions which might profitably be given to attack aviation are the attack of a rail center, lines of communication, an enemy airdrome, neutralization of searchlights and antiaircraft guns in support of a bombing operation, attacks against concentrating points, movements of reserves or troops on the road, movements of truck trains of supplies, attack of vulnerable ships of a convoy, small boats in a landing operation, reinforcements on the road or in bivouac, and bombing vital targets that due to position on the battlefield are immune to artillery fire.

It should be understood that attack aviation is never sent out to cruise about searching for targets. It should be sent on a definite mission against a proper target, about which G-2 has accurate information. Only one target should be assigned at a time, and this should be one which will most assist the operation of ground troops. Attacks for destruction will be in the nature of a surprise and mass attack. Attacks for neutralization and delay might well be in a series of small and almost continuous threats.

On return from a mission from one or two hours will be required before another can be undertaken, depending on whether gasoline must be taken on in addition to ammunition and bombs. While in theory only two missions can be carried out in one day, or a total of four in two days, it must be admitted that there have been occasions where this has been much exceeded. It all comes down to the concrete case: how great is the emergency? How demoralized is the enemy? If it be at a high cost to us, is it worth it?

As to defensive measures to be taken by troops: Concealment is, of course, the greatest security measure. If nothing is known of them they surely will not be attacked. Air observers should be posted both on the march and during halts. Troops attacked by low flying airplanes should open and maintain fire. It should be taught that the greatest danger is from bombs and not from bullets. The fire is intended to cover the approach and create demoralization. The time to seek cover is small. Aviators of the last war, who had much battle experience, are insistent that troops should be first, last and all the time. Much damage may be caused, even though it is not apparent to those that caused it. A hit in the crankcase, oil line, or the cooling system, may force a landing at a distance at which it would not be observed. A wounded pilot might be able to get back over friendly territory, but he is a casualty. Subsequent missions will be more cautiously carried out. Finally, consider that although fragmentation bombs have a very demoralizing effect, the actual damage may be small. Unless one be a direct hit, or close to the spot of the detonation, there is a good chance of his not being hit, especially if he is kneeling, prone, or in a slight depression, such as the ditch beside the road.

### Observation

Observation is that branch of military aviation whose primary function is to furnish information to the commander under whom it is operating, concerning any activity in which he may be interested. In the accomplishment of this mission it reconnoiters dispositions and activities of enemy forces at both close and distant ranges. It secures information both for the ground and air forces. It furnishes an artillery airplane which searches for objects suitable for artillery fire and also assists in the adjustment of artillery fire. It furnishes an infantry airplane which, flying at low altitude, reports the progress of friendly troops and the location of the front line. It can locate and report resistances which are slowing up progress of the attack. It takes photographs, both vertical and oblique.

It is organized, as are the other combat air branches, into flights, but this is purely for technical control. Missions are executed by single machines, with or without protection from pursuit.

It forms an organic part of GHQ, Armies and Corps. The exact details may be found in tables of organization, but for the purposes of this article it is sufficient to consider that all have an observation group.

It is universally acknowledged that an infantry division has need of an observation squadron, but at present it has only a division air officer on the staff of the division commander and five enlisted men. The corps will assign a squadron from its group to each of its divisions, retaining one for its own use.

This brings up an interesting question. Is this system better than giving a corps one squadron with the headquarters and services of a group which is capable of absorbing an organic division squadron brought up when the division was assigned to the corps. This insures the division having its own aviation to work for it at all times and does not prevent the corps employing it if necessary, in the fulfillment of special needs.

This is the system employed in the French Army with its cavalry. Each division and corps has a squadron of cavalry as a part of its reconnaissance group. The corps also has the headquarters and staff of a cavalry regiment which absorbs the squadrons of the incoming divisions. It appears to work satisfactorily for them.

The Germans, while it is purely a paper organization, due to the Versailles Treaty, have an observation squadron organic with each division, and so well do they recognize the importance of aviation working with artillery that their squadron is organized in two parts: the first as an observation unit, and the second as an artillery observation unit, whose observers are artillerymen.

It is understood that England now believes that control of observation squadrons, except in case of a division acting independently, should remain in the corps.

It is believed that a cavalry division has need of an organic air squadron trained to work with cavalry. Often a cavalry division may be attached to a corps which will have too little aviation to give the cavalry that for which it may have need. The nature of the

duties that fall to cavalry are such that a cavalry division has more or less an independent status.

It is believed that generally division aviation will operate from the corps airdrome area where it may have its own special airdrome, in the vicinity of which will be found the group service squadron, which assists in its maintenance.

The title of the senior air officer on duty with the Army is the Army Chief of Aviation, who commands all aviation with the Army and who is at the same time the adviser on aviation matters to the Army Commander. Similarly, the corps has its chief of aviation. The Division Air Officer has two functions—one which is strictly staff, and the other is the tactical and technical control over the air unit attached to it from the corps. Although this agrees with Army Regulations it does not agree with the trend of thought in the Air Corps today. We visualize the air officer as a staff officer and not in command of Air Corps troops in addition.

At the Command and General Staff School at Fort Leavenworth it is stated that "the division air officer is a staff officer of the division commander and tactical commander of all aviation attached to the division. As such, his duties are the same as those of all other staff officers. He keeps himself fully informed as to situation, both ground and air, and probable action of ground forces."

"He should at all times know and be ready to give full information as to the operating strength, morale, general efficiency, and condition of units comprising division aviation."

"He should be prepared to advise as to what support is being furnished by, or should be requested from, corps, army and GHQ aviation."

"He is normally located at the forward echelon of the division headquarters."

"He should be available to advise the division commander and staff before important decisions are made and when important orders are issued."

"He should, on short notice, be prepared to submit a plan for the employment of division aviation, and the necessary orders for carrying out this plan."

"He so plans operations that missions will be kept at a minimum consistent with furnishing full cooperation and support to ground units."

"Upon approval by G-2 and G-3 of plans or receipt of orders for the employment of division aviation, he issues the necessary orders."



A Bi-motored Long-range Observation Plane

"He coordinates aviation activities with commanders of subordinate ground units and has liaison officers detailed to principal units in order that aviation may render maximum assistance to these units. (It is suggested for thought that if it be well for the air service to detail a liaison officer to a ground unit, is it not equally important for the ground force to detail a liaison officer to its air unit?).

"When practicable, an advanced landing field, where command and artillery missions are held on the alert, and for other purposes, is located near the division command post.

"The observation squadron airdrome is connected by telephone with the division command post. Airplanes in the air communicate direct to the squadron airdrome, the division command post and the artillery battalions by radio and to other units by dropped messages." (It would be possible for an airplane to communicate with a cavalry reconnaissance detachment equipped with a radio adjusted to the same wave length.).

This brings up another point. The Division Air Officer is strictly a staff officer until the corps gives the squadron to a division. Is he really as capable of commanding and stating possibilities of work possible to the reinforcing observation squadron, and supervising its technical control, as the one who has been commanding it? The French say "no." With them the Division Air Officer is a capable aviator but strictly a staff officer who keeps in close touch with the squadron; assists in the maintenance of liaison between it and the division; suggests possibilities for the employment of the observation squadron; conducts reconnaissance for new or auxiliary landing fields, but remains always a staff officer. The commander of the attached air unit is the adviser to the division commander on aviation matters, exactly as our artillery brigade commander is the adviser to the division commander on artillery matters. It is not intended to start a discussion but has been introduced here merely to stimulate thought on command and aviation matters. The great essential is that there be close cooperation between every ground force and its air unit which will lead towards economy of force in its employment.

The requirements of each echelon of command are different. For example, division and corps aircraft rarely find employment more than ten or fifteen miles in advance of a front line division. Army missions may be as far distant from the front lines as 75 miles; possibly in these days of mechanization these distances may be increased. At present a 300-mile radius of action may be considered as the maximum for GHQ observation. It may be noted that the radius of action of observation airplanes is now inferior to that of bombardment airplanes. This will, no doubt, be remedied. A cavalry division working independently might have need of an airplane operating at a distance of 80 miles to its front, this being slightly over the distance which it might march in a day and the distance which the force opposed to it might cover during the day, in which case contact would be possible between them at nightfall.

These different requirements have led to two types of observation planes. One, for the Army, Air Force and GHQ is a two-motored, 3-place machine to carry on distant reconnaissance and mapping. Photographic missions are usually performed from a high altitude. The other machine is a light, fast, single-motored plane carrying only a pilot and an observer.

At the Air Corps Tactical School in the solution of map problems a speed is allowed the GHQ plane of 165 mph, with a total range of 700 miles. The corps and division airplane has a speed of 180 mph, with a total 500-mile range.

The two-motored machine carries two single or twin machine guns in each cockpit, one of which is forward of the pilot and the other behind him. The corps airplane has one fixed gun mounted in the wing which shoots outside the radius of the propeller. This enables a higher rate of fire than if it were synchronized with the propeller. It also has a twin machine gun mounted in the rear cockpit. Since the observation airplane is not expected to fight, except to get home, only 200 rounds is carried in the fixed gun and about 600 rounds in each cockpit for the gun mounted there.

Both airplanes require an airdrome of about the same size—approximately a quarter of a mile of fairly smooth and level ground, with no close obstructions. An airplane equipped with brakes can land on a shorter field than that from which it can "take-off." Both of these observation airplanes land at about 60 or 65 miles per hour in still air. Like the birds, an airplane lands or "takes off" into the wind, for it must attain and maintain a certain minimum speed of air flow past its wings in order to "take off" or remain in flight. For example, an airplane which might land at 60 mph on an absolutely calm day could land with a ground speed of 40 mph if it were landing against a 20 mph wind. The same airplane would have to attain a ground speed of 60 mph to take off in calm air, but 40 mph would suffice in the face of a 20 mph wind.

As regards aerial photography one hears of vertical photographs, "pin points," and oblique photographs. A vertical photograph is one that is made when the plane is flying horizontally and the axis of the camera is perpendicular to the horizontal plane. The outside edges of this photograph will be slightly distorted of account of the obliquity of the light rays to it. However, the central portion will be exact. Mosaics are built up by utilizing the central portion of each print and matching it up with an adjoining print. In this manner a composite photograph can be built up by using successive prints. It is possible to make a photograph of this mosaic and reproduce it to any desired scale. A "pin point" is a single photograph taken directly over a definite point on the ground.

The camera taking vertical photographs operates through an aperture in the floor of the airplane. The vertical camera at present in use in our service has a 12" focal length and takes a picture 7 x 9 inches. At 10,000 feet this exposure would include an area on the ground 1-1/10 miles deep and 1-4/10 miles wide. Used in connection with this camera is an electrically operated instrument known as an intervalometer which

automatically exposes the film, winds it for the next exposure, regulates the interval between photographs, and allows for 30 per cent. overlap of photographs. The entire instrument and mount weigh about 90 pounds. In the 3-seater airplane first spoken of, it is carried in the forward cockpit. In the 2-seater machine it is mounted in the rear cockpit and operated by the observer, who faces to the rear and can at the same time observe for hostile airplanes.

The oblique photograph is taken by a camera which has a 20" focal length and takes a picture 7 x 9 inches. The camera weighs 60 pounds and is operated over the side of the ship at an angle of about 30 degrees to the horizontal. This photograph shows relief of a definite feature, such as a building, bridge, or special terrain feature, which is capable of being easily understood by anyone and is valuable for the detail which it furnishes. A new camera weighing only 25 pounds and taking a picture 5 x 7 inches is being developed for use in taking oblique photographs.

There is also a multi-lens camera of three, four or five lenses which is used in high altitude photography for mapping. It takes in about 60 times as much ground as a single lens camera being operated at the same altitude. It is capable of about 24 square miles at 10,000 feet altitude.

Night photography is still in the development stage, although considerable progress has been made. By means of a very sensitive attachment to the lens, the film is automatically exposed at the sudden light of a flashlight bomb which can be dropped and which will explode after having fallen a certain distance.

Observation airplanes are equipped with a standard radio telephone telegraph set, which has a radius of about 30 miles by telephone, and 100 to 200 miles by telegraph. At this time it must be admitted that the radio telephone is not dependable. The receiving and sending set, carried in the forward cockpit of the 3-seater airplanes and in the rear cockpit of the two-seaters, weighs about 150 pounds. The number of missions that might be in the air at the same time and which are expected to report constantly are many in the solution of map problems where it is known that the radio is always perfect. Consideration of the number of wave lengths available creates a little dubiousness as to the amount of this work that will be carried on in any later war. This is the present state of radio communications. Its limitations are known. Development work has been initiated which it is hoped will fully meet the needs of liaison between the Air Corps and the ground force with which it may be working.

Auxiliary methods of communication with an air-

plane in the air are by a preconceived code of various combinations of colored lights, the display of panels according to a prearranged code, the use of smoke candles. The airplane can communicate with the ground by dropped messages and by certain maneuvers of the airplane which have been agreed upon in advance. By taking advantage of a small cleared space, written messages can be picked up by the airplane.

Communication between the observer and pilot can be carried on by means of an interphone installation.

In addition to the equipment spoken of above, there are flares for night observation which illuminate about a square mile of ground from 3,000 feet. There are also map cases, drop message bags, observers' message pad, auxiliary controls for use of the observer in emergency, pencils, and control maps.

From the point of view of command the employment of observation aviation is simple. The commander should know its capability so that he can give it a task which is within its power. Strangely enough, instances are known where aviation serving with a large force during maneuvers was given little to do because it was not realized what could be done by it. Only the commander knows the information of which he has need in order to carry out his mission. He has then only to send out an airplane to obtain it for him, if possible, either visually or photographically. However, it should be sent out on a definite mission; to go to a precisely designated place or well defined area and search for such and such information. It should not be sent out over an area 100 miles square and told to "reconnoiter for the enemy".

The observer should be kept accurately and completely informed of the situation and the intentions of the commander. Knowing these things he can proceed to the area designated, observe not only there for the definite information desired, but on the way to and from, for any indications which may have value to the commander by revealing the intent or possibility of maneuver of the enemy. The absolute necessity for close liaison between the aviation unit and the command for which it is working cannot be stressed too often or too emphatically. The observer should know clearly the mission of the command and how it is intended to be carried out. The ground force commander should tell the observer definitely what information is desired and the hour at which it must be available at its destination. In addition to the definite information requested, the high commander should receive much supplemental information of great value, which would not have been reported, had not the observer clearly understood the maneuver contemplated and its needs.

# Stopping an Apache Battle

## An Episode of the Indian Wars

By George O. Eaton\*

Revised and Edited by 1st Lieutenant Don Russell, 342nd Infantry

### Foreword

By the late General Charles King, formerly Captain,  
5th Cavalry.

THE Civil War gave the Indians opportunity of which the Sioux in Minnesota and the Apaches in Arizona were quick to take advantage with direful result to the settler and emigrant. Deprived of their protectors, "the regulars", for whom there was even greater need "at the front", these unfortunate people, men, women and children, were butchered by the dozen, but after some months of terror the Sioux were rounded up by General Alfred Sully and their leaders hanged. There was no one to round up the Apaches.

Not until six years after Appomattox was the leader found who could master "the monarch of the mountains." Then President Grant took a step that was new to the army. The lieutenant colonel of the 23d Infantry, left to his own devices, had turned the tables on the savages of northern California, of Oregon and Washington. Six years previous he had been commanding a division under Grant's eye in Virginia. Now, as commander-in-chief, the President saw his opportunity. Over the head of every colonel in the army George Crook was made brigadier general and sent to Arizona to tackle the Apache.

That was in the autumn of 1871 and by the time the West Point class of 1873 was graduated there seemed nothing for them to do in Arizona. In the good-natured chaff and banter indulged in, when "the youngsters" first join, not a little fun did the officers of the 5th Cavalry have over the disappointment supposed to be felt by the late arrivals.

All the same there was sharp work ahead that tried the mettle of many a man of their number—work that Crook himself had occasion to watch with keen interest if not anxiety.

And just as luck would have it, late in the fall of 1874 when only two troops of the 5th Cavalry were left at Camp Verde, northernmost of the Arizona garrisons, from the Agency, twenty miles up the valley, came astonishing news. A band of Tonto Apaches, most dreaded of the few "hostiles" still out on the

Black Mesa, had dared to venture far to the northwest of their usual haunts—tempted by the arrival of a big herd of beef cattle—had swooped down from the Red Rock country and driven off every blessed steer of the entire "outfit." The agent was in despair, the commanding officer at the fort in a rage. "What would Crook say to that?"

Almost all the officers and men were scouting far to the south, but at all hazards those cattle had to be recovered, even if his adjutant and commissary had to get after them. And, to make a long story short, adjutant and commissary were prompt to tender their services—and just after dark with some twenty troops and as many Apache Yuma scouts had slipped away up Beaver Creek. Hiding by day and climbing by night, this detachment actually overhauled the cattle at Snow Lake while the captors fled eastward to Sunset Pass.

Sending the herd back under guard, the two officers with fifteen troopers pursued, under instructions to punish, if possible. The Apache Yuma scouts protested, "No Tonto! No Tonto!" in mortal dread of their born enemies. The officer persisted and, on Sunday morning following, far up the mountain side fought it out with the Tontos, and nothing but the superb and skillful handling of the reserves by the junior lieutenant saved the life of his commander. That was the story that brought George Crook all the way down from Prescott to say a word of comfort and commendation to the sorely wounded senior, but more especially, as it turned out, to take stock, as it were, of the tall, silent subaltern whose soldierly skill, bravery and devotion were all that had stood between his comrade and a miserable death.

For Crook had a problem before him that he little liked, and he needed a man of rare nerve, and courage and judgment to solve it.

Against his advice, against his pleading, the Indian bureau had determined to move in one body the bitterly hostile tribes from their former abiding places under the eyes of a competent agent, far to the southeast—leaving to Crook only positive orders and the details of a most hazardous undertaking. That it was actually carried out was again due to the officer whom he finally selected—the same tall silent young subaltern, the unmentioned—save by his crippled commander—and a handful of admiring associates—the unrewarded hero of the desperate fight at Sunset Pass.

\*Not to be confused with a later engagement at Snow Lake in which Lieutenant Eaton led detachments of the same troops, A and K of the 5th Cavalry, against the Apaches, Nov. 27, 1875. The fight at Sunset Pass took place Nov. 1, 1874.

Far by the time it was accomplished, Crook had been summoned to another command, and for long years Arizona knew him no more. Not until a half century had passed away, moved by the incessant urging of his few surviving comrades, among them the life-long friend whose life he had saved—my humble self—was George Eaton of the old 5th Cavalry induced to place his story in hands more accustomed to writing the pen. Told at the time it could have been rewarded with nothing short of the Medal of Honor.

INDIANS were Indians wherever met, but I think the st veterans of the Indian wars who had contact with them will concede that the Apaches were the worst. They killed wantonly and torture the guests and fiendishly. As trailers they were most alert. A faint trace, hardly visible to a white man, would tell them from what tribe the incursions were made and make the track, and how long it had been since the track was made. Their ability to follow such a trail at night was almost incredible.

They were formidable foes. They fought as individuals, but in concert, never accepting a fight unless the advantage was with them, except in rare instances when cornered, and usually confining their activities to surprise raids from which they retreated to the mountains where horse could not follow, nor soldier attempt to keep up.

When they could find no one else to fight, they fought among themselves. Stepping into the midst of one of these interne-line battles might seem the height of folly. The role of the peacemaker in the quarrel of husband and wife traditionally is not a happy one. When the missiles are bullets instead of fashions and rolling pins, the danger is vastly multiplied. Yet, in the instance I am about to relate, it became my duty to so interfere in a bloody battle of Apache sub-tribes.

The Apaches, in their arrogant manner, believed that they were the only people on earth, with the exception of the tribes they had met and driven out of Arizona. The few white settlers who came to this mostly arid country they believed to be members of some outside band that was of no consequence, numerically or otherwise. In the years following the Civil War, when there was a great wave of emigration to all parts of the West, a few white men learned of the great value of Arizona land when irrigated. This was before the discovery of the rich mineral wealth of the region. Against the advice of army men they began streaming into the territory and settled along the streams emerging from the mountains. The mountains, particularly the Mogollon range, were the peculiar preserves of the Apaches.

These settlements were few and scattered, and the Apaches made no difficulty of wiping out most of them, their surprise attacks usually being accompanied by fiendish atrocities. Determined to stop this, the Indian bureau at Washington assigned large reservations to the Indians, and the army was ordered to herd them into these tracts. The first few contacts gave the Apaches little respect for the soldiers. The situation



George O. Eaton

became so bad that a stakeup was ordered. General George Crook, who had won some success in the fights against the Modocs in the Lava Beds of the extreme Northwest and who later won a wider fame in the Sioux campaign of 1876, was ordered to take charge.

Crook fought the Apaches in their own way. In this particular field, at least, he was responsible for the adoption of the skirmish formations that have proved their value in all our wars since that time. The wide-brimmed hat, similar to the present field service hat, replaced the shoddy forage cap of the Civil War uniform, the cartridge box was replaced by the canvas belt stuck full of ammunition, and officers discarded their swords in favor of the private's rifle. Officers who could not get away from the line-of-battle formations that had been prescribed in Casey's Tactics found themselves detached "on special duty" and younger men, often second lieutenants, found themselves commanding companies.

Pack-mules replaced baggage wagons, tentage and forage for the animals were left behind, the blacksmith fitted extra shoes for all animals before leaving barracks, and everything was kept constantly prepared, so that a command could be moved out without any preliminary bustle and activity.

Night marches and surprise attacks so harassed and discouraged the hitherto insolent Apaches that soon they consented to come into the reservations and have their noses counted each morning. Of course a few of them wandered off, but General Crook and his subordinates so impressed upon them that those who did

\*George Oscar Eaton was born at Warren, Maine, May 11, 1848. During the last year of the Civil War he served in the 15th Maine Volunteer Infantry. He was appointed to West Point by James G. Blaine in 1869, was graduated in 1873 and commissioned a second lieutenant, Fifth Cavalry. He became first lieutenant May 1, 1879, and resigned March 29, 1883. Subsequently he studied at the Columbia College School of Mines, Territory of Montana; was a member of the first and second constitutional conventions of that territory, and was appointed surveyor-general of Montana in 1889, holding that position more than five years. In 1894 he removed to New York city and for several years was engaged in mining operations in Mexico. In 1910 he was appointed by Mayor Gaynor one of four members of the Municipal Explosive Commission of New York, retaining that position until the commission was abolished in 1914. He removed to Florida in 1927, where he died at Fort Myers, September 12, 1930.



would be hunted down like dogs and given no chance to surrender and try it again, that few did so.

One of the largest and finest of Apache reservations in Arizona in the '70s was that known as the Verde Indian reservation in northern Arizona. The Verde River ran through its entire length, and its valley was rich and fertile. A few miles below the Indian Agent's office was the military post of Camp Verde, while forty miles due west was department headquarters at Whipple Barracks, three miles from Prescott.

Three sub-tribes of the Apaches were assigned to this reservation. Curiously, the Apaches had little internal solidarity, despite the fact that they usually were united in the face of an invasion. There were twenty or more sub-tribes, some so closely akin that they spoke a common language or one very similar, but others that were hostile to one, or more, or possibly all the rest, speaking a language unintelligible perhaps to their enemies.

The three sub-tribes assigned to the Verde reservation illustrated this peculiarity. The Apache Yumas and the Apache Mojaves spoke the same language and were entirely friendly to each other. The Apache Tontos spoke a language scarcely intelligible to the other two tribes and had a blood feud against all other sub-tribes, by whom they were much dreaded.

The Indian bureau having projected this "happy family" arrangement, the army had to make the best of it, so the Tontos were herded to a far corner of the reservation, and the Yumas and Mojaves assigned separate camps in some proximity to each other, but with a rigid ban against any visiting between the Tontos and their hereditary enemies.

All three tribes were thoroughly cowed for the moment, and quite tractable. A few Tonto bucks, with their squaws and papooses, occasionally "jumped" the reservation and returned to their forays on the settlers, but their days of freedom usually were not long.

A small detachment of soldiers of the Fifth Cavalry from Camp Verde was stationed at the Indian Agent's office to guard the supplies stored there. A full weekly ration was issued every Friday to each head of a family for every member thereof, a baby born the day before getting the same amount as a full grown man. Large supplies were kept on hand in those days before railroads when it took many months to replenish them, for it would never do to have a shortage on an issue day, not if the Indians were to be kept on the reservation. General George Crook the Department Commander was very insistent that every promise made to an Indian should be kept, and for this reason the stores were carefully guarded by the military and carefully rationed by the Indian Agent, who was a civilian employee of the Department of the Interior.

In the spring of 1875 the Indian Agent at Verde reservation was recalled, and, pending the appointment and arrival of a successor from the east, Captain Walter S. Schuyler (late Brigadier General retired) of the 5th Cavalry was appointed acting Indian Agent at the request of the Interior Department. Shortly he was promoted and necessarily relieved from this position, and I was appointed in his stead. I had full

charge of the reservation, though only a second lieutenant shortly out of West Point, including the command of a body of eighty picked Indian scouts, nominally organized as a company of dismounted cavalry, the Apaches making very little use of horses. These scouts while on the reservation lived with the people, being distinguished by wearing a large medallion of which they were very proud.

There were some very bad Indians confined in the guard house at Camp Verde, but on the reservation all was peace and quiet toward the last of April and beginning of May. A large area had been plowed and planted with garden seeds, a great novelty to the Indians who rarely practised agriculture. So great was their interest and curiosity when, under irrigation, a few sprouts began to come up, that a few of the braves were persuaded to help in the work, although most of them preferred to leave the labor to the squaws, who had been taught the use of the hoe by a few white men employed in making the experiment. This was the opening wedge of their awakening to labor and its rewards, although unknown to us they were never to see the harvest. Twenty or more years later hundreds of Apaches from this same reservation did wonderfully good work in the construction of Roosevelt Dam far to the south.

But while the Indians were showing the first stirrings of interest in the almost daily changes in their great garden, I received orders to report to General Crook at department headquarters. He informed me that he had been ordered to transfer all the Indians then at the Verde reservation to the San Carlos reservation on the Gila River in Central Arizona.

The San Carlos Indians were already located on that reservation, which was reputed arid, dusty and unhealthy. The Gila River, on which it bordered, was a synonym, in Arizona, for torrid heat. It seemed nothing short of a crime to move the Verde Indians from their beautiful, temperate and fertile reservation to that simmering desolation. It meant the transfer on foot of thousands, including the aged and infirm of both sexes and mothers with their babies in arms, some one hundred and fifty miles as a bird could fly, and a far greater distance to be actually traveled in large part across mountains, and all of it over bad foot trails, with uncertain water supplies sometimes requiring long marches.

The general said he could send a large military escort but thought it best to avoid any appearance of force lest their medicine men, always trouble makers should tell them that they were being taken into the mountains to be killed off. He added,

"I have decided to place you in charge of moving them. You know the Indians, and they all know you and so far as I can tell, believe in you."

He then told me that he would give no detailed instructions but would allow me to use my own judgment in carrying out the order, and that the commanding officer at Camp Verde would honor all my requisitions in outfitting for the trip, and that anything he did not have would be sent from headquarters.



Office of the Chief of Engineers, U.S.A., 1879

He then asked how soon I could fit up and start, to which I said "approximately two weeks," but to carry provisions for so many people and the standard supplies on hand as surplus, would perhaps require six pack trains, but I could not tell that off hand. He nodded and said,

"How many cavalymen and people will you need, having in mind my desire as stated to avoid a big show of force, but you shall have as many as you think proper?"

That was putting it up to me pretty fast without much time for reflection, but after a few minutes' thought I said,

"I would like a doctor, an interpreter for the Tontos, could get along without an interpreter for the Yumas and Mojaves, and, to protect the large amount of stores and government property en route, a sergeant, two corporals, and twenty privates but I would like the privilege of selecting the enlisted men individually from Company 'A' and 'K' of the Fifth Cavalry."

The general smiled and said, "That shall be so ordered" and seemed quite relieved at the modesty of my requirements. He said that an official of the Indian bureau would go with me as inspector for the bureau to see that the transfer was duly made and

later report the details thereof, but that he would have no authority and would be present simply as an observer, although I would of course provide him with food and sleeping accommodations on the march. The full responsibility would be on me until I got a receipt for the Indians from the San Carlos Indian agent.

There were a few more words from the General in the way of caution and about the trails and water. Without much sleep I rode back to the reservation in the very early morning with plans fairly well outlined in my mind, but with two weeks' hard work and worry ahead of me, not the least of which being to get the Indians of the three tribes in a receptive mood for the change.

However, with the passing of the two weeks I was ready to move out with my motley and picturesque outfit. Meanwhile the official from Washington had arrived and, although having no practical knowledge of Indians, he proved to be a sensible, companionable gentleman, not in any way presuming or fussy, and we hitched together famously.

We had in litters a few infirm Indians who could neither walk nor ride and a few spare horses for those less afflicted. Every day we unloaded mules, as their

packs of provisions were eaten, and there were always old or sick Indians, male and female, to be mounted on them as fast as they became available. The cavalcade, traveling as it must in single file and with frequent rests to enable the old and lame to catch up, strung out four miles or more in length.

I put the Tontos first, with a few mounted cavalrymen to keep them closed up and to separate them by a short distance from the Mojaves and Yumas, who followed. At the very end were a few more soldiers and a corporal to see that no stragglers were left behind and that all finally got into camp for the night. The doctor was all up and down the line as his services were required. My own place ordinarily was in the lead, but like the doctor, my services were often required in all parts of the column, so for much of the time the sergeant was leader.

Fortunately it was a dry season, but the heat was rather intense. Because of the rapid evaporation of perspiration, it was difficult for individuals to carry enough water for the longer marches. A few camps had to be made where water was scant for so many people and animals.

After a few days on the march, when the novelty had worn off, the Indians began to be irritable and captious. My business and that of my men was to smooth over and try to talk the Indians into good humor over petty grievances, but the situation soon began to cause some worry. Even the children, perhaps taking the cue from their elders, began to be cross and troublesome.

Added to this the number of the Indians were increasing, and in a manner that was an added burden. Almost every day a prospective Indian mother would drop out of the line of march and retire to some shelter. The doctor would be sent for, if he could be reached, but it was not infrequent that the commanding officer was compelled to officiate. However, the Indian women required little help in such an emergency, but occasionally a mother would attempt to sneak away and abandon her new born babe. In this case I would have an unloaded mule brought up, load mother and papoose thereon and put them in the procession. Long before night mother love would come to them, and invariably they would go into camp as fond of the child as could possibly be desired.

But the routine of the march, relieved by such incidents, was rudely interrupted.

I do not recall how many days we had been on the road, but perhaps not more than twelve or fourteen, when after a moderately short day's march, we came to the East Verde branch of the Verde River just where it emerged from the mountains into its own little valley with quite steep hills on each side. With water and grass in abundance and dry wood nearby it made an ideal camping ground, so we decided to go no farther but rest for the afternoon there.

As the stream debouched from the foothills it ran close to quickly rising ground. The valley, therefore, lay wholly on the other side, narrowing as one went upstream to a point at the foothills. I placed the supplies and then the horses and pack trains near this

enclosed neck where the animals could be stampeded in only one direction, downstream. I made my own camp next down the creek in a recessed spot of level ground large enough for my little group. Next below perhaps a hundred yards down, I placed the camp of the Tontos, and below them with an interval between, the Mojaves and Yumas, encamped, as usual, together. At the lowest camp the valley was of considerable width.

After dinner we settled for a quiet afternoon, but the half-grown boys of all three tribes began playing games on vacant ground between the two Indian camps, maintaining the tribal separation. In course of time, as boys everywhere so divided would, they began to shout at and ridicule each other. Soon the words became intensified in number and character with corresponding excitement among the boys, until, in imitation of what they had heard from their elders, the little rascals formed themselves in two opposing lines, facing each other and extending at right angles from the branch toward the nearby foothills.

They stretched themselves out on their stomachs seeking cover, in true Indian style, from any grass stunted shrub, or inequality of the ground, just as though they were armed, which they were not except with their tongues. These they kept wagging incessantly, the vocal volley increasing in the intensity of shrill voices until a few unarmed buck Indians began to stray here and there from their respective camps and join their respective children. The numbers of these increased until there were more adult Indians in each line, all lying down and seeking cover, than there were boys. However, they also confined themselves to hurling verbal insults but were getting more and more excited over this outlet to their years of repressed hatred.

Meanwhile the squaws of both camps, in a common sense of fear, began to gather on the steeply sloping hillside directly overlooking the disputants in the valley below, and curiously they seemed to show no desire to take up the quarrel but mingled irrespective of tribe in a common concern over the consequences.

Suddenly there came a sort of verbal explosion in the two lines below them with the result that all the young men, as of one accord, made a rush for their respective camps, armed themselves and returned to the scene of the dispute. The heated verbal exchange, however, was resumed, but a single shot seemed a signal to set things off: a volley from both sides was followed by continuous shooting. Pandemonium seemed to break loose, as added to the shots and shouts of the warriors were the moans and shrieks of the squaws, who, as if balcony seats at a theater, were looking down and seeing their husbands and sons killed and wounded. To them it seemed a fight to the finish, and they well knew that their fate depended upon the outcome.

The Tontos were the best warriors individually, but they were outnumbered by the other two tribes. The Mojaves and Yumas began slowly crawling forward with the result that the Tontos were being forced back toward my camp. At the beginning of the fight, however, in the fairly broad part of the valley, neither

my camp nor that of the horses and mules, which I could have ordered in at the first sign of trouble, were in any danger, as all of the bullets fired upstream passed harmlessly by to one side and were buried in the hills that lined the valley.

However, as the Tontos continued their slow retreat, it was obvious that eventually the animals would come directly in the line of fire of the Mojaves and Yumas. As the course of the stream began to push the flanks closer and closer to the hills—at first the lines did not reach so far—the bullets began to come closer and closer to the herds. Already the animals were becoming restless and alarmed, and if once shot into nothing could avert a stampede and disaster for the entire party.

Meanwhile frenzy reigned. Excited squaws braved chance bullets to come down the hill and drag away the dead or wounded. Because of scarcity of ammunition the firing was not rapid, but for the same reason it was deadly. Ammunition was so scarce among these tribes that it was little used in hunting but was carefully hoarded for war. Most of the dead later were found to have been shot through the head. Nevertheless, there was plenty of shooting as each warrior maneuvered for favorable position and fired whenever he was reasonably sure of hitting.

This was a fine situation to face a second lieutenant not yet two years out of West Point! But it was not entirely unexpected. Knowing of the long feud between these tribes I had asked General Crook just before we parted:

"Supposing that somewhere on the trip to San Carlos the Indians for any reason get to doing real fighting among themselves, what are my instructions?" He dropped his head a moment and then said slowly and reflectively, "Well, if they want to fight wholly among themselves when we are doing our very best for them, then let them fight, but if it comes to a point where government property and the safety of your command are endangered, you will of course stop it if you can." This point had been reached.

For some days I had sensed the impending possibility of trouble. I did not know just when it would happen or what form it would take but I had done some serious thinking.

Back on the reservation the chiefs of the three subtribes had each sought to ingratiate themselves into my good graces. Each had tried to get me to give some outstanding evidence to other Indians that I was exceptionally fond of himself and his tribe. This of course would exalt both him and his tribe above the other chiefs and tribes.

But this I had been most careful to avoid. If I had chosen it would have been "Charlie," chief of the Mojaves, but I never in any way gave any of the three any intimation that he was preferred above the other two. As a result each believed himself to be the chosen friend, but yet was not sure which side I might take in an emergency.

This was what I based my plan on. I first ordered Harry Hawes, the chief packer, to take charge with his armed civilians, try to keep the herd out of the

line of fire and do the best he could with them. I could spare no soldiers as guards.

I had twenty-three well armed soldiers, the doctor, the interpreter, the inspector from Washington, and myself. I sallied out with this little command in single file. I held my Henry Winchester rifle in the hollow of the left arm with the right hand grasping the small of the stock, forefinger in the trigger guard. All the enlisted men did likewise. I had intended to post the doctor next but, as we marched out, I noticed that the inspector was directly behind me, and as close as he could well get. This did not matter; the doctor was next, then the interpreter, sergeant and privates, with the two corporals bringing up the rear.

We followed the valley close to the base of the hills for a hundred feet or so, passing by the flank of the Tonto firing line, until we reached a point half way between the flanks of the shooting zone, but as yet entirely out of its deadly crossfire.

From this point I turned squarely to the left and with my right hand uplifted marched straight down into and then along the center line of the fire-swept zone, my men following me in the order indicated.

The Indians might have kept on fighting—in which case I should not have attained to the age of 82.

But this was the chance I took. As the Indians at that end of the battle line saw my little force, the question inevitably came to each, did I come as friend or foe? If friend the addition of my little band, each man carrying forty rounds of ammunition, each known as a trained marksman adept in the method of fighting then being used, was not to be despised. If a shot was fired, it was natural to suppose that I would immediately align myself with the opposite force. Thus thinking, each held his fire.

The prompt desire of each was to learn with whom I came to cast my lot. As I moved down the center, still with arm upraised, firing on both sides slackened, and we had not gone farther than one-third of the distance down the line when firing ceased altogether, but the Indians still lay in position.

I did not give them an opportunity to think any further about it but immediately halted my command and through the interpreter said that I must talk with all three chiefs in a group and asked them to come where I stood. They objected, being not willing to come out in the open. With a bit more parleying they finally agreed that if all came at once, they would approach. They came slowly, and with much hesitation, each looking to see if the other two were advancing, but finally the three, angry and scowling, but without war paint, came near enough to hear what I had to say.

I told them that there had been much useless killing, and that I wished each chief immediately to withdraw his tribe to the camp to which it had been assigned; that as soon as everything was quiet I would send soldiers to guard them while they sent parties out to bring in their dead whom they could bury as they pleased and that I would have all the wounded brought together to be treated by the doctor.

They did not like this, of course, but I said I was

the friend of all of them and wanted to continue to be so; that, if they continued fighting until one side was entirely wiped out, they knew the "Gray Fox" (General Crook) and the Great Father at Washington would be very angry with them, and that the payment of a life for a life would be demanded. I promised them that, if they now did as I said, I would see that they would be forgiven and not have any more punishment than they had already received.

All this took time, as the interpreter had to make all parties understand. The first to give signs of yielding was Mojave Charlie, and at this I began to feel that I was going to win out, but just then something happened that seemed for a moment hopelessly to end everything.

As the conference continued, curiosity caused several of the Indians to arise and approach part of the way toward us. One I noticed more adventurous than the rest, who stood very near us. He came from the Mojave-Yuma line and was the handsomest, most manly Indian I had ever seen, perhaps in his early twenties, naked except for a fillet to keep the hair out of his eyes, breech-clout and moccasins, moderately tall and finely formed, with a pleasing cast of countenance and a copper-colored skin that shone in the sunlight like a fine piece of bronze.

As he stood there, leaning slightly forward with rifle in hand and showing every sense alert in trying to hear our conversation, and just as Charlie had indicated that he would be willing to act in concert with the other chiefs and withdraw his people, there came a single shot. The listening Indian leaped upward with a yell and fell to earth in his death struggle.

I surely thought everything was lost, but I put up my right hand again, palm outward, and no shots followed. After much persuasion the conference was resumed with the dead Indian still lying nearby.

It was only after the chief of the Tontos was told that he would have my own force against him, allied with the Mojaves and Yumas, if he did not agree, that he yielded, but shortly thereafter all three tribes were returned to their original camps. The dead were collected, and the wounded brought to the shade of a spreading tree, where the doctor was busy the rest of the afternoon and nearly all night.

Every one of my command had behaved splendidly, but a special word of commendation is due the inspector from Washington. He found himself in a trying situation with which he was not in the least familiar. He scarcely knew what we were trying to do, yet he never hesitated in following us and in doing his best to assist us. Yet he caused me the greatest scare of the entire afternoon.

When preparing for his trip, he had thought it necessary to arm himself, and his idea of proper ar-

ment was two old-fashioned, fifty caliber, double-barreled Derringer pistols that would blow a hole in a man as big as two fingers. When I found him directly behind me on the march I observed that he was carrying these Derringers at full cock, with fingers on the triggers, forearms extended and elbows pressed close by his side, which brought the muzzles of both these small cannon almost against the small of my back. Under these conditions, if an Indian bullet, stray or otherwise, should hit him the convulsive movement of his trigger fingers would result in blowing two sizable holes through me.

I had too many other matters to think about even to expostulate with him in gentle manner but I do admit I went through the entire affair with an uncomfortable feeling that I might suddenly be separated from my backbone. Of course, he was all right and he stood up excellently under the nervous tension. I honor him as having faced a real test nobly and I would be glad to write his name but unfortunately with the passage of years I have forgotten it.

In the morning it was a very subdued bunch of Indians that took up the day's march. We mounted on unloaded pack mules all the wounded able to ride but left a large convalescent camp of the more seriously injured under the big tree where the doctor had left them. Their own medicine men took charge, and we left them medicine and bandages with instructions for their use but we later learned that they refused to use them, and that many of the wounded died as the result of their barbarous practice.

In the course of a week or more we arrived at the San Carlos agency, and it was with a sense of great relief that I accepted receipts for warriors, squaws, papooses, Indian scouts, unconsumed provisions, and stores. After a few days my little command took the back trail with all the pack mules. When we arrived at the scene of the fight we found all the convalescents gone. Some of them later straggled into San Carlos agency, but whether the rest all died or whether some stayed out in the hills I never knew.

When we reached Camp Verde we learned that General Crook had been succeeded by Gen. August V. Kautz. I made a report of the affair to departmental headquarters, but perhaps in the confusion of changing command it was pigeon-holed and overlooked; at least I never heard of it again and I know it has never been printed. Shortly after, the 5th Cavalry was ordered to change stations with the 6th. We marched across Arizona, New Mexico, and into Colorado, 1,150 miles, the nearest railroad point in those days, from where we were transferred to posts in Kansas.

The manuscript of General Eaton, written in his 82 year shortly before his death, was read and approved by General Eben Swift and General Charles King. Both were officers of the 5th Cavalry at the time of the episode discussed.

## The Cavalry of the Vikings

By Fletcher Pratt

IT is a truism of history that the whole structure of medieval life was dominated by the armored knight who depended on shock action as the arbiter of battle and who was capable of riding down any type of infantry that existed for centuries. It is generally assumed that this soldier came into being as the result of some mysterious process of evolution.

This is an error; the feudal horseman came into being in response to a military necessity as urgent as that which produced the tank, and of much the same kind—to wit, that of dealing with a highly mobile infantry armed with powerful defensive weapons. The parallel with modern conditions is extraordinary and if one does not stretch it too far, leads to some interesting speculation on the future.

The infantry whose impact on the European cosmos produced this result were the Vikings of Scandinavia. Before their advent, the mounted arm generally was

at the lowest ebb. At Châlons the last of the ironclad Roman legions had shivered to fragments Attila and his horde of the best heavy cavalry in the world; at Tours the footmen of the Franks "standing like a rampart of ice" had demonstrated that the light horse in which the Saracens specialized was helpless against steady infantry. The Germanic races who were building a new world with the wreckage left by the Romans were essentially fighters on foot and, having rolled back in both directions the tides of horsemen that threatened to engulf them, now settled down, satisfied that they had attained the infinite.

Such cavalry as there was in existence inspired them with a well-merited distrust; a situation not without its parallels in the years before the World War. The parallel is even more striking when one discovers that, in the military establishment of Charlemagne, the pro-



Left: European Soldier of the Empire of Charlemagne. This was the type of fighter the Vikings were called on to meet. His equipment was obviously less good than theirs. (See other picture.) Right: Typical Viking Infantryman, full equipment. (From models, Musée de l'Armée, Paris.)

portion of cavalry to infantry was about one to eight—or the average figure for Europe in 1914.

Upon the horizons of this world the Vikings appeared as raiders coming up out of the sea. Like the other Teutonic tribes, they were, in the beginning, purely infantry; their technique was to land from their ships, sack town or monastery and leave the way they had come. In 810, the date of the first great raid, they had never heard of such a thing as cavalry.

For their ignorance of the mounted arm two factors were responsible: the rocky, mountainous and wooded character of their homeland, which placed a heavy premium on men who fought afoot; and the insignificant character of the horses available. The only horse they knew was the northern "forest horse," about the size of a Shetland pony. It existed among them as a kind of zoological curiosity; matches between fighting stallions were arranged in the same spirit that Cubans arrange cockfights or the Japanese matches between pairs of combative crickets. Even for plowing the ox was preferred; and a saga of early date remarks on King Harald Hilditönn's desire to ride into battle as the crotch of an old man who was probably suffering from softening of the brain.

Yet in half a century, this people had some of the best cavalry in history . . .

After the first Viking raids, these visitations increased rapidly, both in number and intensity. The available plundering spots right on the coast were soon exhausted, and it became necessary to hunt farther afield. From the Viking point of view that had two disadvantages. The first was that they had to make long, uncomfortable marches, clad in armor and loaded with booty. The second was that the nearest local baron had time to gather up his levy and fall on them on the way back to their ships; and among these levies, however badly mounted, however clumsily handled, there were sure to be a few horsemen.

The Vikings were pirates, but they were professional pirates and possessed the best military brains of their age. Some genius among them observed this horse-business, and suddenly in 866 there comes an ominous entry in the Anglo-Saxon Chronicle—"A great heathen army came out of the land of the East Angles and there was the army a-horsed."

In other words, someone had discovered a new raiding technique, and a technique that spread like wild-fire, for in two decades it had become the normal one. It consisted in neglecting all other objects on landing for that of gathering up all the horses in the district. Every horse they got increased the mobility of the whole body right up to the point where they were all on horse-back. There was no need for conserving the horses; they were pushed to the utmost, and the raiders moved to enormous distances on them.

When an enemy force was reported at hand, or a fortified town was approached, the main body dismounted at once and formed up in one of the close knots of infantry in which the Vikings fought. Small parties of mounted missile-weapon men, who acted as front and flank guards on the march, were pushed out to either side, with the object of working around the enemy formation, then dismounting and attack-

ing them from the rear. But the fighting was all done afoot; the only men who remained mounted in the presence of the enemy were the irreducible few necessary to keep contact. Even commanders fought afoot, time and again we have evidence of this, as at Brunanburgh where King Athelstan "left the battle-field while his men pursued the fugitives. He mounted his horse and rode back to the burgh."

But the scouting services were extraordinarily well-carried out. During a Viking raid in Brittany, for instance, the King of France came down and beat the Danes in a big battle; they retreated, but at nightfall the Count of Poitiers arrived with his host to aid the King, who, satisfied that he had done a good job, had meanwhile moved off. The scouting service of the Danes advised them of the Count's arrival and the King's departure; they boiled out of their camp, attacked the Count, beat him in a night battle, stormed his camp, and eventually got safe away.

Under such conditions the Vikings did about as they pleased. They held all the trumps. They were well-armed, adequately armored professional soldiers of high mobility, with good scouting services, against hastily raised levies. Their movements were rapid and unpredictable, and tactically they were in a position to deliver a considerable amount of fire-power against any part of an enemy formation and follow it up instantly with a close-range infantry attack. The military problem this "mounted infantry" presented seemed quite insoluble.

At least, so thought Alfred the Great, who was one of the most intelligent men of the age. Taking advantage of England's geographical position he avoided the question entirely by basing his defense on a powerful navy. Still, the problem had to be met some time, as all military problems must if civilization is to continue.

It was another Viking who ended this delightful state of affairs. He was Sveyn Forkbeard, King of Denmark, who made one of the mightiest of all Viking raids, ending in nothing less than the conquest of England. But no sooner was he installed than he discovered it made no difference at all to Norwegian, Swedish and even Danish raiders that England was held by one of their own race. Sveyn's new kingdom was harried from north to south in the good old style, landing, rounding up of horses, swift mounted march and equally swift departure.

After one of these occurrences, the chronicles record that "at this time the Danes established the post of the Thingmannalid in England. They were paid warriors and very valiant." They were rather more than this; they were something as new in the then world as the tank in 1916. They might be described as the "Armored Mounted Corps." Clad in complete armor they were (extraordinary invention!) trained to fight on horseback. They were allowed considerable freedom in the choice of weapons, but the spear was obligatory and the axe, the old Viking infantry weapon, was frowned on in favor of the sword. Nor was this the greatest change—for they were trained to ride, bridle to bridle and to depend on shock action.

The larger organization of the corps was as intelligent as its tactical training. Headquarters and the



From the Bayeux Tapestry. The horsemen at the left are a typical group of cavaliers of the Thingmannna type.

main body of the Thingmannalid were at London, ready to repel an invasion in form, but in all the important centers were small bodies of these soldiers, fixed there as stiffening of the local levies and preventatives of small raids.

The effect of this sapient invention was immediate and overwhelming. When a raiding party landed the nearest post of Thingamen clattered to the spot. If the raiders dispersed to catch horses they were cut to pieces. If they did not, there was no raid; and, if they held to the tight infantry formation for a march, the local levy had plenty of time to gather round and flood into the breach in their ranks that the ponderous charge of the armored horsemen presently made.

The account in the sagas of the last great Viking invasion—that of King Harald Hardrade—shows Sveyn's armored cavalry at its full value, though it occurred some years after that monarch's time. Landing at Stamford Bridge, the Norsemen at once set about gathering horses for a march on London but—

"When they came near the town they saw great clouds of dust and a large host on horseback with fine shields and shining armor. 'These must be the Thingamen,' said King Harald, and ordered the horn to be blown for his men to assemble." He seems to have had a healthy respect for the English cavaliers, for he formed his army in a tight circle with the weapon-throwers inside.

" . . . The array was thus formed because the king knew the Horsemen were wont to ride in small squads

and then draw back at once. The king's guards, very picked men, were in the circle, the archers also, and Tosti with his men. 'Those who stand outermost in the array,' the king said, 'shall put the handles of their spears down on the ground and their points against the breasts of the horsemen if they attack; those who stand next shall direct their spear-points against the breasts of the horses; keep the spears thus everywhere and they cannot advance. Let us stand firm and take care not to break this array.'

In other words, faced with shock action on the part of armored, fast-moving troops, he could think of nothing better than passive defence. This produced its natural and usual result. The English horsemen rooted around for a while without accomplishing very much; then the Norse infantry, tired or bored, broke ranks; the Thingamen got in, and it was all over.

It is one of the mysteries of history why Harald Godwinsson, the winner in this battle, dismounted these invincible cavaliers at Hastings a week later and repeated Norse Harald's experience with a passive defence in the face of a mobile attack.

But short as is the interval, the battle of Hastings is already outside the limits of the Viking age. For Sveyn's success with armored shock troops had given England such security that the invention had instantly spread to kindred Normandy, and from Normandy right across the whole of Europe. And wherever it touched it brought about the end of the Viking period and the beginning of the Middle Ages.



# Cavalry at the Virginia Military Institute

By Second Lieutenant C. H. Dayhuff, Jr., Cavalry Reserve

**S**TANDING serenely on "The Hill" overlooking the sleepy little town of Lexington, Virginia, the yellowish-gray walls of the Virginia Military Institute stand as a beacon heralding the greatness and fame of that old military college.

Formerly an arsenal in which state arms were kept, the Institute was founded in 1839. Before this time a small detachment of hilarious soldiers had occupied the post, and repeatedly the citizens had urged that something be done to eliminate this objectionable group from the town. Colonel Crozet who had been an Engineer officer on Napoleon's staff during the retreat from Moscow was the president of the First Board of Visitors of Virginia's most famous college.

The first year or two of the life of V. M. I. were hectic. The buildings were not completed, and the severe winters caused many hardships for the cadets. Through the leadership of the superintendent, Francis H. Smith, the trials were withstood, however, and the growth and fame which the old college has gained since that time throughout the country, and throughout the Army, is a criterion of its achievement.

General Stonewall Jackson, who was professor of experimental philosophy and artillery tactics left the walls of V. M. I. to achieve immortal fame during the Civil War. Sir Moses Ezekiel, the great sculptor, Clinedinst, the famous painter, Matthew Fontaine Maury, the scientist and naval expert who charted the Pacific, Admiral Richard Byrd, the intrepid explorer, and many others whose names are well known throughout the world have all been connected with the fame and prestige of V. M. I. Many officers in the Army, Navy, and Marine Corps at the present time received their early training under the high arches of the Institute.

V. M. I. is strictly a military college. The backbone of the whole organization is its military system. It was the aim of the founders to pattern the college after that of West Point, and to this day that splendid example has been followed. The cadets wear the same kind of uniforms, and the military duties are about the same in the two schools. Academic courses are offered at V. M. I. in civil, electrical and chemical engineering, and in liberal arts.

In 1930 at the completion of his tour of duty as Commandant of the Marine Corps, Major General John A. Lejeune, became the fifth Superintendent of the V. M. I. His inspiring leadership and his profound interest have done much toward the building of the greater V. M. I.

It would be well to state that a cadet specializes in his chosen branch of the service throughout the four years that he is at V. M. I. and that upon graduation he receives his reserve commission in that branch.

Contrary to the procedure in most of the colleges throughout the country in which the R.O.T.C. is required for two years only, the system at V. M. I. requires a four year course, and unless the cadet is an alien or has been declared physically unfit to enlist in the R.O.T.C., he must fulfill all requirements in this course, as well as in his academic course, before he can receive his diploma upon graduation. Cavalry, Infantry and Artillery are the units offered at the Institute at the present time.

For all ordinary functions, parades, and routine duties the Corps is formed into a regiment of infantry, with two battalions of three companies each. Within these battalions the companies are arranged according to units. The first battalion has two companies composed of cavalymen, ("A" and "C" companies) and one company of infantrymen ("B"). The second battalion composed of "D", "E", and "F" companies is purely artillery. At unit drills and at special instruction periods these companies revert to cavalry, infantry and artillery as the case may be.

Unit drill, infantry drill, theoretical instruction, and evening parade are all part of the daily routine. Inspection of arms and of equipment, followed by a regimental review, is a regular procedure every Saturday at Saturday Evening Inspection. Once a month a garrison review of all units with their respective mounts and equipment is held. Ceremonies of all kinds are a regular part of the cadet life, and each cadet soon becomes familiar with all phases of the military service. A twenty-four hour guard detail keeps watch over the barracks. The usual detail consists of an Officer-in-Charge, who is a tactical officer, a cadet officer who is the O. D., a private of the First Class who serves as the O. G., and the necessary non-commissioned officers and privates to round out a detail of about thirty men. The detail is changed daily, and the cadets mount guard by companies.

The cavalry unit is a very popular one and is very much in demand by the "Rats", when they matriculate. The quota is rapidly filled, and many a potential cavalymen has had to take a second choice of one of the other branches for his training, because he arrived too late to "join the cavalry."

The members of the fourth class cavalry receive an extensive course in equitation, cavalry drill, scouting and patrolling, first aid and hygiene, musketry and minor tactics. Each man is given every opportunity to command the squad, the platoon and even the troop before his first year is completed. This preliminary drill by which the classes drill separately is very beneficial, for it instils confidence in the individual before he is ever turned to duty with the "Old cadets."

Members of the other three classes branch off into the many channels of instruction which are essential to a comprehensive knowledge of the cavalry service. Practically every phase of a cavalymen's life and routine is tasted by the cadets. Equitation, map problems, tactics, machine gun and machine rifle instruction, musketry, pistol and sabre work, stable management, history, military law, hippology, and the other courses so familiar to cavalymen are diligently pursued.

Each spring a practice march is taken by the whole Corps, and the cavalry troop, which is composed of first and second classmen, is given much opportunity to experience actual field conditions and to participate in maneuvers. At the end of the Second Class year the cavalymen attend a six weeks' training course at Fort Myer, Virginia, where the dust and heat and the continual grooming and cleaning of equipment, and the routine work are made bearable, perhaps, by the closeness of Washington, D. C.

For the last three years the members of the First Class cavalry have staged a very interesting and grueling endurance contest for the entertainment of visitors during Graduation Week. This contest which is a variation of the stakes which are held at the Cavalry School, is perhaps the most interesting bit of entertainment offered at Finals. The parade ground and the hilly country nearby make the test one of real endurance for both man and horse. A cup is donated to the winner by the Second Class cavalry. This idea was adopted in 1930 while Captain Kent C. Lambert was the senior instructor of Cavalry at the Institute, and from the popularity and enthusiasm which is shown each year by cadets and by spectators, it is evident that this will be an annual event.

Nothing can be said about that beloved mounted sport, polo, for that glorious game has been discontinued as a varsity sport, and from all indications it will become one of the heritages of the past. Sad, but true.

Improvement has been made on the stables and in the corrals during the last few years, and a very efficient enlisted detachment of the D. E. M. L. serves to facilitate the excellent instruction given by the cavalry officers on D.O.L. duty.

The cavalry instruction is very thoroughly and efficiently handled by Captain Bertrand Morrow and Captain George D. Wiltshire, and the morale and efficiency of the cavalry unit are extremely commendable.

Quarters are not provided for the Army officers other than the Commandant of Cadets, who is also the P. M. S. & T. All other officers are on a commutation status and live in Lexington. At the present time Major John Magruder, F. A., is Commandant of Cadets.

In conclusion it might well be said that the extensive work which is covered and the discipline to which a cadet is subject for the four years that he is in V. M. I., not only fit him to handle his commission properly but make him a better citizen.



Top: Statue of Stonewall Jackson on West Side of Barracks. Center: V. M. I. from the Air. Bottom: Garrison Review of All Units.

# Modern Methods in Stream Crossing

## The Infantry with a Tug at Its Bootstraps, Conquers the Unfordable Streams of the Philippines.

By Major Edward M. Almond, 45th Infantry (PS)

**M**ILITARY history is replete with notable achievements of troop movements across swift and unfordable rivers. There is real leadership, and romance as well, in the commander who scorns and crosses swift waters which separate him from his objective. The military leader who, by any means, increases the power of mobility of his troops very materially improves thereby his chances of success in campaign.

When planning our present day training, however, we are content, usually, with the reading of military history and the thought that such matters are so unusual as to have little or no application to us moderns. We are prone to forget that what confronted Alexander in his passage of the Hydaspes (326 B.C.); Hannibal on the Rhone (218 B.C.); Gustavus Adolphus and his 300 Finns in crossing the Lech (against Tilly in 1632); Napoleon's crossing of the Danube (before the Battle of Wagram in 1809); Wellington and Marmot in the Peninsular Wars (prior to Salamanca in 1812); Lee's retreat from Sharpsburg (1862); Funston at Calumpit, P. I. (1899); the Japanese at the Yalu (1904); all had real application when the 5th (U. S.) Division crossed the Meuse at Dun-sur-Meuse (1918) and that, in the future, the same necessities may arise in military operations in any country where rainy seasons obtain or deep streams exist.

The real trouble with us lies in the fact that we are awed by the thought of being responsible for rapidly passing a military unit and its equipment over an unfordable and formidable stream without the aid of a bridge or the bridging equipment of engineers or locally obtainable materials. These latter not only consume valuable time for construction but may not be available. If we only knew "how" to make the crossing by our own devices, how much simpler the problem would be!

In 1866 Wrangel's Prussian Brigade received the following order: "Cross the river (Saal) some where, no matter how, and attack (the Bavarians) by envelopment." This force had no "special" equipment, no engineers, or pioneers, to assist it. The commander, must have thought many times "But how"; he no doubt set his column in motion with strong misgivings; he, at the time, had no way of knowing that luck awaited him in the form of an old foot bridge which the enemy had only partially destroyed.

Such luck did not await Funston at Calumpit when confronted by the same proposition and the success of whose crossing was dependent upon a single

old raft (capacity 8 equipped soldiers) and the intrepidity of two swimmers towing a rope to the far bank of the stream. This, under hostile fire, being a most time consuming and restricted method of crossing; restricted, because training had not pointed out more rapid methods.

The present Philippine Department Commander, Major General E. E. Booth,—having had to ask himself the question "How?" during his service in the Philippine Insurrection,—soon after assuming command of the Department in 1932, inspired the infantry of the Philippine Division with the desire to learn "how" to speedily cross unfordable streams without the assistance of other units.

The Philippine Division and 23d Brigade (PS) Commanders,—thru their thoughtful supervision and helpful suggestions, made such training possible,—and the troops,—from regimental commander to private,—by their enthusiasm and skill have made remarkable progress and have acquired most gratifying proficiency in this training.

In 1813, Tsheritshev's Cavalry Corps swam the River Elbe; the cossack riders guiding their mounts (stripped) and dragging behind them their equipment and loot,—skillfully packed in small, wickerwoven baskets. One hundred and twenty years later we find the Philippine Scout soldier crossing wide, swift, unfordable streams employing the same principles and using only slightly different methods.

The system of instruction, and the results thereof, in one battalion of infantry of the 23d Brigade (PS) has been selected in order to illustrate what may be accomplished in a reasonable period of time.

The 23d Brigade Training Directive prescribed that troops should be taught to rapidly cross unfordable streams with combat equipment on rafts (or otherwise) and by swimming the personnel and animals (in herd); that tactical exercises should be conducted; and that all troops would undergo such tests as might be prescribed at the end of the training period.

The training began early in September and continued until the beginning of December, the instruction paralleled other training subjects; the period allotted was necessarily an extended one, due to the scarcity of life saving apparatus (row boats and life preservers) and to the limited number of river crossing points suited to initiating untried troops to the unusual risks involved.

<sup>1</sup>It is to be noted that the equipment of all companies includes pack animal transportation for infantry weapons, rations, forage and ammunition. The rifle company machine guns and ammunition therefor are carried on 8 pack mules.

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The training objectives fixed upon by the battalion commander were as follows:

a. To attain proficiency in crossing all personnel and all equipment (including animals and escort wagons) pertaining to the battalion.

b. To investigate all expedients known to swimming, ferrying or floating personnel or equipment over unfordable streams. This with the view to rapidly utilizing any or all of these if available at the time and place required.

c. Finally, and most important, to develop—if practicable—methods with which the battalion could pass rapidly over an unfordable stream (10 to 200 yards in width) with little or no dependence upon materials other than the standard combat equipment of the component units.

The obstacles selected for this training were the Pasig and the Mariquina Rivers,—near Fort McKinley, P. I.; the Pasig, just below its junction with the Mariquina is an especially swift and unusual stream due both to the then existent rainy season and to the tidal effects of Manila Bay (when the tide is receding the

current of the river is greatly increased and at rising tide a cross current results which is far from desirable). The width of the river is 400 feet, its depth varies from 12 to 18 feet and the average current is 5 feet per second.

The Mariquina River is somewhat wider, about the same depth and slightly less in rate of current.

These streams can be considered to be as difficult as will usually be encountered in military operations.<sup>2</sup> Less formidable obstacles were to be desired but were not available.

This discussion will not include the details of the many methods investigated by the troops during the course of this training; only those expedients which proved to be the simplest, involving materials likely to be available, and which can be speedily utilized will be cited. Such assistance seems to be the most desirable in campaign; the methods finally adopted apply in any situation or in any country; and furthermore,

<sup>2</sup>The Meuse River (near Dun-sur-Meuse, France) is 80 to 100 yards wide and the Limmat River (famous for Messena's classic river crossing against the Prussians in 1799) is about the same width.



SERIES NO. 2

1. Infantry section prepared to swim unfordable stream; all individual equipment including arms and ammunition made into 2-man shelter half (canvas) floats. 2. The section enters the river. Scouts, first in, waist deep. 3. The 2-man rifle float on land. 4. The rifle section, with all equipment, swims the Pasig River which is 400 feet wide and 18 feet deep. 5. The 2-man float in the water.



SERIES NO. 3

1. Two machine gun company manta floats containing all equipment of one machine gun squad. 2. Machine Gun company float. Contents: Two Phillips packs and three soldier packs complete in canvas manta container. 3. Machine gun company, complete for field service, preparing to swim unfordable stream. 4. Machine gun company float. Contents: one machine gun and pack saddle, complete, three soldier packs, in canvas manta container.

most of the expedients adopted are inherent to the normal equipment of the unit concerned.

It should be noted that infantry, in the past, when required to swim unfordable streams has resorted to some or all of the following aids to crossing:

a. Wooden Rafts—if materials and time to construct permits.

b. Ropes, or cables, stretched from bank to bank.

c. Floats, such as doors, logs, barrels or boats.

In addition to the foregoing, the training of this battalion included tests of floats made of: Canvas paulins; tents (shelter and other kinds); canvas wagon-covers; canvas mantas; bamboo (single poles and rafts); banana-plant stalks; "G. I." Cans and cooking boilers (made water tight with pieces of burlap; "bahauea vine" and split bamboo (as rope); and the native canoe (banca).

The time devoted to this training in each company was approximately 1200 man-hours for personnel (or 20 hours per man) and 300 man-hours for animals (or 15 hours per animal).

It should be remembered that the above represents the time devoted to an unfamiliar subject and includes much experimentation in methods now discarded for those adopted and illustrated in this discussion. In future training, the above can be reduced 75% for personnel or partially trained animals.

The equipment floated over the streams included all items authorized in Tables of Basic Allowances (less ammunition and extra clothing) for a peace strength infantry battalion consisting of 11 officers, 306 enlisted men, 43 pack mules, 10 riding horses and two escort wagons (including 8 draft mules and harness therefor). To prepare the men and equipment of this battalion for swimming and floatation required approximately 20 minutes at a test near the end of the training period (this included all floats and escort wagons).

The final results obtained from this training in stream crossing methods can be set forth best by the following statements and descriptions of floats,—illustrated by photographs, both on land and in the water:

a. No materials other than canvas and the necessary rope for lashing same were required for the types of floats finally selected as best and simplest for the purpose of moving equipment across the water.

b. Only five types of floats were adopted for crossing the authorized equipment of the infantry battalion. The following describes, in brief, these type-loads:

i. The "2-Man Rifle Float" (see photos: Series No. 2): This float can be prepared by 2 men in 7 minutes. The two shelter halves (one on top of the other) are placed on the ground, and the remainder of the two packs and the clothing of two soldiers are placed in the center of the canvas. Now the rifles, (crossed to give rigidity) are placed on top of the packs and clothing. The float is completed by binding the 4 corners of the outside shelter half to the 4 extremities of the rifles by means of the shelter tent ropes.

In a similar manner (see photo of Float, 1, Series No. 11), using 2 3-foot sticks or two shelter tent poles instead of rifles; a machine gun complete can be floated in a shelter tent.

ii. The "2-Man MG Float" (applies also to "Pack (or other type) Saddle" or to "Ammunition Loads") (see photos: Series No. 3).

This float is prepared by 2 men in 10 minutes. A 6' x 6' canvas manta (having 3 to 5 metal eyelets on each side) is spread on the ground. Next, place 2 pack saddles, one machine gun (or 3 boxes of MG ammunition) and 3 individual packs in the center of the canvas. By means of a 20 foot 1/2" rope (thru the eyelets) all sides of the canvas are drawn up equally against the two pack saddles (set on edge) until the bundle is practically rigid.

iii. The "Cargo Float, Kitchen Load" (see photos, Series No. 4): Four men can prepare this load in 5 to 10 minutes. A small 12' x 15' canvas paulin (part of the company Baggage

Mule load) is spread upon the ground and the loads of the three company train mules (consisting of 3 pack saddles, 1 day's rations for 80 men, one kitchen, pack, (cavalry, artillery or Phil. Scout type); shovel; pick; axe and cooking utensils are all arranged as an oblong solid (approximately 2 1/2' x 2 1/2' x 6'). The canvas is drawn up against the sides and ends of this mass so that all walls are at least 1 1/2 ft. high; lash the load with a 50' to 75' length of rope. This load can be propelled in the water by two men.

iv. The Cargo "Ration and Baggage Wagon Float" (see photos: Series No. 5). This float can be prepared in from 8 to 12 minutes by one squad in a manner similar to the "Cargo Float, Kitchen Load," by using a large canvas paulin (15' x 39') and placing therein all of the company property ordinarily carried in the field on the company "Ration and Baggage Wagon" (such as officer bedding-rolls, GI cans, small wall tents, etc.) except that carried in the MG floats, and in the kitchen float. Three or four men can ride on top of this float without danger of sinking it. Four men can propel it in the water.

v. The "Escort Wagon Float" (see photos: Series No. 6): The escort wagon is prepared for floating in 10 minutes by two squads. First remove the wagon body and place it on the wagon cover (previously spread on the ground or on the bolsters of the wagon frame). Now draw the canvas up around the body so that no side of it is less than 18 to 20 inches deep. Lash to the body with short ropes. Replace the body on the wagon and lash it to the wagon frame to prevent separation when floated. Roll the wagon into the stream and it floats. This wagon can be propelled across water by 6 men; two men guiding the wagon by means of a 10 foot rope tied to the end of the wagon



SERIES NO. 4

1. Cargo load. Contents: Pack loads of three kitchen and ration mules. 2. Cargo load afloat. Contents: pack loads of three kitchen and ration mules.

tongue while the four other men (one near each wagon wheel) swim and push the float.

c. The proficiency attained by the several companies at the end of their 1200 man-hour training period<sup>a</sup> was as follows:

1. One hour was the average time required by each rifle company for one round trip across the river<sup>b</sup> for approximately 60 men, all individual and unit equipment, and 7 pack mules.

2. One hour was the average time required for a one way crossing by the machine gun company; the slower time for this unit being due to the fact that there is equipment for 22 pack animals and 7 horses requiring about 13 cargo floats for these equipment loads. (See photos: Series No. 7).

3. "2-man Rifle Floats" and "Cargo Floats" can be prepared in 7 and 12 minutes, respectively.

4. Generally, all personnel charged with the "2-man Rifle Floats" could cross the river in approximately 10 minutes after the command "Prepare for Crossing" had been given.

d. The proficiency attained by the battalion, as a unit, may be stated by the following results of tests:

1. To cross the entire battalion, using canvas only, required:

a. 2 hours; Bn. on a 2-Co. front; under an assumed tactical situation.

b. 30 to 40 min. per Rifle Co. (incl. animals) without regard to tactical situation.

c. 1 hour; Bn. on a 4-Co. front, from march column to march column.

d. Extra equipment; (1) 31 canvas mantas 6' x 6' (for MGs, Ams and Pack saddles).

(2) 4 large paulins (1 per Co. for Org. Property Float).

2. The following floats were required for the crossings of 208 men and 36 animals:

i. All men crossed by swimming (a few men in each company required assistance of towing by ropes attached to the big floats).

ii. 42 "2-man rifle floats (see also another test in photo. No. 1, Series No. 2).

iii. 20 "2-man MG and pack saddle floats."

iv. 4 Cargo Floats Kitchen and Ration.

v. 4 Cargo Floats Escort Wagon Loads.

vi. 2 Escort Wagon Floats.

3. From 5 to 12 minutes was the average time necessary to launch from 35 to 45 animals (in herd), to swim them and to tie up on the far bank of the river. (See photos in Series No. 8)

4. It requires from 5 to 6 hours for this battalion to cross the stream at the same point as in 1 above when bamboo or other wooden floats are used. For example: 332, 20-foot bamboo poles will be required to construct the 17 rafts necessary to move the machine guns and organizational property. To procure material and construct these

<sup>a</sup>It must be remembered that most Filipinos are excellent swimmers; no claim is made herein to teaching non-swimmers to be expert in this period. However, some 3 to 10 men per company were trained over a period of 3 months and these men crossed the river with their unit.

<sup>b</sup>The Pasig River is 400 feet wide, 18 feet deep and has an average current of 6 feet per second at this point.

rafts, simultaneously, requires 84 men, assuming the material to be within ½ mile of the river bank.

5. This discussion includes photographs, with descriptive titles. (see Series No. 9) intended to illustrate "other" methods of floating equipment: such as flat bottomed rafts, banca ferries, and bundle (or pole) floats, but, as has been shown above, although these may be desirable they are not necessary to a successful stream crossing.

6. During the early stages of this training one company commander prepared a large bamboo raft requiring 35, (30 foot) poles to float the loads of 5 pack mules; it required about 6 hours for 4 men to cut and transport the material to the river's edge and 6 men worked 4 hours on the raft's construction. The equipment concerned could have been transported in 4 mantas requiring from 5 to 10 minutes preparation. The foregoing is illustrative of the selection of simple, effective, and speedy methods of crossing expedients at the beginning and at the end of the training period.

Having determined the suitability of canvas for floating the equipment of the battalion, it was decided to conduct a battalion tactical exercise (copy attached) in Stream Crossing Methods. The situation required the troops to approach the Pasig River; the battalion commander to issue necessary orders which included dispatching a covering force (of five squads) to secure the high ground beyond the stream on a front of some 2000 yards, and then to cross the main body of the unit, less its wheeled transportation (the ammunition and heavy baggage loads). This crossing was accomplished on a two-company front in a period of two hours: the rifle companies following the covering force and these, in turn, were followed by the remaining rifle and machine gun companies.

In order to present a real problem in the technique of crossing unfamiliar streams, the battalion was immediately assembled on the far bank of the Pasig and then moved in route column across country for a distance of two miles to the vicinity of a railway bridge over the Mariquina River.<sup>c</sup> This area had not been visited, previously, by any officer or man of the battalion. The column was halted while a patrol crossed the river by the railroad trestle bridge to make a reconnaissance of the far bank for suitable landing spots for the animals. Having selected localities, all equipment was removed from pack and riding animals and the crossing began.

Some 35 animals swam the stream (one man accompanying each animal) and were tied up on the far bank in 12 minutes from the starting time. In one hour all personnel, carrying all the equipment (thus utilizing the bridge as far as practicable), had crossed the railroad trestle and the unit awaited further orders.

Having successfully crossed the Pasig and Mariquina Rivers numerous times both from the technical and the tactical standpoint and having adopted effective methods for crossing its equipment by means of

<sup>c</sup>Width 450 feet, depth 12 ft., and current 3 feet per second.

the unit's own canvas, training of this nature was suspended pending the test to be prescribed by higher authority. This test was held in the form of a demonstration for the Brigade Commander in "Methods of Crossing Unfordable Streams." The demonstration was performed in the presence of most all of the officers and men stationed at Fort McKinley, numerous visitors from various Army and Navy Posts of the Philippines and prominent civilians in the City of Manila.

This training has shown, conclusively, by demonstration and by the records of the included photographs, the following:

a. A unit whose men and animals are familiar with

swimming and floating equipment by methods, somewhat similar to those described in this discussion, need fear no unfordable stream as an obstacle to military operations.

b. That our combat units, as equipped at present (with a trivial addition of rope and canvas), need no other assistance for the accomplishment of a successful stream crossing. Wooden floats, rafts, boats, etc., can be classed as "luxuries" to be depended upon only where there is much time and when materials are available. The canvas contained load shown in photographs, Series No. 4, was prepared in 4 minutes and floated across the Pasig River in 5 minutes; the same



SERIES NO. 5

1. Preparing the company heavy property for floating. 2. The 4-line ration and baggage wagon and ½ its load prepared for floating. One company's baggage. 3. Escort wagon load. Organizational property floating in canvas paulin (size 18' x 38'). 4. Cargo Float Preparation of R & B wagon load. (Company property) 5. Launching the R & B wagon load float. 6. R & B wagon load of a company being floated over stream. Note the individual soldier on top.





SERIES NO. 6.

1. The escort wagon afloat. Canvas wagon cover, wrapped around body, floats the wagon for several hours. 2. Escort wagon floating in mid-stream, 18 feet deep. 3. Right: Escort wagon floated on two bundles of bamboo poles (20 each) lashed to sides of wheels at the hub. Left: Escort wagon floated by means of its own wagon cover.

load is also shown on a raft which required (Series No. 9) the efforts of eight men for two hours (exclusive of procuring the bamboo) for its construction and passage across the river.

c. That the battalion crossing operation which required two hours on a 2-company front (or one hour on a 4-company front) would have required some three or four hours for eighty-four men to collect the material (if close at hand); an additional three hours for these men to construct 17 rafts (5 men working on each raft); and finally about one hour for loading the equipment and actually crossing the river with it.

All items considered, eight hours is a conservative estimate for crossing by this latter method. Even this is based upon the supposition that materials are available and that the unit has the skill, tools and rope (or nails) to prepare these rafts. In this connection it should be noted, in the photographs of Series No. 6 that an escort wagon can be floated by its own wagon cover (canvas) and that the ration and kitchen pack mule loads (see photographs in photo. Series No. 4) by means of the manta (canvas) containers (wrappers) or the small canvas paulin.

d. That infantry weapons (machine guns, automatic rifles, rifles, and ammunition therefor), saddles (pack or riding) and ration and unit property, loads can be floated by means of shelter tent, manta, or paulin canvas. Further, that the small additions of manta or paulin canvas add very little to the regular loads and that they have the additional utility of covers from sun and damp weather. (See Series No. 11.)

e. That the possible criticism "that canvas wears quickly in campaign" or is easily "snagged" merely begs the question. Canvas can, and must, be kept serviceable; the cargo load, photographs a and b Series No. 5, was floated in a canvas paulin having 25 patches (see arrows) sewed over its worn spots,—candle grease or lubricating oil will render the patch impervious to water. All of the canvas of a unit will not become unserviceable at any one time; a unit which crosses a stream by using serviceable canvas for its floats will require approximately twice as much time for its crossing when one third of its canvas becomes unserviceable since some canvas must be brought back to the



SERIES NO. 7.

1. Preparing machine gun company floats. 2. Machine gun company completing the preparation of manta floats for all machine gun and individual pack equipment of the company. 3. Machine gun company machine guns and individual equipment prepared to swim unfordable river, two men propelling each load. 4. Machine gun and individual equipment loads of a machine gun company being floated over stream, two swimmers propelling each load.

near bank for other loads. Incidentally, all canvas, old or new is less liable to leak (or seep water) if, before using as a float, it is thoroughly soaked in the stream.

f. That the buoyancy of a float and the method of packing it is a matter of test, therefore all units require some training on the subject. Narrow floats or rafts capsize easily; all floats should be at least from three to six feet wide, if possible, and it is always best to have the center of gravity of the load as low as practicable. For weight carrying purposes, deep, wide floats are more stable than shallow ones.

g. That animals which may at first appear impossible to accustom to swimming soon become used to the water and we can expect them to be trained to the extent that they herd into the water as readily as ducks move in flocks. (See Series No. 12.)

A 15-foot length of rope tied to the halter of an animal with two men at the other end and one man in rear to urge the animal will usually succeed in getting the most stubborn mule or horse to enter the water. An individual swimmer by clinging to a stubborn animal's halter (the long rope being removed

once the animal is launched) can pilot it across the stream. A free swimming animal should be selected as a "lead-off" and once across, it should be tied on the far bank in plain view; a cow-bell occasionally jingled from the far side is an inducement for crossing to animals used to herding with the bell. Four or five trips across a stream is sufficient training for individual animals; they should then be crossed by herding; a few men are necessary to start the leading swimmers. In the beginning of herd training 8 or 10 men on the bank with a long rope, surrounding the group, can easily launch the balance of a large herd after a few animals have been led into the water and start for the far bank of the stream.

h. That all training, especially in the early stages, should contemplate adequate safety measures; this may prevent the loss of men or equipment. Whenever training is in progress, boats (motor boats, if available) containing life preservers and several good swimmers should be near at hand. Long ropes with buoyant floats attached should be tied to all loads; these mark the spot of a float which may capsize due to faulty preparation and the long rope serves as a cable by

which the weight may be lifted or dragged to the bank of the stream. Long bamboo poles, logs, planks or life preservers should be used by swimmers of questionable strength. All of the foregoing measures constitute aids to the successful training of the unit.

All companies were required to prepare reports on their experience in developing ways and means for passing over unfordable streams, which,—when approved by the battalion commander,—were filed as a company training document to be used as a reference for future training on this subject.

Such training as has been described herein has particular application to troops in the Philippine Department, especially during the wet season, where units,—perhaps as small as battalions or companies,—may be required to operate independently and, due to the requirements of the situation, at places other than along good roads and over well established stream crossings. These units must depend upon their own ingenuity and devices in order to cross unfordable streams where there are no bridges; they cannot expect to have engineer troops provide the means for crossing.

Moreover, it is believed that one of the prime virtues to be desired by a military unit is that power of mobility which is independent of any aid or service not

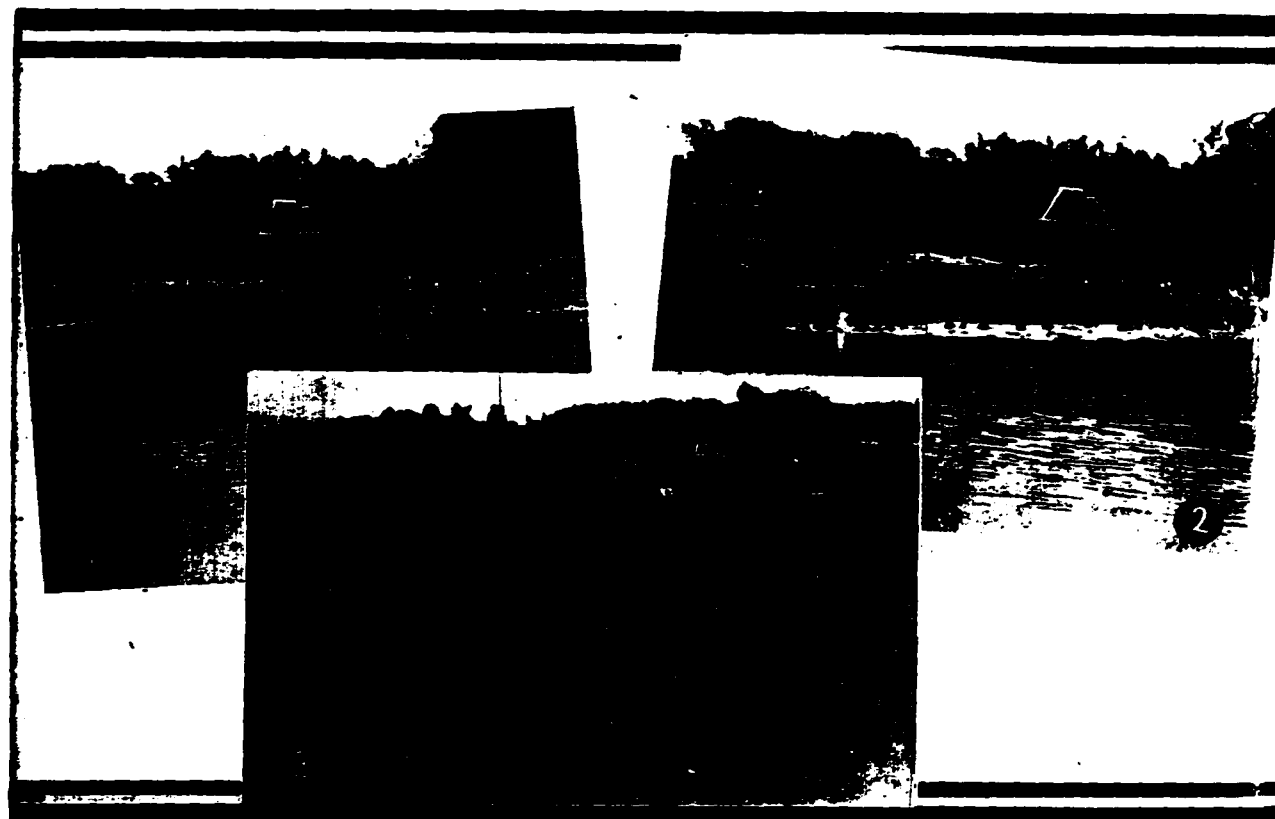
\*During the 1930 Philippine Division Staff Ride the Staff of a cavalry regiment estimated that it would require 14 hours to move the regiment across a stream similar to the Pasig River near Fort McKinley.

a part of itself. If this be true, stream crossing training has general application to the proper combat efficiency of all combat troops throughout our army, especially the infantry and cavalry.\*

The well known and accepted texts on the technique of crossing unfordable streams enumerate many suitable expedients and how to construct them but it is the purpose of this discussion to emphasize the fact that combat units (especially covering forces of larger bodies) should know that they can cross these obstacles and "how" to do so without using extraneous equipment, without losing valuable time collecting materials, and for the construction of rafts therefrom. "How true it is," wrote Wellington, "that in all military operations, time is everything." Any unit which is capable of crossing an unfordable stream by means of its own individual and organizational equipment not only has widened the scope of its maneuverability but at once has minimized the time required for such maneuvering.

It should not be sufficient for combat troops to know how to use special troops (engineers, pioneers, etc.) and bridging materials in campaign: it is proper that such units should know "how" to pass over the unfordable obstacle when the special troops or materials are not available to assist them (the usual case).

Training on this subject may prevent costly errors due to faulty estimates by unit commanders. The



SERIES NO. 8.

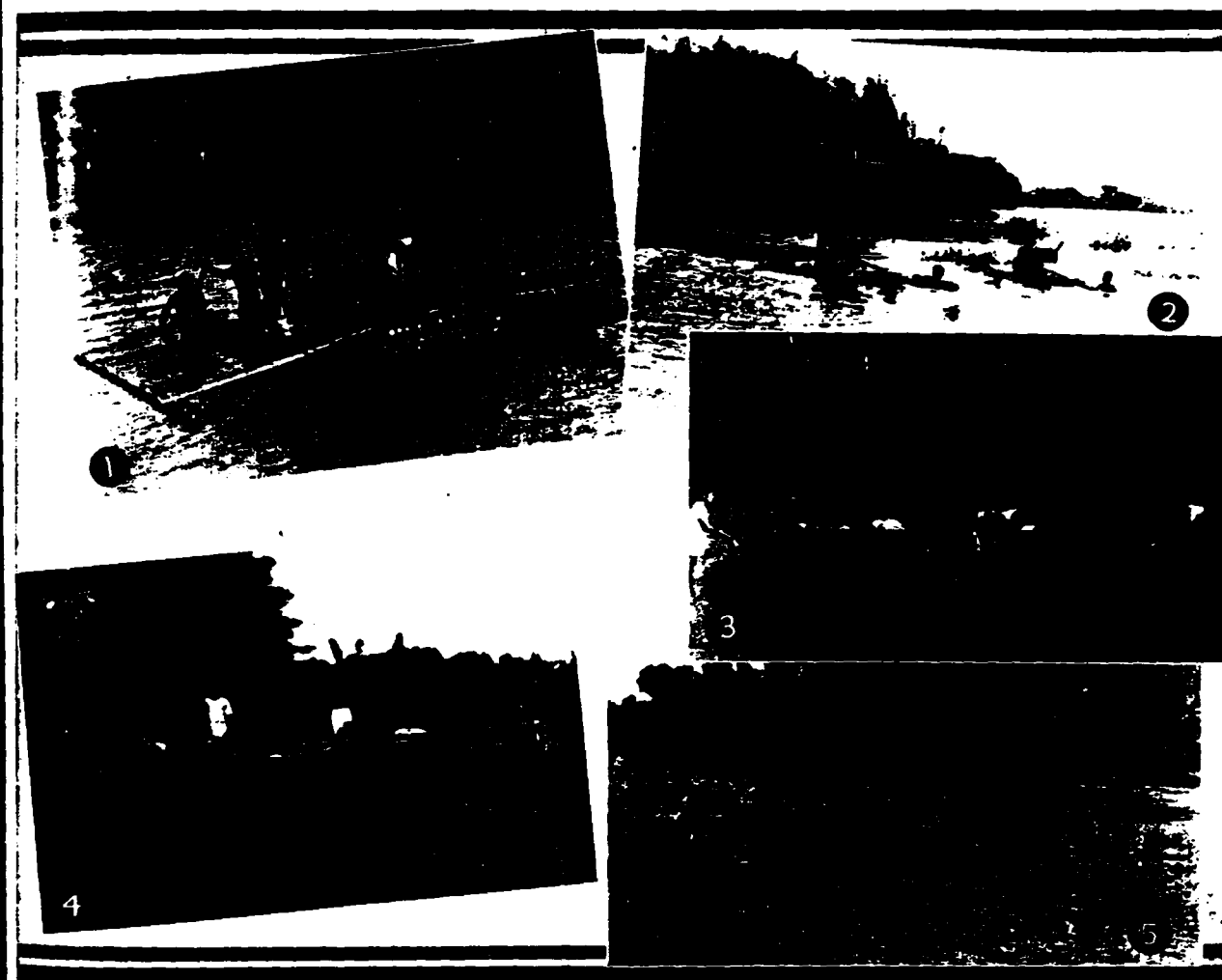
1. The start. 2. The herd approaching mid-stream. 3. Nearing the finish. Mules and horses of infantry battalion returning from the far side of an unfordable stream fifteen minutes after swimming across.

bridge upon which an operation depends may not exist (or be untenable) when the troops reach it (this was the case with Funston at the Quingua, (P. I.) in 1899). Unit leaders should know how to issue appropriate orders; they should be taught to realize that there are no constant rules for stream crossings: that each operation is unlike any other but that all are made easier by both technical and tactical experience resulting from training. Training experiences of other troops and historical examples may serve the unit well when includes river crossings in its training program. Bismark once said, "People say that they learn by their mistakes; I prefer to learn by the mistakes of others."

The situations in which practical methods in crossing unfordable streams may have application are varied and extensive; combat troops may have occasion for their uses both in offensive and defensive operations.

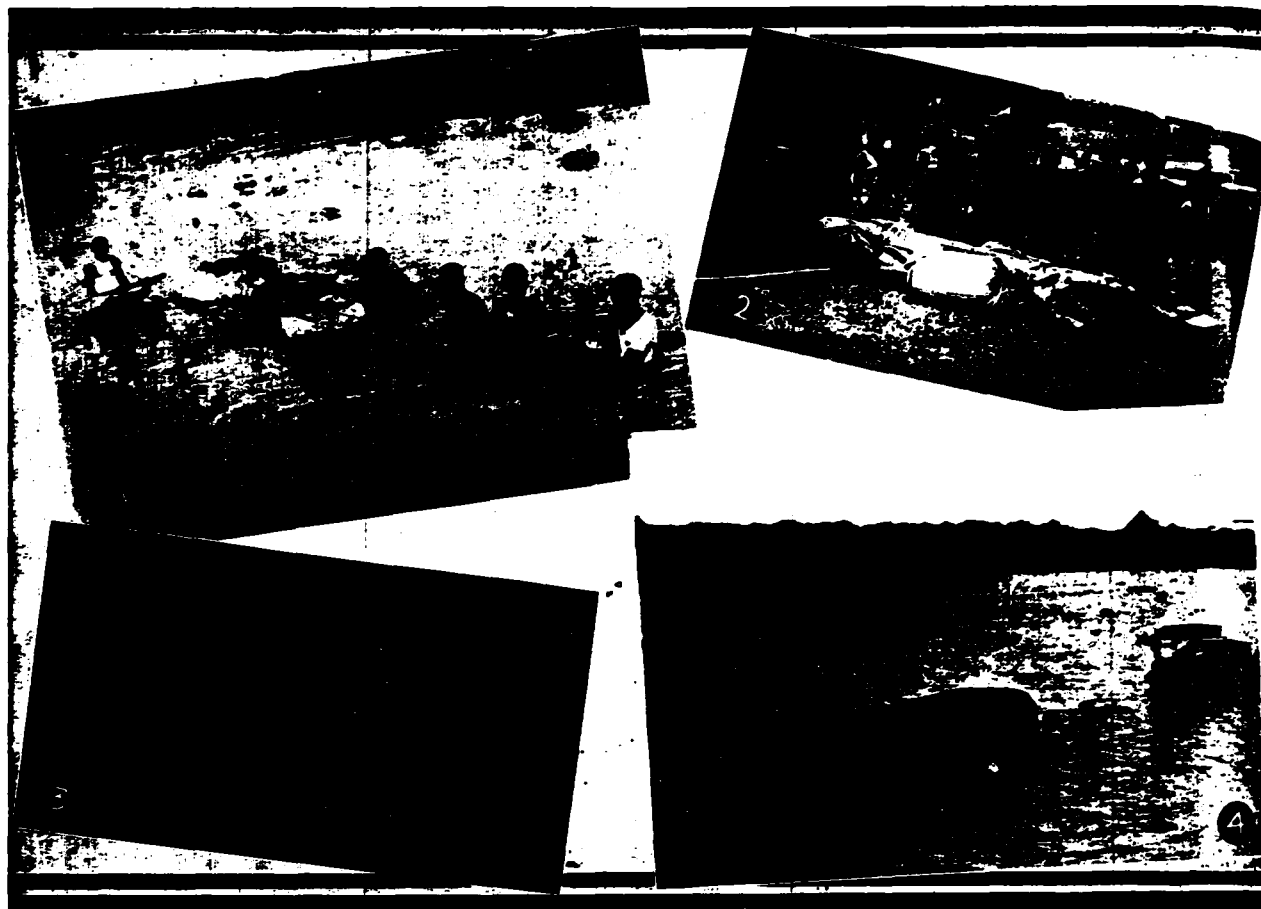
Advance detachments (battalions, regiments or even brigades) sent forward to seize strategic localities may meet with many unforeseen water obstacles; the time required to overcome such interruptions may be the vital element to the successful accomplishment of the mission. All elements of the command should be able to cross the unfordable streams encountered; there may be no secure line of communications in the rear of such unit where baggage, vehicles or animals may be left temporarily.

Covering forces,—screening an advance on a movement to concentration by a large force,—operate to best advantage, especially when opposed by hostile elements, by crossing streams on a broad front; each component unit (platoon, company, battalion, or regiment) should be independent of assistance and capable of effecting a crossing by its own means.



SERIES NO. 9.

1. Banca-bamboo ferry, raft with outriggers, one rifle squad. A heavier load can be carried. 30 bamboo poles, 2 bancas, one hour to cut bamboo and 1½ hour to construct. 2. Browning machine gun on bamboo machine gun raft. One gunner and three men propel the raft. 3. Bamboo float for pack loads of three kitchen and ration mules. 4. The loaded raft afloat. 5. Left: Communication (or machine gun) cart floated in canvas 8' x 10'. Right: Escort wagon floated by means G. I. cans (made airtight with burlap under cover) lashed to the frame of the wagon.



SERIES NO. 11.

1. Fig. 1: One machine gun and two boxes of ammunition in shelter tent. Fig. 2: The ammunition mule load in canvas manta 6' x 6'. (pack saddle and four individual packs and eight boxes of ammunition) Fig. 3: The machine gun mule load in canvas manta 6' x 6'. Machine gun, pack saddle and four individual packs. Fig. 4: 2400 rounds cal. .30 ammunition (two cases) in 6' x 6' manta float. 2. The escort wagon float. Water tight cans give additional buoyancy when weight is increased. 3. The company escort wagon load: 1100 pounds afloat. 4. The escort wagon afloat. Canvas wagon cover, wrapped around body floats the wagon for several hours.

Crossings, forced against hostile opposition, must be protected by covering fire from the near bank of the stream while the first crossing elements accompanied by their equipment make for the far bank. These leading elements must begin operations against the enemy with as little delay as possible; control must be maintained; and arms and ammunition must be kept dry and with the elements to which they pertain.

The elements which arrived on the hostile river bank at the Bag-Bag and at Calumpit (in the P. I. in 1899) were naked and without weapons; and so they remained for from 15 to 30 minutes at the mercy of an enemy which at the particular moment did not act aggressively and so they survived.

Wide envelopments may require rapid stream crossings by swimming and floating combat equipment. Hannibal sent Hanno farther up the Rhone for this purpose in 218 B.C. The occasion to apply these methods may occur on the battle field itself where the enemy has used an unfordable stream, as a natural obstacle, to increase his powers of

defense. Such was the case when Wrangel's Prussian Brigade crossed the Saal below Kissingen. The methods of 1932 would have simplified the problem of 1866 if that brigade had been trained in such matters.

Combat patrols or flank detachments may be required to cross unfordable streams at some distance from the main body in order to make a reconnaissance beyond the stream or for security to the main body's crossing. In 1899 General Funston, then a regimental commander, with one rifle company made such a crossing (800 yards to the flank of his brigade) over the Quingut (200 feet wide and 10 feet deep) but his leading elements had to leave their arms and ammunition behind. In the case of such a strong protecting patrol or detachment it is most important to know "how" to cross the present day machine guns, automatic rifles and other necessary equipment by means other than the time consuming method of raft building.

In retreats and delaying actions the rear guard

elements may be able to delay the enemy considerably longer if it is known that a regiment can cross the stream in its rear in from two to six hours instead the fourteen hour estimate for a cavalry regiment in the 1930 Philippine Division Staff Ride. In such operations there may be no bridges or boats and perhaps there are few fords and no ferries to be expected. Lee's retreat from Sharpsburg after the Battle of Antietam (in 1862) was confronted with only one ford practicable for the wagon train of his entire army and a few deep fords for men and animals.

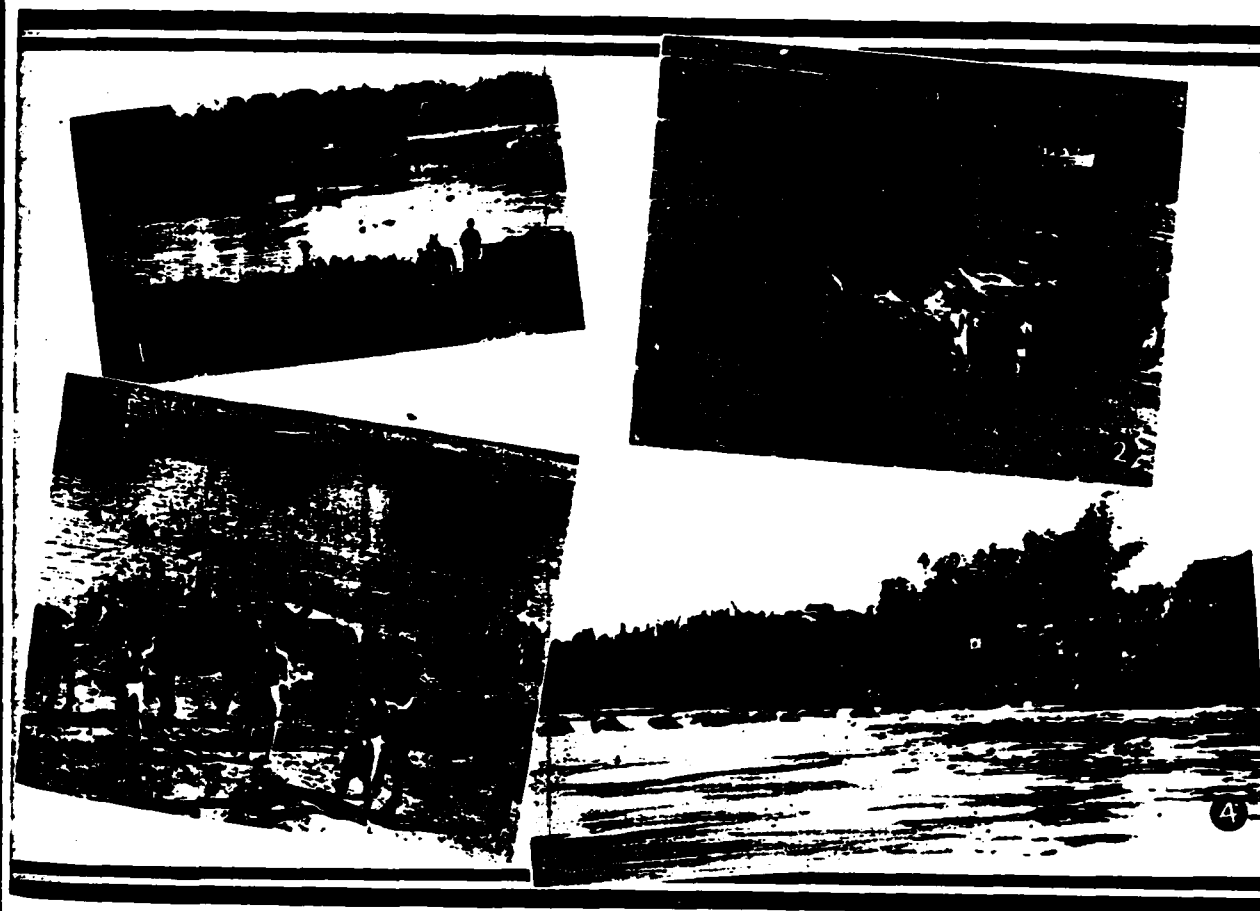
Covering units, (particularly battalions or companies) for the flanks of retreating forces may be required to use all sorts of expedients and to move cross country entirely in order to perform the assigned mission and rejoin the main body later on.

The foregoing situations can be satisfactorily met if simple never-failing methods are sought for in a

reasonable amount of training on the subject. Troops should know how to operate when confronted with the difficulties presented in this discussion. It is believed that the fear of deep streams,—inherent in most of us,—and the mystery of just "how" to pass a military unit over such an obstacle by swimming and floating can be practically eliminated by methods of training somewhat along the lines suggested herein.

It is hoped that the foregoing will serve to refresh the memory of older officers to whom the subject is not new and will inspire inquisitiveness in the minds of the younger officers in the service; thus serving as a guide to all to show how our present equipment lends itself to advantageous uses when military operations require that deep streams be rapidly crossed.

It is well enough to be satisfied with the old proverb "Do not cross the bridge until you come to it" but we should go further in our troop training and be prepared to cross the stream if the bridge is not there.



SERIES NO. 12.

1. Stubborn animal being towed into stream by long rope tied to its halter. 2. Guiding untrained animals in early stages of crossing practice. 3. Teaching the untrained animal to swim. 4. Mules and horses of an infantry battalion beginning the crossing of unfordable stream. The end of the training period.

# The C. C. C. at Fort Knox, Kentucky

By Corporal George Chancellor, 1st Cavalry (Mech.)

**F**ORT KNOX was designated by Headquarters, Fifth Corps Area, as the only camp in that territorial division to receive the incoming members of the Civilian Conservation Corps. The first orders giving Fort Knox a quota of 12,000 had scarcely been understood when there came the electrifying instructions that the quota would be 28,000. This increase necessitated complete revision of plans, and the peak load estimated for the first week in June jumped from 4,000 to 14,000.

Fort Knox is located on the main line of the Illinois Central Railroad, and the famed Dixie Highway traverses the main part of camp, so transportation facilities were of the best. The camp could accommodate 8,000 men at one time with the following facilities: 1st Brigade and 2nd Brigade cantonment areas; Reserve Officers' tent camp. The anticipated peak load would thus increase the post capacity by about 6,000 men.

The 1st Brigade area was thrown open, and a battalion of the 11th Infantry from Fort Benjamin, Harrison, Indiana, arrived here to assist in the processing of the men of the Civilian Conservation Corps. This organization, with the help of the permanent garrison, opened up the C. C. C. Headquarters and the processing establishment, which functioned smoothly during the whole period of the camp. The processing was done in the largest building in that area. Here each newly arrived "forester" was registered, examined by medical officers and given typhoid and other inoculations. His personal history was taken, and he was assigned to a company for permanent duty. Each conservation company consisted of about 200 enrollees and 2 officers, with 4 enlisted men acting as 1st Sergeant, Supply Sergeant, Mess Sergeant, and Cook.

The 1st Brigade area soon became overloaded, and Tent Camp No. 1 was made ready to shelter about 3,000 men in pyramidal tents, each accommodating eight men. This camp was soon filled, and Tent Camp No. 2 was erected on a new camp site, necessitating construction of sewer lines, piping of water and installation of electric lines. A record of time was made in this camp: it was drained, ditched and made ready for the tents in one day.

This new camp was soon filled, and the 2nd Brigade area, which had been utilized by the personnel of the Joint Antiaircraft-Air Corps Exercises (May 15-27) was placed at the disposal of the fast arriving foresters. Now coming in at the rate of 1,500 a day. Tent Camp No. 3 was soon needed; not long after the Reserve Officers' Camp was made ready for occupancy.

The tremendous task of furnishing food, clothing, shelter, and tools for the incoming men required an efficient supply system. Subsistence stores delivered to the garrison on the regular monthly basis were, of course, not adequate to meet the large demands made by increasing population. Large open market purchases were made, and care was taken to select only those products which could be prepared in a minimum

of time and which were adapted to eating from mess kits.

War Department instructions authorized Fort Knox to requisition the Jeffersonville Supply Depot (under the jurisdiction of the 6th Corps Area) directly, which arrangement facilitated the solution of our problems.

Excessive heat when the C. C. C. contingent numbered 15,000 made it necessary to put severe restrictions on the use of water. Fortunately, these conditions abated in a short time.

The Post Office Department in Chicago helped out with 50 T-model Fords of the vintage of about 1920. They were turned over to the Foresters but were soon sent out to work camps, and thereafter trucks were furnished directly to the camps from Corps Area Headquarters.

A Regular Army field officer had been put in charge of each area used by the Conservation Corps, but orders were received requiring each departing company to be commanded by a major of the Regular Army. These changes of personnel complicated the administration problem.

It should be realized that the little old routine jobs of the post had to go on as usual; that such work continued as scheduled is a tribute to the Post Quartermaster and his efficient organization. The subject nearest the heart of the Conservation Corps man was food, and to 1st Lieutenants Victor L. Robinson and C. A. Cotton, Q. M. C., go due praise and acknowledgment of the handling of the difficult positions of Mess Officer and Subsistence Officer respectively.

The percentage of A. W. O. L.'s was only about 0.35 and only two deaths occurred. The number of officers on duty here with the Conservation Corps was: Regular Army, 275; Navy, 40; Reserve Officers, 235. The number of separations from the camp was about 1,500 from all causes, mostly on account of infractions of the rules; this is considered a remarkable record.

The physical condition of the enrollees was improved. Gains in weight of as much as 11 pounds in a month were reported.

The morale was very high. An attempt to introduce propaganda literature by the Young Communist League of Toledo, Ohio, failed.

Athletic facilities and equipment were provided by the government, minstrel shows were put on with local talent and a band was formed. Very commendable groups attended religious services.

Contrary to public belief, the members of the Conservation Corps were given no military training beyond the marching in column to and from their work. However, seeing the demonstrations and drills of the First Cavalry (Mechanized) made them wish to learn military drills themselves. When left to their own devices, groups of the young men could be seen performing military movements which were very creditable. They gave the man in uniform, whether officer or enlisted man, the utmost courtesy and, as a whole, were as fine a group of young men as could be found anywhere.

# Annual Maneuvers at Benning

By Lieutenant Colonel J. W. Stilwell, Infantry

**T**HERE seems to be a widespread opinion in the Infantry that Benning is a pretty good school. I claim that it must be, because early in the course so many students know more than the instructors. It was in my own case as a student and human nature cannot have changed much in the past ten years. This reputation of the school is keenly felt by the corps of instructors, who are alive to their responsibility of meeting as fully as possible the expectations of our branch. So the trend of the school has been to make everything as practical as possible, to throw out anything that does not make common sense, and to get down to the application of principles on the ground, with the troops there.

With a minimum of theory the student gets out on the ground and begins with terrain exercises, during which artillery, tanks, air, and chemical warfare service begin to take part, and finally at the end of the course, he participates in maneuvers, where the parts are all put together, and where tactics, supply, communications, etc., are all a matter for his decision, and for his alone.

For the past few years the proportion of theoretical to practical work has been constantly decreasing, and the proportion of field exercises to terrain exercises constantly increasing. The graduate of ten years ago would be astounded at the amount of practice field work and actual command of troops that the student now gets.

And what troops they are! Here is a convincing demonstration of what training will do for the American soldiers. The Benning garrison will march at night, through woods, at close to three miles an hour; they will find their way through swamps and thickets in the dark, and be where they are going before you, if you don't watch out. They will leave out a meal

or two and laugh about it, and march just as far and just as fast as you say. After watching them for four years, I cannot refrain from expressing the opinion that these are the same types, and just as good, as those who followed Stonewall Jackson up and down the Shenandoah Valley on the run.

This year's maneuvers lasted two weeks. The first week, although one situation led directly to another, an armistice was called each day so as not to make the work over-strenuous, and also to better retain control. Close control was necessary, since certain situations were decided on beforehand, and these situations had to be presented to the student without forcing conditions. The second week the opposing forces were given zones of action and missions, but beyond that were free to act in any way they saw fit.

Any officer, no matter who, that attends maneuvers of this kind and does not find something new and unexpected at every turn, must be either very unobservant or very indifferent. All will of course not see the same thing, nor will all agree that any given thing is the most important. However, to many of us it was quite apparent that one very important thing at least was the re-establishment in the minds of the students of the proper balance between theory and practice, between the map and the ground.

Numerous field exercises that led up to the maneuvers had proved to the students that there is a great difference between saying, "I move this battalion from here to there," and actually doing it. They knew that telephones break down, that runners get lost, that orders are misunderstood, that maps are often wrong, that complicated movements always go wrong, etc., etc., but the daily, almost hourly, demonstration of these and many other points over a period of weeks convinced most of them, I hope, that in warfare only the simplest and most direct methods can succeed, and that calm and common sense are more to be desired than much knowledge.

It is at least certain that no better way has yet been found to impress a truth on a man than to let him tie it up in a maneuver. For instance,—a reconnaissance detachment of one rifle company reaches point A (Plate I) from the south, and instead of holding the bulk of the command there, with scouts out on the three diverging roads until the route of the enemy advance is detected, only a small group is kept back

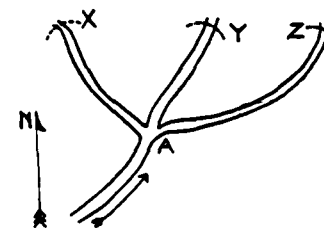


Plate I.



A Machine Gun in Firing Position.



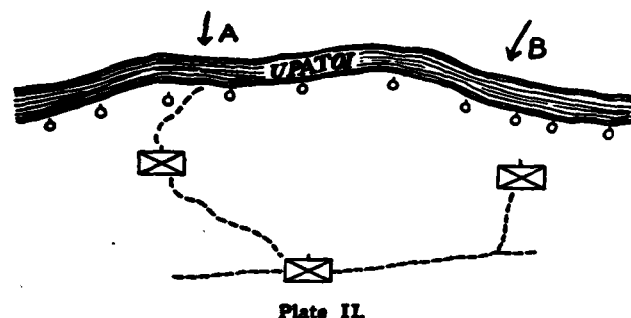


Plate II.

and approximately a platoon is sent out on each road. So when the enemy appears at X, the force there is too weak to delay efficiently. It is too late to get the Y and Z detachments back, and the company gets away by the skin of its teeth. Every man concerned in the action can be trusted not to do that again.

Again, a force south of the Upatoi must be disposed to prevent a threatened crossing. The disposi-

tions are made to perfection,—the bank is thoroughly patrolled, two strong groups placed where they can intervene promptly, and a good-sized reserve stationed where it can support either.

The enemy makes a threat at A and crosses at B. The umpires are wondering how they can reasonably let the attack succeed, because they have more brief arranged on the south bank, but the defense relieves the situation by doing nothing. It couldn't happen on the map, but it does in practice. The reserve is not moved until the company opposite B is overwhelmed, and then it is too late. We may be sure that the commander and staff concerned will not again jeopardize success by clinging too long to a preconceived idea that a crossing would take place at A. These simple evolutions do not seem like much of a trick on paper and in diagram, but try them on your own piano some time and see if they aren't a problem.

There is another lesson in this same little action. The attackers came down from the north and saw the Upatoi on the map. Instead of looking at it on the



1. A 1917 light tank crossing the Upatoi. 2. A fast one gets away. 3. The Christie makes it easily. 4. The veteran of 1917 goes back for more.

ground, or even feeling of it, the presence of bridge material, (foot), added to the existence of a stream, naturally suggested a bridge, and they held up the foot-troops until a bridge was put in. Any one of them who might have been out fishing would have stepped right in and waded across, but the map-room influence dominated their thought until it was almost too late. How well this practical demonstration of the uses of reconnaissance sank in was plainly shown a day later, when the southern force came back, and in the dark pushed over at several places without any trouble or loss of time.

We never lose a unit on the map. We can move it around freely and always pick it up again just where we left it. On such ground as exists at Benning, where most of the terrain is jungle, it is not quite so easy. The northern force, which has crossed the Upatoi and developed the hostile position south of it, decides to attack with two companies in assault, echeloned to the right rear, and one in reserve back of the leading company. The attack fails completely and soon after the jump-off.

The battalion commander wants to pull back the assault companies, one on either side of the reserve, and so orders. Within thirty minutes no one knows where any one of the three companies is, although the command post is less than 600 yards back of the front, and although the orders were received and under-

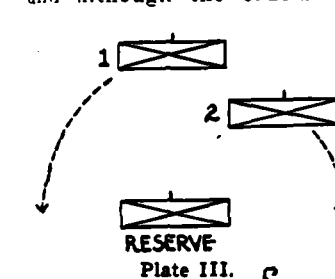


Plate III.

stood, and the movement properly started. It is close to two hours before the companies are again in hand and put where they are wanted. These things are mentioned to invite attention to what in the field prove to be the more essential things.

Motorized machine guns and motorized mortars were used in these maneuvers, and as one result the necessity of all-around security was strongly impressed on all. We can no longer put out a screen across our front and feel safe to move forward. Fast motors will appear from nowhere on our flanks and in our rear and make us pay heavily for our mistake. Manned by members of the company officers' class, these vehicles caused many embarrassing moments to commanders who were thinking in terms of front only, and proved that simply because no enemy is now in an area ten miles square, that is no reason why he won't be there in an hour from now.

The Tate mount for the mortar caused considerable favorable comment. If we can have in the Infantry battalion a few such vehicles, with enough carrying capacity to ease our minds about ammunition supply, then the question of close support for the rifleman will not be nearly so acute.

And this brings us to the matter of artillery support. With all due respect to the effectiveness of light artillery in open country, or for that matter, wherever an observer can see a target, there is no



1. The umpires get together on a knotty problem. 2. Modern communications—an airplane picks up a message from the ground forces. 3. The improved Tate mount for mortars. 4. Loading the Tate mount for a fast getaway.

question of its value to a doughboy. But there are types of country, such as the Fort Benning reservation, where the effectiveness is cut down tremendously by the heavy woods. Without planes to spot for it, the artillery cannot do for the Infantry what it is capable of doing under better conditions.

When a unit as good as the 83rd F.A. can find an opportunity to get off only three rounds in two days of maneuver, even granting that the student commander probably missed some opportunities, then the Infantry had better ponder the question a little. In the entire two weeks' period of these maneuvers, the opportunities for observed artillery support were very few and far between.

If we concede an accurate map of suitable scale, the artillery will give us good results from it, but we cannot count in the general case on anything better than the geological survey map, and it won't do to fire from that. There would be too much hard feeling aroused in the Infantry-Artillery team after the first few salvos. The Infantry has simply got to get something that they can count on for quick action up front in thick country. Mortars supply the answer, and a motorized mortar indicates the solution of the ammunition supply. With six or eight Tate mounts on light chassis to a battalion, the battalion commander will have a powerful help in time of trouble.

We should not sit by and complacently accept what is, when it is plain that something is the matter with it. Let us yell for what we want, and if we do not know what we want, let us experiment a bit until we find out. I believe we want a greatly increased quota of mortars, with possibly a small one like the Spanish 50 mm. right in the Infantry company. With good light machine guns and plenty of mortars the Infantry could go places from which they are now barred by the immobility of the heavy machine gun and the comparative slowness and uncertainty of the response from the artillery.

The arrival of the Tank School and its incorporation in the Infantry School as the 5th section has been a fine thing for all concerned. The tanks were very prominent in the maneuvers, and a whole company of lights were used continuously. I claim it to be a feat worthy of note when 24 of these veterans can be

moved all over Fort Benning under their own power, cross streams, and always reach their destination, with only one breakdown that couldn't be handled in the field.

The tank class operates both slow and fast tanks, and we are now beginning to find out some of the things we can expect from them. On several occasions a pair of fast attacks operated together in executing limited thrusts on opposing troops. One of them would get the attention of the enemy from the front, while the other, making a rapid detour, would cut in on flank or rear. They would then get back quickly before anti-tank weapons could get into action. Such action by fast tanks is, to say the least, going to be very disconcerting. While the slow tanks were in general very well handled, it is more and more apparent that improvement in anti-tank defense will soon make it impossible for them to operate without very favorable conditions, such as good cover, thick weather, or efficient smoke. Speed is the thing, and the slow tank is out of the picture.

To anyone who has the pleasure of laboring on the faculty of the Infantry School, it is most heartening to check up on results at the end of the year and find the general average so high. While many mistakes are of course made, as they would be made by the instructors themselves, after a couple of weeks of continuous field work the students shake down and perform like veterans. In the midst of a night advance, with a battalion in confusion, someone usually steps up, gets the crowd together, and with his mind on the main issue pushes along and brings order and success out of chaos.

Under the pressure artificially created by a corps of umpires who know all the facts in the situation, a commander, with his back to the wall, keeps his head and takes some common-sense action that saves his command. In a rapidly-changing situation, where a change of command has just been made, the staff rallies round and on short notice a team emerges to function as if they had been together for months. All these things and many others occurred during this year's maneuvers to prove again that we are at least on the right track and that Benning can hold up its head, and for its justification merely point to its graduates



## The Civilian Conservation Corps

By Major John J. Bohn, Cavalry

THE transformation of the Civilian Conservation Corps from an idea into a fact has been a remarkable event. A new team is playing a new game in the United States with results which may vitally affect the future. The Department of Labor, the War Department and the Interior Department have been brought together under the Chief Executive in efficient cooperation.

Quite naturally the three great government departments mentioned above had no unanimity of opinion as to the best method of obtaining the results desired. As things developed, the War Department was found to be in possession of the only agencies capable of assembling, transporting and supplying the large number of men involved, as well as of administering the camps. With these matters thus covered by the War Department, the Department of Labor's part was to indicate the quotas to be taken and that of the Interior Department to control the men in their forestry work.

In 1917 an old theory exploded. That theory was based on the idea that in the event of a national emergency, a million men would spring to arms overnight forming an invincible army capable of immediate action. Because of this theory it required thirteen months and a national draft act to place two divisions in action on the battlefields of France.

The Department of Labor by making full use of the army recruiting services, in 1933, in three months has assembled and turned over to the Army 275,000 men, the equivalent in man power of approximately 14 divisions, although restricted by limitations as to age and dependents of the men enrolled. This remarkable achievement was accomplished without the aid of excitement, hysteria or much help from the press. Labor has not been disturbed, 250,000 families have received material aid, the burdens of countless communities have been lightened, and a large bloc of unskilled labor, otherwise hard to place, has been given employment beneficial to the country. The contrast between 1917 and 1933 is startling. The Department of Labor has quietly and efficiently accomplished a task of the greatest significance. A field of future possibilities has been opened that should never be forgotten. The idea of the Department of Labor as a potent factor in a national emergency requiring man power and maintenance of industrial equilibrium at the same time has been given a new meaning.

Many years ago, when the present governor of Pennsylvania was Chief of the U. S. Forest Service, men wearing the pine tree badge on their flannel shirts looked over vast districts and made plans to benefit the future generations of this country. These plans were dreams to a nation too busy making money to think of the future. The forests of France and Germany and the lack of forests in China were significant facts only to a small inconspicuous group of men. The

probability of sufficient labor to transform plans into facts before necessity made such action mandatory was beyond the imagination of even the most hopeful. Millions of feet of good timber burned every year, water-sheds were denuded to the detriment of cities and farms, whose people but dimly guessed the cause, insect pests multiplied, erosion continued unchecked, a vast playground remained inaccessible through lack of roads and trails. Labor has suddenly been made available to correct these adverse conditions. The Forest Service and Department of the Interior have selected 1,330 camp sites, some in every state of the union, except Delaware. Work has begun on countless miles of telephone lines, connecting fire observation towers and scattered ranger stations. Fire lanes will be cut and cleared, first line defensive works in the annual fight against fire, roads and trails will be built, permitting access to areas hitherto explored only by the timber cruiser. Insect blights and contagious diseases of timber will be checked, and erosion of denuded areas will be slowed. The Department of the Interior has undertaken the task of educating the conservation corps, showing it how and what to do, turning into useful work the power of thousands of young men.

This is not easy: a skilled woodsman is every bit as hard to make as a skilled soldier. The work of big muscled country boys is not comparable to what may be expected from the city youth. Results will be slow; camps will differ in output according to personnel; six months will barely scratch the surface of what there is to be done. However, before it is over, the Forest Service will have a comprehensive foundation laid for future work, and work in the forests may continue. Two or three years could be very profitably spent on our public lands: the expenditure would return to the country dividends in many ways too extensive to enlarge upon here.

The important facts to remember are that the Forest Service was and is able to give employment to vast numbers of men in times of emergency; that this employment will benefit the men employed in mind and body and the country as a whole; that the United States has in the public domain a field of employment large enough to make an actual non-productive dole unnecessary, even in the hardest times.

The War Department and the Army have performed a task beyond their capabilities before the war. Lessons learned during and after the war have been applied. Education and organization have been tested and found equal to the responsibilities imposed by a new and strange situation. The value of war reserve stocks has been demonstrated.

The General Staff has certainly justified its existence as a planning agency. Senator Couzens's bill of January 10th providing for Army care of 80,000 indigent

youths gave the War Department sufficient warning to alert the General Staff, causing it to undertake studies to meet such contingencies. The Chief of Staff as early as March 9th directed that estimates and regulations be prepared covering reception, organization and equipping of units of unemployed men.

By March 25th the Corps Area Commanders had received warning orders outlining the probable scope and magnitude of the task allotted to their Corps Areas. On April 5th actual missions were assigned and orders given to begin enrollment. On April 7th the Labor Department began sending men to the Army. As first planned the Army's job was to receive the men, enroll them, start their records, organize them into units, equip them, transport the units to railheads, turn them over the Forest Service or other designated agency. This accomplished, the army was to go back to its regular job of national defense.

It took just one day to find that this plan would not work. Matters of supply in the field, transportation, sanitation, and discipline cannot be lightly undertaken by men untrained to the task. Someone in authority discovered the Quartermaster Corps, and the Army had another job. Shortly thereafter the Army Chaplains got their campaign hats down from the top shelf of the closet, and officers of the line began to say goodbye to their families. Each Corps Area became a communications zone forthwith. The General Staff went to work on a new set of regulations, and in a remarkably short space of time furnished the Army a good working guide for its operations.

Much remained to be done, however, and the three big departments had not settled down to team play by May 10th. On this date 52,000 men were enrolled, and 42 camps were established. Men were coming in at the rate of 1,530 a day, a rate which promised to fall far short of the 250,000 figure set by the President.

In order to reach the objective set, it was apparent that approximately 222,000 additional men should reach the camps by June 7th. This meant a daily rate of 8,540 men, a greater average reception than that experienced in the World War. The question of prompt and sufficient supply was critical.

It was evident at once that peace time restrictions on transportation, war stocks, contracts, and purchases would have to be lifted. There was no time for papers to travel from office to office collecting indorsements. Money was needed. Authority would have to be decentralized. There would have to be a high command to make decisions on controversial matters. All hands got together, definite orders were issued, restrictions were lifted, and the Quartermaster Corps and the Corps Areas proved equal to the task.

The Department of Labor stepped up reception from 1,530 men per day to 13,843. The Forest Service laid out camps and revised plans, the Q. M. Corps furnished transportation, food and clothing, and the Corps Areas, Posts and Stations gathered in the men, organized them and sent them to the woods. By July 1st the job was done, but the task of feeding, working and taking care of this vast army continues.

The lessons learned by this great operation will be of inestimable value to the country when their full significance is understood.

The facts already established have been too great in scope and possibility for the press to grasp or the people to realize.

The making of the Civilian Conservation Corps has demonstrated that the powers of the great departments of our government can be coordinated and directed toward a common goal, although normally engaged in widely divergent activities.

A greater problem than the Conservation Corps now confronts the Government—the application of the National Recovery Act. This problem can be solved only by the closest cooperation of all the agencies of government. Conflicting department interests and petty personal beliefs will have to be thrown overboard if success is to be attained. By application of the principles learned anew in the launching of the Conservation Corps, this great experiment will succeed. Unless there is complete and sensible cooperation directed by high and disinterested authority, the plan will fail.

A great practical opportunity to test army organization has demonstrated the soundness of this organization from top to bottom. Criticized by industrialists, other government departments, and even by members of the army, the task just performed has demonstrated the integrity, flexibility and efficiency of the Army system and Army personnel. It has been discovered that the Army and Navy, by reason of their education, training and organization, can handle any problem involving control, transportation or supply of enormous numbers of people with minimum cost and maximum celerity and are as useful for this purpose in peace as they are in war.

That the present uneconomical distribution of the Army in scattered posts throughout the country is a tremendous asset in any national emergency involving mobilization for internal or external purposes.

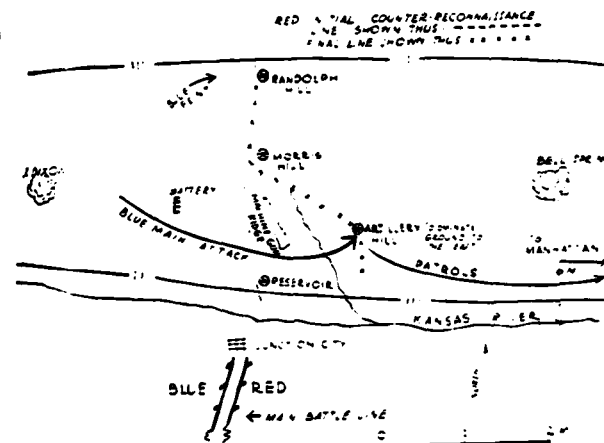
In conclusion it must be said that there is another side to this picture. How was the problem handled by the scattered posts and stations which actually performed the work and carried the load?

We know that over 5,000 Army and Navy officers are in the field with this civilian army; we know that the Quartermaster Corps is purchasing \$85,000 worth of supplies daily, and that this daily supply is reaching 1,330 camps situated in out-of-the-way places; we know that our war reserve stocks of clothing and equipment have been depleted and that 6,000 of our best enlisted men are helping this project to success. We may rest assured that the health, morale and general well-being of this great army is in the hands of a class of men whose good judgment and common sense is not surpassed by any similar group of men in the world. The junior officers of the American Army.

How they met and are meeting the requirements of this great undertaking is told by an eye-witness in another article in this issue.

## NOTES FROM THE CHIEF OF CAVALRY

### What Would You Do in a Situation Like This?



COLONEL Ringbohn smoothed his blouse over his chest, admiring the considerable group of ribbons which told of battles and campaigns past. No question now but that there would soon be another ribbon in token of the successful accomplishment of this day's work. Colonel Ringbohn felt expansive, and very, very much pleased with himself. His had been the first tactical mission of this new campaign, and he had accomplished it in full. Turning to the liaison officer from the Blue GHQ, who had just arrived, Colonel Ringbohn began to explain the situation.

The main Blue and Red forces had been stabilized along the line: Junction City to the south, for some time. North of the Kansas River there had been no fighting until today when Ringbohn's regiment with a horse battery attached, having been detached from the main Blue Cavalry force on the south flank of the battle line had been sent on a reconnaissance mission to determine whether or not there was any truth in the vague reports that the Reds were concentrating a division in the vicinity of Manhattan with a view to subsequent movement against the Blue north flank. A zone in which he was to conduct his reconnaissance had been given Colonel Ringbohn as shown in the sketch.

"Last night," continued Colonel Ringbohn to the liaison officer, "my outfit bivouacked near J. Dixon, having marched in from the west. My patrols quickly developed that Red cavalry was strung along the line: Randolph Hill—Morris Hill—Reservoir. A captured prisoner informed me that opposed to me was the 12th Red Cavalry, obviously on a mission of counter

reconnaissance. As you know, the Red cavalry regiments are the same strength and organization as ours. We could not penetrate the screen with patrols and could not locate the Red reserve, although subsequently we learned that it consisted of about one squadron and was held initially at Bell Springs.

"Early this morning I attacked in the direction: Reservoir—Artillery Hill, in conjunction with a feint against Randolph Hill. The main attack was closely supported by my battery. We took the Reds by surprise, and our attack went through the Red groups holding the Reservoir area with little resistance. In a few minutes we were in possession of Artillery Hill, having penetrated the Red counter-reconnaissance line. We still had not met their reserve, however.

"From Artillery Hill I dispatched patrols to Manhattan to determine whether or not there was a large concentration taking place in that area. I then withdrew to the line of Machine Gun Ridge, as a more easily defended position, and awaited the action of the Reds. I felt sure that some of my patrols would be able to get back with the information I desired by slipping through the now disorganized Red line.

"The Reds reoccupied Artillery Hill but did not attack. We held Machine Gun Ridge with the command disposed as you now see it. In the course of an hour or so two of my patrols worked their way back with the information that at least an Infantry Division is in the Manhattan area."

Colonel Ringbohn having thus tersely summed up the situation could not help adding.

"And a very neat little operation it was."

Both Ringbohn and the liaison officer were startled at this point by the action of an oddly marked bird which had been observing them from a nearby bush. This bird flapped its wings, stretched its neck and uttered a cry which sounded peculiarly like a horse laugh!

"For Heaven's sake! What kind of a bird is that?" exclaimed the liaison officer.

"I am Tictac, the tactics bird," replied the creature, "and I give you the horse laugh because I wouldn't have done what Colonel Ringbohn did." Both the liaison officer and Colonel Ringbohn stared at the bird in amazement. Ringbohn was the first to recover from his surprise and demanded of the bird.

"What Would You Have Done?"  
(For Solution Turn to Next Page)

## A Solution

"It is true that you accomplished your mission, Colonel," the bird began. "You have discovered that the Reds are concentrating a large force in Manhattan. Of course, this force will move west before long and constitute a very serious threat to the left flank of the Blue main army. It should not be difficult for you to anticipate the next orders you will receive from Blue GHQ. You will undoubtedly be told to delay the westward movement of the Red Division until the Blues can get something up here to oppose them with. Now delaying infantry with cavalry is a relatively simple task up to a certain point, but delaying infantry which has a cavalry force nearly equal to your own is something very different.

"When you took Artillery Hill you had created a situation of which you should have taken immediate advantage. To begin with, you had combat superiority in that you had a battery and the enemy did not, and also, your command was much more concentrated than were the Reds, who had to maintain small groups over their entire counter-reconnaissance line. You had possession of ground that dominated the enemy rear area and from which you could threaten it.

"I agree with your idea of sending some patrols out from Artillery Hill to the Manhattan area but I cannot agree with your action of retiring to Machine Gun Ridge and assuming a defensive attitude pending the return of your patrols. On the contrary, you should have sought out the enemy reserve and attacked it. You could not ask for a more favorable situation for giving the Red cavalry a sound drubbing. In my opinion, you had the opportunity to completely defeat it. In so doing you would have enhanced the chances of your patrols getting to Manhattan and back and above all you would have paved the way for a successful delaying action against the Red infantry by the elimination of the Red cavalry.

"May I suggest, Colonel," resumed the bird, "that you examine any future tactical decisions you may make by asking yourself these questions:

'Does my decision accomplish the mission?

'Is it as simple as may be in the circumstances?

'Does it favor the future employment of my command?'"

The bird stood silent for a minute and then flew away to the north, occasionally emitting its raucous horse laugh, which sounded very much like "Rasp-berry." (Department of Tactics, The Cavalry School).

## Cavalry to Retain Horses

COMMENTING on recent articles appearing in the press, Major General Guy V. Henry, Chief of Cavalry, U. S. Army, made the following statement:

There has appeared recently in the public press a statement that the War Department has asked, under the President's Industrial Development Program, for money to motorize the Cavalry of the United States Army. Such a statement is misleading. It is not the intention of the War

Department to provide motors for the transportation of the individual trooper of Cavalry regiments. He is to remain a mounted soldier as heretofore. If the money asked for is made available, it will be used to substitute light trucks for the mule drawn wagons in what are technically known as the Field Trains of Cavalry as well as of Infantry regiments. Such a substitution will be in the interest of general efficiency.

## Motor Trucks for the 2nd Cavalry

ON June 30, 1933, 20 Chevrolet 1½ ton motor trucks were delivered to the 2nd Cavalry. This is an event of great moment to the Cavalry. The delivery of these trucks will provide the means of conducting a test which the Chief of Cavalry, since 1929 having recognized the great importance to the Cavalry arm of such a test, has continually endeavored to carry through.

Since the World War the mobility of the fighting elements of our Cavalry has constantly increased. This increase in mobility can be attributed mainly to three things: general improvement in horsemanship and care of animals throughout the entire Cavalry, due to the influence of the teachings of the Cavalry School; better quality of Cavalry horse furnished by the Remount Service; and the improved Phillips pack saddle which makes it possible for us to transport our weapons over long distances at the gaits of the mounted trooper.

The 20 1½ ton trucks now assigned to the 2nd Cavalry are being given an extended service test under the supervision of the Cavalry Board to determine whether or not a light motor truck can replace the mule-drawn escort wagon of our present regimental field and combat trains.

All twenty of these trucks are equipped with transmissions permitting eight speeds forward and two in reverse. Ten of the trucks have standard tire equipment (duals in rear) and, in addition, are provided with traction devices to be applied to the rear wheels to give traction under difficult conditions. The other ten trucks are equipped with 9" x 15" (doughnut type) tires (singles in rear) with no traction devices provided other than skid chains. It will be noted that two types of tire equipment have been provided in this experimental train. The standard tire equipment, duals in rear, with traction devices, has been used with a great deal of success on the Ford-drawn 75 mm. batteries. The doughnut type tire equipment has been tested on a similar type truck by the 1st Cavalry Division and has given excellent satisfaction in the deep sand and rutted roads characteristic of the Texas border.

## Armored Cars

THE 1st Cavalry (Mechanized) at Fort Knox, Kentucky, has been furnished its complete quota of twenty new armored (reconnaissance) cars. In these vehicles there has been installed either the long or short range radio equipment that has been

under development for the past two years. The sets operate as telephone or telegraph. Successful operation, particularly of the long range type radio, in the new vehicles is a most important step in the tactical handling of this command. It is intended to issue the long range set to Cavalry Brigade and Division Headquarters. When these plans are completed, both horse cavalry and mechanized cavalry will have similar radio equipment, the high-powered set just referred to for the higher echelons and the short range in pack for horse organizations and for inter-organizational communication in the mechanized regiment.

The regiment has also lately been furnished four newly-constructed half-track cars, which will undergo extended service test as carriers for machine gun personnel of the machine gun troop and scout troop.

The latest model of Cavalry armored reconnaissance car, a 4-wheel, 4-wheel drive vehicle, is undergoing proving ground test.

## Machine Guns

At the Cavalry School, Fort Riley, Kansas, one of the several important investigations now being conducted is that of giving the new large caliber air-cooled machine gun a thorough service test. This weapon, successfully developed during the past two years, fills a distinct need in the Cavalry. It is capable of firing armor-piercing ammunition of sufficient power to penetrate the armor of hostile armored vehicles likely to be encountered by our Cavalry. Its design makes it easily adaptable for installation in armored vehicles and in horse pack, thus enabling both horse and mechanized units to protect themselves from hostile mechanization. It is put into action on the ground from horse pack in a matter of seconds.

During the month of June, Major J. C. Woodberry, Ordnance Department, representing the 1st Cavalry Division, and Captain T. J. Heavey, 2nd Cavalry, representing the Cavalry Board, participated at Aberdeen, Maryland, as members of a joint branch board which was concerned with test and study of proper anti-aircraft mounts and means for defense against low-flying attack aviation. These tests showed most conclusively that, for such fire with machine guns, anti-aircraft sights are not necessary and that tracer control is the most effective means.

On completion of these tests, the feeling of the Cavalry about this matter was the same as that of the Infantry and Field Artillery, that is, hearty approval of the simple and efficient mount modification for the

1917 machine gun designed by Captain S. H. Negrotto, infantry. Adoption of this all-purpose cradle will give the weapons of the Cavalry machine gun troop the maximum of flexibility for aerial as well as ground fire. The interests of the Cavalry in these problems were ably handled by Major Woodberry and Captain Heavey. These officers deserve much credit for the excellent firing results obtained during the tests by the Cavalry light machine gun and for their past initiative and ingenuity in developing A. A. defensive means for Cavalry.

## Motor Trucks for Troop A, 1st Armored Car Squadron

TROOP A, 1st Armored Car Squadron, has recently been furnished six 1½ ton 4-wheel, 4-wheel drive Marmon-Herrington trucks for service test. These trucks performed well during a practice march from Fort Bliss, Texas, to Douglas, Arizona, and return, July 12-15, 1933, and also during a 630-mile march from Fort Bliss, Texas, to Terlingua, Texas, and return, August 3-11, 1933, when Troop A, 1st Armored Car Squadron convoyed the 1st Squadron, 7th Cavalry. Major John A. Robenson, commanding, porté in the trucks shown in the frontispiece of the May-June CAVALRY JOURNAL.

On both marches the trucks successfully negotiated varied terrain ranging from paved highways to trackless desert. The terrain encountered cross-country was in general deep, loose sand with gentle grades. Travel on unimproved roads was in general through hilly and mountainous country with many very steep grades.

Average operating speeds were as follows:

On main highways, 22 m.p.h..

On unimproved roads, 16 m.p.h..

Cross-country, 10 m.p.h.

## Radio Equipment

THE Cavalry Board is testing a one-horse load radio set containing both telephone and telegraph features. This set is very similar to that described as the short range set in the paragraph headed "Armored Cars."

## Tests

DUE to Civilian Conservation Corps activities, it has been necessary for the present calendar year to dispense with the Goodrich Trophy Training Test for Cavalry troops and the Leadership Test for Small Cavalry Units (platoons).





## PROFESSIONAL NOTES and DISCUSSION

### Effectiveness of Ground Small Arms Antiaircraft Fire

By Col. Bruce Palmer, Cavalry

IN CONNECTION with the article, "The Browning Light Machine Gun," by Lt. C. L. Ruffner, 5th Cavalry, published in the Jan.-Feb., 1933, issue of THE CAVALRY JOURNAL, attention is invited to the following:

Lieutenant Ruffner states, "the percentage of hits . . . is very small, this having been shown by tests recently conducted at the Cavalry School. . . . The number of fatal hits on the plane is so small that the number of planes shot down from the ground is not worth the ammunition expended."

The author makes the common error of forming his opinion on the percentage of fatal hits obtained—whereas, the true result is indicated by whether or not the fire was effective. The percentage of hits may appear in a written report to be relatively small, but if the actual fire has been effective, whether the percentage is large or small makes no difference.

In practically all of the many tests conducted at the Cavalry School, the fire has been effective. By effective fire is meant that a plane coming within the danger zone of ground troops' small arms, or machine gun, fire, receives one or more hits which will crash it or force a landing.

The above stated conclusion of Lt. Ruffner's as to the value of ground fire against aircraft is diametrically opposed to the Cavalry School's conclusion, which conclusion was based on the results of the same tests referred to by him.

### High Jumping

The Editor,  
THE CAVALRY JOURNAL,  
1624 H Street,  
Washington, D. C.

Dear Sir:

As a regular reader of the JOURNAL I was much interested in the account in the May-June number of the new world record for high jumping.

In this connection I thought the record of *Confidence* might be of interest to you. *Confidence* was owned by the late Sir Clifford Sifton. He was a bay horse, 16'2" by a clean bred hackney. His dam was probably a half-bred hackney mare. His weight was 1,200 lbs. *Confidence* lived to be 23 years old and was destroyed in 1924. In the spring of 1912 he won at Toronto, Montreal, and Ottawa, the shows running one week after another and the horse traveling by train on Sunday in each case, each high jump being over 7 feet.

The day after the Ottawa show he was shipped by steamer to England. He arrived at Olympia just as it was opened. He won both high jumps—loose and tied poles—for the loose pole he set the world's record at 7'6½", jumping out of loose sand. He was then shipped to The Hague and won the Winans Cup for the highest jumper in Europe, again jumping over 7 feet. He was then shipped back to Canada and at Cobourg made the then world's record by jumping 7'10½". He was then shipped to Ottawa, where in open competition he broke his own record by jumping 8'½" over held poles. The horse was broken and ridden throughout his performances by Jack Hambleton, who is still manager of the Sifton Stables. These stables are owned by the sons of the late Sir Clifford Sifton and are well known in the show ring in both Canada and the Eastern States.

I appreciate that a horse does better over a tied or held pole than a loose pole, but, on the other hand, the figures are interesting as a comparison. Apparently in equestrian events as well as athletics the ceiling is always going higher as the years go on.

Yours truly,

C. S. McKEE.

### Canadian Defence Quarterly 1932 Prize Essays

THE July, 1933, issue of the Canadian Defence Quarterly contains two interesting prize essays on the following subject: "In view of the trend of modern civilization, mechanization and motorization must be accepted as an inevitable stage in the evolution of army organization. Its acceptance or rejection may have seemed at one time to be a matter of choice, but this is no longer the case (Modern Formations, 1931)." Discuss this statement in its application to the organization and training of the Non-Permanent Active Militia in Canada." The prize was divided between Major W. J. Baird, M. C., The York Rangers, Toronto, and 2nd Lieutenant Wm. Wallace Goforth, 17th Duke of York's Hussars, Montreal.

The following extract from Lieutenant Goforth's essay stimulates imaginative speculation on the multiple possibilities of future warfare: ". . . It is conceivable that 'motor guerilla swarms' admirably suited to Canadian conditions would neutralize the advantage of an enemy's mechanized formations. They would also provide an excellent, if unorthodox, screen for the movements of the main defending force. The Militia Act provides for the mobilization of every able bodied man, with certain exceptions, between 15 and 60 years of age, if necessary to the defence of the nation. One can picture this being amended, either officially or unofficially, in a war of invasion to include every man and his car!

## NATIONAL GUARD NOTES

### National Guard Status Bill Passes

IN an interval between measures of emergency legislation the House of Representatives brought up and passed the National Guard Status Bill. It then went to the Senate and was passed. It was signed by the President and became a law on June 15.

The Bill in its present form was introduced by Chairman McSwain on May 15th and is designated as H.R. 5645. It constitutes an amendment to the National Defense Act of June 3, 1916.

The measure is designed to fix the status of the National Guard and give it a dual capacity as a state and federal force, enabling the President to use it in the latter capacity without the necessity of drafting it into the service of the United States. It also has the effect of maintaining its identity while in federal service, reverting back to the states on the termination of that service and thus obviating the necessity for a complete reorganization such as was necessary following the World War.

Section 1 of the Bill defines the components of the Army of the United States as the Regular Army, the National Guard of the United States while in the service of the United States, the Officers' Reserve Corps, the Organized Reserves, and the Enlisted Reserve Corps.

In Section 2 the participation of the National Guard and Organized Reserve on the War Department General Staff is provided for. There will always be not less than five officers of each of the two components on duty with the General Staff, and when subjects affecting the policies and regulations governing the organization, distribution, training, appointments, assignment, promotion and discharge of the civilian components are under consideration the committee is to consist of an equal number of each component.

The composition and organization of the Officers' Reserve Corps is provided for in Section 3, which amends Section 37 of the National Defense Act. It provides that all persons appointed in the Officers' Reserve Corps shall be commissioned in the Army of the United States. Appointments are for five years, but an appointment in force at the outbreak of war may be continued in effect until six months after its termination, when an officer can make application and secure his release from the service. Any officer of the Reserve Corps may be discharged at any time in the discretion of the President. The rules governing the appointment of persons and the promotion of members of the Officers' Reserve Corps are specifically set forth and in general conform to the present regulations.

Section 4 amends Section 38 of the National Defense Act which relates to the appointment and assignment of officers of the National Guard. They are appointed and hold office during the period of their federal recog-

nition and they may be held in service during a period of six months after the termination of a war, after which time an officer may request his release from service and it must be granted to him. The active duty status of officers of the National Guard is also provided for.

The composition of the National Guard and its designation as a reserve component of the Army of the United States is provided for in Section 5. It is specifically provided that it is not to be considered in the service of the United States except when so ordered under the law, and in time of peace it is to be administered, armed, uniformed, equipped and trained in its status as the National Guard of the several states, territories and the District of Columbia.

Section 6 covers the organization of the National Guard and contemplates that the units maintained in the several states shall be such that when combined together they will form complete tactical units.

The enlistment of the National Guardsmen is provided for in Sections 7 and 8 which specify the conditions under which enlistments may be made, and the enlistment contract which must be entered into. This latter gives the soldier the dual status and makes him available for service both to his state and to the United States. Original enlistments are for a period of three years, but subsequent enlistments may be for one year or three years. In an emergency the enlistment period may be extended at the discretion of the President for a period of six months after its termination. This insures the service of the guardsman for that period of time in case he may be needed.

Section 9 is devoted to definitions which specifically define the term "National Guard of the United States" as a reserve component of the Army of the United States composed of federally recognized units, organizations and persons duly appointed and commissioned in the National Guard of the several states and who have subscribed to the oath of office or oath of enlistment as provided for in the Act.

The discharge of enlisted men is provided for in Section 10 which states that a discharge certificate in such form and with such classification as is provided for the Regular Army shall be given. In time of peace the Secretary of War may prescribe the conditions under which discharge may be granted prior to the expiration of term of service. At the present time this matter is solely in the hands of state authorities.

Section 11 amends Section 73 of the National Defense Act and prescribes the oath of office for the officers of the National Guard. It gives them a dual status as officers of the National Guard of their state and officers of the National Guard of the United States. It further provides that all officers who are now federally recognized officers of the National Guard may be appointed in the grade they now hold without further

examination except physical and in the meantime they continue to enjoy the privileges, emoluments, rights and benefits of their grade.

The examination for appointment to the National Guard is covered in Section 12. Such examination contemplates an inquiry into the physical, moral, and professional fitness of the applicant. It is to be conducted by a board of three officers of the Regular Army or National Guard of the United States, or both. The examination may be held at any time prior to the appointment or promotion. When found qualified the candidate may be issued a certificate of eligibility which is good for two years. It is understood that this section does not modify the existing regulations under which a candidate may qualify through pursuing the regular extension courses in the Army educational system.

Section 13 provides the law under which the federal recognition of an officer of the National Guard of the United States may be withdrawn. It contemplates that there shall be an efficiency board comprised of Regular or National Guard officers senior in rank to the officer being investigated, appointed by the Secretary of War. If the findings of the board are unfavorable to the officer and they are approved by the President, federal recognition shall be withdrawn. An officer absent without leave for three months may also have his federal recognition withdrawn. The appointment of officers in the National Guard may be terminated or vacated in such manner as may be provided for in the laws of the several States. Federal recognition is withdrawn automatically when an officer reaches the age of 64 years.

The National Guard Reserve is in effect provided for in Section 15. It is denominated the "Inactive National Guard." Men duly qualified for enlistment in the active National Guard may enlist for one term of one or three years only in the inactive National Guard. Members of the active National Guard may

that for which he enlisted. This proviso includes service in both the active and inactive National Guard.

Section 16 changes the designation of the Militia Bureau to "The National Guard Bureau." The Chief of the Bureau is to be appointed by the President with the advice and consent of the Senate, by selection from the lists of officers of the National Guard of the United States recommended as suitable for such appointment by their respective Governors, and who have had ten or more years commissioned service in the active National Guard, at least five of which have been in the line, and who have attained at least the grade of Colonel. He holds office for four years and is not eligible to succeed himself. It is understood that an endeavor will be made to change this proviso in the Senate so that the Chief of Bureau will be eligible to succeed himself. The provisions of officers and enlisted men of the Regular Army for duty with the National Guard is continued and not more than nine officers of the National Guard are authorized for duty in the National Guard Bureau. The actual number to be detailed in the Bureau will always depend upon the funds available for the purpose. At the present time there are three, one from each of the old Army Areas. The succession in command for the National Guard Bureau is also provided for in this section during the disability of the Chief of Bureau.

The arming and equipping of the National Guard is provided for in Section 17 which contemplates that they shall be so armed and equipped in like manner as the regular Army as far as practicable.

Section 18 provides the law under which the National Guard of the United States may be ordered into the service of the nation in any emergency declared by Congress, and in which troops in excess of those available in the Regular Army are necessary. The organization of units when called for such service is to be maintained intact as far as possible, and this will necessitate a much more complete system of replacements than existed during the World War. All of this contemplates that at the termination of the emergency and the completion of active service, the National Guard organizations will revert back to the States. The Section also provides that the war strength officer personnel shall be taken from the National Guard as far as practicable. This will necessitate definite arrangements for providing officers for such expansion.

The right to pensions provided for by law is extended to members of the National Guard when disability is incurred in active service of the United States. This right does not extend to the periods of field training of the National Guard.

Finally a provision is made for the appointment of officers of the Regular Army to the National Guard in time of war, with a temporary higher grade, and when so appointed they do not vacate their regular Army permanent appointment.

This law has been on the boards since 1924. It has been passed by the Senate at a previous session but failed of passage by the House.



## BOOK REVIEWS



HISTORY OF THE THIRD UNITED STATES CAVALRY, 1846-1933. By Chaplain Ralph C. Deibert, U. S. Army. Printed by The Telegraph Press, Harrisburg, Pa. On sale at Hq., 3d Cavalry, Fort Myer, Va. Price \$2.00.

In preparing the *History of the Third United States Cavalry*, Chaplain Deibert has achieved a signal success both as a stylist and as an historian.

No soldier can read this stirring account of valor, fortitude and devotion to duty without feeling his pulse quicken and his spirit swell with pride at the thought that he, too, is a blood brother of the fighting men whose deeds are so vividly portrayed.

But the value and interest of the book are not confined to soldiers. In it the historian will find valuable and accurate data, while the citizens of the western states, whose settlement the blood and sweat of the Third Cavalry did so much to make possible, will read thrilling accounts of the trials and hardships of his ancestors.

The Third Cavalry was organized as *The Regiment of Mounted Riflemen* by an Act of Congress approved May 19, 1846.

Before it was out of its swaddling clothes, fate catapulted it into the War with Mexico. When but seventeen months old, it had already participated in twenty-six battles and engagements and had sustained casualties to the extent of 55% of its strength.

During this campaign it was in the forefront of every operation and achieved the proud distinction of being the first unit to place its flag on the blood-soaked bastions of Chapultepec and on the National Palace in the captured city of Mexico.

The name of Sergeant James Manly, of F Troop, who carried that flag and later died of his wounds, should stand high on the list of warriors whose selfless valor has glorified the record of our arms.

It was while reviewing the regiment just after this feat that General Scott gave it its accolade by saying: "Brave Rifles! Veterans! You have been baptized in fire and blood and have come out steel." These words are now the motto of the Third Cavalry and are emblazoned on the Regimental Coat of Arms.

Nor were the laurels heaped on the regiment for its heroic debut in battle confined only to men—women, too, sought to do it honor. In February, 1848, the ladies of New Orleans presented the regiment with that flag, which still remains a treasured memento at headquarters. The letter accompanying the gift reads, in part, as follows:

"... The ladies desire that the Flag should be presented by you in their name, to that gallant regiment, which from its landing at Vera Cruz to its entry into the famed 'City of the Montezumas' has been foremost in every battle, sustaining, by the valor

and sacrifice of its officers and men, the Flag of our beloved country."

After a stay of less than a year in Jefferson Barracks, Mo., the regiment finally set out on the task for which it had originally been destined, namely, the opening of the Oregon Trail. Marching on May 10, 1849, it traversed 2,500 miles of howling wilderness, finally reaching, in April of 1850, the vicinity of Vancouver.

Such a feat is almost without parallel, and its successful accomplishment stresses the fact that the usefulness of the soldier is not confined to deeds of war alone, for by the opening of this trail the Third Cavalry made the settling of the Northwest possible.

In 1851 the skeleton of the regiment reached Saint Louis by boat and, being recruited to strength, marched immediately to the southwestern frontier, where it remained in Texas, New Mexico and what is now Arizona until 1861. During this period it was constantly engaged in fighting the Indians and, besides innumerable scouts, patrols and other minor operations, participated in forty-three major conflicts.

In 1861 the regiment was rechristened the Third Cavalry, pursuant to an Act of Congress of August 3d, which discarded the terms "Dragoons" and "Mounted Riflemen" and replaced them with serial numbers.

Due to the remoteness of its stations the Third Cavalry was not fortunate enough to participate in many of the major battles of the Civil War, nevertheless it did manage to get into twenty-three such battles, besides innumerable lesser engagements, while one of its officers, Joe Wheeler, achieved fame in the ranks of the Confederacy.

No sooner had Lee surrendered than the regiment returned to its familiar job of fighting Indians, operating in New Mexico, Arizona, Colorado, Nebraska, Wyoming, and Montana until the opening of the Spanish War. Its service during this period was punctuated with ninety-one important combats.

In the Santiago Campaign its luck returned and at San Juan Hill it again achieved the honor of being the first American unit to place the Stars and Stripes on the enemy's works.

During the Philippine Insurrection it saw action almost from the start. Between November 11, 1899, and April 28, 1901, it was in some sixty-two engagements.

Returning to the States in 1902 it naturally drifted to the border and in Texas, in 1911, had the unique distinction of setting an all-time distance record. Between February first and June thirtieth, of that year, statistics show that the distance covered by patrols, detachments and troops on border duty aggregated the amazing total of 119,100 miles.

The Message Center Set-up of the 105th Infantry, New York National Guard, on C.P.X. at Camp Smith, During the Summer Training of 1932.

be transferred to the inactive National Guard. Members of the inactive National Guard may be transferred to vacancies in the active National Guard. In time of peace no enlisted man will be required to serve in the National Guard for a longer period than

On November 4, 1916, a troop of the Third Cavalry made the first march with horses moved by trucks of which there is a record.

Due to the fact that we entered the World War after stabilization had set in, our cavalry had small opportunity, although one troop of the Third was fortunate in getting into action with the enemy.

As may be seen from the foregoing summary, the story of the Third Cavalry is replete with action, and the value of the book is enhanced by the presence of numerous illustrations, maps and tables. The whole forms a volume which should be in the library of every cavalry officer.

G. S. PATTON, JR.,  
Major, 3d Cavalry.

**AMERICA IN THE PACIFIC** by Foster Rhea Dulles. Published by the Houghton Mifflin Company, Boston and New York. 1932. 264 pages. Price, \$3.50.

The history of the United States has been one of an almost continuous expansion towards the west. Sometimes it was the deliberate policy of the administration in office, and sometimes it was the irresistible surge of a land hungry and power seeking young nation. Throughout the entire period, the westward movement has had powerful opponents, both in and out of public life.

Mr. Dulles' well documented chronicle of our westward advance from the Mississippi River to the Philippine Islands show how, step by step, we acquired California and the Oregon Country; why we bought Alaska, and annexed Samoa and Hawaii; the motives that caused us to demand that Spain cede Guam and the Philippine Islands to us after the Spanish-American War. Accompanying the historical narrative describing the various acquisitions is a complete digest of the arguments both for and against each advance on the road to "empire." Numerous quotations are made from the speeches and writings of prominent Americans of the times. "America in the Pacific" should be read by every thoughtful American, and in the opinion of this reviewer the answers as to the "why" of many a diplomatic venture will be disclosed.

It is recommended for the library of every officer interested in Pacific affairs.

**ARMY ENGINEERING**, by Col. William A. Mitchell, Professor of Civil and Military Engineering, U. S. Military Academy, Washington: Society of American Military Engineers, 1933. Third Edition, revised: 4x7, with flexible covers, 329 pages, index. Price \$3.00.

A revision of the textbook in the course of engineering in the First Class, at the U. S. Military Academy, showing the engineering necessary in the general education of a cadet in preparation for his duties as an officer in the United States Army, this book is an excellent field engineering manual, and useful to all officers. It is strictly up to date and covers the following chapters: Military Mapping; Military Shelters; Military Roads; Military Railway; Military Bridges;

Fortification; Camouflage; Explosives and Demolitions; Siege Works; Chemical Warfare; Army Uses of Gasoline Engines; Army Power Plants; Construction of Seacoast Defenses; River and Harbor Engineering; Port Terminals.

**INCREDIBLE PIZARRO** by Frank Shay. Published by the Mohawk Press, New York. 1932. 334 pages. \$3.50.

Mr. Shay admits that Francisco Pizarro was his boyhood hero. The reader will be forced to admit that the author has proved his case by one of the most thrilling and absorbing biographies to appear in recent times. There was a wealth of material from which to obtain the ingredients of a real thriller—and full advantage has been taken of the opportunity.

An illegitimate foundling, a swineherd, and at times a camp-follower and armour bearer for his father—a Spanish officer—such is the start in life of Francisco Pizarro. At twenty, a seasoned soldier and veteran of many campaigns; at thirty-five, a seeker of fortune in the New World; at fifty, a retired soldier trying to win a comfortable existence through the unromantic way of raising cattle and swine to sell to the newcomers in Panama—ambition apparently dead; at sixty, this Captain who had gazed upon the Pacific with Balboa, was Captain-General of his Majesty's Spanish forces in Peru, and acknowledged conqueror of the mighty Inca Empire; at seventy, Francisco Pizarro, Marques de los Atavillos, Royal Governor of Peru, had been murdered by the followers of his old partner, Amalgr. Strong men make strong enemies, and Pizarro was no exception to the rule.

Pizarro was a product of his period, when men were hard and cruel. One rose to fame and fortune by cruel courage, endurance and ability. Life was a matter of hard fighting and intrigue, in which no mercy was shown the weakling. Frequently the successful man died fighting, and again Pizarro was no exception to the rule!

The author gives a clear and interesting picture of the life of the conquerors and settlers of New Spain of that period, and of the hardships and difficulties they encountered from the natives and Nature.

A chapter is devoted to the Inca Empire, giving a brief outline of its political, economic and social structure. It is a most interesting book.

**MARLBOROUGH** by the Hon. Sir John Fortescue. Published by D. Appleton and Company, New York. 1932. 164 pages. \$2.00.

Marlborough is considered one of England's most famous soldiers—if not the greatest. He was also a most successful diplomat. The author in a beautifully clear and concise style narrates the principal events of the Duke's life, both military and diplomatic, and in addition vividly describes the victories of Blenheim, Ramillies and Malplaquet. This little biography portrays a great soldier, a beloved commander and a loyal and loving husband; a splendid and enlivening portrait of one of England's greatest sons.

## SPORTS

### Fort Leavenworth Modernizes the Horse Show

By Captain W. B. Bradford

Reprinted by permission from July, 1933 issue of "Polo," 150 Madison Avenue, New York City.

THERE has just been concluded at Fort Leavenworth, Kansas, an innovation in horse shows that may have its effect upon the sport in America. The change was radical from our familiar form and was interesting, popular and a pronounced success. It evidently points the way to renewed interest and enthusiasm in a game that in recent years has tended to become more of an exhibition of expensive horses and equipment than the thrilling, gripping contest of ability on the part of rider and mount that one has a right to expect.

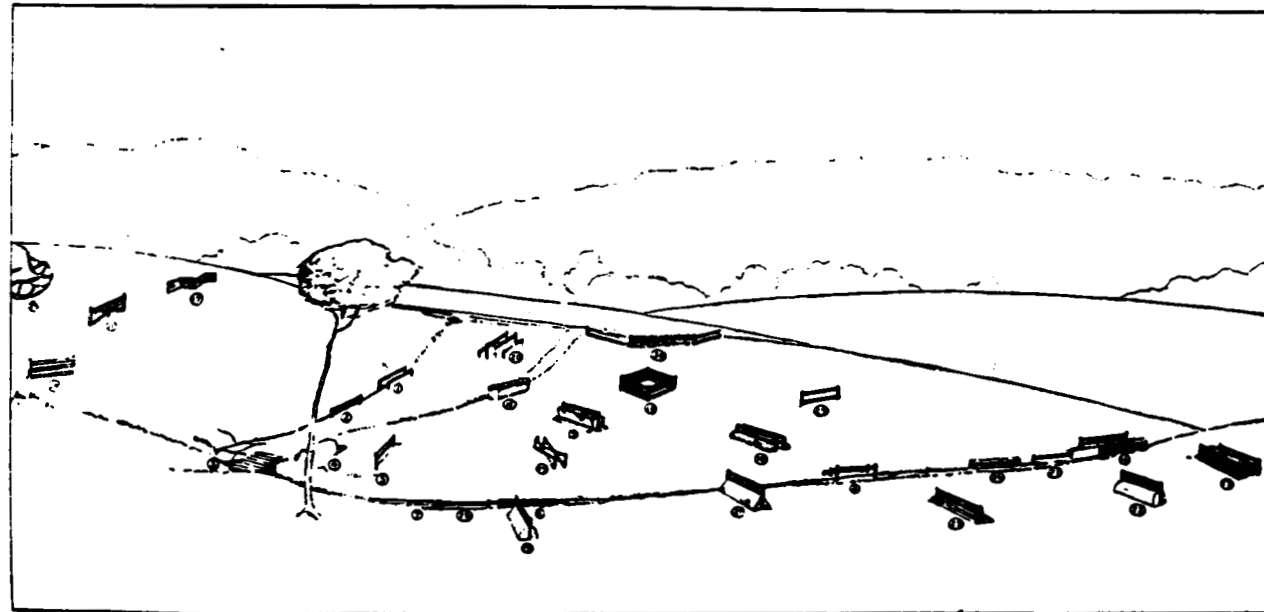
This meeting was not a SHOW, in the sense indicated above. It was a contest of horse and rider against keen competitors, a severe test of the ability of each, and for that reason was called "The Fort Leavenworth Hunter and Jumper Trials." These events formed a part of the Spring Race Meet. The Hunter Trials were included in the racing program and were run over a sporting three-mile course, interspaced as to time between the several races.

The Jumper Trials followed the day of racing. It

is in connection with their special features that I am particularly concerned at this moment.

The Hippodrome was unique. I do not know its size, as it was not enclosed, nor intended to be, and was never measured. Suffice it to say that various courses of a mile or more in length can easily be placed within its limits. The accompanying sketch gives a good general idea of the area, of the obstacles to be encountered, and of the pleasantly rolling nature of the terrain. Indeed it is merely a section of the country over which the local hunt holds forth, adapted to a specific purpose. The obstacles were twenty-eight or thirty in number, built almost entirely from natural material near at hand, and combined with the natural accidents of the terrain itself, to make them more interesting. Every type of jump found in the local hunting country was duplicated: the natural ditches and little stream running through the center of the area were altered only sufficiently to give them the desired size, and a safe footing. A limited number of purely artificial jumps were added. With few exceptions, obstacles were built on a three and one-half foot permanent plan, in order to take care of the greenest horses, but so arranged that they could be raised if desired as high as five and one-half feet. Thus the stage was set.

The rules under which the Jumper Trials were con-



The Fort Leavenworth Hippodrome

1. Road crossing. 2. Post and rail with ditch. 3. Ditch and bank. 4. Irish single bank. 5. Post and rail drop jump. 6. Water jump. 7. Natural ditch. 8. Triple bar over ditch and water. 9. French type "Open ditch." 10. Pen jump. 11. Gate. 12. Brush. 13. Double oxer. 14. Aiken fence. 15. In and out with ditches. 16. Virginia worm fence. 17. Autenil double brush and bar. 18. Double crossed rails. 19. Hog back. 20. Chicken coop with rails. 21. Stone wall with rails. 22. Style with rails. 23. Post and rail. 24. Single rail. 25. Liverpool. 26. Post and rail, ditch and water. 27. Post and rail, ditch and water. 28. Post and rail, ditch and water. 29. Military trench system. 30. Hedge and road crossing. (These obstacles in general have small natural wings, about three feet long, which have been omitted from the sketch in order to show details more clearly.)



ducted were those of the *Fédération Equestre Internationale*, which must be increasingly observed if one's eyes are ever to be turned towards international competition. In general, these rules contemplate various different courses of one-half to one and one-half miles in length, over terrain containing many and different obstacles. They encourage and require horses of galloping ability in hunting condition. Disobediences such as whirling, balking, refusing or running out are severely penalized, a combined total of three such on a course causing elimination. Faults over jumps are confined to knockdowns, with an equal penalty, whether it be in front or behind. Galloping is required by time limits, but a rushing horse automatically handicaps himself by tiring over the long courses and consequently incurs frequent penalties as he draws near the finish. The rules of the *Fédération* forbid riding by professionals. A minimum weight of one hundred and sixty-five pounds is prescribed.

Competitors at the Leavenworth Meet were not informed of any of the details of the courses, except as to maximum height, spread, distance, and time, until the day of the event. Each class was over an entirely different series of jumps, which were consecutively marked in each case by numbered discs which differed in color for each class.

Classes and results were as follows:

**Green Jumpers.** For horses that have never competed in an organized meeting. About 1000 yards over twelve or fourteen obstacles. Maximum height, three feet, six inches. Maximum spread, six feet. Minimum rate, three hundred and fifty yards per minute.

Place	Name	Owner	Rider	Locality
1st	Little Joe	Maj. W. K. Harrison	Maj. Harrison	Ft. Leavenworth
2nd	Don	Maj. Milne	Miss Simons	Ft. Leavenworth
3d	Brian	Born Maj. N. E. Fiske	Maj. Fiske	Ft. Leavenworth

**Individual Jumper Championship.** About 1200 yards with from fifteen to sixteen obstacles. Maximum height, four feet, three inches; maximum spread, twelve feet. Rate, four hundred yards per minute.

**Handicap class.**

Place	Name	Owner	Rider	Locality
1st	Tyrol	Army Team	Lt. C. W. A. Raguse	Ft. Riley
2nd	Suzanne	Army Team	Lt. Raguse	Ft. Riley
3d	Ansonia	Army Team	Lt. Thomson	Ft. Riley

**Handy Jumpers.** About 900 yards over twelve to fifteen obstacles. Maximum height, four feet; maximum spread, ten feet. Minimum rate, four hundred and twenty-five yards per minute. Score to be determined by adding total elapsed time to other penalties incurred on course. Winner to be the contestant with smallest total score. **Handicap class.**

Place	Name	Owner	Rider	Locality
1st	Huajak	The Cavalry School	Lt. Noble	Ft. Riley
2nd	Sally Gun	The Cavalry School	Lt. Yeomans	Ft. Riley
3d	Reno Baby	Army Team	Lt. Thomson	Ft. Riley

**Open Jumpers.** About 1000 yards with from twelve to fifteen obstacles. Maximum height, four feet; maximum spread, twelve feet. Minimum rate, three hundred and seventy-five yards per minute. **Handicap class.**

Place	Name	Owner	Rider	Locality
1st	Don	Army Team	Lt. Hains	Ft. Riley
2nd	Anthony	The Cavalry School	Lt. Yeomans	Ft. Riley
3d	Sally Gun	Army Team	Lt. Raguse	Ft. Riley

**Jumper Team Championship.** About 1200 yards with eighteen to twenty-three obstacles. Maximum height, four feet, six inches; maximum spread, fourteen feet. Minimum rate, four hundred yards per minute. Teams to consist of four contestants. The three best scores only to count. International rules apply, except that the course is to be jumped on time only. **Handicap class.**

Place	Name	Owner	Rider	Locality
1st	Tyrol	The Army Team	Lt. Raguse	Ft. Riley
	Warham	The Army Team	Maj. Thayer	
	Avocat	The Army Team	Lt. Hains	
	Ansonia	The Army Team	Lt. Thomson	
2nd	Timber	F. A. S. H. S. Team	Capt. Argo	Ft. Riley
	Cruiser	F. A. S. H. S. Team	Lt. Williams	
	Triangle	F. A. S. H. S. Team	Lt. Taylor	
	Alcazar	F. A. S. H. S. Team	Lt. Taylor	
	Virginia	F. A. S. H. S. Team	Lt. Taylor	
	Navarre	F. A. S. H. S. Team	Capt. Stewart	

In discussions prior to the Leavenworth meet, often heard: "Yes, these plans are fine; but where are we going to find the horses?" Naturally, it was stop to think, the answer is simple. *Make the course fit the horse.* Any hunter or jumper is capable of competing under these conditions if the planning is carefully done. Entries in this year's Green class, for example, were truly inexperienced, for the conditions not only excluded winners in previous organized meetings, but also all who had previously competed even though unsuccessfully. Yet the class was the second most popular, from the point of view of number of entries, and was eminently successful, for the course was simple and honest and did not overtax the ability of any contestant.

An important feature of the Meet, introduced for the first time in this country, was that of handicapping. In Kansas, Missouri and Oklahoma there are many military hunters and jumpers of widely varying abilities. In some instances their owners came from great distances, at their own personal expense and with no prospect of cash prizes, ready and willing to be handicapped. They were impelled by a true sporting instinct, attracted by the new ideas of the Meet, and willing to undergo a handicap in order to add to the zest of competition, which we all love. At a meeting of these sportsmen on the eve of the contest, a suggested handicap list was presented, examined, altered here and there, and unanimously agreed upon. Well known jumpers from the Army Team such as *Babe*, *Warham*, *Avocat* and *Ansonia* were placed in the five-foot class. This did not prevent them from entering the lower classes, but imposed a handicap of six feet jumps, chosen from the simpler types, in every course. Thus, in the Military Team Event, whose twenty-three obstacles ran in general from four feet to four feet six inches in height, six of the jumps were raised five feet when this particular group of horses appeared. In the same way, *Tyrol*, *Timber Cruiser* and *Prominent Tom*, all well known performers, were rated a four feet, nine. In the four foot, six class were *Suzanne*, of international fame, *Muskogee*, *Reno Baby*, *Triangle*, *Alcazar*, *Virginia Navarre*, *The Judge*, *Tornado*, and others. The four foot, three class contained many more of somewhat less experience, and the remainder were given the general rating of four feet.

This probably sounds complicated but worked simply

and smoothly. In each class, horses were grouped according to their ratings. In the beginning, jumps were set for the lowest rating. When this non-handicap group had all jumped, six of the obstacles on the course were raised three inches, and horses on the first handicap list performed. The same six jumps were then raised again for the next group and so on to make the entries with the highest rating. Results proved that impositions in general had been correct, and contests were well equalized.

Next year similar contests will be held here and on the military posts in this area. Plans are already under way at Fort Sill and Fort Riley. As for handicapping, the original list will be used. However, those horses which won or placed this year will be given a slightly higher rating next spring, with the idea of gradually working them towards the limit of their ability, and at the same time encouraging the younger ones and insuring him a chance. No civilian entries are handicapped until they have actually won at one of the shows of this circuit.

Let us now examine the result of this system for this year and see what can be expected for the future. A marked effect was noticeable primarily in the entry list. A great many old performers which have won for years and are well known but which have reached their limit and have no future, were left behind. Their riders realized that they would be given the maximum handicap and brought younger prospects in their stead. Horses which won this year will be placed in a higher class next year. If they have the ability to continue on, their riders will continue to bring them. If they have no future, they will fade from view, and small loss, for who is anxious to see the same horse, having reached his limit, bring home year after year the same old ribbons, won under unvarying conditions? If one have ridden many such horses and can testify to the lack of thrill. This fault is so noticeable in our Association Shows. One has only to glance over the records of the Blue Book to find the same names leading the list year after year, especially when conformation is a consideration. How much better for sport and industry to make increasingly greater demands on our best and give the promising youngsters a chance! By this means a superior group will reach the top, the mediocre four foot, three veteran will be forced out, and the industry, whose development should be the real *raison d'être* of our shows, will benefit accordingly.

## Fort Leavenworth Hunt Race Meet

By Major Norman E. Fiske, Cavalry

MAY 6th, 1933, the Fort Leavenworth Hunt, in its third annual race meet enjoyed good weather for the first time and turned in a day of sport to satisfy thoroughly the large attendance from Kansas City, St. Joseph and nearby army posts.

The course, which had been extended and improved, traversed about three miles of the country and presented a wide variety of fences, ditches and combi-

nations thereof, sufficient to put the clever, confident freegoing hunter at a premium over the more specialized steeplechaser. Footing for the most part was firm and springy, but a hard rain the night before left bits of heavy going in the low spots which called for a horse with plenty of staying power. Spectators from their vantage point on Merritt Hill could follow the races very well without the aid of glasses. Entry lists and character of performance stacked up well with the first two meetings of this hunt. It was a fortunate thing that the meet got in under the wire, as only a few days later the General Staff School was closed for the summer in order to permit its students to go out with the Citizens' Conservation Corps in the National Forests.

It is the earnest hope of the many who participated in this meet that by next spring the school will be functioning as usual so that another equally successful meet may be held.

The official results follow:

**The First Sergeant Martin McDowell Race.** A cross-country race open to soldiers of the Tenth Cavalry only; in colors on government mounts over 3 miles of hunting country. Time: 8 min., 25 sec.

Place	Name	Rider
1st	Happy Creek	Pvt. J. Johnson
2nd	Valleybrook	Pvt. J. Ashby
3rd	McDonald's	Pvt. H. Watkins

**Hunt Trial for Hunt Members.** A cross-country race open to members of a recognized hunt club in uniform or suitable hunting clothes over 3 miles of hunting country at 18 miles per hour. Catch weights. This class was divided into Ladies and Gentlemen Hunter Trials.

Ladies	Owner	Rider
1st	Babe	Miss H. Stenzel
2nd	Don	Mrs. R. Stenzel
3rd	Jack Rabbit	Mrs. Helen Wilson
Gentlemen	Owner	Rider
1st	Endless	Major R. L. Coe
2nd	B. D. Penn	Capt. M. E. Jones
3rd	Miss Ashby	Capt. J. L. Wood

**The Buffalo Bill Stakes.** A flat race on turf open to all farmers of Platte County, Missouri, and Leavenworth County, Kansas: 3.8 mile. Time: 34 sec.

Place	Name	Owner	Rider
1st	Chief	Mr. Carl Dietrich	Mr. Lee Murawski
2nd	Jerry	Mr. Arlie Durce	Mr. Durce
3rd	Molly	Mr. Osburn Hall	Mr. Hall

**The Skinny Wainwright Race.** A cross-country race open to members of a recognized hunt club, in hunt livery or uniform over 3 miles of hunting country; for hunters (non-thoroughbred) certified by a M. F. H. as qualified and to have hunted regularly during the past season. Time: 8 min., 15 sec.

Place	Name	Owner	Rider
1st	Brown Arrow	Cav. S. H. Hunt	Major R. L. Coe
2nd	Kim Brown	Ft. L.	Capt. M. E. Jones
3rd	Cyclone	Ft. L.	Lt. Col. Tombaugh

**Hunter Trials for Teams of Three Members of a Hunt Staff.** A cross-country race open to members of a hunt staff in hunt livery over 3 miles of hunting country at 20 miles per hour, 50 yards distance between riders.



1st <i>Black Fox</i>	Ft. Leavenworth	Capt. P. C. Febiger
<i>Oracle</i>	Ft. Leavenworth	Miss H. Sterling
<i>Black Boy</i>	Ft. Leavenworth	Miss M. Woodruff
2nd <i>Payette</i>	Ft. Leavenworth	Capt. W. Bradford
<i>Gray Ike</i>	Ft. Leavenworth	Capt. M. E. Jones
<i>Adversity</i>	Ft. Leavenworth	Capt. J. L. Wood
3rd <i>Water Flower</i>	Cav. School Hunt	Capt. McNabb
<i>Evidence</i>	Cav. School Hunt	Major Coe
<i>Howdy</i>	Cav. School Hunt	Major K. Thomas

**Fort Leavenworth Hunt Cup.** A cross-country race; open to members of recognized hunt club in hunt livery or uniform over 2½ miles of hunting country; for horses that hunted regularly during the past season and certified by a M. F. H. as qualified hunters. Time: 8 min., 20 sec.

1st <i>Sooter</i>	2nd Cavalry	Capt. F. Nelson
<i>Bubbles</i>	Capt. Lattimore	Major Harrison
3rd <i>Happy Creek</i>	Ft. Leavenworth	Capt. Lueking

**The Tommy Heintzelman Race.** A cross-country race; open to all in colors over 2½ miles of hunting country. Time: 8 min., 4 sec.

1st <i>Long Tom</i>	Mr. W. Keith	Clyde Compa
2nd <i>Misrael</i>	Ft. Leavenworth	Major E. E. Schmeier
3rd <i>Bunker Hills</i>	Capt. J. H. Irving	Capt. Irving

## Mission Valley Hunt Race Meet Kansas City, Mo., April 29, 1933

**STEEPLE-CHASERS** and hunters representing The Cavalry School competed in a race meet at the Mission Valley Hunt, April 29, 1933, with the following results:

### Individual Hunter Trials—

1st Place—Water Flower—Capt. A. B. MacNabb, 9th Cav.

2nd Place—Evidence—Major R. L. Coe, Cavalry

### Hunter trials for teams of three members—

1st Place—The Cavalry School Team:

Brown Arrow—Major R. L. Coe, Cavalry  
Water Flower—Capt. A. B. MacNabb, 9th Cav.

Evidence—Major Kramer Thomas, Cavalry

Two mile steeple-chase over brush—Kellsboro' Jack

(2nd place in this race was won by Capt. M. E. Jones, 10th Cavalry, Ft. Leavenworth.)

3rd Place—Onall—Lt. F. P. Tompkins, 9th Cavalry

Three mile Point to Point—Mission Valley Adieu

1st Place—Frills—Lt. E. F. Thomson, 9th Cavalry

2nd Place—Sooter—Capt. Frank Nelson, 2d Cavalry

## Results of the Artillery Hunt Point-to-Point Meet

May 13th and 14th 1933, The Field Artillery School, Fort Sill, Oklahoma

**NACRE "POINT-TO-POINT"**—Two (2) miles—over timber and stone wall. **Entry Requirements:** Open to any horse owned by the United States Government or an officer of the Regular Army. Ridden by officers assigned to the School Troops Division of the Field Artillery School. Horseshow Team and Instructors in the Department of Animal Transport of the Field Artillery

School not eligible. Silks or uniform. Weight: 160 pounds; overweight permitted but no allowance made.

Starters	Finish	Riders	Owners
<i>Fritz</i> , b.g., 14	1	Capt. A. P. Kitson	U. S. Army
<i>Phor</i> , ch.g., 8	2	Lieut. J. P. Hill	U. S. Army
<i>Hula Girl</i> , ch.m., 6	3	Lieut. G. C. Stewart	Lt. G. C. Stewart

**ARTILLERY SCHOOL "POINT-TO-POINT"**—Two (2) miles over timber, brush, and stone wall. **Entry Requirements:** Open to any horse owned by the United States Government or an officer of the Regular Army. Ridden by members of the Advanced Class in Horsemanship and instructors in the Field Artillery School. Silks and uniform worn. Weight: 160 pounds; overweight permitted, but no allowance made.

Starters	Finish	Riders	Owners
<i>Kiluna</i> , ch.m., 8	1	Lieut. L. S. Griffing	U. S. Army
<i>Cardita</i> , b.m., 6	2	Lieut. H. F. Handy	U. S. Army
<i>Lady Cliff</i> , b.m., 6	3	Lieut. L. R. Winfield	U. S. Army

**GERONIMO "POINT-TO-POINT"**—Two (2) miles over timber, logs, and stone wall. **Entry Requirements:** Open to any horse owned by a member of a recognized hunt or the United States Government which has not raced in any race except hunt races for the past four (4) years. Ridden by members of recognized hunts—in silks or hunt livery. Weight: 160 pounds; overweight permitted, but no allowance made.

Starters	Finish	Riders	Owners
<i>Joseph Sabbath</i> , ch.g., 8	1	Major C. A. Pierce	U. S. Army
<i>Lord Russell</i> , b.g., 7	2	Lieut. J. E. Thelmer	Capt. G. L. Dantford
<i>Front Royal</i> , b.g., 6	3	Lieut. E. L. Strohhenn	U. S. Army

**COLONEL ARTHUR J. ELLIOTT MEMORIAL "POINT-TO-POINT"**—Three and one-half (3½) miles over timber logs, ditches, stone wall, and fair hunting field. **Entry Requirements:** Open to horses owned by an officer of the Regular Army or by the United States Government that have been certified as qualified hunters by the Master of Fox Hounds of one of the Service Hunts and have not previously run in other than Hunter Races. Ridden by officers of the Regular Army stationed at Fort Leavenworth, Fort Riley, or Fort Sill, and who are members of either The Fort Leavenworth Hunt Cavalry School Hunt, or the Artillery Hunt. Weight: 160 pounds; overweight permitted, but no allowance made.

Starters	Finish	Riders	Owners
<i>Frills</i> , b.m., 7	1	Lieut. E. F. Thomson	U. S. Army
<i>Dolly Crump</i> , b.m., 11	2	Lieut. R. L. Taylor	U. S. Army
<i>Brown Arrow</i> , br.g., 13	3	Lieut. D. E. Bradford	U. S. Army

## The West Point Horse Show

By Lieutenant Frank DeK. Huyler, Cavalry Reserve

Extracts reprinted by permission from the June 17, 1933, issue of "The Rider and Driver," 342 Madison Avenue, New York City

**A**S A Hunter and Jumper Show, West Point is unsurpassed. People who attended, exhibitors and spectators alike, are agreed that the new courses are among the most sporting in the country. While not unduly hard, the jumps were such as to make a horse put his best foot forward.

The management holds that hunters and jumpers alike should be sensible and level-headed, should jump boldly and be under control at all times. Each should keep his eyes and mind on the obstacles to be met and should take his fences in a uniform manner. It was with these ideas in mind that a course of jumps was constructed that would make it necessary for a horse to gallop on and jump at his best.

In order to show proper training and to require some show of horsemanship on the part of the rider, wings were eliminated from all fences. Much to the surprise of some people, the horses jumped just as well, and in most cases a lot better than they are accustomed to jump over the usual course of four post-and-rails. The different types of jumps on the course kept the horses awake, and their minds alert. There should be many more shows of this type put on at West Point. Once an exhibitor has shown his horse over such a course, it is hard to see how he will be satisfied with any other.

Only thirteen classes made up the two-day exhibition, giving the entrants plenty of rest between appearances. Because of the length of the courses and the number of entrants in the classes, there was not a dull moment in the two days. The classes followed each other without even the usual delay, as the only change that had to be made for the different events was the flagging of the various jumps to be used. The fences were all permanent and remained in place throughout the two days, with the exception of the second morning, when the show was held in the riding hall because of impending rain. However, the clouds cleared away, and the show was able to come out in the open for the afternoon session.

The jumper championship was awarded to *Pat Grey*, of the New York State Troopers, ridden by Bud Keely. Reserve champion was the writer's little bay gelding, *Captain Kidd*, which had been accounting for himself quite favorably throughout the show, winning the Robert L. Howze 4 ft. 6 in. class and placing in two others.

Perhaps the most consistent horse of the show was Major George S. Patton's chestnut, *Hukupu*. This



Hukupu, Major G. S. Patton Up

horse jumped in about every class of the show and placed in most of them. He won the Military Stake class on the first day, placed 2d to *Captain Kidd* in the Robert L. Howze, took 3d in the Corinthian, was a member of the winning military team and added 4th ribbons to his list in two other classes.

The Fault-and-out Stake was won by Captain Frank L. Carr, riding the West Point Horse Show team's black gelding, *Geronimo*, after a jump-off with Mr. Jack Spratt's bay gelding, *Jack Spratt*, and *Captain Kidd*. The latter two finished in the order named. *Geronimo* was also the winner of the "Malin Craig," shown over jumps up to 4 ft. 3 in., and placed 3d in the Military Stake. Captain Carr's own imported Thoroughbred, *Mithridate*, schooled beautifully, and jumped well to take an Officer's Charger class, in which an exceptionally fine looking bay, *Dayfik*, owned and ridden by Major Rayner, of West Point, took 2d. Third money went to Major Frederick W. Boye's *King of Hearts*.

The Fort Myer Horse Show team came to the front to win the first jumping class of the show, the blue to Major Patton's bay gelding, *Wild Ben*. This class, for the Edward L. King Trophy, was competed for over jumps up to 4 ft. Second money went to Major Boye, riding *Queen's Own*, the veteran grey of the West Point team, while 3d place was awarded to Lt. J. W. Wofford's *Diplomat*.

Lt. Robert L. Howze gave Mr. Marcellus H. Gallop's grey gelding, *Royal Hawk*, a very fine ride to win the novice hunter class, in which there were fourteen entries. Jumping for the first time over a course without wings, the horse travelled steadily to defeat Warfield Farm's *Lucca*, a brown mare of promise. Third place was taken by *Reno Africa*, entered by the West Point team.

Everything was done for the enjoyment of exhibitors. Luncheons were served each day at Cullum Hall, to which exhibitors and judges were invited as guests of West Point Horse Show Association. As customary, the show was given for the benefit of the Army Relief Society.

West Point is to be congratulated on its courage in attempting a show that was such a departure from the usual stereotyped event. The classes brought out the real hunters and jumpers, setting them apart. It might be well to assure those exhibitors who did not show at West Point that the courses did not contain one single fence that it was not reasonable to expect a horse to jump. The fences were solid enough to make a horse take care of himself, but all would come down if given a hard rap. Another year exhibitors would do well to include West Point on their schedule, as they will find waiting for them a show that will live long in their memory as one of the best they ever attended.

## Tuxedo Horse Show

By Lieutenant Frank DeK. Huyler, Cavalry Reserve

Reprinted by permission from the June 17, 1933, issue of "The Rider and Driver", 342 Madison Avenue, New York City

"ALWAYS one of the finest of the Spring shows."

Such is the reputation that the Tuxedo Horse Show has made for itself during its many years of existence. Under the most capable direction of its President, the genial Mrs. David Wagstaff, the show this year was even better than in previous years.

The classes in all divisions were well filled, and the presence of various Army teams on their way to the West Point Show added a military color to some of the classes. The outside course has been much improved, and the hunter performances were consequently a lot better.

The Special course jumping was won by Captain G. I. Smith, riding Fort Myer's chestnut jumper, *Flash*. Another jump-off occurred in this class, with 2d money going to the Park Auto Renting Company's *Overlooking General*.

*Redwood*, owned by the Essex Troop Horse Show team, defeated Fort Myer's *Hukupu* in the military jumping class open to officers. On the day before, *Hukupu* had won a nice class of officers' chargers, defeating Major Fred Boye's *King of Hearts*.

One interesting thing was the victory of the aged gelding, *Pleasanton*, in both military jumping classes open to cadets from West Point, and also in the class for limit military jumpers. *Pleasanton* has been jumping about as long as any horse in the ring. The writer himself remembers jumping against him as far back as 1917, at which time the horse was listed as aged. However old he may be, he was still able to enter three classes and take the blue in all of them, ridden by Cadet J. O. Boswell.

## Military Polo

From the French "Revue de Cavalerie," March-April, 1933; translated by Major N. Butler Briscoe, Cavalry

POLO, "the king of games and the game of kings," is also the game *par excellence* for the military rider. If racing, horseshows and other sports develop in the ranks of the army the taste for risk, hardiness and precision, polo alone can give them sporting discipline and requires of them a profitable physical training. Profit, but pleasure also. Is not the supreme joy of the mounted man to feel the effort of his horse?

Where, more than in polo, can one test it? This effort, renewing itself each instant, be it in the contest of speed, the contest of mass forcing the adversary out of the play or contest in handiness for the rapid accomplishment of a turn. Whether actuated, then, by the complete training of man and horse, or simply by the pleasure that he gets, every soldier should be a fervent adept in this fine sport.

In the army polo was born following the war, under the impulse of Captain Malcor and with the aid of the Federation of Polo Clubs of France.

In discovering this new sport, the mounted men were thrilled and at once were filled with the most beautiful hopes. With the equestrian ability of the corps of officers, the large choice of horses, the facilities for training which exist in a great number of regiments the military teams should progress rapidly and be able to line up against the "civilians" and the "foreigners". In fact Saumur stood at the head of the movement and had attained a measure of success, being classed as the best military team and competing against good Spanish teams.

Then came a disenchantment. Saumur retired from the game, and the military trophy has belonged to different regiments, but frequently returning to Tarbes. Against the foreign teams, against the good civilian teams, the regimental teams have been able to do nothing.

Then recourse was had to selection: a national team, regional teams. The result has been excellent. These regional teams played in 1931 for the Cup of France and the national team has had frequent occasion to go outside the frontiers and defend the French colours in foreign countries with success. Very recently a national team met the Italians and the English at Rome. It outclassed the former but it could do no more than defend itself with success against the latter who had sent an excellent team.

Where, then, is polo today from the point of view of numbers and quality? Some fifteen regiments practise the game, and some hundred players have handled a mallet. From the standpoint of quality, no regimental team is capable of playing on a fair competitive basis with a good civilian team. Of the hundred players some twenty more or less will be eligible to play at Bagatelle with a handicap above 0. Finally if there is opposed to the French team playing recently at Laversine and composed of Messrs. de Monbrison, Macaire, Couturier, and Rassin, a military team selected from among the best, perhaps one could give the military team a handicap of 7 against 17. The difference between these numbers indicates the margin that we feel exists between the best teams, military and civilian. Certainly progress is undeniable, but the results have not fulfilled the hopes at the start. Why be astonished,—could it be otherwise?

Let us try to find the answer and indicate how to direct our efforts. First, for what should we reproach our horses; can they equal the best ponies of the civilian players? Evidently ours do not attain the happy combination of weight and speed which makes certain of theirs marvelous playing ponies. How many of us after having succeeded in training our mounts, with great reinforcement of whip blows, to the point of being "crocodiles", feel ourselves irresistibly ridden off the line of the ball?

However, an officer, allowed to exercise his choice in the lot of 20 young horses per squadron, can find among them some which approach this standard. There are in the dragoons some Norman horses which gallop

and win cross-country races; the Anglo-Arabs of the light regiments at least have the speed and the suppleness. Certain horses from Tarbes, like *Vaillant*, shown at Rome by Captain de Talancé and classed first, present the characteristics of the perfect pony, strong, splendid, breezy.

We can certainly better our strings of ponies; the difficulty for us lies in conditioning and training. Our horses are primarily military horses and naturally available for all drills. Exceptionally we can get some for a game or a trip, and frequently even this in addition to their daily work. It becomes, under these conditions, almost impossible for an officer to present a stable having the condition and training of a civilian stable.

Second cause of inferiority: the lack of training in company. If players can, in addition to their duties, find time to work individually, on the other hand it becomes difficult, considering military obligations, to collect the number of people necessary for a game. Finally and above all, the opportunities of meeting are extremely rare; how many of us have had the good fortune to play with the good teams at Bagatelle, Laversine, Deauville, Cannes, Biarritz, or Aix? These alone can teach true play to the army players.

But even there is not the root of our inferiority, and that can be remedied. We have said there are about a hundred players, of whom about half work. Of this number, how many are young? Very few. To be 20 years old, well bred, cool-headed, loving the horse and the sport, one could be classed "international" in a few years. Are there not other Henri Couturiers in the army? There are some. What is needed is to advise and train them.



What Effect Would Be Obtained by a Patrol



Composed of a Good Polo Team, Men and Horses!

Certainly this sport makes heavy demands: it needs a great number of horses, trips, some hours left free from military duty, a piece of the drill ground. But how well it pays! The regiment that triumphs in sports is far from being the worst, and a corps of officers who cultivate polo, with its animation, its sports-discipline, is more apt than another to transmit to their men the fundamental virtues of the French cavalryman.

Finally, in order to sum up, let us picture one of the cavalry fights of the latest war and imagine the effect obtained by a patrol composed of a good polo outfit, men and horses. And what sport is closest to combat mounted?

Chef d'escadrons Poupel

## Fédération Equestre Internationale

THE International Equestrian Federation of which General Henry is President held a meeting in Paris during the latter part of November.

After considering the report of the Olympic Games held in Los Angeles last summer, the International Dressage Contest for 1933 was discussed. This contest is an annual event in Europe, being held in a different country each year.

The International Dressage Contest for 1933 was held at Aix-La-Chapelle, Aachen, Germany between the 22nd and 27th of July and consisted of two classes: one called the *Prix de Saint Georges* was relatively simple, and the other called the *Grand Prix de Dressage* included movements of the High School. Descriptions of these contests may be had on request.

## Atlantic City Horse Show

Fort Myer Horse Show Team

- Palladium*, Lt. E. L. Harrison, 3rd Cav.
- 2nd, Bridle Path Hacks, 14 hands and over
- 4th, Bridle Path Hacks, half-bred
- Bay Morn*, Lt. C. W. Bennett, 3rd Cav.
- 3rd, Bridle Path Hacks, Registered Thoroughbreds
- Miss America*, Lt. Col. C. P. George, 16th F. A.
- 2nd, Handy Hunters
- 6th, Marlborough-Blenheim \$1,000 Open Championship Jumper Stake
- Squire*, Lt. C. W. Bennett, 3rd Cav.
- 3rd, Handy Hunters
- 4th, Open Jumpers
- 4th, Triple Bar
- 3rd, Bareback Jumping
- Gargon*, Capt. G. I. Smith, 3rd Cav.
- 3rd, Open Jumping
- 4th, Touch and Out
- Flash*, Capt. G. I. Smith, 3rd Cav.
- 1st, Bareback Jumping
- Pairs of Hunters*
- 1st, *Squire*, Lt. Bennett
- Flash*, Capt. Smith
- 2nd, *Miss America*, Lt. Col. George
- Gargon*, Capt. Smith

# The Foreign Military Press

Reviewed by Major Alexander L. P. Johnson, Infantry

AUSTRIA—*Militärwissenschaftliche Mitteilungen*—June, 1933.

"The Concluding Operations or an Enlarged Manchuria and Considerations of the Problems of the Pacific," by General Otto Wiesinger.

A summary account of the Japanese operations in Jehol, and a brief comment upon the Japanese withdrawal from the League of Nations form the background of an interesting survey of Japan's international relations. Thus, the author points out, that Japan's relations with Great Britain involve political, economic and racial questions. Politically, Japan and Great Britain were allies from 1902 to 1922. The treaty clause, which assured Japan of British help in the event of war with the United States, the author observes, proved rather irksome to the British. Great Britain feared that it might encourage Japan to aggressive action at a time which might prove embarrassing to British interests. Great Britain secured release from that treaty obligation, the author notes, by assigning to Japan the Port of Kiautschau (Tsingtau) and the German Pacific Islands.

In the author's opinion, Japan is Great Britain's natural ally against Soviet Russia, and similarly Great Britain is Japan's natural ally against the United States. He states, that in the event of a war between the United States and Japan, the former could hardly rely upon British racial kinship and comradeship at arms. Great Britain has basic interests in maintaining Japanese power as a counterweight against both Soviet Russian and American projects.

From an economic point of view, Japan became England's greatest competitor in China. The growth of Japan's trade in India is likewise viewed with misgivings by the British. In racial matters, owing to the attitude of the Dominions, the British Government was unable to meet the wishes of Japan. The exclusion of Japanese immigrants from the Dominions caused considerable ill-feeling among the Japanese.

The three powers, Japan, Great Britain and the United States, the author observes, are now engaged in an acute commercial competition for the markets of Asia. Japan is consolidating her position on the continental mainland, and, at the same time, she is also getting her Pacific front ready for eventualities.

The relations between Japan and the United States, the author writes, are influenced by the same factors which dominate relations with Great Britain. The friction is, however, intensified by the greater aggressiveness of the American people. He points out, that the American press quite frequently assumes an openly hostile attitude towards Japan, although upon sensing an actual peril of war, a more conciliatory tone is assumed. The racial difficulties arising from the exclusion of Japanese immigrants from the United States brought the two Powers to the verge of war in 1914.

The Washington Conference not only deprived Japan of all advantages she had secured in China, but it actually compelled Japan to recognize the policy of the Open Door in China. This tended to aggravate the difficulties between the two nations.

America's trade in the Far East, in 1913, amounted to \$125,000,000 while in 1931 it actually exceeded two billion dollars. Since 1919 the United States has doubled her trade with China, and trebled that with Japan, which receives the lion's share of America's Far Eastern trade. In the author's opinion, the United States can bide her time, since all her interests in the Pacific appear to be satisfied. Japan, on the other hand, is in dire need of expansion. The Philippines, Yap, and Guam, the author believes, constitute focal points of the clashing Japanese-American interests. It is there, he believes, that the fate of the world will be decided. He does not consider the Philippine Independence Bill enacted by the last Congress as the final word upon the subject.

In the author's opinion, a naval war between Japan and the United States is at present out of question without the active cooperation of a third power. He considers the naval establishments in Hawaii and the Philippines inadequate for war time requirements. He believes that in the event of war, naval superiority favors the United States, but that the probable theater of operations accrues to Japan's advantage. The great distances involved affect the United States unfavorably, while her isolation and the hostility of China and Soviet Russia have a similarly adverse effect upon Japan.

The Chino-Japanese conflict after two years established Japan as the absolute master of the Far East. Japan achieved this result at a comparatively small human sacrifice, but at a staggering financial cost. Japan's shipping and banking interests in South China were practically destroyed.

Relations between Soviet Russia and Japan, the author believes, are somewhat difficult to gauge. Notwithstanding the conflicting interests of these Powers, he writes, war between them in the near future is unthinkable. Nevertheless, it is within Japan's power to set the day which will witness the elimination of Russia from the Far East. Whether this will occur before or after the settlement of the Pacific problem the author states, remains to be seen. In any event it will compel Russia to face westward again, and whatever her political complex might then be, she will once more become an active factor in European affairs.

Although Japan seeks to cultivate friendly relations with France, an actual alliance, the author writes, is not considered at this time. Such an alliance might tend to force Great Britain into the American camp. The author does not believe that either France or the Netherlands would assist Japan in a war against the United States.

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Summarizing all factors, the author concludes that we are on the threshold of the great struggle for the mastery of the Far East and the Pacific; that Japan and the United States will play the principal roles in that struggle which is destined to decide the primacy between the white and yellow races. The outcome of that struggle, the author believes, will affect materially the future of Europe and the entire world.

GERMANY—*Militär Wochenblatt*—January 25, 1933. "Tactical Control of Anti-Aircraft Artillery," by No. 337.

The peculiar character of its material, and the special mission for which it is designed, renders anti-aircraft artillery unsuited for employment against terrestrial targets. In order to perform its functions efficiently and execute its missions effectively, the author writes, it is essential that the anti-aircraft artillery commander be at all times thoroughly informed of the situation within the area which he must protect. For this reason, the author holds, anti-aircraft artillery should never be placed under the tactical control of the divisional or higher artillery commander. He believes that the most efficient employment of anti-aircraft artillery demand that it be at all times under the direct control of the division and higher commanders.

MEXICO—*Revista del Ejercito y de la Marina*—March, 1933.

"The Army National Bank," by General Rafael Aguirre Majarrez.

General Depression hit Mexico as severely as it did other parts of the world. That the army, like all armies, traditionally poorly paid, should feel the pinch of an economically adverse situation, is to be expected. That an army under such circumstances should seek to lift itself out of this depression by its own boot straps is, to say the least, a decidedly novel experiment. This the author seeks to accomplish by means of an Army National Bank. He submitted to the President of the Republic, General Rodriguez, a project for the establishment of such an institution whose stockholders would consist of the officer personnel of the army.

The March issue of the *Revista del Ejercito y de la Marina* publishes the text of General Aguirre's proposal. He would allot shares to officers according to rank, which is but another way of saying that the official rate of pay determines the number of shares each officer may acquire. Payments are to be made in ten monthly installments, each representing about five per cent of the officer's pay per month. The author calculates that in ten months the paid-up capital would amount to \$847,443.60 (Mex.).

This will prove a novel experiment indeed. For the present, it still lacks presidential approval. If put into execution, it will be interesting to watch its progress. Difficulties are to be expected, but evidently the author of the plan does not include among these the possibility that certain officers may not be financially able to acquire the allotted number of shares, for apparently the acquisition of the prescribed number of

shares would be obligatory, and with each promotion in grade there would go an automatic increase in the number of shares allotted.

No doubt General Aguirre could obtain some very valuable information if he looked into the effects of mandatory pay reductions upon the comparatively higher paid officers of the United States Army. The author credits his colleagues with financial and business acumen that is not ordinarily associated with the profession of arms. Whether that optimism is justified remains to be seen. If put into execution, let us hope, this beautiful project will not result in giving a literal meaning to the Filipino figure of speech: "los paraos andan y los banqueros son pobres."

URUGUAY—*Revista Militar y Naval*—March, 1933.

"Armaments of the Principal Powers."

A statistical tabulation, though not so stated, seemingly obtained from German sources.

	Population	Army	Air-planes	Guns	M.G.'s
Russia .....	153,000,000	1,200,000	1,950	3,000	23,000
France .....	40,700,000	655,000	3,000	2,920	35,000
Great Britain .....	45,600,000	422,000	1,853	2,400	14,200
Italy .....	42,500,000	255,000	1,507	2,132	4,300
Germany .....	63,300,000	100,000	...	310	1,926
Czechoslovakia .....	14,600,000	140,000	657	1,276	9,500
Poland .....	30,400,000	208,000	1,300	1,850	9,700
Belgium .....	5,000,000	66,000	359	550	4,173
United States .....	121,000,000	130,000	2,500	1,500*	30,000*
Japan .....	64,500,000	210,000	1,039	1,500*	20,000*

\* Approximate figures.

HUNGARY—*Magyar Katonai Szemle*—January, 1933.

"Organization of the A.A. Defense of the Civilian Population in Germany," by Colonel Stephen Petröczy, retired.

The latest decree relative to the organization of the A.A. defense of the civilian population, released by the German government last spring, is the result of methodical, scientific study of the question. The solution not only seeks to provide for all contingencies, but endeavors with equal care to provide the best possible defensive plan at a minimum of expense.

The basic principle of the plan is that it makes the entire police force of the nation, and as far as practicable the entire force of civil officials and organized society itself, a part in the A.A. defense of the nation. Appreciating the fact that existing agencies for the preservation of public order and first aid would not be adequate to meet all demands of an air attack in the event of war, the German defensive plan calls for certain auxiliary organizations. These constitute the active portion of the population, while the remainder is designated as the passive portion. The active element is to receive special training and equipment, while the passive element is to be provided with the necessary protective shelters. The general conduct of the A.A. and Gas Defense is entrusted to the police. Industries, the railroad, and postal services are required to establish their special defensive organization. Cooperation between these agencies is compulsory.

Each community and organization is required to set aside the funds necessary for the effective func-

tioning of its own defensive system. This is an innovation. France provides the funds by public appropriation, while Poland relies mainly upon voluntary contributions through the A.A. and Gas Defense League.

The German plan places great emphasis upon the proper instruction and enlightenment of the "passive" portion of its population. The actual work in this important phase of preparedness is entrusted to the German A.A. Defense League and its affiliates. The press, radio broadcasting system, movies, schools and colleges are required to lend full assistance in this respect. Members of the active element, who, in case of war, may suffer injuries, are to be placed upon an equal footing with other war casualties.

The police is to organize in every community a council of technical advisors to consist of a representative each of the municipal board, industries, railways, postal service, ambulance service, Red Cross and similar organizations, the fire department, the National Labor Defense, schools, associations, the press, and selected technical experts. An Executive Board of five members and ten committees serves to promote the effective functioning of this otherwise unwieldy council. The mission of the council is to provide for public order, first aid, promotion of self-help, decentralization of protective installations, organization of a fire-fighting unit for each house, establishment of bomb and gas proof shelters, and sanitation. All services are required to be rendered without compensation.

The *Pesti Naplo*, prominent daily of Budapest, Hungary, in its May 4 issue, publishes a London news dispatch quoting Thomas Reid, Canadian M.P., who in a dramatic speech before the House of Commons at Ottawa declared that the British Columbia coast is overrun by Japanese spies disguised as seamen and fishermen. Japanese naval officers in disguise accept any employment on fishing craft in order to familiarize themselves with the coastal waters and bays of western Canada, which according to Mr. Reid might serve as bases of operations for an expeditionary force.

**GREAT BRITAIN**—*The Army, Navy and Air Force Gazette*—March 9, 1933.

"Bessarabia," by C. F. A. Maitland-Macgill-Crichton.

Bessarabia is the territory between the Rivers Pruth and Dniester and the Black Sea. Transferred to Russia by Turkey in 1812, it continued a Russian province until 1917, when it passed under Roumanian domination. Soviet Russia never recognized this change and her maps still show the province within the boundaries of U. S. S. R. Although the soviet authorities have declared that they would not go to war over the lost province, the Soviet press constantly refers to it as the "Alsace on the Dniester." The question induced Roumania to seek an alliance with Poland since her other allies, Yugoslavia and Czechoslovakia declared their unwillingness to defend Roumanian frontiers against Russia. In the author's opinion, the treaty which transferred Bessarabia to Roumania is without legal effect, partly because one of the signatories failed to ratify it but mainly because Russia was not a party to it,

and she has consistently protested against Roumanian action. The Roumanian case is based on historical grounds, claiming that Bessarabia had been part of Roumania from time immemorial until forcibly severed in 1812. Russia counters that claims based on a situation prior to 1812 are impossible since at that time Roumania did not even exist. There were only two Turkish provinces, Moldavia and Wallachia, without any trace of Roumanian national sentiment. Russia lost a part of the province as a result of the Crimean War. It passed to Roumania in 1859, but was recovered by Russia in 1878. As a compensation Roumania then acquired the Dobroudja.

The Bolsheviks likewise challenge the means whereby the present situation was created and charge the Roumanians with bad faith. They set forth that the so-called "National Council" which voted the transfer of allegiance, was not truly representative of the people, and they insist upon a plebiscite to determine the wishes of the Bessarabians. The author points out that the moral value of the Russian case lies in the fact that the Russians are not claiming for themselves any more right than Roumania to dispose of Bessarabia.

—*Journal of the Royal United Service Institution*—May, 1933 "The International Situation—The European Crisis," by Major E. W. Polson-Newman, R.A. F.R.G.S.

The author summarizes the chief causes of the European crisis as follows:

1. The general collapse of international confidence together with the political tension caused by the situation in the Polish Corridor, Central Europe, and the Adriatic.

2. The unsettled state of affairs in Germany as a result of Hitler's accession to power. Its disturbing effect upon Germany's neighbors. It increased the tension in the Corridor.

3. The bad moral effect of the economic depression.

4. The threatened failure of the disarmament conference arising out of the fact that the *status quo* is rapidly dividing Europe into two hostile camps, each desiring adequate armaments either for aggressive or defensive purposes, and the consequent tendency of delegations to see what they can get or keep rather than what they can do without or give up.

The author writes that the combined efforts of these causes produced the disarmament deadlock, which is in reality the pivot on which the whole situation has turned. He points out that all efforts to bring about disarmament without removing the potential causes of war is "putting the cart before the horse." It springs from the delusion that cooperation is compatible with the *status quo* of Versailles, St. Germain and Trianon. The author believes that the most important result of the MacDonald-Mussolini collaboration has been the realization that treaty revision must in principle precede disarmament. Treaty revision, he states, is the only open door to peace, and that without revision, war will sooner or later be inevitable.

Great Britain and Italy, on the whole, seem to agree on most points. The attitude of France is, however, more complex as she must take into consideration the

attitude of her allies, Poland and the Little Entente. M. Titulesco, spokesman of the Little Entente, and other champions of the *status quo*, the author writes, have been resorting to every conceivable argument to convince the French that treaty revision can only lead to war. That, of course, compels France to pursue a cautious course to avoid ultimate isolation in the face of a re-armed Germany.

The author regards the situation in Central Europe and the Adriatic as the most important factors in the present crisis, but he sees in the Polish-German problem the most immediate danger. With feeling running very high in Danzig, the Corridor, and in Upper Silesia, a mere incident might easily entail serious complications. Danzig is a stronghold of German nationalism. The extensive privileges enjoyed by the Poles in the Free City have been a continual source of political irritation. A grave situation may quickly arise. In Silesia the bad feeling arises chiefly out of the Corridor question but is intensified by the personal inconvenience of individuals. It is another area where the Polish-German question may easily come to a head.

—*The Journal of the United Service Institution of India*—October, 1932.

"The Cut in Pay," editorial.

This editorial is quoted practically in its entirety because of its timely interest to officers of the military and naval services of the United States.

"In his pay bill for the month of November, 1931, very often in the employ of the Government of India found himself confronted for the first time by that unwelcome item 'Deduction on account of temporary ten per cent cut in pay.' He was told that the Government of India finances was such that this sacrifice was demanded of him as much by patriotism as by necessity, and he accepted it on those grounds, comforting himself with the assurance that it was temporary. He has now had ten months' experience of this reduction in his income, and he would be more than human if, as the year draws to its close, he were not wondering whether these reasons of patriotism and necessity still hold, or whether the time is approaching when it might wisely and safely be demonstrated that the cut was indeed temporary.

"The truth is that the officer, especially the junior married one, whether civil or military, has found the effects of the cut much more serious than was anticipated. A good deal of nonsense has been talked, usually by those whose experience is limited, about the high standard of living amongst European officials in India, but no one who had any first-hand knowledge of conditions in the ordinary station believed that the average married couple wasted much of their substance in their living. Nevertheless, when the cut fell upon them, the official and his wife started off optimistically enough to reduce 'their standard of living.' It was then that they discovered there really was not very much that they could reduce. They could not move into a smaller house—there were no smaller houses and the hotels of India are as expensive as they are bad. Servants were already reduced to the minimum

unavoidable. . . . Something could be saved . . . by giving up the occasional dinner party to their friends, by passing a fraction of their cut to their servants . . . . But the sum total of their efforts—and they did make real, honest efforts—was grievously small; few of the larger items of the family budget could be seriously touched. Rent, servants' wages, regimental subscriptions, income tax, family pension funds, clothing, stores bills, education and insurances, all were as before; any slight reduction in one was counterbalanced by increases in others. Indeed with increased customs duties and higher income tax, the cut was in practice found to be fifteen per cent rather than ten.

"After doing their best to reduce expenses to the utmost practical limit . . . it is safe to say that there are no junior, and few even comparatively senior Government officers, with families and without private means, who do not find it desperately difficult to provide for their children's education. Either the children are at home—and there has been too cut in school fees—or they are still in this country and, if they are to have any hope of future schooling, money must be found for their educational insurance. The amount that could be spared for such educational and for life insurance was calculated before pay was cut, but the same premiums must still be paid from the reduced pay. This has been one of the main factors of upsetting the family budget, and it is not often realized in how many cases the insurance policy has had to be pawned to cover either an overdraft at the bank or its own premium. On the surface things may not seem so very changed—less entertaining, families that stay longer in the plains, a greater keenness to get any job with a little extra pay; beyond this all is much as it was. But underneath is a growing anxiety as to what will happen if the overdrafts go on increasing, month after month, year after year. *The cut may be temporary, but if it continues much longer, its effects will be permanent.* For most married British officers of every Service in India the alternatives are a gradually increasing indebtedness with all that this entails in anxiety, ill-health, discontent and loss of efficiency, or a restoration of the cut in some form.

"It is not only because of the increasingly serious position of the individual officer, but because of its adverse effects on the contentment and efficiency of the Services as a whole that every possible avenue of alternative economy should be explored in order that the cut may be restored. Above all things it is essential that, before legislation to prolong the cut another year is brought forward, it should be conclusively shown that its retention is necessary for the financial stability of India. Compared with a year ago the financial position of India has vastly improved. Civil disobedience with all its cost in disturbance and delay in collecting revenue is practically dead; agricultural prospects are on the whole good; drastic economies made in expenditure should produce a balanced budget. Unless there is some unexpected deterioration in the restoration of the cut ought not unholy to strain India's resources in 1933.



## Organization Activities



Brigadier General E. J. Stackpole, Jr.

### 52nd Cavalry Brigade

Harrisburg, Pa.

#### THE MILITARY RECORD

**OF BRIGADIER GENERAL EDWARD J. STACKPOLE, Jr.**  
**STARTED** military career by attending Plattsburg Camps in 1915 and 1916. Took examination for and received commission of Second Lieutenant of Infantry, December, 1916. Ordered to active duty in the first Officers Training Camp, Madison Barracks, New York, on the declaration of war with Germany.

Promoted to Captain of Infantry, ORC, August, 1917, and assigned to Camp Dix, New Jersey. Transferred the same month to the 28th Division, Camp Hancock, Augusta, Georgia.

Functioned as Division Bayonet Instructor for the 28th Division until May, 1918, when the Division sailed for France. At this time was assigned to command Company "M," 110th Infantry. Commanded this Company overseas until sent to hospital, September 5, 1918.

Wounded in action: August 1, 1918, airplane bomb; August 25, 1918, hand grenade; September 5, 1918, machine gun bullets in both legs.

Awarded Distinguished Service Cross and Purple Heart.

In hospitals France and United States, September 1918 until January, 1921.

When the 28th Division was reorganized was appointed Colonel and placed in command of the 8th Infantry, Pennsylvania National Guard, which Regiment was converted into the 104th Cavalry in 1921. Continued in command of the Regiment until promoted to Brigadier General in May, 1933, to command 52d Cavalry Brigade, vice Brigadier General E. C. Shannon, who was promoted to command the 28th Division.

Graduate of Cavalry School, advanced N.G. & R.O. class 1928.

President, National Guard Association of Pennsylvania, 1929-1931.

Member of the Executive Council, U. S. Cavalry Association, 1932 and 1933.

### 6th Cavalry

Fort Oglethorpe, Georgia

**THE** regiment left the latter part of March for a hike to Fort Benning, Georgia, to participate in the corps area maneuvers but after two nights of from the post the regiment was ordered back to Fort Oglethorpe to take part in the Civilian Conservation Corps work.

The regiment has been very busy with the receipt and conditioning of 5,600 C. C. C. selectees since the first part of May. Colonel Gordon Johnston, commanding the 6th Cavalry, is in command of District C of the Fourth Corps Area, which consists of 42 companies located in 40 forestry work camps, two of the camps being double ones. The regiment has about 75 non-commissioned officers and 25 privates as the Regular Army cadre present with the companies in the field, while most of the officers on duty with the troops of the regiment have been sent out in charge of companies.

The following officers have joined the regiment within the last few months: Major Frederic W. Boye, Captain Charles F. Houghton, 1st Lt. H. Jordan Thies and 1st Lt. Harry W. Johnson.

Captain Harry Knight is under orders to attend a course of instruction at the Cavalry School during the coming school year.

### 103d Cavalry

Philadelphia, Pennsylvania

**THE** First Squadron, 103rd Cavalry, Pennsylvania National Guard, under the command of Major Edward Hoopes was reviewed on Friday evening, June

## Organization Activities

63

30, 1933 by Lieut. Colonel John W. Converse prior to holding its first annual horse show at the armory in West Philadelphia.

Five events were judged by Colonel Converse and Colonel R. D. Newman, Cavalry, Senior instructor, 32nd Cavalry Brigade, for the State of Pennsylvania. The Squadron Stable Sergeants, Eugene A. Fischer, Troop A., Milton McHenry, Troop B., and Gilbert W. Jenkins, Troop C. were in complete charge of the show.

The entrants, limited to non-commissioned officers and troopers, were given no choice of horses. Each troop drew its mounts by lot, and the contestants did the best they could with whatever animals they had assigned. Ribbon awards were based on horsemanship and performance rather than on the conformation of the mount. Individuals were permitted to enter only one class.

Terminating the events was a novelty class which called for ability at polo, good form with the saber, marksmanship with the pistol, and jumping.

Music was furnished by the Henry H. Huston 2nd Post, American Legion, Drum and Bugle Corps.

The summary of events shows that A Troop secured the greatest number of places:

Class I—N. C. O.'s, jumping, twice around four 5 ft. 6 in. jumps. Performance 25%, Horsemanship 15%—Won by Sergeant Edward P. O'Tone, Troop A.—Second Corp. Robert N. Sangro, Troop B. Third Corp. Samuel J. Miller, Troop C.

Class II—Troopers, full pack field equipment, walk, trot, and gallop, stand, mount and dismount. Equipment 50%, manners and way of going 25%, appearance of Trooper 25%—Won by Corp. William A. Taylor, Troop C. Second Pvt. William O. Patchen, Troop A. Third Pvt. 1st. Lewis J. Nicolucci, Troop C.

Class III—Troopers, bareback jumping, twice around four 3 ft. jumps. Performance 50%, horsemanship 50%. Won by Pvt. 1st. Lawrence K. Maisel, Troop B. second Pvt. 1st Cl. Veal L. Ball, Troop C. Third Pvt. L. Elsworth, Troop A.

Class IV—Open, horsemanship, walk, trot, gallop, back, turn on forehand, pass to right and left, stand quietly at mount and dismount, performance 75%, appearance of horse and rider 25%—Won by Sergeant Thomas J. Culbertson, Troop A. second Pvt. 1st John J. McKernan, Troop C. third Sergeant Robert E. O'Brien, Troop A.

Class V—Novelty—Won by Corp. George S. Ruffee, Troop A. second Pvt. Paul Hoffmann, Troop C. Third Corp. James B. Jenks.

### 305th Cavalry

Philadelphia, Pennsylvania

**AFTER** the receipt of the new summer training schedule which allowed only two field officers of the Regiment to take active duty training, the inactive training schedule was suspended. Officers of the Regiment were keenly disappointed when it was learned there was to be no camp this summer. It is felt, however, that all profited by the intensive training embodied in our inactive training schedule.

On Friday, June 16th, in a well planned dinner party, our Chief of Staff, Colonel George T. Bowman, was presented with a farewell gift in honor of his retirement from active service with the Regular Army.

Since the last issue of the JOURNAL we have had two promotions in the Regiment:

To Captain, Cavalry Reserve:

1st Lt. Frederick Streicher

1st Lt. Horace A. Franklin

### 306th Cavalry

Baltimore, Maryland

**MAJOR** E. W. TAULBEE, Cavalry, the Unit Instructor, was ordered recently to duty with the Civilian Conservation Corps. Colonel Harry N. Cootes, Cavalry, the newly detailed Liaison Officer at Third Corps Area Headquarters, is Acting Unit Instructor of the 306th, during the absence of Major Taulbee.

The past year's work of the officers of the 306th Cavalry has been characterized by a high degree of service. From the Colonel of the Regiment down to the Lieutenants a marked degree of interest has been manifested.

Group schools, pistol marksmanship, and equitation classes have been well attended and much improvement has been noted in all phases of work.

The coming year, despite the cuts in active duty, promises to be a very successful one. The officers of this regiment exhibit splendid morale and esprit and are determined to "carry on" despite the temporary setback in active duty training due to lack of Congressional appropriations.

### Second Squadron and Machine Gun Troop, 306th Cavalry

Washington, D. C.

**THE** Squadron finished an unusually successful year of instruction at conference schools and equitation classes, on June 30, 1933.

A most gratifying attendance was present at the 62nd Cavalry Division's farewell party to our esteemed retiring Chief of Staff, Colonel George T. Bowman, Cavalry, held at the Mayflower Hotel, Washington, D. C., on Saturday night, June 10, 1933.

### 307th Cavalry

Richmond, Virginia

**THE** Extension School year just completed has been very successful in respect to the number enrolled and subcourses completed.

Lieutenant Colonel F. K. Chapin, Major Harold H. Jacobs, and Lieutenants Cecil Hope Miles and Sam H. Franklin, Jr., attended the dinner dance at the Mayflower, Washington, D. C., in compliment to Colonel and Mrs. George T. Bowman.

Lieutenant Colonel William Henry Clifford, the Regimental Commander, has been ordered to active duty at Fort Myer, Va., during the period August 13 to 26, 1933.

Lieutenants Leonard T. Preston and Robert G. Southall, II, have received their Certificates of Capacity for promotion to 1st Lieutenant.

Lieutenants George Cole Scott, Jr., and George Washington Day have taken the practical test required for a Certificate of Capacity for promotion and Captain Edward C. Harrison, Jr., and Lieutenant James Gifford Earnest, Jr., have applied for the practical test.

2nd Lieut. Richard F. Beirne, Jr., Cav.-Res., received his appointment on June 9, 1933.

Lieutenants Walter Gray Robertson, Woods Garth Talman, William Temple Talman (brothers), and Thomas Tunstall Adams have recently joined the regiment.

The following Second Lieutenants, recent graduates from the Virginia Military Institute, have been assigned to the Regiment:

Lieutenants John H. Carrico, Samuel G. Crews, Jack L. Epps, Jr., William H. Face, Jr., Winfred S. Hayman, Landon Hilliard, Jr., Ernest C. Hudgins, Jr., Fowler P. Johnson, William P. Jones, Jr., Marsden C. Jordan, George M. King, Jr., Russel A. McCoy, Jr., Lawrence C. Page, Jr., Charles A. Payne, Jr., William H. Pettigrew, Carl A. Steidtmann, Ashby B. Taylor, Jr., William F. Tompkins, Jack T. Walker, Ashby S. Wilson, and Percival C. Wooters.

2nd Lieutenant Joseph E. Dillon, 3211 Omohundro St., Norfolk, Va., a graduate of the Agricultural and Mechanical College of Texas, College Station, Texas, has also been assigned to this regiment.

### Third Squadron and Machine Gun Troop, 307th Cavalry

Norfolk, Virginia

COLONEL GEORGE T. BOWMAN, Cavalry, Chief of Staff of the 62nd Cavalry Division inspected the activities of the Squadron on May 23. This will be the last inspection by Colonel Bowman, as he retires on June 30, 1933. He has always been helpful and understanding and has been a true guide, counselor and friend, and all members of the squadron sincerely regret to see him retire.

The following named Reserve Officers were assigned to the 307th Cavalry by Special Orders No. 10, Hq. 62nd Cavalry Division, 1933, and it is expected that they will be assigned to the Squadron, as they all reside in the vicinity of Norfolk:

2nd Lieut. Joseph E. Dillon, Cav.-Res.

2nd Lieut. William H. Face, Cav.-Res.

2nd Lieut. Winfred S. Hayman, Cav.-Res.

2nd Lieut. Landon Hilliard, Jr., Cav.-Res.

2nd Lieut. Marsden C. Jordan, Cav.-Res.

2nd Lieut. Russell A. McCoy, Jr., Cav.-Res.

2nd Lieut. Lawrence C. Page, Jr., Cav.-Res.

2nd Lieut. Ashby B. Taylor, Jr., Cav.-Res.

The above officers are all 1933 graduates of Virginia Military Institute with the exception of Lieut. Dillon, who is a 1933 graduate of Agricultural and Mechanical

College of Texas. These young officers will be a decided addition to the Squadron.

### 308th Cavalry

Pittsburgh, Pennsylvania

THE 308th Cavalry Field at Aspinwall, Pa., is undergoing a complete change. A new stable under construction, the polo field is in daily use, and plans include a complete renovation of the Club house.

The appearance of the whole property will be greatly improved.

After weeks of uncertainty as to whether there would be a camp this summer, orders are out for eighteen 308th Cavalry officers to proceed to Fort Myer, Va. to conduct C.M.T.C. training.

The promotion of Captain George W. Connor to the grade of Major has recently been announced. The Regiment congratulates Major Connor.

Recent assignments to the 308th Cavalry include: Capt. Robert C. Wallace and, 1st Lt. Paul G. Dingley, both living in New Castle, Pa.

2nd Lt. William C. Hood, Jr., living in Uniontown, Pa., and,

2nd Lts. William C. Calhoun, James J. Heffner, and C. Victor VerMilyea, all graduates of the Virginia Military Institute.

The inactive duty training season which has just closed has been a pleasant and instructive one, and all feel that under plans which have been worked out by our Regimental S-3, Capt. Harry B. Peebles, the coming year should be more so.

### 862nd Field Artillery (Horse)

Baltimore, Maryland

THE number of officers of the Regiment designated for duty with the C.M.T.C. at Fort Hoyle, Maryland, has been reduced from 27 to 10. The ten selected for this important service have been, under the direction of the Regimental Commander, Lieutenant Colonel Roger S. B. Hartz, busy preparing themselves for it. Those selected are:

Lieut. Col. Roger S. B. Hartz.

Major Frank Gosnell.

Capt. Harry S. Middendorf.

Capt. Jack V. Thomas.

1st Lieut. Harold W. Morford.

1st Lieut. Marion J. Woodford.

2nd Lieut. Levin G. Shreve.

2nd Lieut. Allen A. Davis.

2nd Lieut. Daniel G. McIntosh, III.

2nd Lieut. Thomas G. Young, Jr.

The conferences, riding classes, and pistol firing have been discontinued for the summer. The officers of the Regiment sincerely regret, as do all members of the Division, the retirement of the Chief of Staff, Colonel George T. Bowman, Cavalry. They are keenly appreciative of the untiring efforts of Colonel Bowman to promote the interests and efficiency of the Regiment and of its individual members. He has been not only a chief but also a disinterested friend.

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Teaching Young Cavalry Officers to Appreciate the Cross-Country Ability of their Horses (Where their Officers Can Lead, the Men Will Follow).

## Mechanized Forces

By Major George S. Patton, Jr., 3rd Cavalry\*

A Lecture Given to the Regular Officers at Fort Myer, Va., in January; at Fort Humphreys in March and to Reserve Officers at Fort Myer in August, 1933

**M**ANY soldiers are led to faulty ideas of war by knowing too much about too little.

A picture without a background is both uninteresting and misleading. Hence, in order to paint you an intelligent picture of Mechanization as it exists today we must provide an historical background. The appearance of armored fighting vehicles in the World War was a striking reaffirmation of the old adage: "There is nothing new under the sun." After the failure of the German attacks of August and September, 1914, first political and then tactical considerations arose, which made the resumption of a successful offensive well nigh impossible. Neither valor nor ballistics could overcome for long the heightened power of resistance inherent in automatic weapons, barbed wire and trenches. Now this ascendancy of the defense over the offense was not new; all through history victory has oscillated between the spear and the shield, the wall and the charge, tactics and technique.

Because of their truly startling parallelism let us investigate two sets of cases. In 1096 B. C., nine years of Hellenic valor had failed to breach the Trojan walls. Then came the Wooden Horse, which by carrying men unscathed within that impregnable circle destroyed in a night Priam's mighty fort. Again in 312 B. C. the walls and ditches of Tyre withstood for a year the furious assaults of the best troops of the day only to fall in their turn before the moving towers of Alexander.

Now let us turn to 1914-16 A. D. Here we find that the inverted wall (the trench) and the inverted ditch (barbed wire) had again rendered assaults abortive until in their turn they succumbed to the modern version of the wooden horse and the moving tower, which during the winter of 1915-16 had been simultaneously reevolved by England and France. The striking circumstance that, thousands of years later, necessity had again begat of invention identical solutions for identical problems is truly arresting.

The French, following the lead of Ulysses, thought of their *chars d'assaut* as armored carriers destined to transport groups of infantry, unscathed, across No Man's Land, through the wire and over the trenches and then disgorge them in the enemy's rear. The British, on the other hand, followed the Macedonian idea and constructed not carriers but mechanical fighters whose duty it was to shoot down resistance, smash wire and bridge trenches so as to render the infantry assault less impossible.

Unfortunately for the French plan, that mutual esteem and confidence usually existing between allies prevented either nation from informing the other of its invention so that, when the French had some hundreds of machines almost ready for a surprise attack,

the British spilled the beans by jumping off on the Somme on September 15, 1916, with a handful of tanks. Since surprise, on which the French had counted for success, was then impossible, they had to revamp their carriers into improvised fighters. The results of this change were the ponderous St. Chammonds and feeble Schneiders in which many valiant Frenchmen were roasted and from which few Germans were killed.

The British idea having triumphed, the Allies and later the Germans made more and more tanks but, due to the lag phase of about a year which always intervened between design and production, the tanks were always just inadequate to the complete accomplishment of their tasks. The Mark VIII or, as we call it, the Liberty was the crowning glory of this lag business, in that, while much money and effort were expended on it for the specific purpose of forcing the Hindenburg Line, the war was over some months before the first tank appeared. It is pertinent to remark that for the future a similar fate probably awaits machines.

As the war progressed a doctrine for the use of tanks was evolved which was officially stated as follows: "Tanks are an auxiliary arm whose mission it is to facilitate the advance of the assault infantry. To do this they must so act as to bridge the gap between the lifting of the barrage and the arrival of the bayonet." Towards the very close of the war a corollary was added to the effect that, since machine guns were the enemy to tactical maneuver and tanks were the enemy to the machine gun, tanks had the added function of restoring maneuver to tactics. Within its limits the tank achieved the results above set down.

After the Armistice the natural antipathy aroused in the public mind by the appalling losses of a war of attrition, coupled with the belief that their reduced and dwindling man power and horse power would prove inadequate to another such struggle, caused the British to expand the idea of mechanization to the field of strategy, in the hope that by its use they could restore movement and so pave the way for shorter and more decisive wars. While other nations have failed to visualize identical means they are all more or less alive to the necessity of devising some form of warfare which will prevent stabilization. For example, we find General von Seeckt writing: "When recourse must be had

\*D. S. C. Citation. "Colonel, Tank Corps. For extraordinary heroism in action near Cheppy, France, September 26, 1918. He displayed conspicuous courage, coolness, energy, and intelligence in directing the advance of his brigade down the valley of the Aire. Later, he rallied a force of disorganized infantry and led it forward behind the tanks under heavy machine gun and artillery fire until he was wounded. Unable to advance farther, he continued to direct the operations of his unit until all arrangements for turning over the command were completed."



to arms, is it necessary that whole peoples hurl themselves at each other's throats? Can masses be handled with decisive strategy? Will not future wars of masses again end in stalemate?" "Perhaps the principle of the *levée en masse* is out of date? It becomes immobile; cannot maneuver. Therefore it cannot conquer; it can only stifle." Elsewhere he says: "The *levée en masse* failed to annihilate decisively the enemy on the battlefield. It degenerated into the attrition of trench warfare. Germany was beaten down, not conquered. The results of the war were not proportionate to the sacrifices."

Writing in 1930 General Debeney says: "Germany has in effect 250,000 regulars of long service. We are prone to believe that this is the best modern form." As a reason for this statement he says that small armies of regulars are always ready for war and can maneuver fast.

With the possible exception of England most of the thought expended on solving the problem of avoiding stabilization has been concentrated on a solution for the situation as it exists in western Europe. No notice has been taken of the fact that in practically every other possible theater of war physical conditions exist which of themselves preclude stabilization. For example, in Western Europe there is one mile of improved hard surfaced road for every six-tenths of a square mile of country. In the Northeastern United States, the next best roaded area, there is one mile of improved road for every one and eight-tenths square miles—only one-third as good. For the United States as a whole, the ratio is one to four and a half. In Mexico we find one to five hundred and thirty; in China one to one hundred and twenty-three.

Now we know that in order to maintain the man density necessary to stabilization, even on the relatively short battle front of Western Europe, we used the roads to their maximum capacity. Without pressing the discussion further it is therefore evident that, in bigger theaters of war with poorer road nets, the masses necessary for the holding of continuous lines cannot be supplied and hence cannot be used. Where continuous lines are not occupied, flanks reappear and bring with them their natural corollary, maneuver. In spite of this fact the want of perspective I have alluded to still induces most of us to visualize future battles as simple repetitions of the butting matches of the World War, while soldiers who talk of forces smaller than groups of armies are considered pikers. However, within the last few years certain signs have appeared which indicate that the tide has turned and that some thought will henceforth be given to fighting wars of maneuver. Let me explain my personal views as to the way mechanized forces will be employed in such wars. We will start with an approved W. D. Definition. "A Mechanized Force is one which is not only transported in motor vehicles, but also fights from some or all of them, the vehicles themselves having armament and protective armor." Further, the War Department has decided that the allotment of fighting vehicles to arms shall be along functional lines. That is, vehicles appropriate to the traditional tactics of

cavalry shall pertain to the cavalry, those appropriate to the traditional functions of the infantry to the infantry, and so on.

Due to the fact that we entered the World War in the middle, we had no experience of those secondary but none the less vital operations incident to the opening phases of all wars and to the entire duration of those waged on the maneuver basis. Since cavalry is the arm chiefly used in these so-called minor operations, I shall begin by discussing it and shall point out my conception of how mechanized and horse cavalry will function in such operations.

The chief advantages of Mechanized units are:

1. They possess, under many conditions of terrain and weather, a wider range of strategic and tactical speeds than do any other ground troops.
2. They possess, again under suitable conditions, more rapid tactical mobility than do any other ground troops.
3. Their armor gives them such immunity to many present types of small-arms fire that they can develop a maximum of tactical effect in a minimum of time. Their principal disadvantages are:
  1. Being blind, deaf, and having no sensory nerves nor instinct of self-preservation, they are very fatiguing to operate.
  2. At night, in the presence of the enemy, they are practically incapable of independent movement.
  3. They are extremely sensitive to ground and weather conditions.
  4. They are no longer a novelty.
  5. The increased use of large caliber anti-tank machine guns and the reported invention of a 5,000 foot second .30 caliber bullet will increase machine casualties.

Remembering these things let us see how we may employ machines in minor operations. Heretofore such tasks as reconnaissance, counterreconnaissance, the seizure of critical points, delaying actions, flanking operations, and the combats incident to the same have devolved on the cavalry and the air corps.

For the purpose of strategic reconnaissance the armored car occupies a position intermediate between the airplane and a horse patrol. When terrain and weather permit, armored cars can go far and fast; they can secure both positive and negative information and obtain identifications. Their radio equipment should permit them to make prompt reports. On the other hand their inabilities at night limit their employment.

Armored cars can locate the critical points on the contour of the enemy advance when such points occur on the roads but they cannot trace the curve between the highways nor can they maintain continuous observation. Hence, when the enemy is distant their observations are adequate; as he draws nearer and more minute information is important, they need help.

As the opposing forces approach each other, both sides will attempt to veil their movements by the use of counterreconnaissance. It will then be necessary to fight for information. In 1914 the British state that all the information they got had to be fought for.

Where the resistance encountered is of a minor nature, armored cars can brush it aside. Where it is more serious or where the country is wooded, full of tall crops, or mountainous, the cars lack the necessary combat power and must be helped. The form in which this assistance should be supplied depends on the distance to the front at which the contacts occur. If close in, horse cavalry is best; if farther out, light tanks or, as they are called in the cavalry, combat cars, will be needed. Moving on roads already patrolled by the armored cars, the tanks can go faster than horses and for a longer time. When they arrive they have sufficient cross-country power to make limited turning movements and so compel the enemy to either pull out or show his strength.

For distant reconnaissance against a determined enemy and for pursuits, still another type of mechanized unit is necessary.

Any stream large enough to be shown on a one-inch map is an obstacle to machines; if it is defended it is a serious obstacle. Many motor maniacs do not admit this, but talk largely of using their speed to go around. When, however, we consider the difficulty of getting orders to mechanized units, the time necessary to determine on, and then reconnoiter, new routes and the delays incident to enemy actions, it is certain that mechanized units must often choose between forcing a passage or abandoning a mission.

To force a passage a bridge head must be established; to do this we must have footmen and in considerable numbers. If these men are transported in trucks much time is lost in detrucking on the road, often at the limit of artillery range, and then deploying into approach formation and walking to the firing line while carrying their accompanying weapons. For a force which must depend for success on celerity such a procedure is too slow. To be available in time, these foot fighters or portée troops must be conveyed in light unarmored track-laying vehicles which can move across country when that country is covered by the armored cars and tanks. Moving fanwise, these carriers deploy under cover close to the scene of action, and their crews (less the driver) have only a short walk into combat.

Before leaving the question of mechanical reconnaissance, it is useful to point out that in horse cavalry we have at all times the three types of units so far described. Patrols equal armored cars, mounted reserves equal tanks and dismounted troopers equal foot fighters. As ever, there is nothing new. Only the speed ranges and the universality of employment differ somewhat. Next, it is interesting to recall that in war the maps are of small scale, signs missing or in a foreign language and the people often hostile and always dumb. Try driving at forty miles an hour in a strange country without signs and see where you get. Finally, let me remind you that since for the immediate future, at least, the major parts of all armies will be muscle-propelled, information of conditions miles in advance will often be stale before those needing it arrive.

A British writer states that, had mechanized forces

existed in Palestine and Mesopotamia in 1917-18, the greatest distance to the front at which they could have been usefully employed would have been 150 miles. Beyond that range the number of supply trains doubles, and intermediate camps must be established.

For counterreconnaissance, armored cars are adequate on the roads by daylight. Off the roads, or anywhere at night, neither they nor tanks are useful. Without lights they are stationary; with lights they can be avoided. A fair sort of screen could be made by establishing a line of standing patrols from men in the *portée* echelon. However, better results will come from using horse cavalry for counterreconnaissance and backing it up with the mechanized forces as a fast reserve to move rapidly to any point where a penetration threatens. You will please notice that, since the horse cavalry covers the front, the mechanized force is immune from the need of reconnoitering for itself, so can go fast. Where columns of machines must move without previous reconnaissance, their rate is very slow as they can be so easily ambushed.

All operations incident to the seizure of critical points, delays, flanking operations, and pursuits demand for their successful accomplishment rapid reconnaissance, fast marching, short violent attacks, and the holding of delaying positions. A command consisting of armored cars, tanks and foot fighters carried in track-laying vehicles possesses all the elements save one necessary to the accomplishment of the above tasks, either alone or in conjunction with horse cavalry. The missing element is, of course, supporting artillery.

On the offensive a mechanized force such as just described would work in general as follows: cover its defensive flank with armored car patrols, dismount some of its *portée* elements supported by the attached artillery to execute the holding attack, send the rest of the *portée* elements and all the tanks by road preceded by the armored cars as advance guard to some place from which this maneuvering force can launch an attack against the enemy's flank or rear. When the attack starts, the armored cars, relieved of advance guard duty, assume the role of flank patrols. Here we have the tanks as the charging element, the *portée* troops as the dismounted cavalry, and the armored cars as patrols.

On the defensive, the foot fighters, deployed at very wide intervals, hold the line; great extension is permissible as the carriers are deployed behind the line like lead horses and no ployment is necessary in withdrawing, as is the case where infantry have to converge on trucks. The artillery supports the line. The armored cars cover the flanks, and the tanks act as a mounted reserve.

Thus far I have confined my remarks chiefly to machines acting alone, as this is the most novel and least well understood problem now confronting us. It is my opinion, however, that such operations will be the exception rather than the rule and that in general mechanized and horse cavalry will operate together. When the two types are combined we have nothing complicated to distract us, since both possess identical tactical and strategic characteristics, the relative ad-

vantage shifting from one to the other according to the nature of the terrain in which the actions occur.

Very often it will be necessary to form composite commands in which combat cars and carrier units operate directly with horse cavalry. Think, for example, of the possibilities of a combat car charge instantly exploited by horsemen. Or of a pivot of maneuver formed by *portée* troops, while the combat cars and horsemen move out rapidly to clinch the victory by a flank attack.

For night marches,—and there will be many of them in the next war,—machines must *always* be preceded by horsemen or else become the victims of ambush.

Coming now to major operations and still remembering the functional distinction of which I have spoken, we find that machines used in major operations act as infantry and belong to it. In offensive battle it is my opinion that tanks should be held as an offensive reserve for the delivery of the main blow. The timely employment of a reserve composed of footmen in a force the size of a division is most difficult due to the lag which exists between the moment when the situation indicates its use and time it gets into action. In the corps the conditions are even worse.

Geographically, the area occupied by a tank unit is much smaller than that occupied by an equivalent force of infantry. Hence the tanks are easier to hide and can come closer to the front.

Tanks move at least four times as fast as infantry.

Tanks develop the full power of their blow at once. Infantry must build up its attack.

When tanks are used in this way their assault must be prepared by the greatest possible artillery concentration. If an air attack using bombs and smoke can just precede the tanks, so much the better. Tanks need all the help they can get. Anti-tank weapons are improving daily, and the novelty which saved us in France no longer exists.

On the defensive, infantry tanks and cavalry mechanized forces will be used for offensive returns against enemy enveloping movements or for direct counterattacks against penetrations.

The *portée* units of mechanized cavalry will also be very useful in filling temporary gaps in a line of battle, though horse cavalry is generally more suitable, since it is even less a slave to roads.

Possibly some of you may have noticed that so far I have not dealt with the famous American pastime of raids. A moment's reflection should convince any one that the advent of the radio and the airplane have made this always dubious operation still less promising. Secrecy, night marches, the ability to live off the country, avoid roads, and swim rivers, are more important than ever. Mechanized forces have none of these qualities. The operations of large independent mechanized forces much heralded abroad are nothing but big raids and are discarded for the same reason.

Next it is pertinent to consider the question of where the machines we talk about are coming from. At the moment the United States possesses some old Renault tanks and some Mark VIII. While neither make has any of the characteristics of a modern fight-

ing machine, as *hoped for*, except armor plate, they will be used in an emergency—at least they will draw fire.

Of the few machines built since the World War only about one-half have armor plate. The procurement of such plate is most difficult, and this fact will materially limit the speed of hasty rearmament.

Certain writers have said that just as the Mongols conquered by exploiting their resources in horse- and horsemanship, so should modern industrial nations conquer by exploiting their supremacy in the automotive world. The comparison is not exact. The Mongol used in unaltered form his normal means of transportation and food—the horse. Had some abstruse military reason made it necessary for him to fight only on "Gray Mares with one China eye," his style would have been cramped, his numbers reduced and his replacement problems augmented. Armored fighting vehicles are Gray Mares. They are special, costly machines with no commercial use. Hardly a part of them is standard. Also, they become obsolescent before they are finished. For this reason no nation will ever start a war with many machines. Those that exist will be expended rather rapidly. Suppose we put the date of their final extinction at three months. Those who know state that a period of from twelve to fifteen months will elapse before replacement machines laid down at the beginning of the war will become available. This means that, for a period of from nine months to a year, mechanized forces will cease to exist except for some extemporized armored cars on commercial chassis. Yet fighting will still go on. God takes care of horse replacements.

In closing, let me remind you of just one more thing. When Samson took the fresh jawbone of an ass and slew a thousand men therewith he probably started such a vogue for the weapon, especially among the Philistines, that for years no prudent donkey dared to bray. Yet, despite its initial popularity, it was discarded and now appears only as a barrage instrument for acrimonious debate.

History is replete with countless other instances of military implements each in its day heralded as the last word—the key to victory—yet each in its turn subsiding to its useful but inconspicuous niche.

Today machines hold the place formerly occupied by the jawbone, the elephant, armor, the long bow, gun powder, and, latterly, the submarine.

They, too, shall pass. To me it seems that any person who would scrap the old age-tried arms for this new *ism* is as foolish as the poor man who, on seeing an overcoat, pawned his shirt and pants to buy it.

New weapons are useful in that they add to the repertoire of killing, but, be they tank or tomahawk, weapons are only weapons after all. Wars may be fought with weapons, but they are won by men. It is the spirit of the men who follow and of the man who leads that gains the victory. In biblical times this spirit was ascribed and, probably with some justice, to the Lord. It was the spirit of the Lord, COURAGE, that came mightily upon Samson at Lehi which gained the victory—not the jawbone of an ass.

## Cavalry Crossing of an Unfordable River in the Philippines

By Colonel A. F. Commiskey, 26th Cavalry

IN compliance with the training programmes of the Philippine Division, to which the 26th Cavalry is attached for training and of the Post of Fort Stotsenburg which has direct supervision of training, the Regiment included in its programme and schedule a practical test of the swimming of horses and men, in the form of crossing an unfordable river with all combat elements but without other assistance than the material normally carried in the field and that immediately available along the river banks.

Preliminary training in the post was limited to the use of the enlisted men's swimming tank. This was used for improving the individual swimming of the men and for testing the buoyancy of combat material such as rifles, pistols, saddles, machine guns, and their accessories, wrapped in mantas or paulins.

Early in May reconnaissances were made to the vicinity of Mount Arayat where the Rio Grande Pampanga broadens out along the Candaba Swamp. Several old river bows or resacas were located, but there was no current, and the water was shallow, (about 10 feet and dirty due to lack of flow. Later the vicinity of Calumpit (Bulacan) was reconnoitered and found unsatisfactory due to river traffic and unsuitable camping facilities. Finally a reconnaissance was made of Camp Treadwell, an abandoned Scout camp near the barrio of Bitas, Macabebe. This site was chosen. It was along the west bank of the Rio Grande Pampanga, opposite the mouth of the Hagonoy River. The banks of the river were high, about 10 feet. The river at this point was from 35 to 70 feet deep and from 100 to 150 yards in width, with a current of from two to four miles an hour, depending on the tide. The water was clear and comparatively clean.

On May 3rd the Regiment marched from Fort Stotsenburg to Camp Treadwell stopping over night at San

Fernando, Pampanga, thus making two short marches of about seventeen miles each. Among the horses were a number of recently received remounts.

Five days were available for training at Camp Treadwell. They were allotted as follows: two days to troops under their respective troop commanders, two days to squadrons under the squadron commanders and one day to the Regiment which was used in solving a tactical problem involving the crossing of the river on a broad front, about 2000 yards, in line of troop columns. Training by troops included the maintaining of all combat equipment in appropriate loads, and so arranged that it would have sufficient buoyancy to float the load and also act as a support for two swimmers who pushed the load across the river. The mantas had been fitted with eyelets along the edges to permit the lashing of the loads. Shelter halves were used in a similar manner to float the enlisted men's personal equipment. Illustrations show the various kinds of loads.

Due to the large proportion of animals and machine guns to the number of men, it was impracticable to send individual men over with their respective mounts, as this would have involved leaving the machine guns and the mules, which carry them, for a second trip. Therefore, the animals, mules and horses crossed in herds following the crossing of the men, arms, ammunition, picket lines, and personal equipment which crossed by floating packs propelled by swimmers.

Many methods were tried in training the animals to cross. The final and most satisfactory method was found to be as follows: make a cut in the bank like a chute, have sufficient men (about eight) holding bamboo poles horizontally to form a flexible and movable corral into which the horses are led, leaving but one opening toward the chute. Horses that are natural



Left: Showing banks and current. Animals swimming against current to cut in bank where they landed. Right: Escort wagon, after crossing, being hauled ashore.



1. Equipment for 2-man float. 2. Two-man float prepared. 3. Equipment for machine gun float. 4. Machine gun float prepared. 5. Kitchen and ration packs, with equipment of 3 men. This all goes in kitchen and ration float. 6. Kitchen and ration float.

herd leaders and strong swimmers are then led into the water and taken over either by men swimming alongside of them or guiding them by the halter shank. If the animals see the landing and are headed for it, the men hold on by the tail and guide the horses by splashing either to one side or the other of the horse's head. Once the leaders start the men holding the bamboo poles close in, and the remaining horses follow the leaders into the river. In a very short time the whole

herd is in the water and on the way across. Men either in bancas or in the water at the opposite side meet the herd leaders and guide them to the landing place. In several instances men who were able to imitate the whinny of a horse or the bray of a mule were able to bring the herd to the landing place, even against a fairly strong current, by calling to them. It was found that a mixed herd of horses and mules crossed more easily than if the horses and mules were separated.

Picket lines which had crossed in packs ahead of the animals were set up waiting for them. The animals were tied on the line and saddled in the usual way. They were ready to continue the march.

One combat wagon for each two troops was considered sufficient for the immediate supply of the troops which crossed. These crossed with the troops in a separate lane. The wagon sheet was taken off the bows. The wagon was lifted off the running gear. The wagon sheet was then wrapped around the wagon body, bottom and sides, and lashed with the usual lash ropes, and the body replaced on the running gear. A good swimmer carried a rope across the river, attached it to a tree on the far side, and the wagons were pulled across the river by this rope. The rope might have been sent across in a banca, as bancas are always available along Philippine rivers.

In the crossing of light wagons a different scheme had to be adopted due to the fact that they have very low sides and no wagon sheet. Two tent poles from the kitchen tent flies were passed under the wagon and through the spokes of the wheels. These poles extended beyond the axles. The extensions of the poles were placed on bancas just outside the axles on both sides of the wagon and lashed to the bancas by small ropes. The wagon floated easily, and it was a simple matter to draw it across the river by a rope. It was guided by men in the bancas. Had it been impossible to haul it across by a rope, it would have been paddled by men in the bancas.

In order to get the three radio sets and their equipment across the river an improvised boat was made by Headquarters Troop. The frame was made of split bamboo poles, obtained along the bank of the river. The ends were formed from two Philips pack saddles. The frame was covered by a paulin 24 feet by 6 feet, in which eyelets had been placed along all edges at intervals of 22 inches. The cover was lashed around the frame, using lash rope through the eyelets. It took seven minutes to construct this boat after the bamboo had been split. Seven additional minutes were necessary to split the bamboo with bolos. The boat will carry seventeen men. It carried all the radio



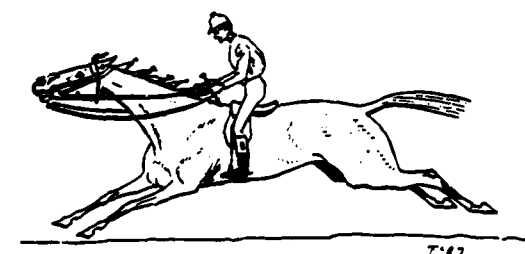
HEADQUARTERS TROOP FLOAT DESCRIBED  
IN ARTICLE

1st Lieut. G. W. West, the communications officer, supervised the making of this float

equipment 6 packs in one load. It carried 74 rifles at one time. The rifles were bundled in canvas, and a long rope attached to a float of bamboo was carried so that in case of accident the rifles might be recovered from the bottom of the river. However, no pack sank.

The total number of actual training hours, exclusive of the time used at the post in the swimming tank, was twenty-five. Starting from a line of mounted columns, each near its reconnoitered crossing point, the actual time consumed in the regimental problem was as follows: the first column crossed in fifty-five minutes. It had the shortest lane to cross in and did not saddle after crossing, as it landed in camp. The longest time taken by any column was two hours. This column had the most difficult crossing points, both as to banks and distance. It saddled and packed on the bank after crossing and led to the nearest cleared space, which was about one-half mile from the bank. All of this was done within the two hours. The wagons crossed in about twenty minutes. This time did not include the wrapping of the wagons in the sheets and preparing them for the water. This takes about ten additional minutes.

Using this method of crossing a river, which must be varied to meet local conditions, it is estimated that two hours would be sufficient time to cross and saddle on the far bank ready to resume the march.



# Joseph Orville Shelby

By Major Joseph Mills Hanson, F. A. Reserve

**I**N THE chamber of the Federal court in Kansas City, one morning in the early nineties, the United States marshal, a grave-faced, quiet little man with a pointed gray beard, stood and listened as the judge pronounced sentence upon a young man for a petty crime against a post office. Having spoken the fateful words, the magistrate directed the marshal to remove the convicted youth. Thereupon the small man stepped to the side of the prisoner. But, instead of catching the latter roughly by the arm, he laid his own over the young fellow's shoulders and spoke to him in a low voice, compassionate with understanding. The boy looked up at the sympathetic touch, then, suddenly turning, buried his face on the marshal's shoulder and burst into tears. Thus they left the court room, while the surprised spectators gaped in silence.

The tender-hearted marshal, upon whose spirit the storms of more than sixty years had wrought only a more mellowed kindness, was Joseph Orville Shelby, sometime Brigadier General in the Confederate States Army. Outside of Missouri, his name is scarcely remembered today. Nevertheless, he was one of those Americans who, scorning publicity, deserved fame more richly than many who have courted it. There is something to be said for a man whose career proved him the ablest Southern cavalry leader west of the Mississippi; one whose moral ascendancy over his men was so great that, at the very end, they suffered him to lead them across the Rio Grande, the only body of organized troops to march, with battle flag flying, out of the dead Confederacy. His devoted followers of those days knew him as a man of mercurial temperament; a battle commander "stern, brilliant, and concise"; on the march or in camp at one moment "all hilarity and the next all dignity and discipline." Yet, even then, one of the finest things said of him was curiously prophetic of the Shelby of the Kansas City court room: "He was accessible, kind, bluff, and free-spoken, sympathizing with the troubles of his soldiers, and making their cause his own."

But many other contrasts met in the nature of this courteous little gentleman, with his mild gray eyes and thoughtful gravity of manner. In his youthful years of conflict he was the most bewildering paradox of courage and bombast, clear-headed sense of reality and fantastic romanticism to be found in all that half-tamed trans-Mississippi region, where extraordinary characters flourished abundantly. Had he done nothing else than contribute his amazing reports to the one hundred and twenty-eight volumes of the *Official Records, War of the Rebellion*, which lie, embalmed in dust and cobwebs, on the shelves of libraries all over the country, history in its lighter vein would owe him a perpetual debt of gratitude. They seem too good to be true. Imagine one of our steel-helmeted brigadiers in France dictating anything like the following, to be

clicked out by typewriter on the field desk and transmitted to Division:

"The red sun looked down upon the scene, and the redder clouds floated away with angry, sullen glare. Slowly, slowly, my old brigade was melting away. The high-toned and chivalric Dobbin, formed on my right, stood by me in all that fiery storm, and Elliott's and Gordon's voices sounded high above the rage of the conflict. 'My merry men, fight on!'"

Best of all, it was really sober fact, decked out in swelling phrases to make a rough-and-tumble cavalry fight on the Missouri prairies resemble a joust of the Knights of the Round Table at Camelot. Joe Shelby was a Kentuckian, born at Lexington, December 12, 1830, in a day when Scott and Byron dominated Anglo-American literature, and when the first families of Kentucky esteemed themselves the guardians of every thing chivalric west of the Alleghenies.

Joseph Shelby belonged distinctly to the first families, for he was a grandson of Colonel Isaac Shelby, hero of the Revolution and the War of 1812 and first Governor of Kentucky, while he was also closely related to Thomas H. Benton, Francis Preston Blair and Benjamin Gratz Brown, all of whom became, like Joe Shelby himself, distinguished citizens of Missouri. He spent three years at Transylvania University and finished his education at a college in Philadelphia, where he graduated in 1849. For three years thereafter he lived at Lexington, learning the business of manufacturing hemp, and then removed to western Missouri. Here, at Waverly, Lafayette County, he established a rope factory, acquired lands and slaves and in the course of the following eight years accumulated a fortune reputedly one of the largest in that part of Missouri. In 1858 he married a daughter of another branch of the family, Elizabeth N. Shelby, who later devotedly shared with him many of his stern experiences, bore him a family of eight children and survived him for many years, dying in 1929 at the age of eighty-eight.

During this busy period of money-getting and home-making, young Shelby took no active part in the seething politics of the day. But he entertained decided opinions on the slavery question and participated as a leader with the pro-slavery Missourians in many of the border troubles in Kansas which did so much to lash the anger of both sections into the temper for war. Strong, however, as were his Southern convictions, they were less so than his sense of justice. Long afterward, a man, then living near Lexington, related an incident of election day, 1860, in that town, on which occasion he was the only person present who voted for Lincoln. His action so enraged some of the young Southerners that they were threatening him with violence, when Joe Shelby appeared.

"I have no sympathy with your political principles," he remarked to the young Republican, "but this

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is a free country and the law guarantees the right of every man to vote as he pleases." Then, turning to the crowd, he continued: "Gentlemen, you know me: many of you are my friends. But, friends or not, I propose to see this young man safe and harmless out of this town, and anyone who interferes with him will have me to deal with."

The incident recalls another, also involving the name of Mr. Lincoln. Shelby's division, camped at Clarksville, Texas, happened to be on review when the messenger arrived bringing the news of Lincoln's assassination. The word ran swiftly down the lines, and some of the men began cheering. Shelby straightened in his saddle, raised his hand for silence and, baring his head, said, solemnly: "Boys, this is the heaviest blow yet dealt us. Lincoln's slaughter was the act of a madman. If he had lived, he would have been just and generous to the South." The cheering ceased.

Such occurrences reveal the workings of a mind singularly capable of independent thought, much as it might ordinarily allow itself to be governed by class and sectional sentiments. In the crisis of 1861, Shelby had to balance such sentiments against material interests. A successful young business man of thirty-one years, happily married, with extensive properties and many powerful relatives and friends in the high places of the United States, his future, obviously, would have been best assured by the maintenance of the existing order. But when his cousin, Frank P. Blair, offered to secure for him a commission in the Federal army, he indignantly refused and at once set about raising a cavalry company of Lafayette County farmers, which he placed at the disposal of the secessionist State authorities. Soon after, all his property was confiscated by the Federal government.

Up to this time Shelby had manifested no special interest in the profession of arms and no more than Nathan Bedford Forrest at the same period was he a trained soldier. But General Sterling Price recognized qualities of leadership in him. He was commissioned a captain in the Missouri State troops and, after the evacuation of Jefferson City, the capital, shared the fortunes of Price's army for a year. From the first, Shelby saw to it that his men were well mounted, armed and uniformed, and under his firm discipline and training they were soon recognized by Price himself as the most efficient separate organization in his army. Hence they took a conspicuous part in all of his campaigns and battles, from the first combat at Carthage, in July, 1861, to Pea Ridge in March of the following year and the expedition across the Mississippi to reinforce Beauregard at Corinth.

In the intervals between battles Shelby and his command returned three times to Lafayette county in the hope of recruiting a regiment. This proved no easy task in a country whose towns and avenues of communication were now all firmly in the hands of the enemy. Few men were gathered, but every one of these expeditions to the Missouri river was a nightmare of danger and exertion which none but the hardest could endure. For days and nights the raiders

marched, almost without rest, hunted on every side by hostile columns; snatching a few brief moments with kindred and friends when the home country was reached, and fighting there to wrest from the enemy the arms, equipment, and ammunition to replenish exhausted stocks and supply recruits. Then by similar nerve-straining marches they made their way back over rough and obscure roads, beset by foes still more thoroughly aroused, to arrive in Arkansas on their last ounce of strength.

At Corinth the unhappy horse soldiers had to serve dismounted, so they were glad enough to receive an order, after Beauregard's retreat from that place, to go back once more to Lafayette County in quest of the regiment of recruits, even though the commission involved a thousand-mile journey, largely through hostile territory. Recrossing the Mississippi at Helena, where "the beautiful Helena girls" gave the hungry soldiers "a magnificent breakfast washed down by copious goblets of champagne," admittedly an innovation as a breakfast beverage in that staid Arkansas community, the happy-go-lucky Missourians foot marched to Fort Smith, where, to their joy, horses were again secured.

Riding on into Missouri the recruiting mission, despite numerous fights with Federal detachments in occupation, was this time accomplished, and Shelby returned South with enough men for ten cavalry com-



*Joe Shelby*

From "Shelby and His Men," Edwards



panies. Other recruiting detachments had been as successful, and three Missouri regiments were organized in the regular Confederate service. Of these a brigade was formed, and Shelby, commissioned a colonel, was placed in command. Thus a man who ought, on his merits, to have had his colonelcy a year earlier, finally got it by himself finding every man for his regiment.

To the authorities both at Washington and Richmond, the vast region west of the Mississippi was a sort of precursor of Blois in the A. E. F.—a salvage yard into which officers might be shunted who could not be used anywhere else. Throughout the war its destinies were guided mainly by local favorite sons and "lame ducks" from the main theaters of operations who had either failed or passed out of favor, though still too prominent as personages to be summarily dismissed. Joe Shelby, riding and fighting endlessly, was too busy to curry favor in such quarters, while many graybeards among his superiors looked upon his youth with distrust. Only repeated brilliant achievements finally brought him his commission as brigadier general in March, 1864, when he became the youngest of his grade west of the great river. After that, ironically, he usually commanded a division, so his rank never corresponded with his responsibilities.

Yet in a country of great distances and such primitive conditions as existed in the trans-Mississippi region of that day, campaigning was always rigorous, and a commander of Shelby's exhaustless resource and driving power was of incalculable value. Not only in battle was his genius manifest. At all times he kept his troops fit, and they seldom suffered hunger or the kindred deprivations that often afflicted others. There was always plenty of food in the Southwestern states for those who knew how to get it, and Shelby did. His "Iron Brigade" and his later division fought the war on pork, corn and beef, and plenty of each, while he also managed, either by requisitions or captures from the enemy, to keep his men fairly well clothed and very well mounted and armed.

For these reasons only were they able to make the appalling campaigns that he demanded of them. Broken-down horses and riders never could have endured such an expedition as the one of September and October, 1863, when one thousand men with two pieces of horse artillery raided up through Missouri to Jefferson City and Boonville, covering fifteen hundred miles in forty days and on one occasion doing one hundred and six miles and fighting two engagements in eighteen hours. During this terrific march Shelby won more encounters with the enemy than he lost and completely baffled pursuit, because his daring was guided, as always, by unrelenting vigilance, his main body being surrounded continually by a sensitive network of pickets and scouts to secure information and give timely warning for either attack or defense. Moreover, the troops were inspired throughout by the example of their colonel, who constantly led them. Though suffering every moment from a wound in the arm, extending from wrist to elbow, he never faltered.

When General Banks opened the campaign of 1864 by moving up the Red River toward Shreveport,

Price's infantry hurried to Louisiana to assist in opposing him, leaving only cavalry to resist General Frederick Steele, who simultaneously marched from Little Rock toward Shreveport by way of Camden, Arkansas. But the outnumbered gray horsemen fought Steele so fiercely that in Camden he was reduced almost to a state of siege. About the middle of April he sent a heavily-guarded train containing nearly all of his wagons over the long road to Pine Bluff after sorely needed supplies. Sweeping around from the south, two Confederate brigades attacked this train at Marks Mill, while Shelby's brigade galloped ten miles further and suddenly swooped upon it from the front. The Federals had almost beaten off the rear attack when the Missouri squadrons burst upon them, but now the escort dissolved in utter confusion, and the exultant rebels gathered in 1,300 prisoners, four guns, and all of the 250 wagons, most of the booty falling directly to Shelby's brigade, the driving power of the attack.

Not much was ever said in the north about this débâcle at Marks' Mill. It was one of the most substantial successes gained by the western Confederates during the war, and it forced General Steele immediately to abandon Camden and retreat to Little Rock. Shelby's swift encircling movement and the fury of his attack were very suggestive of the tactics of "Jeb" Stuart and, indeed, it may well be suspected that the Missouri cavalryman was a conscious disciple of the brilliant Virginian. Not only did he affect the black-plumed hat of Stuart and the latter's mingled dignity and good fellowship with his men, but his conceptions of strategy and tactics were quite in the Stuart manner, while his command, in an army whose standards of discipline were none too high, was no unworthy miniature of the Cavalry Corps of the Army of Northern Virginia. Col. Thomas L. Snead, who knew the Confederate troops and commanders of the West as well as any man, called Shelby "one of the very best officers I have ever known," and his men "as fine a body of young fellows as ever fought under any flag." Shelby's regiments and brigades were as proud of their records as those of Wade Hampton or Fitzhugh Lee, and they were supplemented by a battery of Missouri horse artillery under Captain Richard A. Collins, armed usually with the best of 10-pounder Parrotts and 3-inch rifles, which served its horse soldier comrades as devotedly as did the famous horse artillery of "the gallant Pelham" and Robert Chew.

Dick Collins' battery never displayed its nerve and skill to better advantage than during Shelby's campaign in the valley of the White River, squarely behind Steele's army at Little Rock, in the summer of 1864. His command increased to a division of two brigades. Shelby occupied such a dangerous position in order to round up recruits in this favorite haunt of conscription dodgers and to demoralize navigation on the river, an important supply line of Steele's army.

In June he marched through rain-flooded bottoms to Clarendon, a Federal post on the lower White River, where his scouts, always inquisitive, discovered a Federal ironclad, the *Queen City*, nine guns, anchored off shore guarding the channel for Steele's transports. In

the darkness of midnight Shelby's dismounted troopers stumbled into battle line while Collins' cannoners rolled their four guns by hand for a mile, muffling the bridge with weeds, and got them into battery on the river bank, hardly more than fifty feet from the side of the ironclad. Drama drips from Shelby's pen as he reports the event to Price:

"It was a beautiful moonlit night. White fleecy clouds hovered over the sleeping river, over the doomed craft with all her gala lights in bloom, and over the crouching lines of infantry and the yawning cannon. The silence was broken only by the measured tread of the sentinels and the deep striking of the time-bell. Just as the white hand of morning put away the sable clouds of night four pieces of artillery sent their terrible messengers crashing through the boat. Then the infantry opened with terrible effect, and in ten minutes the *Queen City* was a helpless wreck upon the water, her captain surrendering unconditionally."

The Confederates had gotten two 12-pounder boat howitzers off the prize when three more Union gunboats, racing to the sound of the firing, rounded the bend above, whereupon the victors laid a train to the *Queen City's* magazine and "in ten seconds," if we may credit Shelby's hyperboles, "the unfortunate boat was blown into a thousand fragments, the splinters and pieces of iron and wood coming down for hours." More soberly and gloomily the Federal naval commander on the White River reported to his chief merely that "the gunboats from Devall's Bluff came down and forced them to burn the *Queen City*," and admitted that "thus far the enemy has made good the blockade of the river."

But Collins was not satisfied. When the three gunboats, with a total of twenty-six guns, reached the scene, he opened intervals between his pieces and, standing without cover, gave them shot for shot for two hours before retiring.

Large Federal forces were brought into the field to drive Shelby from the White River country where, two hundred miles beyond the Confederate lines, he recruited, armed, and trained three new cavalry brigades, and by his incessant activities captured hundreds of prisoners, paralyzed the enemy's communications, and nearly forced the evacuation of Little Rock by General Steele. Frequent as were their conflicts, however, Shelby warmly admired this gallant Federal commander, believing that he did everything possible, in those days of almost universal bushwhacking, murder and pillage, to soften the rigors of warfare alike for the combatants and the helpless, ruined families of the country. Hence all prisoners taken from Steele's army received at Shelby's hands like considerate treatment. But this was not enough to suit the sentimental Southron, who planned for his honorable foe a concrete evidence of esteem peculiarly characteristic of his own chivalrous nature. He had received from Mexico a magnificent sombrero, embroidered with flowers and decorations of gold and trimmed with a wide gold band. This he laid aside, intending to send it to Steele with his compliments and

those of his division on the first occasion of a flag of truce. Unfortunately, before the opportunity came, the sombrero was one day blown out of Shelby's tent into a camp-fire, so disfiguring it that he would not send it, though his biographer, writing in 1867, publicly stated the circumstances, asking General Steele to accept the will for the deed.

No efforts of the Federals availed to drive Shelby from northeastern Arkansas, and he was still there when the Price expedition of the autumn of 1864, organized near Camden, reached the White River on its way to the invasion of Missouri. This expedition was frankly based upon considerations of political rather than military expediency. The possibility of capturing St. Louis and Jefferson City by a sudden and overwhelming cavalry incursion was alluring, and if such a dazzling success could be timed with the approaching presidential election in the United States it might be expected to greatly encourage the peace party in the North and cut down the Lincoln vote. Price came up to the White River with two skeleton cavalry divisions, commanded respectively by Major Generals John S. Marmaduke and James F. Fagan. To these Brigadier General Shelby, without a murmur, contributed the three new brigades which he had organized, retaining only his two original brigades to constitute the third division of the army. Thus he furnished the latter with five of its nine brigades. The whole force amounted to possibly 15,000 men, with twenty guns.

But the expedition forfeited any chance of success by its sluggish movements. General Price encumbered it with a train of 500 wagons, cutting its speed from a possible thirty to about fifteen miles per day. Furthermore, after entering southeastern Missouri, he halted for three days in his direct descent upon St. Louis to capture the tight little fort at Pilot Knob, defended by a determined garrison of 1,500 men. On September 27, Marmaduke's and Fagan's divisions assaulted Fort Davidson and met with a repulse so bloody that the morale of the men was shaken and they were in no condition to attack St. Louis, which meantime had been largely reinforced. Shelby had strongly objected to the unnecessary diversion, so his troops had been sent on beyond Pilot Knob to cover the attack and did not suffer in the reverse. But they were not strong enough to fall upon St. Louis alone and were soon ordered by Price to proceed westward toward Jefferson City.

While driving the enemy's advanced lines into the capital on October 6, one of Shelby's best officers, Colonel David Shanks, was mortally wounded. We can feel the division commander's strong emotion as he sought words which seemed to him appropriately eloquent in which to report the loss of his beloved subordinate.

"A lion in battle; fleet-foot on the *correi*, sage counsel in *cumber*; the Murat of my command. When he left us, a star went out, a giant was gone. Whether upon the march or the bivouac, the cold and weary advance or the dark and pitiless retreat, where death is swift as the wave of its sable banner, he was always

the same heroic soldier, ready at all times and under all circumstances.

"The scythe of the reaper  
Takes the ears that are hoary;  
But the voice of the weeper  
Wails manhood in glory."

Jefferson City, amply warned of the approaching storm, was found so strongly fortified and defended that Price dared not assault it, but marched his army on westward. Both St. Louis and the capital having now been passed without a blow, the campaign henceforth became an utter futility, for the mere threat to these places, while it impended, was worth far more to the Southern cause than anything Price could accomplish on the remote frontier of Kansas. Although largely outnumbered in total, the Confederate force was a compact striking body and had it been commanded, as it should have been, by the young brigadier who, abominating wagon trains, had frequently raided Missouri like a thunderbolt, it is very probable that he would have taken both cities before his adversaries could concentrate. But the actual commander, growing corpulent and inert, was plainly no longer the leader for a mobile cavalry army.

Disheartened by failure, the Confederate columns hurried on, capturing a few minor Federal posts near the Missouri river, but pressed in rear by increasing numbers of pursuers and opposed in front by a similarly growing host based on Kansas City. After a three days' battle around Independence, the Big Blue River, and Westport, Missouri, in which every element of the army fought desperately against overwhelming attacks in both front and rear, the immense wagon train, on October 23, finally swung safely into the State Line road and started toward Arkansas.

But the divisions of Fagan and Marmaduke were obviously shaken by their continuous fighting and a growing impression of defeat. The pursuing Federal cavalry was commanded by General Alfred Pleasonton, displaced chief of the Cavalry Corps of the Army of the Potomac, one of the very best cavalry leaders in the United States service, and he pressed his attacks vigorously. On the 25th, at the Marais des Cygnes River, Marmaduke made a stand to cover the wagon train while it crossed the stream. But an impetuous Federal charge over the open prairie broke his division utterly. Marmaduke and two of his brigade commanders, together with nearly a thousand other ranks, and eight cannon, were captured, while the rest fled, rolling up Fagan's supporting division in their rout. The panic-stricken mass poured back through the train, involving it in the wild confusion, and the whole army seemed doomed to destruction.

But in this hour of disaster the genius of Joseph Shelby and the devotion of his troops rose to their greatest heights. In his despair turning to the only man capable of meeting such a crisis, Price sent him a frantic message to "save the army." Shelby's division was this day leading the column. Facing about, the solid squadrons came galloping back, twelve miles through the ruck of the panic, until they encountered the enemy a short distance north of the Little Osage

River. Here a swift collision momentarily checked the over-eager pursuit when, swarming back across the stream to the ridge on its farther side, Shelby's troopers flung themselves into positions in which they knew they must stay until dark if what was left of the train were to be given a running start for safety.

The pursuers were soon upon them, flanks extending over the prairies, far overlapping those of the Confederates.

"It was an evening to try the hearts of my best and bravest," declared Shelby, "and rallying around me they even surpassed all former days of high and heroic bearing. . . . The narrow issue of life or death stood out all dark and barren as a rainy sea. . . . They came upon me steadily and calm. For fifteen minutes both lines stood the pelting of the leaden hail without flinching, and the incessant roar of musketry rang on wildly and shrill, all separate sounds blending in the universal crash. The fate of the army hung upon the result, and our very existence tottered and tossed in the smoke of the strife."

At last, as dusk came down, a timely counter-charge drove back Pleasonton's lines a little, and his troops resorted to long range artillery fire, while Shelby's depleted ranks moved away on the track of Price's shattered army. All through the night the road was lighted by burning wagons and supplies abandoned in the flight, while along the horizon blazed vast prairie fires, sweeping the plains with waves of flame and smoke.

Early next morning the Federal attacks were renewed. In a state of unabated demoralization Price's fugitives fled southward, repeatedly saved from destruction during the ensuing three days by the thin lines of Shelby's cavalry and Collins' battery, the only one remaining in the army. On October 28, at Newtonia, Shelby fought the last battle of the war in Missouri, repulsing the division of General Blunt and ending the pursuit.

Yet, in many respects, the retreat from this point was worse than what had gone before. The storms of an early winter howled over the famished host, and in the steep gorges of the Boston mountains the snow was two feet deep. Just beyond the mountains General Price, fearing to cross the Arkansas between the strong Federal posts at Fort Smith and Little Rock, turned sharply to the southwest and headed for Texas across the desolated country of the Cherokees and Chickasaws in the Indian Territory. Practically no food was to be found along this road, and scores of men, exhausted, starved, or stricken with smallpox, dropped by the way and were left to be eaten by the wolves and coyotes.

Soldiers of the A. E. F. saw comrades perish of exposure in the traffic congestions around Monacaucot and Malancourt, but they never experienced anything like this. Throughout the horrible march Shelby's men were suffering the same hardships as the rest, yet under his firm guidance they endured the ordeal far better than the others. Day after day they marched "solidly and compactly, mounted guard, held inspections and dress parades morning and night, and neither

threw away a gun nor broke a platoon during the entire march."

After the army had crossed the Arkansas, Shelby, finding Price determined to push right on to Texas, demanded permission to remain behind for a week so that his famished men might hunt wild cattle and game in the valley of the Canadian River. Price reluctantly consented, and a systematic hunt was promptly organized in this sportsmen's paradise, where white men probably had not been for years.

A brigade at a time deployed in regular line of battle, sent skirmishers ahead, started the game in groves, when the deep, silent woods thundered like a battlefield until hundreds of steers were dead upon the ground. . . . Turkeys, deer, pheasants, partridges, rabbits, raccoons, opossums, bears, and wild cattle filled the woods as far as one might walk or ride."

With his men and his remaining horses full fed and thoroughly rested, Shelby resumed the march, carrying along an abundant supply of jerked meat to last until regular rations could be issued again. His own horse having died, the general, regardless of the scandalized protests of his followers, insisted on sharing the fate of the other dismounted men and for six days marched on foot at the head of the division, until arrival at Clarksville, Texas. Here winter quarters were established, with the rest of Price's troops in the same region.

Of all that badly punished army, however, only Shelby's organizations remained of serious military value, or were called upon for active operations thereafter until the end of the war. This came in the spring of 1865, following soon upon the news of the surrender of Lee's and Johnston's armies. Early in May the commander of the Trans-Mississippi Department, General E. Kirby Smith, entered into negotiations with Federal commissioners looking to a surrender on terms. But events outran his efforts and in his final letter to the commissioners he confessed that he had nothing left to surrender. "From one end of the department to the other," he wrote, "the troops, except Shelby's heroic division of Missouri cavalry, have dissolved all military organization, seized the public property, and scattered to their homes."

"Except Shelby's heroic division of Missouri cavalry!" The word, "surrender," was not in Shelby's vocabulary. While the issue was still open he was hurrying from one after another of the generals and governors of the trans-Mississippi states, pleading with them to stand firm, to fight and conquer, at least, what he considered an honorable peace. When all efforts proved vain, he returned to his division, in camp at Corsicana, Texas, and offered his men the free choice of giving up the now hopeless contest and returning home, or of accompanying him to Mexico, there to ally themselves as soldiers of fortune with either the French and Imperialists under Maximilian or the Liberals under Juárez, as the majority might elect.

A large number decided to make the best of the situation and returned to their former homes. But about a thousand determined spirits threw in their lot with their leader and on June 2 started southwestward to

reach the Rio Grande at Eagle Pass, a distance of three hundred and fifty miles as the crow flies. Every man was mounted on an excellent horse and armed with a Sharpe's carbine, a saber, and revolvers, while a battery of four new rifled guns and a wagon train well loaded with provisions and reserve arms and ammunition marched with the column.

Riding on through town after Texas town where anarchy and violence had followed the collapse of all authority, this body of disciplined soldiers everywhere punished the most flagrant outlaws and restored the confidence of the orderly elements. At San Antonio nearly a hundred former Confederate officers and civil officials, including the governors of Louisiana, Kentucky, and Texas, joined the bold brigadier in his ride for liberty. The Rio Grande was reached at the beginning of July, and here the battery and surplus arms and ammunition were sold to the Liberal governors of Nuevo León and Coahuila for the meager sum of sixteen thousand dollars, silver, which was divided pro rata among the officers and men. The governors offered Shelby the military command of their two states, but though he personally sympathized with the Republicans, a majority of his followers voted in favor of espousing the cause of Maximilian, so he bowed to their wishes.

But before leaving the Rio Grande, on the 4th of July the tattered battle flag of Shelby's division, which had waved over two hundred fields of conflict, was brought forth and given to the winds for the last time. While the sunlight touched its faded silken stars and bars, and the alien mountains of El Paso del Aguila loomed in the background, General Shelby stepped forward—and said to the faithful few around:

"This tattered rag  
Is the only flag  
That floats on Dixie ground.  
And this plume that I rear  
From the hat I wear  
Of all my spoils is my only share."

The veterans who had fought beneath the folds of that flag stood in line with bare, bowed heads and tears coursing down bronzed cheeks as the five stalwart colonels, Elliott, Williams, Slayback, Gordon, and Blackwell, for a moment held the beloved emblems above the stream, then slowly lowered them and let the swirling waters clutch and bury them in the eternal sands. Then these brave men, with hearts that bled for a cause they had loved and lost, turned from their native shores and marched away across the deserts of a foreign land.

Presently they waited before the City of Mexico while their chief interviewed the young Austrian prince who was seeking to establish himself as emperor of Mexico. His old gray hat in his hand, Shelby presented himself before Maximilian and respectfully, but with no courtly deference, offered him the immediate services of himself and his command and the promise of 40,000 more ex-Confederate soldiers to seat him firmly on his throne. But the emperor, confident in the pledges of the crafty Louis Napoleon, declined, though Shelby predicted that his French support would

soon be withdrawn and that he must have American reinforcements if he would survive.

Bitterly disappointed in their expected military employment, the Southern veterans knew not which way to turn. But Maximilian, though unwise, was not unsympathetic. He granted them lands in a fertile province, and there they established a colony, named Carlota in honor of the empress. For some two years the little band remained, but finally Shelby's prophecy came true; the French troops were withdrawn, and the forces of Juárez began to close about the doomed emperor. Then, two years too late, Maximilian sent for the blunt and faithful exile.

"How many Americans are there in the country?" he asked.

"Not a corporal's guard who could be gotten together," replied Shelby.

"I need twenty thousand men."

"Pardon me," Shelby rejoined, "if I speak plainly. You need forty thousand men. Not a single regiment in your service is dependable. You cannot now rely upon numbers; only upon devotion. I am but one man, but I am at your service."

Maximilian looked admiringly into the eyes of the honest American and, grasping Shelby's hand, exclaimed:

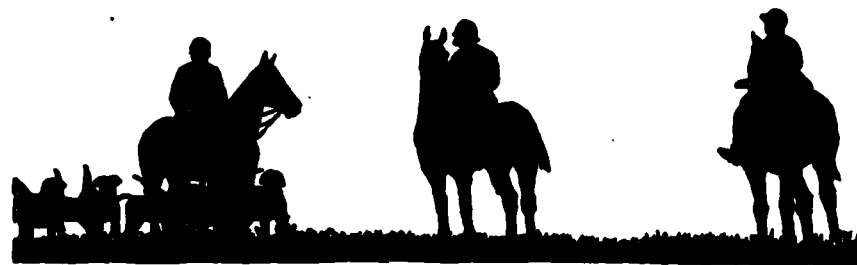
"It is refreshing to listen to the truth! I feel that you tell it to me as one who neither fears nor flatters." With a quick movement he unclasped the golden cross of the Order of Guadalupe hanging upon his breast and fastened it to Shelby's, continuing, "Accept this in parting, and remember that circumstances never render impossible the right to die for a principle."

Pityingly the former rebel cavalry chief took his leave, to watch shortly afterward from a distance as Maximilian evacuated his capital forever and, moving north with a feeble little army, was speedily hemmed in and besieged at Querétaro. Betrayed, first in policy by the shabby duplicity of Louis Napoleon, and last in person by the treachery of his false friend, Colonel Miguel López, the unfortunate emperor was captured,

tried, and shot, the final victim of imperialistic European plots in America.

The extinction of the empire rendered impossible the continued existence of the patronized colony of Carlota. Shelby and most of his followers returned to the United States, the general himself settling in Bates County, Missouri, where he courageously set about rebuilding his shattered fortunes. Remaining thenceforth in loyal relations to the government, his many comrades of the war and other admirers would at one time have elected him governor of the State, but he declined any part in politics. In 1893 President Cleveland appointed him United States Marshal for the Western District of Missouri. It was on a trip in the performance of his duties that he contracted the cold which resulted in his death, in February, 1897. One of the highest tributes ever offered to the memory of a soldier by a generous foe was that paid to Shelby by General Pleasanton, the creator of the Cavalry Corps of the Army of the Potomac. Pleasanton, who had led the pursuit of Price's raiders in the fall of 1864, was himself on his death bed in Washington, D. C., when he heard of the passing of Shelby at Merwin, Missouri. In almost his last conscious utterance, the brilliant Union cavalry leader said: "Shelby was the best cavalry general of the South. Under other conditions he would have been one of the best in the world."

And so today, beside the Confederate monument in Forest Hill cemetery at Kansas City, lies the dust of Joe Shelby, chevalier of the prairies, to whom every Missouri swale and hill crest was a Field of the Cloth of Gold, and every loping, gray-oad farmer boy a knight in armor. Perhaps the irrepressible sense of romance in the man was incongruous in the circumstances; perhaps sometimes it was even laughable. But no foe ever laughed at Joe Shelby when his saber was out and his black plume streaming. And there are not many men from whose souls shine forth, in the evening of life, such love and charity as drew the head of a convicted criminal to his shoulder in that court room at Kansas City.



## The Employment of a Mechanized Cavalry Brigade

By Captain F. T. Bonsteel, Cavalry

### 1. Is the Employment of Mechanized Cavalry Desirable?

Mobility is essential to outdistance the enemy, to strike quickly at vital points, to conquer. Devastating modern fire-power so enhanced the capabilities of the defense on the Western Front in the World War, resulting in a stalemate with all its attendant evils,—enormous casualties, tremendous cost, excessive length and indecisive results,—that nations are now seeking new means to restore mobility to warfare. How can this be accomplished?

A few extremists believe that, except for small-scale operations in woods, swamps, rugged terrain and other similar obstacles to machines, present-day formations of infantry, cavalry and artillery have no place in modern warfare and should be replaced by small, completely mechanized armies. Another school, looking back upon the limitations of World War tanks and magnifying the difficulties that might result in the employment of mechanical elements, can foresee but little practical use for mechanized formations. It seems reasonable, however, that any large war of the future will be fought by "nations at war." Man-power, raw materials and industry will be utilized and exploited to put into the field the most effective fighting force that a nation can produce. This force will consist, as in the past, of normal formations supplemented by all of the modern instruments of war that man can devise. Among the latter, mechanized cavalry should prove a powerful, mobile auxiliary to the other arms.

### 2. Essentially an Element of Offense.

Conspicuous among the numerous variants of expressed opinions on other details concerning the potentialities of mechanized cavalry, we find considerable unanimity in the belief that this arm is essentially an element of offense. A résumé of ideas on this point reveals rather definitely crystallized thought, justifying the following fundamental principles governing the employment of mechanized cavalry:

- Its mobility and striking power can best be exploited by offensive action.
- It is unsuitable for holding ground, except for brief periods.
- When forced to defend, offensive action will probably offer a better chance for success than immobile defense.

### 3. Strategic Employment.

#### a. Strategic Missions.

Accepted doctrine of our present-day army contemplates that strategic missions, such as reconnais-

sance to gain information in enemy territory, raids to impede the mobilization and concentration of hostile forces at the outbreak of war, and the delay of distant hostile columns, will normally be the function of the air corps and horse cavalry, the former conserving the strength of the latter, wherever possible, by performing the more distant tasks.

Some advocate the use of mechanized cavalry, also, for these strategic missions, believing: that its mobility can best be exploited by employing it independently on missions beyond the range of the other arms, that its speed and armor give it a sufficient degree of invulnerability to risk the attendant dangers, and that its ability to inflict powerful surprise blows will have a telling effect in the accomplishment of such missions.

Others are equally emphatic in denouncing such employment, contending that to throw mechanized cavalry far ahead of the remainder of the army would be a dissipation of force and a needless risk of its being cut off and destroyed if deprived of the prompt support of the other arms, which they consider essential. They cite the following limitations of armored vehicles to substantiate their convictions:

- They are unsuitable for holding ground, except for brief periods.
- They are relatively "blind" when moving fast, and vulnerable to artillery fire when halted.
- The places most likely to be utilized by the enemy for concealment and defense,—woods, buildings, rugged commanding terrain and positions behind streams,—will be most difficult, if not impossible, for them to reconnoiter.
- Their personnel will have difficulty in hearing sounds other than those made by the machine, when moving.
- Their night movements will probably be on roads, where they can be stopped or cut off by very small artificial obstacles, demolished bridges, anti-tank guns in ambush or disabled vehicles.
- Clouds of dust frequently reveal their daytime movements.
- Woods, swamps, rivers, mountains or steep, rugged hills and rainy weather are serious obstacles to them.
- They cannot live off the country, and the supply of fuel, spare parts and other necessities will present a serious problem.
- Their inherent noise announces their approach at a considerable distance.

A more flexible view than either of the aforementioned seems to indicate that, in suitable situations,

\*Organized approximately the same as the Cavalry Brigade (Mechanized) (Reinforced), Table 46, Changes No. 7, Reference Data, Command and General Staff School, Fort Leavenworth, Kansas, 1932, which includes the following: Brigade Headquarters and Headquarters Troop, two Cavalry Regiments (Mechanized), one Artillery Battalion, 75 mm guns, (Mechanized), one Engineer Troop (Motorized), One Chemical Troop (Mechanized) and one Motor Repair Section.



it should be practicable to employ mechanized cavalry independently to enhance the rapidity with which the higher commander can influence the course of events and extend his powers well beyond the sphere of activity of the other arms. In other situations, the cooperation of normal formations, particularly horse cavalry, would be indispensable.

A commander will have to weigh carefully the influence that limitations may exercise upon each proposed mission. In many instances, the attendant risks may be so great as to predestine such an adventure to almost inevitable failure,—even to expose the mechanized cavalry to practically certain capture, thus depriving the commander of this valuable force for future employment. It seems self-evident that, in such cases, the commander will seek other means to accomplish his purpose. On the other hand, special situations may arise when the acquisition of immediately essential information, or the hurling of dynamic blows at advancing hostile columns, or the rupture of the enemy's communications, or the prompt seizure of a critically indispensable objective may be of paramount strategic importance and there is a reasonable chance for attaining initial surprise. In these circumstances, the commander will resolutely risk the possibilities of the dangers involved, in order to achieve the desired results.

If the mission entails the seizing and holding of an objective for a considerable period of time, horse cavalry or infantry in trucks should follow the mechanized cavalry as close as possible in order to prevent the recapture of the objective by the enemy.

#### b. The Approach March.

##### (1) Plans and Preparations.

The approach march to strategic objectives will probably require careful plans and preparations and very effective cooperation between the air corps, engineers, general staff and mechanized cavalry in order to insure the latter's uninterrupted advance. Routes, definitely practicable for the movement, should be selected after a careful study of air-photographs taken to discover all potential obstacles. Timely discovery of these obstacles should permit either their circumvention by the mechanized cavalry, or their prompt elimination by the engineers. The superior mobility of mechanized cavalry will often make it relatively easier and quicker for mechanized cavalry to go around obstacles by using alternative routes, than to have the engineers undertake extensive construction or repair work.

##### (2) Secrecy.

Air superiority over the zone of advance seems essential. Absolute immunity, however, from the penetration of single hostile observation planes into the air area over that zone seems improbable. Consequently, such marches of mechanized cavalry will usually be made at night, and daytime concealment sought by hiding in woods or by camouflage. An advance on as broad a front as practicable, consistent with the available road net, will tend to keep the enemy in ignorance of the exact direction of the impending blow, in case the movement is discovered.

##### (3) Formation.

The formation for the advance will vary in detail with each situation. The brigade will advance, in a number of columns, disposed in a wedge, echelon or diamond-shaped formation, depending upon the mission, situation and road net. The regiments may be assigned zones, in which case an advanced guard will probably be used in front of each regiment; or one regiment may follow the other, necessitating only one advance guard.

The armored-car troop, operating patrols, each of at least two vehicles, and proceeding by bounds, will reconnoiter the routes of advance and adjacent roads. If held up, a patrol will report by radio or by sending back a vehicle. The number of patrols will vary with the road net and the distance from the enemy. In some instances, only a few patrols will be necessary; the remainder of the troop following as a reserve ready to reinforce patrols to brush aside minor resistance which they cannot handle independently. In many instances, however, with only four platoons of four cars each, the majority, if not all, of the armored-car troop will be needed for patrols, the commander coordinating their movements and reporting information to the commander of the covering squadron.

The covering squadron, as a whole, will function in a manner analogous to a combination of a reconnaissance detachment and an advance guard of horse cavalry, to insure the uninterrupted forward movement of the main body until the enemy is encountered in force. Prompt, aggressive action will be employed to drive off hostile reconnaissance, and minor enemy resistance will be overrun, or outflanked and brushed aside. Successive rear elements will complement the action of preceding elements promptly to clear the way for uninterrupted advance of the remainder of the force. The main body of the covering squadron will march at a distance of fifteen to twenty-five miles in rear of the patrols. If definitely stopped by a superior hostile force which it cannot dislodge, the covering squadron will protect the development of the main body of the brigade, instituting vigorous reconnaissance around the enemy flanks to determine his strength and dispositions.

The main body of the brigade, protected locally by security patrols, and marching in as many columns as the situation and road net permit, to facilitate movement and reduce vulnerability to air attack, will advance at a steady prescribed rate of march toward the objective, at a distance of five to ten miles in rear of the covering squadron or squadrons.

Coordination throughout all echelons will be maintained by prescribing lines to be reached by designated hours, and requiring periodic reports. Reconnaissance forces will not stop at these lines longer than is necessary to report their arrival, after which they will push ahead, continuing on their mission.

#### 4. Tactical Employment with Large Forces of Combined Arms.

##### a. Turning Movements and Encircling Maneuvers.

That the most decisive direction of attack has always been against the hostile lines of communication, is a dogma accepted by all military men. A surprise blow

delivered at the right moment, threatening the capture of a critical area that will block the enemy's withdrawal and cut off his reinforcements and supplies, is likely to be far more effective than a frontal attack or one launched against the immediate flank of the enemy's position, where he has undoubtedly made elaborate preparations to meet just such a contingency. The difficulty in accomplishing such movements lies in the fact that the enemy, operating on interior lines, often can interpose reserves between a slow maneuvering force and the critical objective. Many see in the advent of mechanized cavalry the logical weapon with which to strike such blows. Its superior mobility, enabling it to move rapidly to a position from which it can gain a favorable direction for its attack; the speed and dynamic force with which it can drive through to the objective; its comparative invulnerability to hastily assembled forces that may attempt to block its advance; and its psychological effect on hostile morale are characteristics which make it admirably suited for such employment.

Future attacks of the combined arms in open warfare are visualized somewhat as follows: infantry, supported by artillery, will fix the enemy in position and initiate the envelopment. Horse cavalry will extend the envelopment farther to the flank, and screen the movements of the mechanized cavalry to assembly positions on the extreme flank, whence the latter can launch its turning movements or encircling maneuvers. Suitable objectives for the mechanized cavalry would be the enemy reserve divisions, GHQ artillery, command posts, lines of communication, or critical areas of importance to its own army or essential to the withdrawal of the enemy.

The successful accomplishment of such missions by mechanized cavalry seems practicable, provided:

- (1) Supremacy of the air is achieved.
- (2) Intelligent staff work develops adequate plans and preparations.
- (3) All commanders concerned furnish effective cooperation in preserving secrecy of the initiation of the movement that will lead to it dynamic surprise and the requisite assistance to capitalize its effect.

With these essentials attained, the success of the attack of the mechanized cavalry is likely to be magnified out of all proportion to its actual strength, possibly demoralizing the enemy sufficiently to enable the other arms to drive through to victory.

Even should the enemy discover the movement, thus diminishing the full effect of the blow itself, the maneuver should not prove fruitless, because it will probably cause him to commit his reserves and so dissipate his force in an extension of front in order to protect his lines of communications as to invite a then-practicable penetration by the other arms.

The mechanized cavalry should be followed as closely as practicable by horse cavalry or infantry in trucks to consolidate its gains.

##### b. Break-through and Exploitation.

Some believe, apparently without reservation, that mechanized cavalry may be employed to make the

actual penetration of a hostile position, and continue on, through hostile supporting artillery, to objectives well in rear of the enemy front lines. A sounder view recognizes that combat cars such as will constitute the main force of mechanized cavalry should not attempt to break through a strong defensive position adequately supported by effective artillery fire. Opportunities may occur, however, before the enemy has had time to organize a strong defense, or after his position or zone defense has been substantially weakened by attacks made by the other arms and his artillery neutralized, for mechanized cavalry to pierce an enemy screen and then exploit the success. Mechanized cavalry should prove a valuable arm to push through a gap, in a decisive attack against one of the newly-created flanks, before the enemy can entrench; or to seize important terrain to cut off the enemy's retreat or block the movements of his reserves. Complicated maneuvers should not be attempted against the wavering flanks of a gap, lest valuable time be lost, and in most cases the exploitation should go only to such extent into enemy territory as will enable the mechanized cavalry to coordinate its action with the general tactical mission of the command as a whole, in order to avoid being cut off and destroyed.

Mechanized cavalry should be followed as closely as practicable by horse cavalry to take over the objectives which the former's mobility will enable it to seize, but which it cannot hold for a prolonged period. Infantry in trucks would probably be unable to follow closely through a gap in a break-through on account of the torn-up condition of the hostile defensive area.

As would be the case of any other reserves assembled in anticipation of a break-through, mechanized cavalry should be on hand, close to the place of the expected break, and ready promptly to initiate the exploitation before the enemy can assemble new reserves to reconstitute his defense. The superior mobility of mechanized cavalry will enable it to be brought up on shorter notice and from far greater distances than the other arms.

##### c. Counter-attack.

Mechanized cavalry is a highly mobile force of considerable striking power and limited holding power. It seems that a force of the combined arms could best utilize these attributes by holding its mechanized cavalry in reserve to preserve the flexibility of the defense. The comparative facility with which it could be moved to counter-attack the hostile main blow should enable mechanized cavalry to strike the opponent in a critical direction, while he is still in motion, or before he can reorganize on his new position.

The reserve of a defensive force has been termed the commander's "Peace of Mind." Possession of a relatively large force of mechanized cavalry, held intact, conveniently located behind the other forces pending the critical stage in a conflict when full use of its mobility and striking power can be adequately exploited to deliver a decisive blow against the most dangerous enemy threat, should do much to sustain the mental tranquility of any commander.



#### d. Delaying Action.

Consistent with the principle of making the best use of its mobility and striking power to play a strong hand rather than to attempt to fight at a disadvantage by assuming a rigid defense, mechanized cavalry's part in delaying a superior hostile force should contemplate maneuvering to gain a favorable position whence it can inflict a short, quick thrust against the flank of the opponent's most serious threat,—a surprise jab to slow him up,—and then a speedy withdrawal to a safe position where it can make preparations to deliver a similar subsequent blow. By successive repetition of these tactics an effort will be made to effect the requisite enemy delay. Some believe that, in many situations, mechanized cavalry, acting alone, will not be flexible enough to accomplish such missions. They advocate the cooperative employment of horse and mechanized cavalry for these missions. Certainly, the cooperation of these complementary elements of the mobile arm will accomplish the maximum delay. When the enemy is advancing from a distance, the mechanized cavalry can be sent out to gain contact and institute the initial delay; the horse cavalry following as closely as practicable to support it. When the horse cavalry reaches the theatre of action, it can take over the task of intercepting the enemy close to his axis of movement, while the mechanized cavalry maneuvers to strike him in flank. In retrograde movements, the horse cavalry can directly cover the retirement of the main forces, while the mechanized cavalry maneuvers to strike successive blows against the flank of the most dangerous hostile threat.

#### e. Neutralization Of Hostile Mechanized Cavalry.

A commander should strive to achieve positive profit from the employment of his mechanized cavalry rather than merely to neutralize hostile mechanized cavalry. Artillery fire, .50 caliber machine gun fire and the placing of natural or artificial obstacles and demolitions directly in the path of advancing hostile mechanized cavalry or cutting off its retreat, offer far more effective and possibly far less expensive means of dealing with the enemy's force than needlessly immolating one's own mechanized cavalry. It is believed, however, that the enemy will utilize his mobility to avoid those means that the defender might otherwise find most efficacious for his protection. There will be times, consequently, both on the offense and defense, when the hostile mechanized cavalry will become the most serious, imminent danger to the accomplishment of a commander's mission. In such cases, the commander will use his own mechanized cavalry to attack or counter-attack the hostile force. The essence of success in such an engagement will lie in successfully driving the enemy against an obstacle or into one's own supporting artillery fire.

#### 5. The Attack Against Unmechanized Forces.

##### a. Fundamental Principles.

Three principles are deemed fundamental in the employment of mechanized cavalry in the attack:

##### (1) Fix the Enemy in Position.

Modern weapons have prodigiously increased the tenacity of the defense. The real weakness of the de-

fense, however, is the uncertainty as to where the attacker will concentrate his decisive effort, necessitating a relative dispersion of the defensive force. Nevertheless, an alert defender will always endeavor to keep his defense flexible by organizing his artillery and his reserves in depth, with plans prepared to frustrate an attack before it can reach vital areas. Unless he is immobilized he will try to shift his guns or interpose his reserves. Consequently, he must be fixed in position.

##### (2) Outflank Strongly Organized Resistance.

Protection is always sacrificed to gain mobility. A heavy tank would be considerably less vulnerable to hostile fire than a light combat car, but the latter has been adopted for mechanized cavalry, among other reasons, in order to enable it to avoid such fire. Mobility is an empty power unless it is used. Therefore, the decisive attack of mechanized cavalry should employ mobility to outflank hostile artillery fire to which it is vulnerable. To attempt to penetrate a strongly organized hostile defensive position, adequately supported by effective artillery fire, would represent a flagrant misuse of its mobility, except in most extraordinary circumstances such as: where maneuver within its radius of action around the enemy flanks is utterly impracticable, and more suitable weapons, such as infantry tanks and heavy artillery are not available; or as a surprise variant of tactics against an enemy recently taught by numerous previous experiences to expect and prepare for attacks against his flanks and rear.

##### (3) Multiply Numbers by Surprise.

The moral effect claimed for mechanized cavalry can only attain full consequences when it finds the enemy unprepared. It will then probably be magnified, out of all proportion to the limited force involved, by the seemingly unlimited potential damage that the enemy fears might ensue. To achieve this moral effect, surprise is essential.

##### b. The Attack in Cooperation with the Other Arms.

When mechanized cavalry makes the decisive attack in cooperation with the other arms, the latter fix the enemy in their front, while the mechanized cavalry maneuvers to a flank position whence it can deliver a vital blow in a decisive direction. The attack of the mechanized cavalry is made in several waves, with the combat cars in each wave in irregular formation, on a broad front, to take advantage of favorable terrain and to avoid presenting favorable targets to enemy guns that may be lurking in their path. The reserve follows as the last wave, probably echeloned to a flank. The leading wave, supported by the other waves in series, drives thru, if practicable, to the objective; but if it encounters unforeseen difficulties, the following waves successively outflank strong hostile resistance or obstacles until a relatively unimpeded course is found to the goal. A wave that is held up reorganizes as soon as the opposition in its front is outflanked, and then becomes the new reserve, taking its place in the leap-frogging formation. The armored cars protect the flank or flanks and reconnoiter to find

the open flank of hostile opposition. The artillery may either accompany the leading waves to support the combat cars by neutralizing with smoke or shell the hostile anti-tank weapons encountered, or follow with the reserve. The machine-gun troops follow with the reserve, prepared promptly to take over, when necessary, the mission of temporarily holding ground seized by the combat cars.

##### c. The Attack While on Strategic Missions.

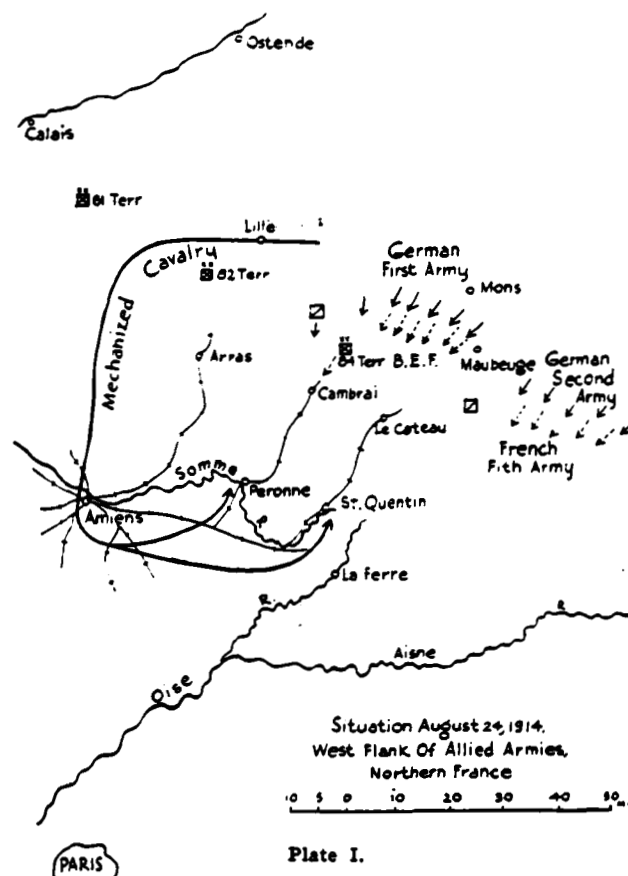
When operating on missions beyond supporting distance of the other arms, mechanized cavalry endeavors to reach its objective with the minimum of serious fighting en route, conserving its strength for the ultimate accomplishment of its mission. If it runs into strong hostile opposition on the way, it does not persist at that point; the leading element endeavors to fix the enemy in position and freeze his reserves, while the remainder of the brigade promptly outflanks the resistance and continues on.

To be effective, this fixing task will require the acme of skill on the part of subordinate leaders and individual fighters, inculcated by careful training. The ideal contemplates intuitive action, evoked by a simple signal. Combat cars are instantly scattered on as wide a front as the situation and terrain permit. Bold, prodigious efforts are energetically employed to deceive the enemy into the conviction that danger of his being run over is imminent, or that a hole is about to be punched thru his line. The essence of success is indefatigable activity. Seemingly ubiquitous bursts of fire are turned loose upon the enemy by combat cars darting round behind cover afforded by accidents of the terrain. Artillery and chemical mortars may supplement these efforts. Under cover of smoke, surprise jabs, impetuously directed at suspected soft spots,—some adroitly inflicted, others skillfully constricted or dexterously diverted in time to avoid developed hostile strength,—may be lunged at the enemy from various vantage points. There will be casualties, but surprise, speed and dispersion will materially reduce these. It must be remembered that the loss of a few cars represents but a small sacrifice compared with the accomplishment of the brigade's major mission, which is now in jeopardy.

In the meantime, the bulk of the brigade is moving, by routes concealed from the enemy, around his flank, prepared to continue on its mission. If it runs into more opposition, another fixing detachment is dropped off to immobilize the enemy at that place. Several such encounters do not discourage it, nor do they entice it to hazard the accomplishment of its major mission by prematurely committing the main force to decisive action. In most cases, its mobility should enable it eventually to find practically unimpeded access to the vital objectives in rear of the enemy. By continuing on, around the flank of the enemy, less time is given the latter to interpose new opposition between the brigade and its objective, and the bulk of the brigade is placed in a favorable position to launch a decisive attack, if need be, in a vital direction against the flank or rear of the enemy. As soon as each fixing detachment has gained the requisite time for the movement

of the remainder of the brigade, it extricates itself and rejoins.

When the brigade is committed to decisive action, it will usually employ a fixing force or forces, a maneuvering force and a reserve. The latter is initially maneuvered to support either the fixing forces or the maneuvering force. It may be committed as soon as one of the detachments that has been operating as a fixing force approaches and thus becomes available as



a new reserve. This is not considered piecemeal employment, because normally the attack will be launched in successive waves.

In the absence of natural cover, smoke screens provided by the chemical troop, supplemented when necessary and practicable by supporting aviation, will afford effective concealment for the maneuvers preparatory to the attack.

The rally of all, or any part, of the force, will constitute a critical moment favorable to hostile air and ground counter-attacks, testing the previous training of the force and the initiative of subordinate commanders. Where practicable, the rally is made beyond the objective so as to be prepared to launch a subsequent attack.

##### 6. Employment in Conjunction with Horse Cavalry.

With varying degrees of enthusiasm, there is a growing sentiment that mechanized and horse cavalry are complementary to each other. Modern weapons have unquestionably increased the limitations of horse

cavalry. The need for additional means to accomplish results beyond the powers of horse cavalry is recognized. It should not be inferred that horse cavalry is no longer useful. There is not a single prominent World War commander who entertains such a belief. On the contrary most of the greatest leaders in the last war have unequivocally expressed their deliberate convictions as to the great importance of horse cavalry in modern warfare. In the opinion of a few, the very factors that limit its capabilities to perform some functions, make imperative the organization of huge armies of horse cavalry to be used in decisive action in open warfare in the early stages of the next war, in order to avoid consequences such as were experienced in the World War.

Horse cavalry can travel over terrain impassable by mechanized cavalry. It can fight independent campaigns or battles requiring fluctuating changes from offensive to defensive combat. It is the most reliable ground reconnaissance agency over all kinds of terrain and in every condition of weather. Its strength is divisible into many individual, mobile fighting units. It can live, and has lived, off the country for considerable periods of time.

Mechanized cavalry possesses greater strategic mobility than horse cavalry though the differences in their speeds will be materially reduced in combat. Its machines have range and endurance far beyond the physical strength of animals, though the former are subject to mechanical malfunctions which often will be irreparable in time for them to rejoin in the accomplishment of a mission. It is relatively invulnerable to machine-gun fire, and it is capable of tremendous striking power.

It seems, therefore, that these two arms, both characterized by mobility though of different degrees, and each possessing qualities that make it superior to the other for certain purposes, might well be used in co-operation with each other when their mutual actions will collectively enhance their separate powers and the importance of the mission justifies the use of mechanized cavalry. This does not imply that they should be tied together; each should be employed in a manner so as to derive the greatest benefit from its peculiar characteristics. Missions requiring such joint action might be:

- a. Strategic reconnaissance.
- b. Securing an advanced position.
- c. Covering a concentration or protecting a flank.
- d. Defense on wide fronts, such as river or coast lines.
- e. Delaying action and covering a retirement.
- f. Turning movements and encircling maneuvers.
- g. Mobile reserves held for decisive action, either on the offense or defense.
- h. Exploitation of a success.

It must not be inferred that every time horse cavalry is dispatched on one of these missions an element of mechanized cavalry of proportionate size will be sent along to reinforce it. On the other hand, when mechanized cavalry is employed, horse cavalry or infantry in trucks will usually follow as closely as practicable

to consolidate the former's gains. In many situations, however, infantry in trucks, being even less flexible than the mechanized cavalry, would be of little assistance.

#### 7. Weapon of Army and GHQ.

The amount of mechanized cavalry available in the early stages of the next war will, undoubtedly, be very limited. Improvements in design develop rapidly. Appropriations to manufacture, in peace-times, a force larger than a few brigades that might soon become obsolescent, seem impossible. Proven worth in war would encourage expansion, as has been the case of the air corps, but even then mechanized cavalry, being strictly a war implement, could not derive comparable benefit from peace-time commercial development. It is quite likely that a few years after a war it would relapse into a relatively small force with experimental development concentrated on pilot models.

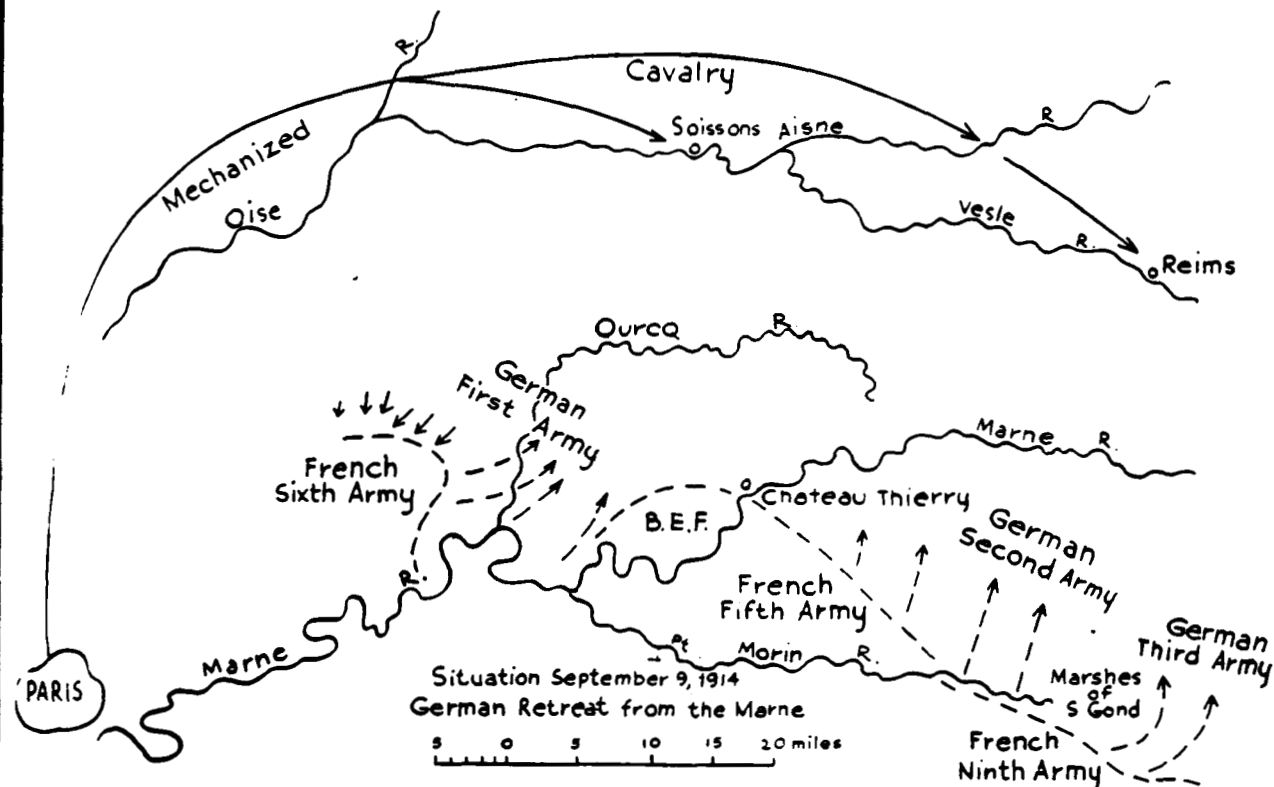
We have seen the potentialities of mechanized cavalry for extending the powers of a commander beyond the sphere of influence of the other arms, for deftly launching a dynamic blow against the most dangerous threat of the enemy, and for employment in decisive attack in a vital direction against the hostile lines of communication or against other critical objectives. Does it not seem obvious that a commander should be reluctant to dissipate a relatively small force, so precious to him for exploiting the fleeting opportunities of a crisis, by parcelling it out in detachments? We venture the principle that mechanized cavalry should never be used on a mission that can be accomplished as well or better by another available arm; its strength should be husbanded for occasions when full use can be made of its combined characteristics of speed, relative invulnerability to machine-gun fire, and terrific force. It is a weapon of opportunity.

It is prophesied that mechanized cavalry will achieve its greatest results if concentrated in as large masses as can be secured, under direct control of the army or GHQ commander, and employed in decisive action to exploit fleeting opportunities which the genius of leadership or the mistakes of the enemy will create. One such successful engagement in a campaign will probably prove infinitely more profitable than continuous employment on enterprises which serve only subordinate aims, or innumerable periodic minor success of small detachments.

This prophecy, though necessarily speculative in absence of actual war experience, courts favor when we contemplate the effect such employment might have had in specific historical situations in the World War. A few examples are illustrated on the plates which follow. In each case it is assumed that horse cavalry promptly followed the mechanized cavalry to take over the critical objectives seized by the mechanized cavalry, releasing the latter to strike a dynamic blow in a vital direction against the enemy, and that the success was vigorously exploited by the other arms.

#### Plate I. (see page 23).

Had the Germans successfully employed mechanized cavalry to seize the crossings of the Somme River and interrupted the critical lines of hostile communication.



blocking the retreat of the British Expeditionary Force and cutting off reinforcements, the destruction of that army might have ensued. If mechanized cavalry could then have promptly seized the crossings of the Aisne River, in rear of the French Armies, the decisive short-war victory which Germany had anticipated would seem to have been within the realm of possibility.

#### Plate II. (see page 25).

If the Allies had had available a large force of mechanized cavalry to seize the crossings of the Aisne River behind the retreating German Armies, after the First Battle of the Marne, years of costly trench warfare on the Western Front might have been obviated.

#### Plate III. (see page 26).

What would have been the effect on history had the Russians succeeded in cutting off and destroying the retreating Austrian Armies in the East at practically the same time as our hypothetical victory of the Allies in France as illustrated in Plate II?

Each of the above operations undoubtedly would have required a mechanized cavalry mass larger than the brigade we have been considering in the preceding pages; in fact, probably the equivalent of the entire mechanized cavalry that any nation will have available for the next war. Could any conceivable form of employment of a mechanized cavalry force in small detachments offer prospects for commensurate results?

#### a. Command and Staff Problems.

Higher commanders and their staffs must learn the capabilities and limitations of mechanized cavalry and constantly keep these factors in mind when considering its employment. Its superior mobility will offer

recurring temptations to dissipate it on missions, the importance of which may temporarily be magnified by local conditions, but which will contribute but little to the accomplishment of the primary objective. In each situation, the advantages of the potential results expected must be promptly and judiciously weighed against the possibilities of the deprivation of mechanized cavalry for future use. When the real opportunity for such employment occurs, however, it must be recognized and grasped with avidity.

Mechanized cavalry has been termed "modern cavalry" and "the cavalry's cavalry." History is replete with the successes of cavalry. Its failures in many instances may be attributed to a disregard of its limitations. Two examples should suffice to illustrate the point: the first, to expound the improper use of mobility; the second, the failure to use mobility:

Sordet's French Cavalry Corps, as nearly perfect as possible at mobilization, became almost completely exhausted in the first few weeks of the World War rendering it practically incapable of decisive action when real opportunities occurred for it to have influenced the course of events during the First Battle of the Marne. This exhaustion was caused, not by fighting, but by excessive, rapid, relatively ineffective marches, covering an estimated distance of about nine hundred miles during the German march on Paris. (The distance from the German-Belgian frontier to Paris is about one hundred and eighty miles.) If a commander dissipates the strength of mechanized cavalry by subjecting it to futile deterioration, can he expect to have it ready at a crucial moment when full benefit might be derived from its employment in decisive action?

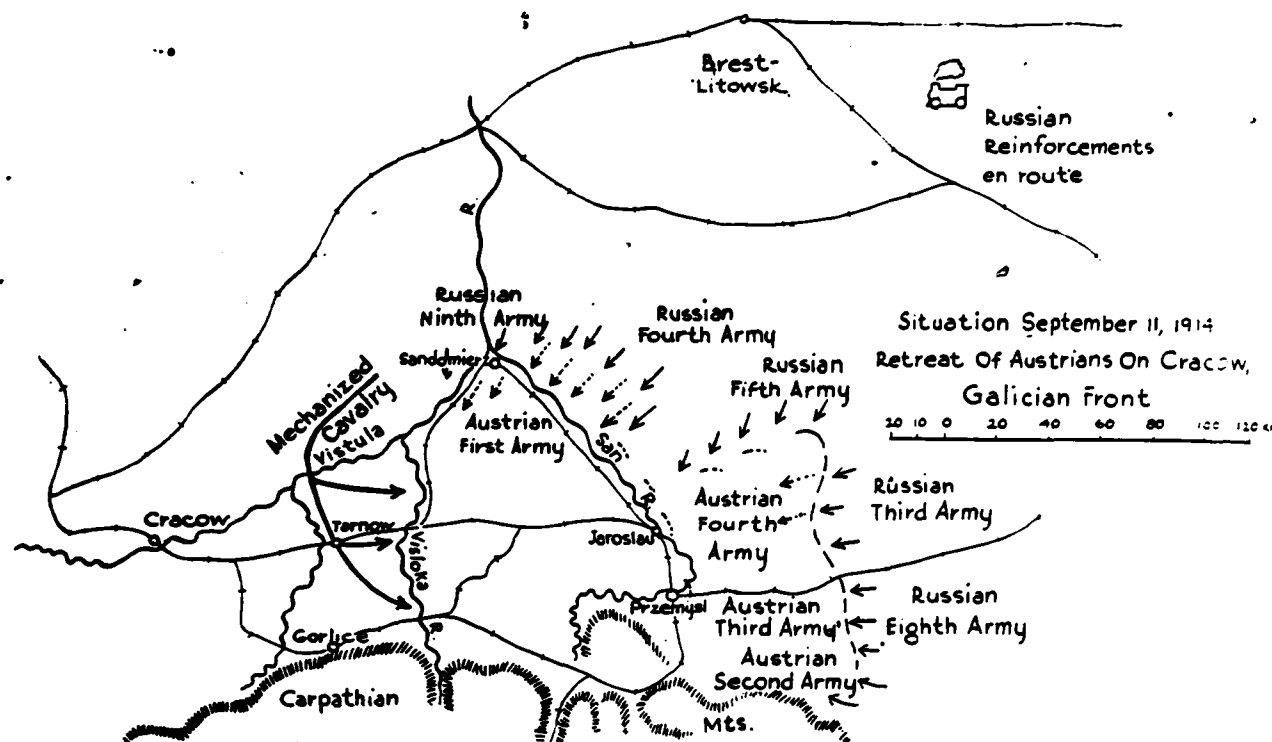


Plate III.

Von Marwitz's German Cavalry Corps piled up ten successive mounted attacks, of a squadron or more each, in close order, against an enemy in position, protected by barbed wire, artillery, machine-guns and rifle fire, at Haelen, August 12, 1914. For what purpose does an arm possess mobility if its strength is to be squandered in futile frontal attacks?

Commanders and their staffs must be mobile-minded; they must think rapidly, decide promptly and act quickly. During the World War, a mistake in calculations of an hour usually meant an error of not over two or three miles; in the next war, it may mean fifty miles or more if the speed expected by the more sanguine can be attained by mechanized cavalry.

Once the employment of mechanized cavalry has been decided upon, every effort must be bent toward making the action "click." This presupposes carefully-prepared, far-seeing, flexible plans, developed in anticipation of possible alternative contingencies; and readiness to execute them expeditiously on call. The role played by mechanized cavalry will frequently depend for its success, at least initially, upon the co-operation of some if not all of the other arms. Reconnaissance and air supremacy by the air corps, preparation of routes and camouflage of bivouacs by the engineers, protection of movements by anti-aircraft artillery, reconnaissance and screening into position by horse cavalry, fixing the enemy in position by the infantry and artillery, smoke screening by the chemical warfare units, and provisions for adequate support, prompt reinforcement, or speedy exploitation of success must be planned, prepared and coordinated, if full benefit of the expected surprise is to be achieved.

Control of the mechanized cavalry by its unit com-

mander constitutes a serious problem that will require much study and development. When combat is imminent it seems essential that the commander keep well forward to gain early information of changes in the situation, make rapid personal reconnaissance, quickly formulate his plan of action, and issue his orders for development, without unduly checking the advance of his main body. Simple, effective communications must be employed to insure prompt, coordinated action. A command tank, with radio (including, perhaps, wireless telephone) to subordinate elements and supporting units; staff officers and messengers in tanks or armored cars to transmit orders; and a code of visual signals devised to reduce conventional orders to brief symbols, seem to be indicated. Control of the unit after it has been committed to action will depend mainly upon the general understanding of the results desired, the initiative of subordinate leaders in dealing with successive changes in the situation to carry out the plan of the commander, and skillful teamwork acquired by careful previous training.

#### 9. Conclusions.

a. Mechanized cavalry will enable a commander to extend his powers beyond the sphere of activity of the other arms, and tactically to influence the course of events by striking a dynamic blow in a vital direction.

b. Mechanized cavalry will achieve its greatest results when concentrated in large masses, under direct control of higher commanders, and employed in decisive action to exploit fleeting opportunities.

c. Higher commanders and their staffs must learn the capabilities and limitations of mechanized cavalry and constantly keep these factors in mind when considering its employment.

## The Siege of Malta—A Coast Defence Epic

By Fletcher Pratt

IN the whole of military history, there is no event which better illustrates every principle upon which the attack and defence of a coastal fortress is based than the famous siege of Malta. Thanks to the persistence and ingenuity shown on both sides, every device known to the military art was tried to the limit; and if one can neglect for a moment the fact that the guns in use had a limit range of about a mile and the fortifications were of the masonry castle type and look at the underlying principles one finds in this celebrated feat of arms an almost perfect example of how coast defence should be conducted and of the results a resolute defence can achieve.

In 1565 Malta was held by the Knights of St. John, whose business in life was making things uncomfortable for the Turks. Their ships had caused serious damage to Turkish commerce and when one of them captured a vessel that was carrying part of Sultan Soliman II's harem, that monarch decided to put an end to this state of affairs by capturing Malta as he had Rhodes some time before.

He began preparations at once on the receipt of the news, but they took time, and the Grand Master of the Knights, Jean de la Valette, was given a well-employed opportunity to prepare for a siege. He did this principally by laying in a stock of provisions and increasing the garrison. The island was always in a state of defence from a military standpoint.

His force consisted of the 700 chevaliers of the Order, men whose lifetime had been spent in military service, and who could be considered as an officers' corps. There were also 6500 soldiers. The fortifications of the island were in three main groups, centering around the harbor which was the only good anchorage. The little Fort St. Elmo stood on a point of land jutting out into the center of the harbor, with its guns covering both entrances. The city was to the east of this fort, behind two other points of land, and consisted of four groups of fortifications; Fort St. Angelo; a castle on a point, and Fort St. Michel, a companion piece on the next point, with the basin for the navy of the Order between them. Behind each of these castles was a land fortification. The Fort St. Angelo was covered by the Bourg, a ring-wall with towers enclosing the city; Fort St. Michel was backed by the Sangle, a work of the same character as its mate. All of these fortifications were provided with guns of the then-current type; culverins firing a sixty-pound ball for the most part. Their most formidable feature was the careful traversing work that had been done under Grand Master La Valette's direction (and of which the Turks were ignorant). The artillerists knew almost to an inch where every shot would fall; a thing quite exceptional in that age.

An essential element of the situation, as in the case of any coast defence, was the political background.

Aid for the garrison could be expected from the Spanish Viceroy of Sicily, but only after a period of months and if the garrison succeeded in making a good defence, as the Viceroy would not willingly embroil his nation with a Turkish force that had been an easy victor. The case of the defenders, therefore, was the not uncommon one of having to hold out behind their fixed defences for a certain amount of time in order to give the mobile defences time to get into operation.

On the Turkish side, the commanders were the Pashas Kara Mustafa and Piali; the famous Algerine corsair Dragut Reis, and a renegade Greek named Candeliasa, who had charge of the naval side of the expedition. They had some 35,000 men to start with, and the assurance of unlimited reinforcements, a fleet of overwhelming superiority, and all the artillery they were likely to need. The Turkish artillery service at that time was the best in the world.

The fleet of the attackers arrived at the island early in May, and the disembarkation was made north of the city on an open beach. The point was well chosen, and there were no defenders on hand and no fixed defences. Most commanders would have attempted to improvise a defence and dispute the landing, but La Valette had a sounder conception of the strategic value of surprise. Permitting the Turks to think their own surprise had won them an unimpeded landing by letting them severely alone during the first day, he concentrated a force of heavy cavalry behind some rolling ground. On the second day, while the Turks were fully occupied with landing their siege artillery, he charged suddenly into the midst of the operation, inflicted a loss of 1500 men, and got out and away before any serious force could be concentrated against him. Having dealt this one blow he then ceased to bother about the landing; and the heavy guards the Turks put out were useless. Quite a little classic of an operation in offensive-defensive.

Kara Mustafa, after getting things straightened out at the landing point, decided to attack Fort St. Elmo first. He had to have a safe anchorage for his ships and the possession of the central peninsula of the harbor would give him one. It was nearly a month, however, before he could get trenches run across the peninsula and a twelve-gun battery set up to hammer at the fort. The trenching was constantly interrupted by a galling enfilade fire from Fort St. Angelo and Fort St. Michel, both of them, thanks to La Valette's careful traversing, making excellent practice.

On May 28 a practicable breach was made in St. Elmo's walls and an assault was ordered, under cover of the fire of the fleet from the outside. It was a signal failure; the garrison in the fort had mounted two guns to sweep the breach and the ships of the Order came down to the harbor mouth and kept the Turkish fleet



so busy that its fire was altogether ineffective. And finally, Mustafa's own artillerists in the trenches could not fire over the heads of the massed formation that tried the assault.

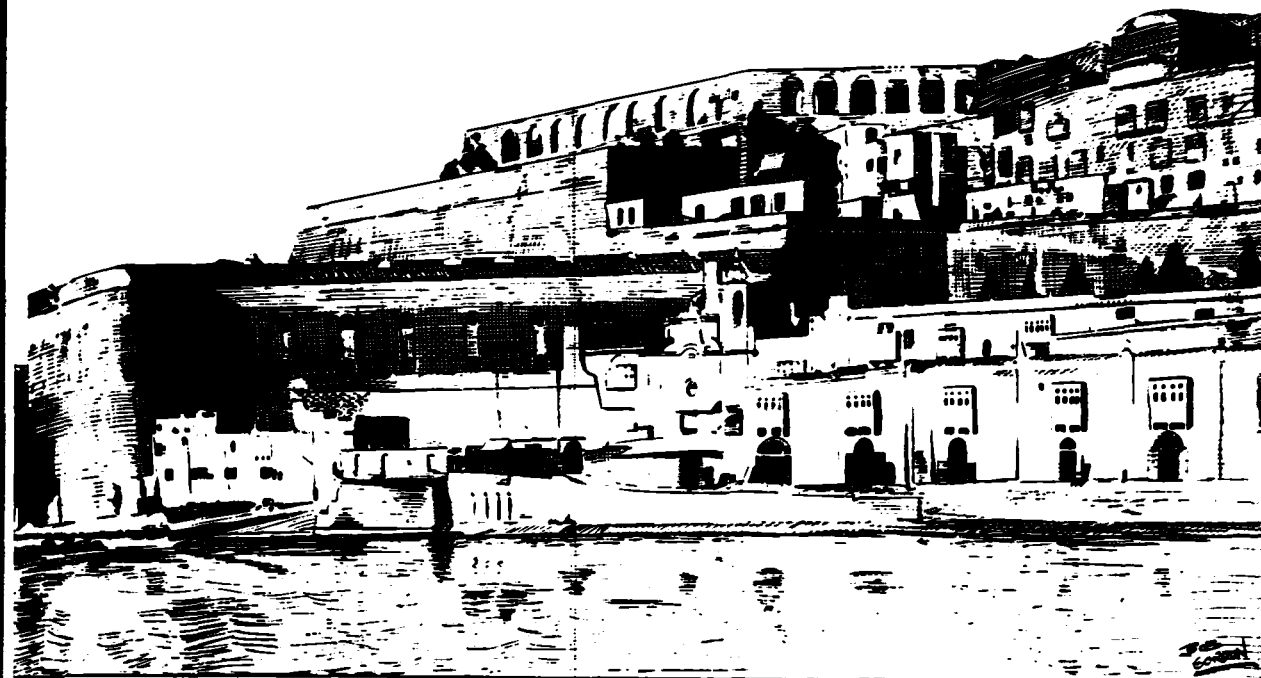
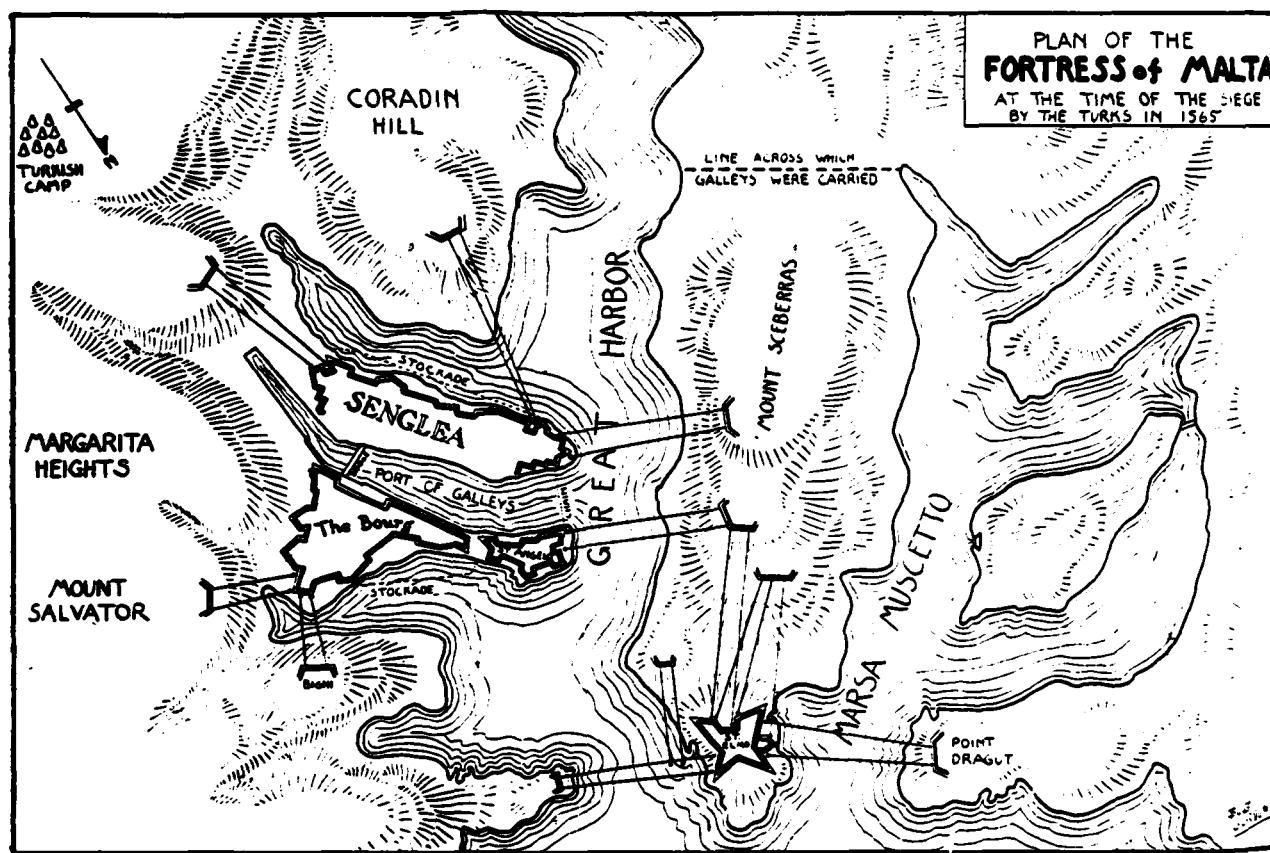
Mustafa had to have his anchorage however; and so he now tried to overwhelm St. Elmo by mere mass. Four heavy guns were mounted on Point Dragut where they could fire down into the fort. A several days' bombardment of incredible intensity for that age followed; the walls of the castle crumbled to powder under it and most of the fort's guns were dismounted. The place seemed absolutely beyond defence, and even the garrison begged the Grand Master to abandon it.

But La Valette had an eye for strategic values, especially for the strategic value of time, and a keen appreciation of the psychological factor. He realized that the Turks could not now give up the siege of Fort St. Elmo without a destructive effect on the morale of their troops, and that every day they spent on it was one taken away from the attack on the main fortress. Under his orders the fort was reinforced by boat from St. Angelo and the garrison dug themselves into trenches reinforced with the rubbish of their crumbled walls.

The next assault came on June 2; like the other it was an attack in mass, but this time under cover of the enfilading fire from Point Dragut. It ended in utter failure, with 5000 casualties for the attackers—over

ten times the whole number of the defenders. The reason was largely that the defence achieved another surprise by springing a new and special weapon in large quantity. Working in secret they had manufactured a kind of flame-thrower. At the crisis of the attack, without any warning, the flame-projectors were turned loose wholesale against the massed column of attackers. Numbers of the Turks were burned to death, the rest fled. The knights charged them in retreat, inflicting terrific loss, and might even have burned out their works if the garrison had been larger. But they lacked the force fully to exploit the moral impression produced by their special weapons whose effect here, as always, is largely against the morale of the opponents and must be followed up by a physical blow of the hardest kind.

After this assault another period of bombarding the little castle set in, accompanied by mining operations. As St. Elmo was built on almost solid rock, the mines were not a success, but the artillery fire was continued with the same obstinacy and the same object as similar efforts during the World War—that of completely obliterating the defenders. It succeeded no better than the eight day bombardments along the Somme. The garrison was constantly reinforced by volunteers in boats, and picked off a good many of their opponents by musketry fire, the Grand Master still refusing resolutely to abandon the fort.



The Old Fortifications of St. Angelo Are Still a Prominent Part of the City of Valletta, Named in Honor of La Valette.

The next attack came on June 16, and was accompanied by two innovations from the Turkish side. It was covered not only by the enfilading artillery fire from Point Dragut, but by an intense infantry fire from 4000 archers and arquebusiers thrown out on the flanks of the assaulting column; and in a last effort at surprise a big boat containing 50 men was sent around to surprise the sea-side of the castle while the garrison was occupied with the storming column.

Like the others this assault failed. A single well-directed shot from St. Angelo demolished the boat of the surprise party and killed 28 of them, and the rest did not wait for another such shot. The storming column was turned back in savage hand-to-hand fighting which cost the knights the heaviest losses they had suffered to date. Realizing that the further tenure of so ruinous a place as St. Elmo depended on morale; the Grand Master had sent over an extraordinary number of the chevaliers, and the line of defence at the breach was composed of 25% officers during this attack.

After this third failure Mustafa began to realize that St. Elmo would hold out as long as there was anyone in it. The trenches of the defenders were constantly growing stronger in spite of the insistent bombardments and the wrecked appearance of the place. To cut off the reinforcements which were negating his efforts, the siege lines were faced outward toward the harbor and a battery of heavy guns mounted in this direction to play on St. Angelo and keep the reinforcing boats quiet. After this piece of preparation and more bombardment a final and successful assault on St. Elmo was launched on June 20.

Possession of the place had cost the Turks over 6000 men in actual casualties, including Dragut, their ablest

commander, not to speak of the loss of a month and a half of time and numerous ships that had been wrecked in the open anchorages for lack of a harbor. The order had lost about 1,000 soldiers and 300 chevaliers, but the gain was all on the side of the defenders; a perfect example of what useful results a "useless" small coast defence position can achieve.

With St. Elmo out of the way, and a safe harbor gained, Mustafa now opened operations against the main fortress and the town. Nine batteries, mounting 66 heavy guns (how diminutive these figures seem today!) were established and St. Michel, the Sangle and the Bourg were all bombarded at once. Mustafa planned to breach all three places, then use his enormous numerical superiority in a general assault, with the idea of using up all the defender's reserves so that any local success could be exploited into a complete victory. But La Valette, who was usually a jump or two ahead of his opponents in strategic ideas, had realized this would be the object, and pared down the garrisons in the various forts to barely enough men to work the guns and to protect them against surprise. The rest were installed as a general reserve in Fort St. Angelo, where they were protected both physically and morally from the effect of the fire.

Meanwhile, under Candelissa's direction, a number of light ships were hauled over the central peninsula into the harbor on rollers, and it was planned to deliver an assault on St. Michel from the water side at the same time as the land attack. But La Valette, who had been sowing a stream of spies into the Turkish camp under the guise of renegades, was fully aware of this intended surprise. The marine attack was



countered before it was made with a floating boom off the fort.

It was mid-July before the walls were breached enough for the long-planned general assault, which was delivered by the whole Turkish force all round the circle of fortifications. Even the naval attack was carried out, the boom being broken under heavy gunfire and in spite of severe loss. This operation came the nearest of any to success—Candelissa and the 4000 Algerines he led got a lodgement in a branch in Fort St. Michel and began to move along the wall in both directions. Only the opportune arrival of La Valette in person with the reserves, which he had moved down into the Bourg in preparation for the assault, saved the fort. With considerable tactical ingenuity, La Valette led these reserves around the outside of the fort and took the storming column in the rear instead of trying to make good the defence from the inside, and of the 4000 Algerines only 500 escaped.

At the Bourg the attack was beaten off without the reserves and at the Sangle there was no hand to hand fighting at all save when the knights made a sally, which was repulsed. No quarter was given on either side, and when the assault was over, in loving remembrance of the fact that the men captured in St. Elmo had been crucified, the Knights fired the heads of what Turkish prisoners they had on hand into Mustafa's camp from cannon. But perhaps it is not fair to cite this as a mere piece of warlike barbarity; all through the siege La Valette showed a singular ingenuity in irritating his opponents into doing the wrong thing.

At all events they did the wrong thing now. At a Turkish council of war it was decided to divide forces; each general was to be responsible only for his own part of future operations without reference to the others. Mustafa himself was to continue the attack on the Sangle and St. Michel, Piali that on the Bourg and Candelissa to conduct the sea blockade and any further boat operations that seemed hopeful.

One would think that the Turkish commanders would have learned by this time that the alternation of preparatory bombardment with massed infantry attack was not getting them anywhere, but this is one of the hardest of all military lessons to learn as the World War demonstrated, and it is very difficult for any commander to abandon a program he has once embarked upon. Moreover the thing had now gone so far as to become a matter of prestige. After an intense fire from all the guns in the siege-lines for two weeks more, another assault was delivered on St. Michel on August 2 and still another on August 7.

The second of these two was intelligently handled and came near to success. It was preceded by a covering attack on the Sangle, which drew most of the available forces thither and pinned them (thus preventing a repetition of La Valette's coup against the Algerines), was covered by an intense musketry fire and nourished by the device of continually feeding in new waves of assault, a procedure from which the Turks were enabled to draw the utmost benefit thanks

to their numerical superiority. Just at the moment when the defence seemed about to collapse, wearied out by these continual attacks of fresh troops, the Turkish trumpets sounded a recall and the whole force retired.

The division of command in the attackers' forces had done its work. La Valette, instead of sending his reserve to the support of St. Michel across the harbor, had formed it up under protection of a hot fire from the guns of the Bourg, feinted at the Turkish trenches opposite him and then made a sudden sally into Mustafa's camp from the south end of the fortifications. He had gained possession of the Turkish hospital, massacred everybody in it, and was beginning to swallow up the attacking column from the tail like a snake, when the Turk finally decided to pull out and face him.

After this there was relative quiet in the siege operations until August 16, while the Turks resorted to mining with indifferent success. Again, as with St. Elmo, they had reduced a part of the defenses to ruinous condition; it did not seem possible to hold the Bourg for another day, and the knights begged La Valette to abandon the place and concentrate in St. Angelo. He refused for the same reason he had refused to abandon the fort on the point. The Spaniards were known to be already moving in the rear, and every day gained worked powerfully for the defence. August 16th was marked by a particularly determined assault on the Bourg in which La Valette was forced to put the reserve in a frontal attack, and the knights employed flame-throwers for the second time, but without the good results that had attended them before: the moral effect of them as a surprise was gone; a fact worth remarking by all those who insist on the value of such weapons.

Four days later a night attack on St. Michel was tried but was not pushed in. The Turkish soldiers, who were beginning to show the effects of their repeated defeats and heavy losses, refused to advance.

Mustafa was not beaten yet, however. He contrived a kind of infernal machine; an enormous barrel, filled with powder and scrap iron and fitted with a fuse. Another assault on the breach in St. Michel was ordered, with the Janizaries, the flower of the Turkish army, at its head. The moment the storming column mounted the breach the infernal machine was pitched among the defenders by a kind of catapult. Unfortunately, the fuse was too long; the Knights dusted the smoking object and rolled it down the breach, where it exploded in the midst of the storming column. Its destructiveness was quite up to Mustafa's expectations, for it blew the whole head of the column to glory. The rest ran away.

As though this demonstration of the futility of ingenious military tricks were not enough Piali had to try another one the next day. The trenches were only a few yards from the wall at one point. During the night his men quickly ran up a heavy wooden tower against the wall, and out of range of the defense artillery. Musketeers on the top of the tower spent a

very satisfactory day picking off the defenders from above, and an assault on the nearby breach was only repulsed by the use of the last reserves.

But that same night, the Knights tunnelled through their own wall, muffling the sound of their operation with cloths; then tunnelled through the side of the tower in the same manner and carried it with a rush. Braced and barricaded with stone, it was made an integral part of the defensive system and with its dominating height, it made further attacks on the breach at the Bourg hopeless.

It was now the first of September and every device of the besiegers from solid hammering to ingenious inventions had been tried in vain. Moreover Mustafa received with dismay the news that there were only 25 days' provisions left in his camp, and that a Spanish fleet, with the Viceroy of Sicily's army was already at sea. If he met them on the water, the undamaged ships of the Knights would certainly rush out and take him in the rear. He determined to meet the Spaniards where he was, and made preparations to receive them with a hot fire from Fort St. Elmo and Point Dragut, where the works were put in order, as he assumed that they would seek the anchorage of the port. Meanwhile mining operations were pushed against the Bourg as the only remaining hope.

The Spaniards, no bad strategists themselves, instead of attacking the port entrance, made a complete circuit of the island and landed unexpectedly on the other side. They put a force of light cavalry ashore first, and before Mustafa had even heard of their presence, these horsemen raided his camp. Something like a panic took place among the Turks, and with the troops that still remained steady, Mustafa was forced to cover his retreat to the west side of the harbor.

Even here the indefatigable La Valette would give him no peace. The moment the Turkish retreat began the Grand Master drew out his whole force, effected a junction with the advancing Spaniards, and covered their right wing in a pitched battle at the harbor which resulted in the utter rout of the Turkish forces.

To set the capstone on this epic defence, La Valette's

men immediately demolished the siege-works and set about rebuilding their ruined walls, with special attention to St. Elmo. And as a final exhibition of strategic foresight, La Valette had sent his spies to embark with the Turkish fleet with certain definite instructions. When that fleet arrived at Constantinople; these spies managed to set fire to it and burn out the whole business—thus insuring the Knights plenty of time to repair all damages before another attack could take place. But there was no other attack. Even Sultan Soliman had had enough of a coast defence that had cost him 25,000 men and nearly the whole of his navy, to inflict a loss of 5,000 men on his opponents.

.....It is hardly worth while commenting on the special lessons to be drawn from this siege, as most of them are so evident as to be in no need of comment. Perhaps the most prominent point of all is that illustrated by the defence of St. Elmo and later of the Bourg; that the most apparently hopeless of defences is worth carrying on, not merely for the time it gains, but also for the excellent moral effect it produces. No coast defence is a separate mechanism; it is one element in the whole defensive system of the state, and needs to be considered in relation to the whole.

A second striking characteristic is the amount of offensive action La Valette managed to take in a situation that would seem to be limited to purely passive defensive measures. His attack on the Turkish landing; the raid on Mustafa's camp, the reinforcing of St. Elmo and the capture of the tower, were all examples of offensives, which though momentary and local, produced a great effect.

Special weapons were demonstrated as something of purely moral value and extreme untrustworthiness. The flame-throwers produced one victory for the Knights; after that they were of very little use. All the Turkish attempts to use new and special weapons failed flatly, either through failure to use them in quantity or through mishandling.

And finally, the fact that one ounce of surprise is worth any amount of bull-dog hammering, even in static warfare, was most convincingly demonstrated. But that is a lesson that any warfare teaches.



THE ART AND SCIENCE OF FORTIFICATION, *field and permanent*, far from suffering from the advent of the tank, are on the contrary restored to their historic significance as the guardians of supply and the means of creating bases of mobile attack.—GOFORTH.

# The Grand Strategy of the World War

From the Point of View of an "Easterner"

By Captain Gordon Gordon-Smith\*

## PART I

**M**UCH has been written about the causes of the World War and the aims and objects of the various belligerent powers. The war literature is indeed so vast that it has become a sort of jungle in which the searcher after truth wanders aimlessly. So many "red herrings" have been drawn across the trails that it is almost impossible to follow any given one to its definite and logical conclusion.

One of the chief sources of error is the fact that most of the studies of the political and military factors of the war have been written by "Westerners," that is to say, writers hypnotised by the war on the French and Russian fronts who have refused to study the real origin, the *causa causans* of the conflict. I am, however, an impenitent "Easterner"; I believe the World War began in the Balkans, for the Balkans, and ended in the Balkans, and that there can be no complete comprehension of the great struggle which is not based on this as its *point de depart*.

In order to realize the real origin of the war we must go back a matter of seventy years, to the early 'sixties, when the greatest German statesman of the nineteenth century, Otto von Bismarck, embarked on his life-work, the creation and the consolidation of the German Empire. At that time the ruling power in the loose confederation of German States was the Austrian Empire, Bismarck, the "strong man" of Prussia, saw that the German confederation could only be welded into an empire under Prussian hegemony after the expulsion of Austria-Hungary from the combination.

The first step toward this was an alliance of Prussia and Austria-Hungary to wrest the provinces of Schleswig and Holstein from Denmark. The real object of this inglorious campaign was to furnish Bismarck with an excuse for a conflict with the Vienna government such as would excite patriotic enthusiasm in Prussia.

The war against Denmark of 1864 was hardly at an

end before differences with Austria regarding the sharing of the war plunder, which Bismarck had foreseen and, in fact, counted upon, became acute and two years later led to the Austro-Prussian War of 1866 in which Austria, on the battlefield of Sadowa, went down to defeat and was driven from the leadership of the

German States. It was on the occasion of this victory that Bismarck showed his greatness as a statesman. Von Moltke and the military leaders, intoxicated with their victory, wished to push on to Vienna and dictate the terms of peace in the Austrian capital. This Bismarck resisted. He had accomplished his purpose of driving Austria from the leadership of the German States, but he had no intention of inflicting such a humiliation on the defeated empire as would preclude its future friendship and even alliance.

As a result, thanks to Bismarck's insistence, the most generous peace terms were accorded to the defeated enemy. Four years later came the final phase of Bismarck's policy, the war with France, in which the modern German Empire was forged "in blood and iron" and all hope of Austria ever again playing a role in the German Confederation came to an end.

The German Chancellor then began to reap the fruits of his statesmanship.

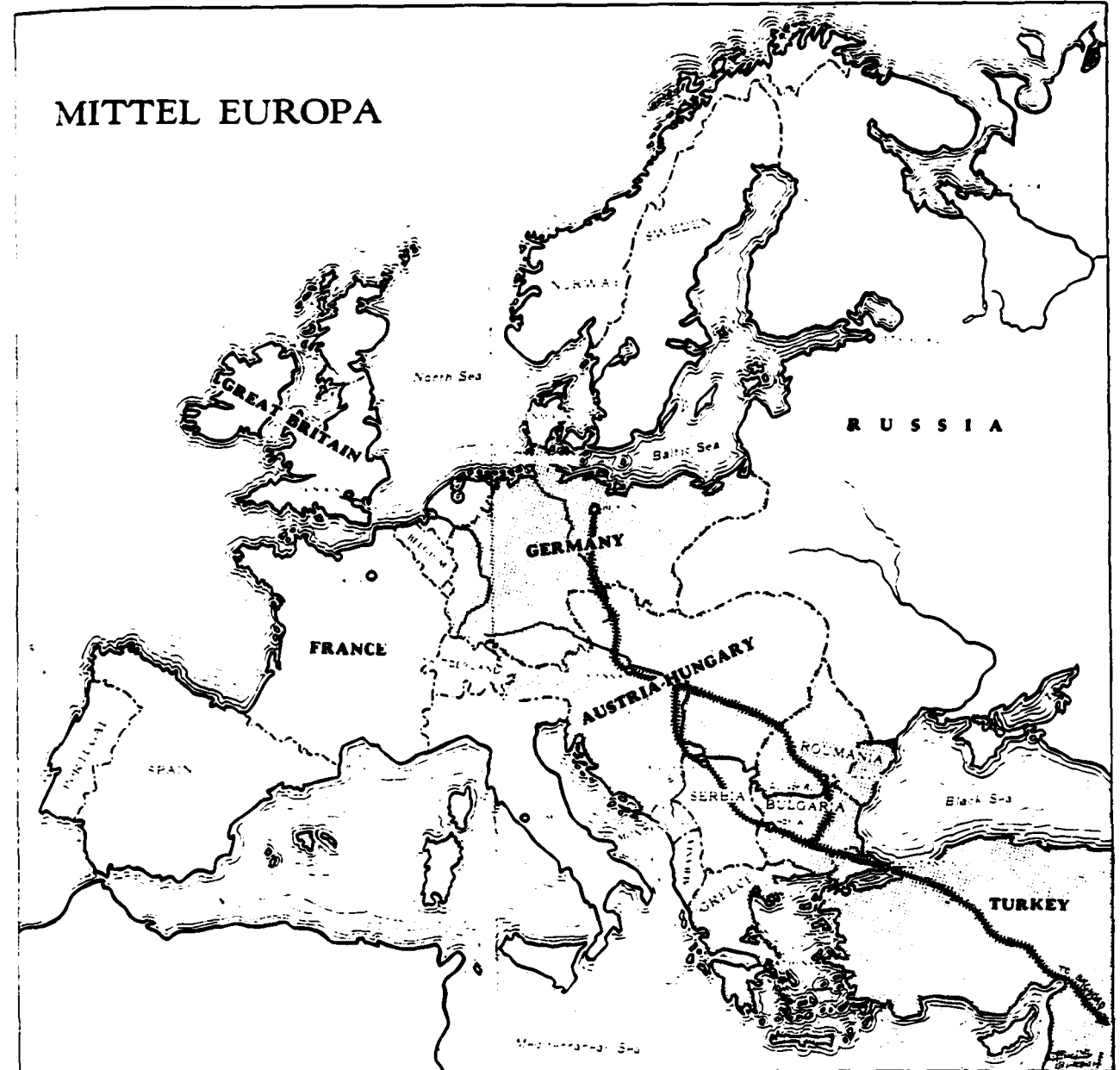
Berlin and Vienna were drawn closer together and the modern balance of power in Europe took shape. Bismarck saw that in order to extinguish the last remnants of ill-will on the part of Austria that power should be encouraged to find some other outlet for its energies and ambitions, such as would wipe out the memory of its defeat at Sadowa. This was found in the Near East. The Wilhelmstrasse encouraged the Ballplatz in this policy and the famous "Drang nach Osten" began. Austria made no secret of her intention to drive down the Balkan Peninsula and occupy Salonica, as soon as the disintegration of the Turkish Empire should justify the effort.

This was the new orientation of Austrian policy



Archduke Franz Ferdinand, whose assassination precipitated the World War.

## MITTEL EUROPA



which laid the seeds of conflict which culminated in the World War of 1914. But such a culmination was not in the plans of Prince Bismarck. He had no intention of allowing Germany to be drawn by Austria into any conflict in the Near East. The world remembers his famous declaration, "The whole Balkan question is not worth the bones of a single Pomeranian grenadier," and as long as he was in power he set his face against any active aid in the realization of Austrian ambitions.

But unfortunately for Germany and the world, Bismarck could not remain in power forever. In 1888 came the death of the Emperor Frederick and the accession of the Kaiser William II. A few short months later came the inevitable conflict between the Iron

Chancellor and his autocratic sovereign and Bismarck left Berlin forever.

Then came a complete *volte-face* in German policy. The Kaiser, and with him the whole German people, from the humblest peasant to the "captains of industry," began to dream a great dream. This was the creation of a great Teutonic Empire, to which its partisans gave the name of "Mittel Europa." This was to include Germany, Austria-Hungary, the Balkan Peninsula and Turkey. When this was created the Kaiser's *flot* would run from Koenigsberg-in-Preussen, on the Baltic, to Coveit, on the Persian Gulf. Europe would be cut clean in two down the center and Russia completely separated from the rest of Europe.

The first step in this great combination was to estab-

\* Author of *Through the Serbian Campaign*, Hutchinson & Sons, London, 1916 and *From Serbia to Yugoslavia*, Putnam, 1919.

lish such close relations with Austria-Hungary as would assure the supremacy of the Kaiser's will. These two states had entered into an offensive and defensive alliance in 1879. This was renewed in 1892 and 1902 and the bonds finally drawn so tight that the Austrian Foreign Office, in matters of international policy, ended by practically accepting the orders of the Wilhelmstrasse, while the great general staff in Vienna became a mere department of the great general staff in Berlin.

This is clear to anyone who has read the memoirs of Field Marshal Conrad von Hotzendorf, the Austrian chief of staff, who sent dispatch upon dispatch to Berlin asking permission to loose the Austrian forces against the Kingdom of Serbia years before the World War.

Austria-Hungary being thus reduced to the position of a German satrapy, the next field of German action was the Balkan Peninsula. Roumania's adhesion to the "Mittel Europa" scheme was assured by the presence of a cousin of the Kaiser, Carl von Hohenzollern, on the throne of that country. Roumania entered into an offensive and defensive alliance with Austria-Hungary in 1902 and this treaty was renewed in 1910 and was still in force (it only expired in 1915) when the World War began.

The support of Bulgaria was assured by placing Ferdinand of Saxe-Coburg-Gotha, a German prince, on the throne of that country. Greece was won over by the Kaiser giving his sister Sophie in marriage to the Crown Prince Constantine. The latter was brought to Potsdam where he served for two years as an officer of the Prussian corps of guards and was thoroughly imbued with the invincibility of German arms.

After the wedding festivities at Athens in October, 1889, the Kaiser pushed on to Constantinople where, with the Sultan Abdul Hamid, he laid the foundations of the Turko-German alliance which played such an important role in the World War. Behind the Kaiser came the German captains of industry; the concession of the Berlin-Baghdad railway, the backbone of the "Mittel Europa" scheme, was obtained and the active construction of that line begun. General von der Goltz and some scores of German staff officers were sent to Constantinople to reorganize the Turkish army, rearmed with Mauser rifles and Krupp guns.

"Mittel Europa," with the exception of one link, was thus complete. That link was Serbia. That kingdom had the good fortune of having at the head of its government the late Nicolas Pashitch, one of the greatest European statesmen of the nineteenth century. M. Pashitch saw the danger of the "Mittel Europa" scheme. He realized that if it was accepted by Serbia the king of that country would become a mere vassal of the German Kaiser. For thirty long years he, therefore, resisted all the efforts of the Vienna government

to draw Serbia into the orbit of Austro-German policy. Nothing was left untried to break Serbian resistance. Threats and persuasion were tried in turn. A hostile tariff was erected to ruin Serbian commerce, but all in vain. The nation was determined to uphold its freedom and independence to the last.

Since diplomatic means had failed it became clear that the Central Powers would have recourse to force. All that was needed was a pretext. This was found on June 28, 1914. On that day the Archduke Franz Ferdinand, the heir to the Austrian throne, and his consort, the Duchess of Hohenburg, were assassinated in the Bosnian town of Sarajevo by a seventeen-year-old schoolboy named Gabriel Prinzip. On the pretext that he was a Serb (how could it be otherwise in an Austrian province inhabited entirely by Serbs? the Belgrade government was accused of complicity in the crime and on July 25 Baron Giesl von Gieslingen, the Austro-Hungarian Minister to Belgrade, presented the famous ultimatum, probably the most insolent diplomatic document ever penned, giving the Serbian government 48 hours to satisfy the Austrian demands.



King Peter I of Serbia

It was not intended to be accepted. The Central Powers had decided that the moment had come for the creation of "Mittel Europa," of which the crushing of Serbia was a necessary preliminary. In the interest of the maintenance of peace Serbia, in her reply, went to the utmost limit in her concessions to the Austrian demands. All these were accepted except two which, it was pointed out, would require special legislation by the Serbian parliament. In addition the Belgrade government offered to submit the whole dispute to the International Arbitration Court at The Hague and to abide by its decision. But all in vain. Forty-eight hours later Austria-Hungary de-

clared war on Serbia. Within a few days Germany, Russia, France and Great Britain were involved and the World War had begun.

An Austrian army of about half a million men, under the command of Field Marshal von Potiorek, was given the mission of crushing Serbia. The remainder of the Austro-Hungarian army and the entire military forces of Germany were mobilized. Their mission should have been to prevent any interference on the part of France or Russia with the designs of the Central Powers in the Balkan Peninsula. The war on the part of the latter, therefore, should have been an *offensive* one in the Balkans and a *defensive* one against France and Russia.

The Central Powers counted on overrunning Serbia in the first four weeks of the war and on bringing in on their side Roumania, Bulgaria, Greece and Turkey. "Mittel Europa" would be at once realized and Russia completely isolated from her French and British allies.

All the Central Powers would have to do would be to hold back Russia and France until the armed strength of Roumania, Bulgaria, Greece and Turkey, over a million men, with twice as many reserves, could be mobilized and thrown into the scale. With these tremendous forces hurled against her, France, it was confidently expected in Berlin and Vienna, would go down to defeat long before Great Britain could mobilize and train an army to come to her assistance. Once France was disposed of, the whole of this tremendous military power would be turned against Russia and that empire defeated in her turn. The Central Powers would then be masters of continental Europe. Then it would be the turn of Great Britain and the Kaiser would achieve supreme power.

That this was not accomplished was due only to two factors, one the courage and bravery of the Serbian army and the other the error, due to Prussian arrogance, that Germany made in not remaining on the strict defensive till the victory in the Balkans was assured. Instead of doing so her armies pushed on to the battlefield of the Marne.

For things on the Balkan front had not gone according to program. Field Marshal von Potiorek's invasion of Serbia had been a complete fiasco and in four weeks his armies were hurled back across the Drina in hopeless rout. Twice again the Austrians returned to the attack but without avail and in the third attempt, the battle of the Kolubara, the disaster became complete. Von Potiorek's army fled back across the Drina, a routed rabble. Tens of thousands of prisoners were taken and enough war material captured to equip three army corps.

The Kaiser, however, could only look on helplessly as all his hopes of the immediate realization of "Mittel Europa" went a-glimmering. On the battlefield of the Marne he had "got a wolf by the ear" and did not dare let go. His army had "to dig itself in" and go on the defensive. The Serbian successes had convinced the Italian government that the interest of Italy lay in joining forces with the Entente Powers and the attack on Austria on the Adige front began.

Trench warfare became the order of the day. A line of trenches, such as the world had never seen, ran from the North Sea to the Swiss frontier. Switzerland, to maintain her neutrality, had mobilized her small but extremely efficient army and created a line of strong defenses all along her frontiers. On the other side of Switzerland the Italian trenches began and continued to the Adriatic. On the other side of that sea the Serbian front ran its trenches right up to the frontier of Roumania. Roumania, like Switzerland, had mobilized her forces to defend her neutrality.

On the other side of Roumania the Russian trenches began and continued right up to the Baltic. The British, French and Italian fleets assured the blockade by sea. The Central Powers had now become a besieged fortress and were, slowly but surely, being strangled to death. They replied, however, by making Russia a besieged fortress in her turn. Turkey was brought into the war and the Dardanelles were closed, while the German fleet closed the entrance to the Baltic.

Russia was, therefore, completely isolated from her allies. Archangel and Vladivostok became the only ports by which supplies and war material could reach her.

The Entente Powers accordingly resolved to break the strangle hold the Central Powers had thus established on Russia and a Franco-British force invaded the Gallipoli Peninsula. This plan was strategically sound but its tactical realization proved more difficult than had been expected. There was one thing, however, in favor of the Entente Powers. Turkey had no means of manufacturing ammunition and was completely dependent on Germany for her supplies. These were sent via Roumania and the Black Sea.

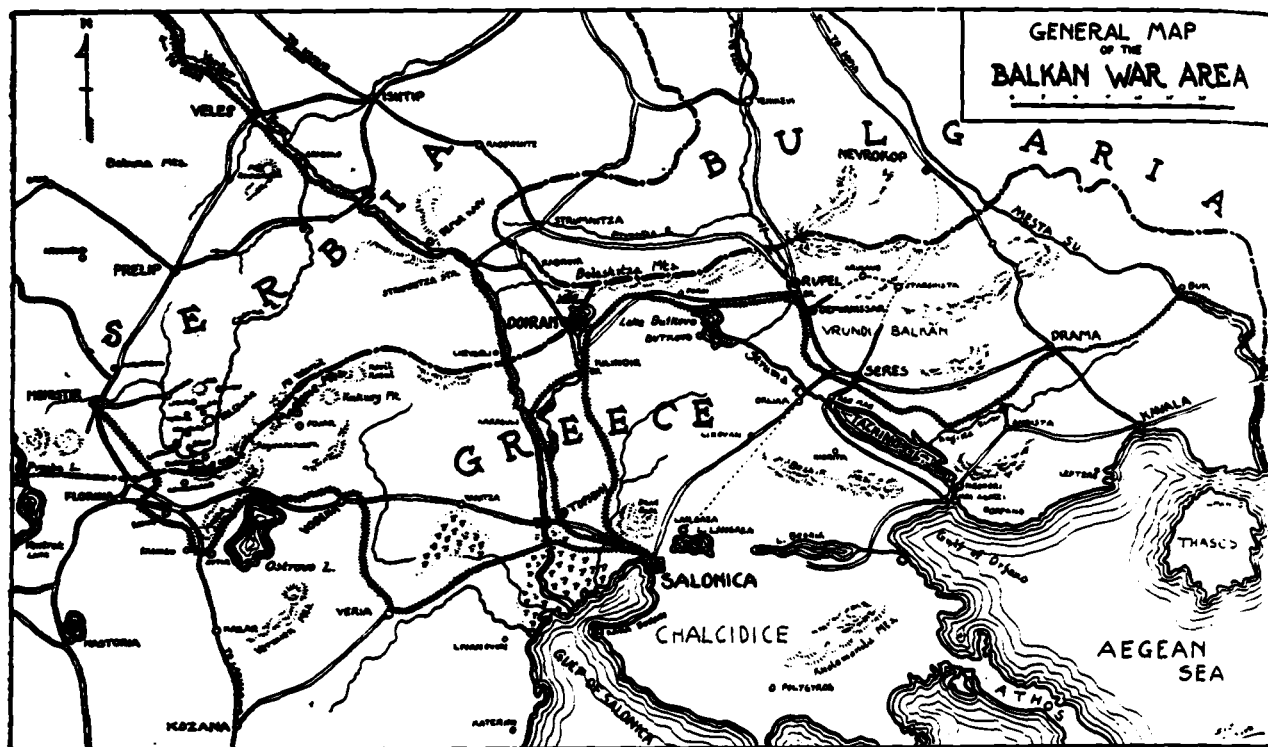
When then, in the spring of 1915, the Entente Powers brought such pressure to bear on Roumania that she closed her frontiers to the transport of war material to Turkey, the position of that country became critical in the extreme. If Turkey could be put out of business and the strangle hold maintained on the Central Powers the end of the war was in sight.

It was, therefore, clear to the meanest intelligence that it was a question of life and death for Germany to drive down to Constantinople and come to the rescue of her Turkish ally. In the preceding months Germany had, to a certain extent, recovered her liberty of action, and could now spare enough troops to carry out what Field Marshal von Potiorek had so ingloriously failed to do. Orders were given to assemble an army of 300,000 men on the plains of Hungary for the invasion of Serbia. The command of this army was entrusted to Field Marshal von Mackensen, one of the most brilliant German commanders.

In the month of July, 1915, the French aviation attached to the Serbian army reported the commencement of this concentration. The Belgrade government saw the danger. The military position of Serbia, in spite of the fact that every instant of the six months respite from actual fighting had been utilized to rest and recruit the army, to call out and train the new "classes," to fill the depleted arsenals and to accumulate food stuffs and war stores of all kinds, was a critical one.

When, therefore, it became evident that the country was threatened with a fresh attack and that this time the Austrian army was to be reinforced by German troops, the Serbian government was of opinion that it could no longer resist the new aggression single-handed. It, therefore, appealed to the Allies for help.

It was from this moment that the latter made their greatest military and diplomatic failure. Instead of themselves sending the military aid demanded by the Serbs, the British, French and Russian governments declared they would obtain this from Bulgaria. This reply caused consternation in Belgrade. It was in vain, however, that M. Pashitch and his colleagues pointed out that Bulgaria was their worst enemy, that she had in 1913, at the instigation of Germany and Austria, neutralized the effects of the victorious war against Turkey by abandoning her Greek and Serbian allies, and had treacherously tried to stab them in the back; these objections were brushed aside and the Allies began negotiating with the government at Sofia. Serbia



was to be left to defend the Danube front against the coming Austro-German invasion, while Bulgaria was to be induced to march on Constantinople as the ally of the Entente Powers. The fate of Europe was thus placed in the hands of Bulgaria's German-born king.

In order to get Bulgaria to do this the Allies offered to obtain for her, from the Bucharest government, the retrocession of the Dobruja Province, wrested from her after her defeat by Serbia and Greece two years before; from Serbia a large part of Macedonia and from Greece the cession of the towns of Drama, Cavalla and Seres. If the Allies, who were thus disposing of property which did not belong to them, had deliberately desired to cool all enthusiasm for their cause in these states they would not have proceeded otherwise.

M. Radoslavoff, the astute Bulgarian Premier, acting on orders from Berlin, pretended that a basis of agreement might be found on these lines and embarked on a series of deliberately long drawn-out negotiations. The truth was that Bulgaria was already pledged to the Central Powers and had been assured of a war chest of 200,000,000 gold marks. Germany further forced Turkey to cede to Bulgaria the port of Dedeağatch, on the Aegean and a strip of Thracian territory running up to it.

M. Pashitch, the Serbian Premier, and M. Venizelos, the head of the Greek government, sent dispatch after dispatch to the Entente Powers, warning them that Bulgaria was going to betray them. But to all these warnings the Entente Powers turned a deaf ear and declared that the Sofia government was one of the most loyal and upright in the world and was, beyond

all doubt, coming in on the side of the Entente Powers and would march her armies on Constantinople. All these pretended negotiations on the part of Bulgaria were, of course, carried out in order to throw dust in the eyes of the Entente Powers and gain time for Germany and Austria to assemble their armies on the plains of Hungary.

Then came the moment when, the Austro-German armies, having completed their concentration, Bulgaria threw off the mask and mobilized her army. And then came the crowning error of the Allies. Field Marshal Putnik, the Chief of Staff of the Serbian army, telegraphed to London, Paris and Petrograd, asking permission to march the Serbian army across the frontier and attack the Bulgarians before they had completed their concentration. He declared that the Serbian army would be in Sofia in five days. Bulgaria being thus disposed of the Serbs could turn their full strength against the Austrian and German armies on the Danube front.

But not only was this permission refused but the Entente Powers declared that if Serbia broke the Balkan peace the Allies would leave her to her fate. Sir Edward Grey, the British Foreign Minister, sent for M. Bozhkivitch, the Serbian Minister in London, and informed him that the Bulgarian mobilization was not directed against Serbia. When M. Pashitch was informed of this extraordinary communication he was completely puzzled, for all the information in his hands went to show that the attack by Bulgaria was only a matter of hours. He concluded that there must be some secret understanding between Bulgaria and the Entente Powers of which he had not been informed.

He accordingly gave orders that the Serbian army, to avoid all danger of a Serb-Bulgarian "incident," should be withdrawn five kilometers from the Bulgarian frontier and at the same time declared that any Serbian officer, whatever his rank, who should provoke any frontier incident would be pitilessly shot.

Having thus tied the unfortunate Serbia hand and foot the Allies could only look on helplessly while the Central Powers and their Bulgarian ally proceeded to cut her throat.

Four days later came the inevitable crash, when 300,000 Austro-German troops began a tremendous attack upon the Danube front while 400,000 Bulgarians were hurled across the western frontier. Field Marshal Putnik with his 250,000 men performed prodigies of valor. For two long months he faced overwhelming odds. Cut off from all communication with the outside world, the Serbs fought with the courage of despair. The British and French began hastily landing troops at Salonica but they came too late. As far as saving Serbia was concerned the expedition was doomed to failure from the first. It was *la moutarde après le dîner* as our French friends would say.

Slowly, foot by foot, the Serbian armies fell back under the pressure of an enemy outnumbering them nearly three to one. But human strength has its limits, and on November 24, 1915, all that remained of King Peter's gallant army left Serbian territory and began its fateful march across the snow-clad mountains into Albania. The triumphant invaders were masters of Serbia. Their armies poured down to Constantinople and also proceeded to invest the entrenched camp on the Salonica front, established by the Army of the Orient, under the command of General Sarrail.

Thousands of tons of ammunition were rushed to Constantinople to reprovision the Turkish armies. The first result of this was the abandonment by the British and French of the now hopeless enterprise on the Gallipoli Peninsula. The Danube had been the front line of that force and once these were gone nothing was left but to evacuate. A month later Montenegro was occupied. Albania was invaded and the remnants of the Serbian army forced to take refuge in Corfu. Such was the disastrous result of the error, political and military, made by the Entente Powers.

But it is when we consider what would have happened if the Allies had listened to the counsels of the Balkan governments that the colossal nature of the errors committed becomes apparent. As far back as July, 1915, when the Austro-German menace first became apparent, the Serbian government urged the Allies to send 250,000 men to the Danube front. If this had been done the Austro-German armies would have

found themselves opposed by half a million men (250,000 Anglo-French troops and 250,000 Serbs). With such a guarantee Roumania would at once have come into the war on the side of the Entente. This assurance was given M. Pashitch, the Serbian Premier, in the spring of 1915 by M. Bratiano, the Roumanian Prime Minister. This would have meant an additional 600,000 men at the disposal of the Allies, making a total of 1,100,000 bayonets on the Danube front. Under these circumstances M. Venizelos, who was then in power, would have forced King Constantine's hand and 300,000 Greeks would have swelled the forces of the Allies.

If this had taken place Bulgaria would not have dared to move, or, if she had, would have been disposed of at short notice. The result would have been the creation of a fourth front for the Central Powers which they would not have defended with less than a million men. And these million men they did not have. Then would have followed the march across the Hungarian *pusta* to Budapest.

Once the Allies were in possession of the Hungarian capital, the Austrian army facing the Italians in the Trentino would have become untenable. The Italian army would have poured across into Austrian territory. With Vienna thus menaced from two sides, Austrian resistance would have been broken and Germany would have been face to face, single-handed, with Europe in arms, and defeat in a few weeks or at most a few months would have been certain.

That this result was not achieved is due to the fact that the diplomats of the Allies allowed themselves to be deceived by an astute politician like M. Radoslavoff and his unscrupulous German-born sovereign. The French at once drew the logical conclusion from the errors committed. M. Delcassé, the French Foreign Minister resigned. But this did not satisfy the French Parliament and the Viviani Ministry, as the result of the errors of its Balkan policy, was driven from power.

The Germans had thus realized their aim. "Mittel Europa" had become a *fait accompli* but it was not the "Mittel Europa" of the Kaiser's dreams. As long as the Salonica front menaced the Berlin-Constantinople railway the German hold was a precarious one. The struggle on the French and Russian fronts had called for too great an effort on the part of the Central Powers; there had been nowhere such a clean-cut, decisive victory as would force the Entente Powers to bow to the decision of arms and make peace on German terms. Though successful the Central Powers no longer had the "knock out punch" such as was required to impose their will on their adversaries and so the struggle continued.

(To Be Continued)



IT IS NOT ENOUGH to put an army into the field: it must be well trained to be effective.—MITCHELL.



# Recognition of Merits and Deficiencies

By Major Ralph E. Jones, Infantry

**I**NSPECTIONS, competitions, prizes, decorations, pennants, citations, rewards, commendation, bawlings out, and punishments are matters with which we army officers are very much concerned in connection with our daily work with soldiers. These matters comprise the application of practical psychology in the work that the government is paying us to do. In all of this there is essentially but one purpose—to spur the soldier on to his best efforts. The underlying purpose is to improve the appearance and efficiency of our organizations. Since all of this has but a single purpose, a careful consideration of how that purpose can be achieved to the highest degree and most easily, is worthy of some time and thought.

The degree of desire in the mind of the soldier to respond to our will is the crux of the matter. To what extent will "this or that" action on our part engender in his mind a desire to do our bidding or to what extent will it influence him reversely? This all sounds very theoretical but, in reality, it is of the highest practical importance. If our mental conception in this field is deficient and we are, in consequence, not able to answer correctly in our minds the various types of specific questions suggested by the above general question, we shall be much less able and efficient as leaders and officers.

Although it is true that not all soldiers respond alike to the various types of stimuli, the great majority of them react pretty much the same. The reaction of the majority is, therefore, our most important and first consideration. In the discussion that follows, it is to be understood that we are dealing with one of the majority; not with an outstandingly exceptional case.

The primary motives that actuate the soldier in striving to do that which he ought to do are hope, pride, affection, and fear. The chief factors hindering such endeavor are lack of motive, lack of self-confidence, resentment, and fear or likelihood of personal sacrifice. These barren primary motives require elaboration. To put it more clearly, they are:

1. Hope of favorable reputation.
2. Hope of practical reward.
3. Pride of workmanship.
4. Pride of favorable reputation.
5. Affection for leader, comrades, unit, army, country.
6. Fear of unfavorable reputation.
7. Fear of practical punishment.

The ignorant leader, the psychological monstrosity, who thinks that the outstanding motive of the soldier is the seventh and that the only other is the second, is sadly in need of enlightenment.

Men are to be treated as men, not as babies, yet he who ruthlessly or ignorantly destroys affection, hope, and self-confidence, and inspires resentment by unfair

treatment, can never build a thoroughly efficient organization through fear of practical punishment. He can never inspire personal loyalty. However brilliant he may be otherwise, he can never be successful as a leader.

The foregoing paragraphs furnish the basis for our practical psychology of leadership. The deductions that give us rules for procedure are relatively simple and obvious.

The arch-enemies of leadership are psychological; in difference, unfairness, and an overbalanced excess of fault-finding with a corresponding rarity of recognition of merit. There is no need for the leader to rant and rave about the errors that he notices. It is true that in many or most cases they should not be ignored. But it is usually sufficient to indicate them clearly, briefly and in a kindly manner. On the other hand, any outstanding excellence should never be passed by in apparent blindness. To recognize merit, though ever so briefly, is to inspire loyalty and increased efforts. To ignore merit is to discourage, and create indifference.

It is difficult to go about, day after day, making corrections here and there in a kindly way and commending for this and that. Moreover, the fair-minded recognition of merits and deficiencies (especially merits) brings about greater psychological results if put up on a pedestal, so to speak. A little prominence and publicity brings potentially into the picture hope and pride in relation to favorable reputation. In consequence of these considerations, the desired results are easily brought about in a large measure when action that brings merits into publicity can be taken in a practicable way, with fairness, without destroying hope, and without serious objection due to other considerations. This leads us to the subject of competitions, the worthiness of which, in a general way, is widely recognized.

To compete is to strive to equal or excel the attainments of others who have the same or a like objective. Competitions may be divided into two important classes. In the one form, there can be but one real winner—the one that excels all others. In the other form, there can be a number of winners, all of equally recognized merit, provided all such reach a determined standard. To win the selection as orderly for the commanding officer exemplifies the first form; to "make" expert rifleman exemplifies the second. These forms of competition might be termed uniwinner and multiwinner. Often the conditions are such that only one form is suitable. In other situations the form is open to choice. Wherever it can be satisfactorily applied, it is believed that the multiwinner competition is psychologically much superior to and more effective than the uniwinner. One of the chief reasons for this is the lesser degree of discouragement involved. In the

multiwinner case, the competitors generally feel that they can achieve the honor of full success if they will determinedly put forth their best efforts. If they strive diligently, they are not likely to be disappointed, if they do not strive, they know that they cannot reasonably expect success. On the other hand, in the uniwinner case, a competitor may strive his utmost and put forth a very superior performance only to find that he has lost all recognition due to a trivial fractional margin possessed by one of his rivals.

If competitions are overdone, they can easily lose their merit and become detrimental. This is especially true of those of the uniwinner class that are organizational or not wholly fair. When a competition causes men to put forth a degree of effort out of all proportion to the needs of the situation or causes them to expend considerable sums of personal funds for unwarranted purposes, the competition has gone beyond its proper limits. The ideal military competition has for its objective the attainment of a wholly desirable military purpose and it simply encourages the necessary effort to reach the objective, with a minimum element of discouragement and a minimum possibility of unfairness.

On two occasions during the past ten years, I have instituted in different units at different stations a form of multiwinner competition that astonished me with its high degree of practical success. The procedure was substantially the same in both cases. I shall try to describe it briefly.

The competitors were the companies of a battalion. As battalion commander, I was the inspector and judge. With frequency and regularity and always on Saturday, but not each week for a particular company, I made thorough inspections of the several companies. A small mimeographed form was used for recording the grades pertaining to a company. The scope of the inspection was divided into several items. *Men in ranks* was one; it included the condition and appearance of the men, their clothing, arms, and equipment. *Kitchen, mess hall and garbage cans* constituted another item. All parts of the barracks and outside police were included somewhere. In the barrack items, some one noncommissioned officer or soldier was in charge of

each. The various items had different weights assigned for the determination of the company score. *Men in ranks* counted much more heavily than *Outside police*. The grade awarded each item was either *Excellent*, *Very good*, or no grade. *Excellent* counted twice as much as *Very good*. In the front hall of the company barrack was a large wooden special bulletin board upon which were painted the name of the items, and opposite each item were hooks upon which could be hung a small lettered metal plate. After the inspection of a company, Es and VGs were hung upon the special bulletin board. If any item was less than VG, there was no award to the company as a whole. If all items were VG or better and the total weighted score was closer to a perfect score than to a straight VG score, the company was awarded a large white E. If an E was won for every item, the company was awarded a large gold E. There was a place over the main front doorway of the barrack, on the outside, prepared for the hanging of a large painted wooden plaque, the regimental coat of arms. A white or gold metal E, as the case might be, was superimposed upon the plaque. If no large letter was won, the coat of arms was kept in the storeroom. The grade awarded remained until the next inspection of that company. When a gold E was won, the next graded inspection of that company was omitted and the company had a holiday.

I have said that I was astonished by the success of this system. It required a minimum of effort by the company commanders. There was a pronounced spirit of confidence and determination throughout among the men. At the first inspection most companies failed to win a white E. The improvement in appearance was rapid and continuous. In less than three months, each company had a gold E, fairly won. An entirely different standard of appearance was established, seemingly with a considerable degree of permanence.

The excellent results achieved with this particular system is perhaps of slight importance to officers generally, but the principle illustrated is of great importance. *Merit should be recognized—fairly, sensibly, with adequate frequency, and with such prominence as may be appropriate.* It is thus that efficient organizations are perfected, and thus that men in authority succeed as leaders.



IT IS OF THE UTMOST IMPORTANCE to educate and retain a body of officers sufficient for all the labors preparatory to war, capable of forming soldiers, of supplying them, and putting them in motion in the event of war.—EATON.

## The Red Cross and Its Duty to the Ex-Service Man

**T**HE obligations of the American Red Cross to the ex-service men, as well as to those on active duty, have their roots in the Treaty of Geneva and from its Congressional Charter, and constitute one of its most sacred charges.

During the last year these duties took on a new and deep significance because of the exigencies of the

work to ex-service men, and together with the national organization had handled 528,000 cases during the year; the largest number reported since the World War.

This important phase of Red Cross work is continuing with the probability that the load will be materially increased during the period in which unemployment remains a major problem. Moreover new legislation, with its drastic reductions in federal benefits for veterans, and curtailment of hospitalization privileges, will undoubtedly bring heavier pressure upon the Red Cross. This pressure will bear seriously upon communities and chapters which have carried on during the depression, and who will feel the responsibility of dealing meticulously with the work of obtaining, preparing and presenting all kinds of claims evidence for the ex-service men. No veteran need go to the expense of consulting a lawyer as to his status. The Red Cross workers exist to give him interpretations of the new legislation, and to assist in preparing his claims, free of any cost.

No picture of the Red Cross effort for the ex-service men would be complete without featuring the Junior Red Cross. Through the adoption of Veterans' hospitals and Army and Navy hospitals throughout the country by schools where the Junior Red Cross is established, a mutually helpful relation between the boys and girls of our country and its defenders is being cherished. To these heroes of the World War the children give a quality of hero worship which finds expression in seasonal gifts in such numbers that each patient receives a remembrance. In addition to these hand-made tributes, the hospitals are supplied with flowers, games, place-cards and favors of all kinds. Girls in cooking classes supply cakes, jams and jellies. Boys in manual training schools make chess and checkerboards, games of all types, besides tables, reading racks, trays, vases, writing tables, etc. Art classes furnish posters and wall decorations. In each school this work is done as a classroom project. At the holidays the Juniors give entertainments and carol services in the wards.

During the annual Roll Call of the American Red Cross the Juniors give valued assistance at chapter offices to those who are soliciting the memberships which finance the nation-wide program of the Greatest Mother.



recent depression. At no time since the Armistice have so many Red Cross chapters and branches been engaged in home service work for the ex-service men and their families. Not since those crowded days have so many cases been handled. In January, (1933) 3,179 of the 3,700 Red Cross chapters were engaged in relief



THE PRIMARY DUTY of government is the national defense.—THOMAS JEFFERSON.

## REGULAR ARMY NOTES

### From Class B Trucks to Armored Cars

*Effective Conversion by U. S. Army Troops in China*

**C**ONVERSION of two Class B trucks into armored cars combining in an unusual degree simplicity of construction, fire power, mobility, and protection of crew was recently successfully accomplished by the

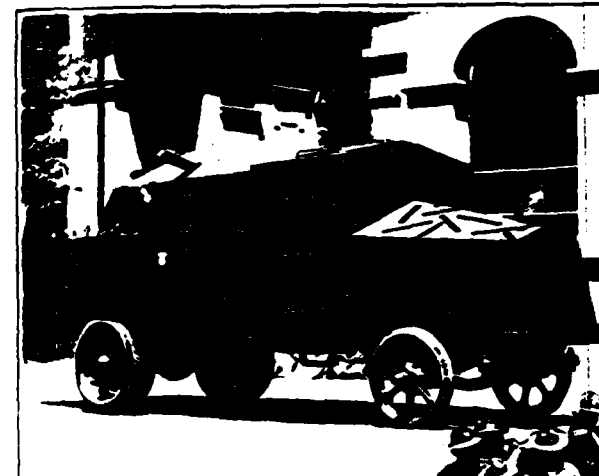
stricted largely to paved roads, but their employment on unsurfaced roads and across country over hard soil is entirely practicable. By the use of flanged wheels the cars may easily be adapted to run on railway tracks.

The possible tactical missions envisaged for the employment of the armored truck unit are on close and distant reconnaissance, as a street patrol or in street fighting; in the attack of a locality, such as a village; in the advance of an infantry attack or in conjunction therewith; as security to a convoy, and as a rescue unit.

The use of the cars as a rescue unit would be particularly applicable in Tientsin, where a situation might conceivably arise in which it would be necessary to convey American citizens residing in areas located

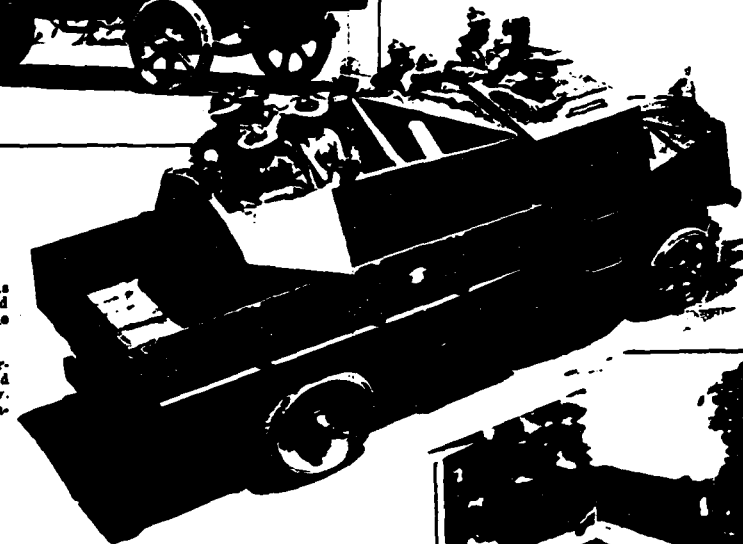
at considerable distances from the American compound, through danger zones to places of safety.

Two main tasks were involved in the conversion of the trucks, which were accomplished without major modifications in the chassis or bodies. These



Above: A Class B truck as an armored car—the overhead plates are in place and the car is ready for action.

Right: The improvised armored car with the overhead plates down to show the crew. Note the camouflage to conceal the true loop-holes.



United States Army troops stationed in Tientsin, China.

The cars were constructed with a particular view to their utilization in accordance with the mission of the troops in China, which includes the protection of the lives and property of American citizens residing in the Tientsin area. In principle it is contemplated to employ the two cars as a single combat unit, each supporting the other. The unit may be employed in attack or counter attack, but is not intended for use in defense. Use of the trucks will probably be re-



The Two Armored Cars Constructed by the United States Army Troops at Tientsin, China.

were the armoring of the cabs and engines and the construction of combat turrets in the bodies of the trucks. Each of the tasks involved the building of a basic hull of five-sixteenths inch mild steel, riveted to an angle steel skeleton. Bolted to this hull, and covering it completely, is a covering or reinforcing layer of steel plate of similar thickness.

Protection for the top of the engine is provided by one thickness of five-sixteenths inch plate, while two layers of the same material protect the crank case from frontal and flanking fire.

The problem of devising adequate overhead protection against thrown missiles for the operating personnel in the cab of the car and the combat force in the turret was solved by providing alternate hinged and fixed covers of a single thickness of steel plate one-eighth inch thick. This affords sufficient protection, with a minimum of weight, against ordinary missiles, such as bricks, stones, bottles, and even hand grenades. The overhead plate is considered entirely adequate, as protection against small arms fire is not a requisite.

All protective armor on the cars can be removed in a short time and the trucks restored to their original condition. Similarly the change from truck to armored car can be effected with equal ease.

Both the roof of the cab and the combat turret roof are hinged to provide free use of fixed armament, proper ventilation, and convenient entrance and exit of personnel, and in addition are properly trussed to reduce vibration.

By careful planning and utilization of all possible space in both cab and turret, it has been possible to provide the cars with a very effective fixed armament of four heavy Browning machine guns each, three such guns being mounted in the turret of each car. On one car, the forward machine gun is placed on the cab roof, while on the other the gun is suspended in a cradle inside the cab, the front shield of which is loop-holed to permit frontal fire. The turret guns are mounted on standard cradles suitably attached by brackets to the walls.

Beside the fixed armament of the cars, each is capable of carrying, in addition to the individual arms of the combat personnel, an auxiliary armament of four automatic rifles, four riot guns, and such material in the way of hand grenades, smoke grenades, and tear gas bombs as the particular mission may warrant. Both cab and turret are fully loop-holed to permit the use of small arms, and the amount of dead space outside the cars has been reduced to a minimum.

Each truck is capable of accommodating operating and combat personnel up to a maximum of fourteen men. For combat purposes the minimum personnel is considered to consist of a car commander, driver, assistant driver, and four machine gunners. Additional personnel up to the maximum capacity of the car would probably be made up of riflemen and auto-riflemen.

Entrance to the combat turret may be effected not only through the hinged roof, but also through a trap door in the floor of the truck body. Use of this trap

door not only permits entrance to and exit from the car with a minimum of exposure, but also provides a convenient means for laying down gas or smoke and the discharge of firearms and hand grenades.

Tests on the armor of the cab and turret show that it offers complete protection against bullets of not more than .30 (or metric equivalent) caliber.

A notable feature of the cars is the camouflaging of the armor. By means of a clever arrangement of painted lines it has been made almost impossible for a potential enemy to pick out quickly the slits and loop-holes provided for the use of the operating and combat personnel.

Trial runs of the cars indicate their maneuverability as approximately equal to that of the original Class B trucks, operated with a full load, and the combined weight of armor, armament, and maximum personnel is well within the rated capacity of the trucks.

The work of converting the trucks into armored cars was carried out by Chinese mechanics under the supervision of Captain Paul E. Leiber, 15th Infantry, and Private First Class E. H. Stephenson, Quartermaster Corps. The workmen employed apparently took as much interest in the job as their foreign supervisors, and cheerfully put forth their best efforts to turn out a creditable product. The ultimate success of the project, however, would not have been attained had it not been for the skill, patience, and ingenuity displayed on the part of Captain Leiber and Private First Class Stephenson, both of whom practically lived at the Chinese iron works during the period in which the cars were under construction.

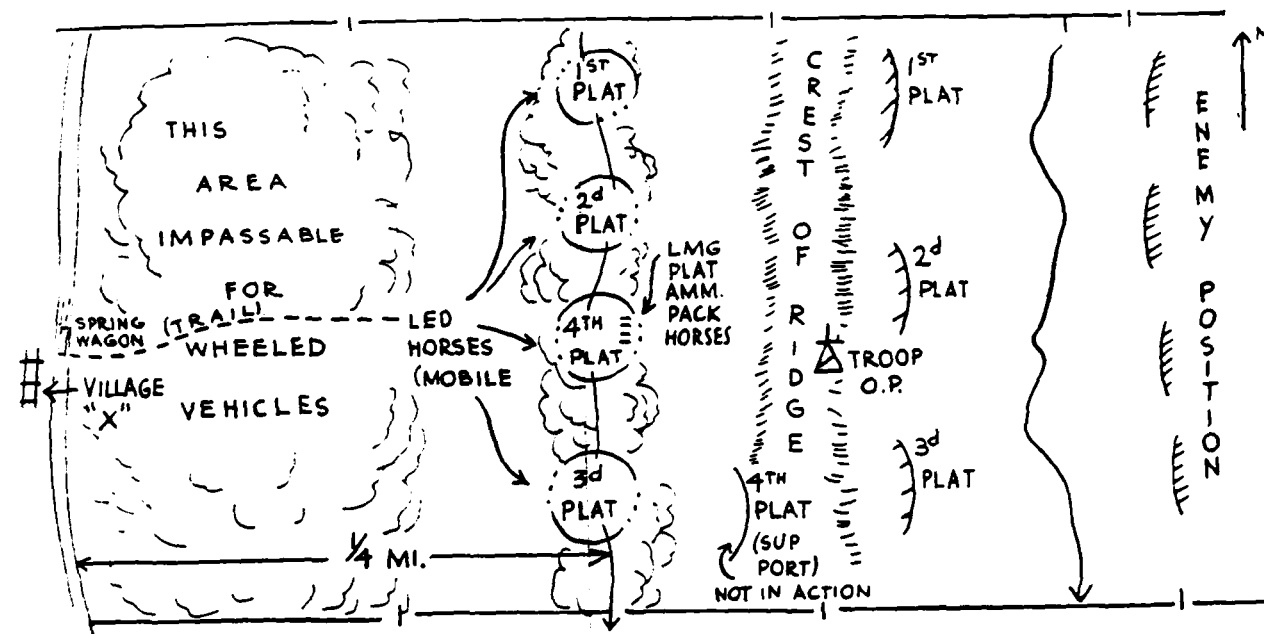
An interesting point in connection with the conversion of the trucks is that all operations, except the drilling of rivet holes, were carried out by hand, without the use of any of the power machinery, such as forming presses, rolls, shears, and other facilities commonly available in iron works at home.

Another feature of the work worthy of note was the low proportion of labor costs to material costs. In America the former usually amount to about eighty-five percent of the cost of the finished product, but in this case the labor came only to fifteen percent of the total expenditure. This is easily understood in view of the fact that in Tientsin skilled ironworkers receive about seventy-five cents United States currency per week, while apprentices are paid nothing, although they do receive their board. The wages of the shop foreman amounted to the munificent sum of twenty-five cents per day, U. S. currency.

Taking advantage of the low cost of labor and by the exercise of good judgment and careful planning in the purchase of the necessary materials, it was possible to complete the conversion of the cars for the almost unbelievably small sum of two hundred and five dollars, U. S. currency.

Extensive tests are now being undertaken to determine the most economical methods of operation of the cars, as well as their most effective tactical employment as a combat unit.

## NOTES FROM THE CHIEF OF CAVALRY



### What Would You Do In a Situation Like This?

CAPTAIN Peepsyte had to admit that things were not turning out as he and the Squadron Commander had expected. The enemy was considerably stronger than had been anticipated, and the attack of the 55th Cavalry, instead of being a rapid advance to its objective, was developing into a very slow-moving fire fight. The sketch above shows the disposition of Peepsyte's war strength troop within its limiting boundaries. The spring wagon loaded with 5 boxes of rifle ammunition (1200 rounds per box) and 4 boxes of M. G. ammunition (1500 rounds per box) was halted on the road as close as it could get to the troop. Each rifleman had entered the fight with 150 rounds of ammunition. The light machine guns carried their 950

rounds on each gun pack horse, and the four light machine gun ammunition pack horses, each with 1500 rounds, were with the led horses of the 4th Platoon. The 4th Platoon (dismounted support) had not yet entered the action. Because it was expected the attack would move forward much more rapidly than was proving to be the case, the horses had been left mobile.

Captain Peepsyte, observing the action with his second in command, Captain Mettle-Fowling, at the Troop O. P., began to realize that the platoons could not carry the action through with their remaining ammunition. A system of ammunition supply was becoming an immediate and imperative necessity. If you were Captain Peepsyte, faced with the problem of getting ammunition to the firing line,

WHAT WOULD YOU DO?  
(For Solution Turn the Page)

## A SOLUTION

Captain Peepsyte turned to Captain Mettle-Fowling: "Start ammunition forward to the assault platoons at once, on this general plan: establish an ammunition replenishing point (ARP) in rear of each assault platoon, and notify platoon commanders that the ammunition is there. Send three of the L. M. G. ammunition packs up at once, one per assault platoon to the platoon ARP, then back to the spring wagon to reload and return. Hold the fourth in reserve. Send horseholders with one led horse apiece from each platoon to the spring wagon to bring up rifle ammunition to the platoon ARP. You arrange the details."

Peepsyte then wrote and dispatched the following message to the Squadron Commander:

"Request my escort wagon (combat) be spotted at Village 'X' in the next hour. I must have M. G. and rifle ammunition without delay. I will send my spring wagon wherever you direct."

## DISCUSSION

Peepsyte has three platoons engaged; counting out eighteen horseholders and nine corporals not firing, there are 45 riflemen in action, and six light machine guns. Assuming a maximum rate of fire of 5 rounds per minute per rifleman and 20 rounds per minute per light machine gun, the ammunition with which the platoon entered the action will be practically exhausted at the end of 30 minutes' fire fight for the riflemen and 40 minutes for the light guns. It is obvious that steps for the resupply of ammunition must be taken in a fire fight, as soon as the troops are committed.

Peepsyte has an immediately available reserve consisting of:

- 4 L. M. G. ammunition packs carrying 1500 rounds each, representing about 50 minutes of fire.
- The ammunition with the 4th Platoon and the Horseholders, representing about 20 minutes of fire for the troop.
- The spring wagon, loaded with:
  - 5 boxes of rifle ammunition (100 bandoleers or 6000 rounds), representing about 30 minutes of fire.
  - 4 boxes of L. M. G. ammunition (6000 rounds), or about 50 minutes of fire.

At his disposal, after ammunition carried into action with the assault platoons is consumed, is a minimum of about 30 minutes of rifle and about 50 minutes of L. M. G. fire. Due to temporary cessations in fire incident to the normal development of the action, Captain Peepsyte may anticipate that he has ammunition sufficient for approximately an hour of combat.

There are many methods by which Peepsyte might have established his ammunition supply system; the one given above is based on:

1. Platoons ARP's, which means getting the ammunition, under troop control, as close to the points of consumption as possible.
2. Supplying L. M. G. ammunition by use of the L. M. G. ammunition pack horses initially dumping their loads and then refilling at the spring wagon.

\*Bandoleers may be conveniently carried on a led horse with a McClellan Saddle by passing the stirrup leather through the bandoleers, which then hang across the saddle. The stirrups should be laced into the web girth to secure the load.

3. Carrying up rifle ammunition to platoon ARP by platoon details using led horses as pack animals for the bandoleers.\*
4. Turning the details of execution over to the second in command.
5. Maintaining a local reserve close to the firing line under troop control, consisting of one L. M. G. ammunition pack horse and the rifle ammunition on the horseholders and in the support platoon.
6. Taking prompt steps with a view to replenishing the stock of ammunition taken from the spring wagon. (Department of Tactics, The Cavalry School).

## Equipment Development and Experiments

THE following development and experiments being made by the 2nd Cavalry at Fort Riley, should be of considerable interest to the Cavalry at large.

**Trailer.** Several types of trailers have been devised which can be drawn by trucks, then detached therefrom and used as two-horse vehicles. Photographs 1 and 2 herewith show one type of trailer which has been experimented with. Note that when detached it is drawn by two pack horses. The weight of the harness, exclusive of pack, is 33 pounds, the pay load of the trailer is 1,000 pounds, gross weight 2,000 pounds.

**Pack Equipment.** The development of a general cargo hanger by Col. A. E. Phillips, Cav., and now in use with the 2nd Cavalry, has been an important step in simplifying the packing of general cargoes of various kinds. Photo No. 3 shows the essential characteristics of this new hanger. The most important item in this new development is the sliding shelf, which replaces the troublesome sling rope of the hitched load. The shelf can be adjusted at different heights to suit the particular load to be carried. Since this hanger method eliminates or greatly reduces the use of the difficult rope hitches, this new pack is a very important development in handling cargo pack properly in time of war when inexperienced personnel may be called upon to operate pack transportation.

**Stream Crossing Expedients.** Most ingenious schemes are being practiced in the 2nd Cavalry for crossing equipment over streams in floats by utilizing only what is carried on the trooper or on the horse. Photo No. 4 shows a bundle being done up in shelter halves for floating over a stream. It contains the full field equipment of two men including reserve ration, 20 pounds of grain, 42 rounds of pistol and 180 rounds of rifle ammunition—total weight 180 pounds. Photo No. 5 shows a machine gun float done up in mantas and contains two pack saddles, two sets of hangers, ammunition boxes, spare parts, 1,800 rounds ammunition, caliber .30, and two light machine guns. Total weight, 422 pounds. Photo No. 6 shows how these bundles are floated across a stream.



1. Trailer attached to truck. 2. Trailer detached as two-horse vehicle. 3. General cargo hanger, Phillips pack saddle. 4. Preparing shelter-half bundle for stream crossing. 5. Machine gun bundle for stream crossing. 6. Machine gun bundles crossing stream.



# BOOK REVIEWS

**BAYARDO.** The year book of Yaguachi Cavalry Regiment No. 1, Army of Ecuador, 1932.

*Reviewed by 1st Lieut. C. C. Clendenen, 5th Cavalry.*

In a previous article in the CAVALRY JOURNAL, the present writer expressed the view that there is a veritable wealth of military history and tradition in Latin America. "Bayardo," the year book of the Yaguachi Cavalry Regiment No. 1, of the Ecuadorian Army, is ample evidence of the truth of this view.

The Yaguachi Regiment, stationed in the capital, Quito, is a regiment with a long and honorable history. It had its birth in the epic struggles for the freedom of Latin America from Spain, having been organized in 1822, by Marshall Sucre, and was named in commemoration of his first victory on the soil of the present country of Ecuador. It took "Honor and Loyalty" as its regimental motto and from the very first has maintained a tradition of steadfastness and discipline of which any regiment in the world might be proud.

The year book, "Bayardo" is both a chronicle of regimental activities during 1932 and a forum for professional discussion. The American cavalryman will be interested to note similarities between his duties and those of the Ecuadorian officer, and he will be still more interested to note the marked differences. The round of training, the purely routine duties, the victory of the regimental football team, the defeat of the regimental polo team—all these have a very familiar sound. But being called on to suppress a riot between students and police and three days of nasty fighting in suppressing a mutiny of certain disaffected units of the capital garrison are something else.

The American reader will feel appreciative on reading one note in particular. "February 25. For the purpose of celebrating the bicentenary of the Father of one of the great democracies of the world, Washington, the Army rendered homage to the Hero of Mt. Vernon, holding a conference in our barracks, on the work and personality of the Liberator of the United States."

The professional viewpoint of the man who lives in the other half of the world is always of interest. In "Bayardo" there is a group of articles worthy of the attention of any thoughtful soldier. For example, Captain Ruben Calderon, who is a professor in the Escuela Superior de Guerra, writes on the "Squadron in Combat." The discussion (based on a regimental organization very similar to our own) is much broader, however, than the title would lead the reader to suppose. It is actually a broad discussion of Cavalry Combat, and Captain Calderon reaches conclusions in close agreement with those which are orthodox in our service.

Colonel Darques contributes a somewhat philosophical article on "War." "In order to condemn war," writes Colonel Darques, "The ultrapacifists (they seem

to have them in Ecuador, too) condemn the Army, as if it alone were the cause of wars. No, gentlemen, soldiers also possess that moral quality called reason, and hence they condemn war. But, unfortunately, reason does not govern the world. The instincts of man have not changed. Man is born with the necessity for bread, and if necessary he will defend his bread—then he takes the sword."

Ecuador, like Mexico, employs her army as a means of educating the peasant who cannot be reached by a more conventional system of schools. The troop schools are evidently an important feature of the Yaguachi Regiment's activities, although it would seem that few countries place quite as much stress on the education of the soldier as Mexico does.

"Bayardo" is illustrated by a large number of photographs, showing many features of the year's activities and of the regiment's home and personnel. The veterinary is shown operating on an injured horse, an officer is shown reading the paper in the comfortable-looking, well-stocked regimental library, various officers are shown taking jumps in excellent form. And to a foreigner, most interesting of all are photographs of various incidents in the four days' battle of Quito, to which reference has been made already.

Early in the morning of August 27, 1932, the Bolivar Regiment of Artillery, stationed in the capital, proclaimed a revolution because of the expulsion of a certain member of the National Congress. The national police and the Manabi and Constitution Battalions of Infantry joined the revolution at once, leaving the Yaguachi Regiment as the only loyal unit in Quito. Under the command of its energetic Lieutenant Colonel, Alberto Enriquez, the Yaguachi took prompt measures to prevent surprise, improvised a train, equipped itself for field service, and withdrew to the south, all in a few hours time. The High Command of the Army acted promptly and by the next day had assembled at Latacunga a force comprising the Yaguachi Regiment, two battalions of infantry, a battalion of Engineers, and a regiment of Artillery. The force moved on Quito at once, and after four days of fierce and incessant fighting, the revolution was completely broken, and the capital again in possession of the government.

The officers of the Yaguachi Regiment are to be congratulated on producing a year book of which they can well be proud and which must prove interesting to any military reader who happens to understand the Spanish language.

THE EVOLUTION OF THE ENDURANCE, SPEED AND STAYING POWER OF THE RACE HORSE. By W. J. Stewart McKay, M.B., M.Ch., B.Sc. Charles Scribner's Sons, 309 pages, Illustrated, \$5.00.

The author is a surgeon of some note in Australia, and the author of many published articles on race

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horses. His interest lies principally in the development of the physiology of the race horse, which has brought about the characteristic "staying heart" of the successful race horse.

Although the evolution of the horse is traced from some 40 million years back, when he was an animal about the size and appearance of the fox and travelled on five toes, it is the heart of the horse in which Dr. McKay is principally interested and to which he devotes most of this book. And by heart is meant the physical organ.

"One often hears it said of a popular horse 'He has a great heart,' meaning that he will give his best and never quit. Few of us who use this expression realize that the heart of 'the true stayer' is actually a better pump than that of the nag who 'quit like a dog' at the end of six furlongs. Dr. McKay shows through scientific study extending over a number of years that the heart of the 'true stayer' has been developed through selective breeding into a more powerful organ with thicker walls and larger ventricles than that of the horses of a century ago, whose track records are now broken by what we would term second rate horses.

Not only has this evolution of the heart taken place, but Dr. McKay goes on to show that every horse has his 'Inherited Heart Distance.' The sprinter is at his best at 6 furlongs, the true stayer at 16 furlongs, while the endurance horse shows his contempt for distance by going 16 miles or more without sign of distress. And just as one would never think of putting an endurance horse up against a sprinter for 6 furlongs, it is quite as futile to ask a 6-furlong horse to race a true stayer for two miles. When the horse reaches his heart distance, the heart does not get the blood around fast enough, lactic acid slows up muscular action, carbon dioxide smothers the breathing apparatus, and the man with money on him says the horse is yellow.

The great Australian horse *Phar Lap*, "the greatest racer of all time," to whom the book is dedicated, confirmed most of the author's theories about the "staying heart," and although his untimely death was most deplorable, Dr. McKay was fortunate in being able actually to examine, weigh and measure his heart.

The book is written in a pleasing style, and will appeal to all who are interested in horses, whether they breed them, ride them, train them, bet on them, or just like them.

## Book Suggestions

ADVENTURE, Seely .....	\$3.50
THE A. E. F., Liggett .....	3.50
ALLENBY OF ARMAGEDDON, Savage .....	5.00
AMERICAN BLACK CHAMBER, Yardley .....	3.50
AMERICA IN BATTLE, Moss and Howland .....	3.75
AMERICAN CAMPAIGNS, Steele .....	10.00
AMERICA'S SIBERIAN ADVENTURE, Gen. W. S. Graves .....	3.50
ARMY ENGINEERING, Col. W. A. Mitchell .....	3.00
BEDFORD FORREST, E. W. Sheppard .....	5.00
BEDFORD FORREST AND HIS CRITTER COMPANY, Little .....	5.00

BETWEEN THE BIG PARADES, Ward .....	2.50
COMMANDING AN AMERICAN ARMY, Liggett .....	2.00
COMMANDO (BOER WAR), Reitz .....	1.50
THE DECISIVE WARS OF HISTORY, Liddell Hart .....	3.50
THE DESERT COLUMN, Idriess .....	2.00
THE DRAGON'S TEETH, Gen. J. F. C. Fuller ..	2.00
THE FIRST WORLD WAR (a photographic history), Stallings .....	3.50
FOCH, THE MAN OF ORLEANS, Liddell Hart ..	4.00
FOCH, MY CONVERSATIONS WITH THE MARSHAL, Recouly .....	3.00
FOCH SPEAKS, Bugnet .....	5.00
FROM SERBIA TO JUGOSLAVIA, G. Gordon-Smith ..	2.50
FUTURE OF THE BRITISH ARMY, Denning .....	2.60
GENERALSHIP, ITS DISEASES AND THEIR CURE, Fuller .....	1.00
THE GENERALSHIP OF ULYSSES S. GRANT, Fuller ..	5.00
GEORGE WASHINGTON, COMMANDER IN CHIEF, Frothingham .....	5.00
A GREATER THAN NAPOLEON, SCIPIO AFRICANUS, Liddell Hart .....	3.50
GREAT CAPTAINS UNVEILED, Liddell Hart ..	3.50
HELL'S BELLS AND MADAMOISELLES, Maxwell ..	2.00
HISTORY OF CAVALRY, DENISON .....	3.00
HISTORY OF THE THIRD UNITED STATES CAVALRY, Deibert .....	2.00
INCREDIBLE PIZARRO, Shay .....	3.50
INEVITABLE WAR, Stockton, \$7.50. With service discount .....	4.87
INTRODUCTION TO MILITARY HISTORY, Albion ..	2.25
IT MIGHT HAVE BEEN LOST, Loneragan .....	3.50
JEB STUART, Thomason .....	5.00
LECTURES OF F. S. R. II, Fuller .....	2.25
LECTURES OF F. S. R. III, Operations between Mechanized Forces, Fuller .....	2.25
ROBERT E. LEE, THE SOLDIER, Maurice .....	4.00
THE LIVES OF A BENGAL LANCER, Yeats-Brown ..	2.75
MACHINE GUNNER'S NOTEBOOK, Campbell .....	1.00
MAINTENANCE OF PEACE, Vestal .....	3.50
MARLBOROUGH, Fortescue .....	2.00
THE MARTIAL SPIRIT, Millis .....	4.00
MECHANIZATION OF WARFARE, Fuller .....	2.00
MECHANIZATION OF WAR, Germain .....	2.15
MEMORIES OF THE WORLD WAR, Alexander ..	4.00
MY EXPERIENCES IN THE WORLD WAR, Pershing ..	9.50
THE NATION AT WAR, March .....	3.00
OLD ARMY MEMORIES, Maj. Gen. James Parker ..	4.00
ON FUTURE WARFARE, Fuller .....	2.00
OUTLINES OF THE WORLD'S MILITARY HISTORY, Mitchell .....	5.00
PERSONAL MEMOIRS OF JOFFRE, translated by Col. T. Bentley Mott .....	6.00
THE REAL WAR, Liddell Hart .....	4.00
THE RED KNIGHT OF GERMANY, Gibbons .....	1.00
THE RED MAN IN THE NEW WORLD DRAMA, Wise ..	5.00
REMINISCENCES OF A MARINE, Lejeune .....	4.00
REVOLT IN THE DESERT, Laurence .....	1.00
THE RUSSIAN ARMY IN THE WORLD WAR, Gen. V. N. Golovine .....	3.25
THE SERVICE OF SUPPLY, Hagood .....	5.00
THE STRATEGY ON THE WESTERN FRONT, Sargent ..	2.50
SHERMAN, SOLDIER, REALIST, AMERICAN .....	5.00
VERDUN, Petain .....	4.00
WITH ALLENBY'S CRUSADERS, More .....	3.00
WITH LAWRENCE IN ARABIA, Thomas .....	4.00
LEONARD WOOD, Hagedorn .....	10.00

# NATIONAL GUARD NOTES

## Operations of National Guard

**D**UE to drastic cuts in the Budget of the National Guard Bureau it will be necessary to curtail some activities during the present fiscal year. In arriving at the distribution of funds General Leach insisted that the field training of the National Guard be provided for completely. This has been done and all organizations have had their scheduled camps this summer. Funds will be reserved for those whose camps are scheduled for next June and they will have them on a normal basis.

A C.P.X. was scheduled for the Seventh Corps Area this year, but it had to be eliminated. It will be provided for when the budget goes back to normal and the funds for it can be provided.

Camp construction, maintenance and repairs are limited to emergencies only. It is to be hoped that the curtailment of this work will be compensated for by an allotment of funds from the Industrial Recovery Bureau. The National Guard Bureau has a project of several million dollars, and if the funds are made available there will be a lot of new construction and rehabilitation work undertaken.

Only 50 National Guard officers will be detailed for courses this year, and these will be limited to the General Service Schools and those pertaining to the combat arms. All school courses of the staff departments and corps have been eliminated for the year and no enlisted men will be detailed for any of the schools.

A limited allotment has been made for the pay of range keepers. This will be distributed to the States in an equitable way, based on the use that is being made of the home station ranges. The target range leases will be maintained on a normal basis, but in the renewal of leases it is to be expected that the rental will be materially reduced.

The alteration, renovation and repair of articles of the uniform and individual equipment must be proceeded with this year on a curtailed basis. The funds available under this project are limited to 25 cents per man for the entire year. Property and disbursing officers will have to get along with the allotment stated and forego projects to bring the total within the amounts allocated to the States. The same is true with respect to organizational equipment, for the care of which only a bare 20 cents per man will be made available this year. This includes labor and materials, except repair parts and cleaning and preserving materials, which will be supplied on requisition and charged to funds allotted to Corps Area and Department Commanders under appropriate projects.

Gas and oil for armory training is limited to an allowance for 18 running hours per motor vehicle. It also provides 96 hours flying time for each of the pilots of the 19 air squadrons.

Office equipment and supplies for the officers and enlisted men on duty with the National Guard has been cut to \$15.00 per officer and \$3.00 per enlisted man. This is about half of the normal and the supplies must be conserved to the end that they will provide for the requirements over the entire year.

With the curtailment of service school attendance it is contemplated that there will be a considerable increase in the number who will engage in extension course work. This has been provided for and sufficient funds allocated to take care of this.

No funds will be available for visits of instruction by officers and enlisted men on duty with the National Guard. In many of the States arrangements have been made by State authorities to supply oil and gas for private cars and the instructors can get around through this medium as far as practicable.

Funds have been set up to meet the normal expenses of sergeant instructors authorized by the regulations to the extent of one such instructor for each regiment and separate organization. This provides for 351 sergeant instructors. The remainder are to be relieved from duty with the National Guard and assigned to duty with the Regular Army and other activities of the Army in the Corps Area.

Funds for the complete administrative pay of organization and unit commanders authorized to draw the same under the regulations have been set up. In addition, there will be funds for the payment of 36 armory drills with normal attendance of officers and enlisted men. The schedule prescribed by the National Guard Bureau must be closely adhered to, for in it the payment for the last 12 drills of the year is to be carried over into the fiscal year 1935, and it is only through this expedient that the full 36 drills can be authorized and compensation provided for them.

The uniform project has been curtailed about one-third. Allotment of funds for the purpose will be on the basis of \$2.50 per man for the continental United States and \$1.25 per man for Hawaii and Porto Rico.

National Guard band supplies will have to be curtailed 50 per cent during the year. Funds have been allocated on the basis of \$2.00 per bandsman and will have to cover the purchase of instruments for the entire year. Local repairs are chargeable under Project 16. No purchases of sheet music are authorized.

No funds are available for the purchase of ammunition, but it is understood that the National Guard is to receive its share of the ammunition to be made from funds allocated to the War Department under the National Recovery Act, so that a normal supply will be available for the field training next year.

The technical supplies and equipment furnished by the several supply departments of the Army must be limited to necessities for all of these projects have been trimmed down in order to meet the budget.

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It is expected and to be hoped that the present conditions will pertain for only this fiscal year, and that the National Guard will get back on a normal basis.

## Details for Service School

**A**RRANGEMENTS have been perfected for the attendance at the special course for National Guard and Reserve Officers at the Command and General Staff School at Fort Leavenworth next year.

Preference is to be given to those officers who have completed the Command and General Staff School Extension Course and those who have completed the advance course at the special service schools of their respective arms.

In case there are not a sufficient number of officers having these military educational qualifications to fill the quota of the National Guard, officers will be selected

from those who have completed the special advanced courses and have in addition completed the first four subcourses of the Command and General Staff School Extension Course. In no event will an officer be detailed to take the course unless he has completed the four subcourses referred to above. This is the strict policy of the Chief of the National Guard Bureau and will not be waived under any circumstances.

The selection will be limited to field officers, but in case there are not a sufficient number of these grades to take up the quota captains may be detailed for the course. No officer on the Emergency Officers' Retired List, or who is drawing any kind of compensation from the Government for disability, can be detailed to take the course.

Another strict limitation imposed by the War Department is that officers detailed for the course must not be more than 48 years of age on March 1, 1934, and this age limitation will not be waived in any event.

## R. O. T. C. NOTES

### Maryland Court Upholds Military Training

**F**OR the first time in a Federal Court, the Maryland Court of Appeals has rendered an important decision as to whether or not a conscientious objector has any legal or constitutional rights.

The decision was based on the case of Ennis H. Coale, a student at the University of Maryland who had been suspended from that school following his refusal to take the regular course in military training, on the grounds that he was a conscientious objector. Coale brought suit in the Superior Court at Baltimore to compel the University to reinstate him upon agreement to take any other course the University might direct, in lieu of the R. O. T. C. course. The court decided in favor of the student and the University appealed the case to the Maryland Court of Appeals.

In reversing the decision of the lower court the Court of Appeals went into the matter more deeply than to merely pass upon the rights of the particular student and school concerned. Its unanimous decision, handed down by Justice Patterson, reads in part:

"The sole claim here made is that a sincere religious conscientious objector is legally and constitutionally exempt from a compulsory course in military training upon his taking such other course or courses as the authorities might designate. . . .

... The conscientious objector is relieved from the obligation to bear arms in obedience to no constitutional provision, express or implied; but because, and only because, it has accorded with the policy of Congress thus to relieve him. . . . The privilege of the conscientious objector to avoid bearing arms comes not from the Constitution, but from acts of Congress. That body may grant or withhold the exemption as in its wisdom it sees fit; and if it be withheld the conscientious objector cannot successfully assert the privilege."

Evidence brought before the court shows that Coale did not set forth his objections solely on his own initiative, but had received instructions on the steps to be taken from one Mr. Tucker, secretary of the Committee on Militarism and Education, a society with offices in New York City. The decision further stated:

"The court, we think, would be going very far should it encourage this or like societies, or persons with similar views, in their interference with the constituted authorities in the management and control of colleges and universities when acting upon authority duly and lawfully conferred upon them, or to give encouragement to such societies or persons to interfere with the Government in all lawful efforts to keep the country in a state of preparedness for war so long as the nations of the world continue to settle their disputes by means of war."

## SPORTS

### Polo in Panama

By Captain Maurice Rose, Cavalry

WITH the arrival of the "rainy season," the polo season has been officially declared closed, the ponies have been turned out to pasture, the Jamaican grooms have been released and the players have centered their attention upon the fleshpots of Panama, rather than the feed boxes of the polo stables.

Upon the arrival in Panama of Colonel George Williams, one of the Army's well-known polo players, about two years ago, it was predestined that the game of polo would be revived on the Isthmus. The first year of Colonel Williams' service was marked by a determined effort on his part to arouse an interest in polo among the officers of the various branches stationed within the Pacific sector and to bring together those officers who had previously played polo, either at their service schools or on their regimental teams. The Infantry responded with its Captain Bill McKee, Lieutenant George Carmouche, Lieutenant "Swede" Henderson, Lieutenant David Hedekin, the Cavalry with Colonel George Williams, Colonel Conrad Babcock, Captain Harry Branson and Captain Rose, the Field Artillery with Lieutenant Edward Seibert and Lieutenant Julius Slack, the Quartermaster Corps with the well-known Freddie Hamilton (Cavalry), the Air Corps with the buxom but hard-riding "Bunkie" Day, the Coast Artillery with Lieutenant George Burgess, and the Engineers with Major Holland Robb and Lieutenant David Watt; all of these assisted in reviving the interest in the most sporting sport of them all and bringing the game of polo back to Panama after it had been practically dormant since the departure of the cavalry in 1921.

The interest in polo reached its peak at about the same time the various reductions in pay and allowances struck the Army, and the financial side of playing polo had to be given very serious consideration in order to keep the game within the means of all of those who desired to play. The solution to this problem proved to be the procurement of native ponies and the use of native civilians as grooms. The ponies could be purchased in the interior and brought to the Pacific sector at a cost of about twenty-five dollars each, the grooms could be hired for about ten dollars per month each and forage was purchased from the quartermaster at current rates. This brought the running expense of owning a pony to about five dollars per month each.

Two means of obtaining ponies were adopted; first was by purchase by the individual and, secondly, the organization of polo associations within the various posts, establishing a fund and having the club purchase the ponies for the use of their players.

Regardless of how the ponies were secured, all of them were centrally located at the stables at the post of Corozal, which is commanded by Colonel Williams. This arrangement is particularly satisfactory as Corozal is easily accessible by paved highway from all posts in the Pacific sector and located only three miles from Fort Clayton, where the playing field is located.

The use of the native pony proved to be a delightful surprise, for, although they are referred to as a pony, they really possess all of the characteristics of a normal horse. These ponies average in height about thirteen hands two and one-half inches and weight about six hundred and fifty pounds. Their conformation in nearly all cases is very good and many of them show excellent traces of their Peruvian ancestor. Even from the time that the pony is brought in from the *bosque*, he shows practically no timidity toward the indications of civilization which confront him at the Army post for the first time. Practically no indication of mallet shyness is in evidence, and after a very short period of training the pony readily adapts himself to the game. Each pony is good for two full periods in each game.

In conditioning and training the ponies, practically the same schedule that would be used in training and conditioning full-grown horses in the states was used and found to be successful.

At the beginning of the 1933 dry season, effort was exerted by Colonel Williams to bring the ponies and players to a playing condition as quickly as possible, and the excellent exhibition game played on the Fort Clayton field before a large and enthusiastic audience proved that the efforts were successful, and the polo season was officially declared open by Brigadier General Thomas Darrah, the president of the Panama Canal Polo Association.

For the first few months of the polo season, teams were selected without regard to organizations and stations and matched for play on Wednesday and Sunday afternoons, but, as the players improved and the interest in the game increased, the desire for permanent teams was voiced and the following organizations came into existence:

Quarry Heights: Color, White. Handicap, 4 goals

- No. 1 Lieut. Julius Slack
- No. 2 Lieut. Edw. Seibert
- No. 3 Capt. Wm. McKee
- Back Lieut. George Carmouche

Thirty-Third Infantry: Color, Blue. Handicap, 4 goals

- No. 1 Lieut. Dave Hedekin
- No. 2 Lieut. R. S. Henderson
- No. 3 Lieut. N. I. Fooks
- No. 4 Capt. J. L. Connolly



RAMBLERS

Left to right: Watt, Williams, Branson, Hamilton

Ramblers: Color, Yellow. Handicap, 4 goals

- No. 1 Lieut. David Watt
- No. 2 Colonel George Williams
- No. 3 Capt. Harry L. Branson
- No. 4 Lieut. Fred L. Hamilton

Freebooters: Color, Red. Handicap, 0

- No. 1 Lieut. L. L. Skinner
- No. 2 Lieut. J. C. Adams
- No. 3 Lieut. Geo. Burgess
- Back Lieut. H. V. White

Iguanas: Color, White. Handicap, 0

- No. 1 Mr. C. P. Babcock
- No. 2 Lieut. C. Hildebrandt
- No. 3 Major Holland Robb
- Back Lieut. J. P. Breden

Fort Clayton: Color, Blue. Handicap, 0

- No. 1 Lieut. G. Barnes
- No. 2 Lieut. S. F. Silver
- No. 3 Lieut. A. Fadness
- Back Lieut. G. W. Smythe

The first four teams constituted the senior tournament and, after nine games had been played, the Ramblers carried off the honors in their section, while the Iguanas proved their hitting and riding superiority in five fast games played by the junior division.

Each game consisted of four periods, lasting six minutes each, with a three-minute rest between the periods and a five-minute break during the half. Each pony played two periods in each game and gave no evidence of fatigue during the second period in which they played.

The next polo season promises to be even more successful than the last. Within the next few months, the Second Field Artillery, which is now stationed within the Atlantic sector, will move to its new quarters at Fort Clayton and promises to put several polo teams on the field from the regiment. Civilians are contemplating the organization of teams from the Republic of Panama and, with the continuance of the excellent and enthusiastic support of the department and senior commanders, there can be no doubt but what polo has returned to the Isthmus to stay on a better and firmer basis than ever before.

### Polo in the French Army

A FRENCH War Department bulletin contains the following paragraph:

"Polo develops the fighting spirit, as well as decision, and demands the proper handling of a horse at the most rapid pace. This sport requires of the players a high degree of discipline and complete team work. It should be considered as the perfect team work game of eavalrymen."

Officers and noncommissioned officers are authorized to take part in public polo tournaments. Insofar as is compatible with the exigencies of the service and the fit condition of the horses, commanding officers are invited to give officers and noncommissioned officers every facility to prepare for their participation in polo tournaments, in the same manner as for other sport competitions (races and horse shows).

Military tournaments are played by teams of officers and non-commissioned officers. Mixed teams may also be organized; that is, teams of officers and noncommissioned officers, but in this case the number of non-commissioned officers should not exceed half the team. In mixed teams, the captain must be an officer.

The Minister of War designates a certain number of officers called "military delegates to the Polo Federation." They endeavor to organize polo teams in the mounted arms. They organize the annual program of the contests and carry it out in agreement with the proper military authorities. They request the support of the Federation for the organization of tournaments.

The officers are qualified to furnish the commanding officers information as to the relative value of regimental teams or of military players in their regions and to set forth the best qualified players to take part in tournaments abroad or tournaments organized locally or by the military authorities.

Tournaments played by military teams exclusively may be played only on horses belonging to the State and carried on the army registers for three months already. The horses must be at least 5 years old if they are British thoroughbreds, 6 years old if they are Arab thoroughbreds or Anglo-Arab thoroughbreds, Barbary horses or a cross between a Barbary horse and a thoroughbred of the above type, 7 years old if half-breds or of an unknown breed.

When playing with civilians on the same team, military players may use mounts belonging to the State, their own private mounts or horses belonging to private individuals. In matches other than championship matches, the players of one regiment may be authorized to use the horses of another regiment.

In a championship match between regiments, the players must use the horses of their own regiment, unless the umpire authorizes them to use the horses of another regiment in exceptional cases provided for in the regulations of the match.

In the case of inter-regimental tournaments, the umpire and his assistant must be officers on active duty.

A "military commissioner" is always present. The duties are fulfilled by the umpire in tournaments between exclusively military teams. When isolated offi-

cers participate and the umpire is a civilian, the senior officer having taken part in the tournament acts as military commissioner. In tournaments in which military teams participate and the umpire is a civilian, the commanding general of the region in which the tournament takes place designates a qualified military commissioner to be present.

The military commissioner is responsible to higher authority for military discipline on the ground and for the conduct and appearance of officers and non-commissioned officers taking part in the tournament and of the orderlies in charge of the horses.

In localities where there is no garrison, they also supervise the appearance of military men who are on the field in any capacity.

The troopers in charge of the horses have two uniforms, one of which is worn off duty and when they bring the horses to the field. Horses are required to be well groomed, and the saddles and blankets have to be in perfect condition.

Polo teams exist in half or two-thirds of the French cavalry regiments and, while they are inactive during the winter time, they are quite active during the open season. Regimental elimination tournaments are held, following which a final tournament is held at Vittel in August each year, with six teams competing, two from the south of France, two from the east of France and two from the Paris region.

An indoor polo tournament is usually held in connection with the *Concours Hippique* in April, with both military and civilian teams competing.

There is an apparent desire to give polo further encouragement as a means of perfecting horsemanship, as has been done for many years in the case of horse racing.

### Rome International Horse Show, 1933

The following nations were represented at Rome:  
Italy with 78 horses; Belgium with 6 horses;  
Germany with 30 horses; Ireland with 6 horses;  
Spain with 12 horses; Denmark with 3 horses;  
France with 12 horses; Hungary with 3 horses;  
Portugal with 12 horses; Roumania with 3 horses;  
Poland with 10 horses;

Recapitulation for all events:

	Italy	Germany	France	Portugal	Spain	Poland	Belgium	Ireland
1st	3	3	1	0	0	0	0	1
2nd	1	2	0	0	2	0	1	1
3rd	45	28	13	10	4	6	4	0
Other prizes								
Coupe d'or Mussolini (Coupe des Nations)								

Italy and Germany had a considerable advantage on account of the large number of horses entered by these two countries, in comparison with the other entries. The July-August *Revue de Cavalerie*, from which the figures above have been taken, has this to say on the subject: "It may be said by some that international horse shows are not, properly speaking, contests between nations, but competitions between horsemen of different nations. This is exact

in theory; in fact, the public does not look at the question in this way and considers as victorious that nation that has carried off the most prizes. Evidently the regulations of international horse shows should be revised."

### International Military Horse Show at Nice

EIGHT nations were represented at the International Military Horse Show at Nice, France, April 15-25, 1933. According to regulations each team had a maximum of five horsemen, each riding two horses. Belgium and Ireland had sent only four riders.

Results as follows:

Belgium: 9 prizes of which 2 were firsts;  
Spain: 22 prizes, of which 3 were firsts;  
France: 24 prizes, of which 4 were firsts;  
Italy: 8 prizes, of which 1 was first;  
Poland: 11 prizes;  
Portugal: 13 prizes, of which 1 was first;  
Switzerland: 13 prizes.

The "Coupe des Nations" was won by the French Captain Clavé, 11th Cuirassiers, on *Judas*.  
Captain du Breuil, Cavalry School, on *Royal*.  
Lieutenant Bizard, Cavalry School, on *Arachon*.  
Lieutenant Cavaillé, Cavalry School, on *Olivette*.  
(Data from the *Revue de Cavalerie*, July-August issue, Berger-Levrault, Nancy)

### Speed Patrols

IN the July, 1933, number of *The Journal of the United Service Institution of India*, there is a letter to the Editor from "Lumbidum" on the subject of reconnaissance to determine whether a certain route is feasible, firstly for light tanks, and secondly for wheeler M. T. To send Armored Cars or Light Tanks on such a reconnaissance may give away the commander's intention, and they may not be available or may want the time for overhaul and rest. "Incidental" comparatively small obstacles hold up reconnaissance of this kind which have no means of improving crossings over nalas, etc."

The writer suggests "speed patrols" of horse cavalry for these reconnaissances. Not patrols in full marching kit, but patrols with specially selected horses which shall have been led and not ridden on the march. Such patrols correspond to special light craft maintained by the Navy and the Air Force for delicate missions on the sea and in the air.

"Carefully worked out speed patrolling contests would provide a welcome change from the annual tugging competitions, which, to say the least of it, are difficult to justify in the light of our various manuals of horsemanship. Classes for teams of speed patrol horses might be introduced into our premier horse show even at the cost of excluding four in hand teams and coaching marathons, which we all like to see but for which it is not easy to produce any convincing arguments."

"If a precedent for speed patrols is required, we have only to refer to the British officers in the Peninsular War who, mounted on blood hunters, brought in information for the British Armies."

## The Foreign Military Press

Reviewed by Major Alexander L. P. Johnson, Infantry

CANADA—*Canadian Defense Quarterly*—July, 1933  
Europe: Great Britain and the United States; editorial.

The editorial writer comments upon the "Roosevelt Offer" as expressed by Ambassador Davis, according to which the United States, subject to ratification by Congress, agreed to join with the League of Nations in any consultation in case of a breach or threatened breach of the Kellogg Pact, and that the United States would not enforce its neutral rights in the event the League resorted to sanctions under Article 16 of the Covenant provided the United States concurred in the judgment of the League as to the guilty party. The author does not discern any startling departure from the policies of the immediate past and he expresses the opinion that those who ascribe a deeper meaning and a definite commitment to the words of the President are doomed to disillusionment. As the author views the declaration, the American government not only does not promise to join the collective effort and suggests no positive action of its own, but reserves to itself the right to decide on the aggressor state. The author believes that the weakness of the declaration lies in the fact that it is directed "towards a mythical and nebulous objective . . . the strengthening of a collective system of security, which, in fact, has never existed."

In response to the American declaration, the author states, Great Britain promptly informed the other powers that she would assume no further obligations than she has already taken to protect them from war. The author states that the British and American declarations have shown to the world "that the League's collective system of security is non-existent." The failure of the Anglo-Saxon countries to return to Europe, in the author's opinion, confronts France with the alternative of a preventive war against Germany or an agreement to consent to the territorial revision of frontiers with the consequent disappearance of her allies as factors in the political affairs of Europe. The author believes that Europe is facing a crisis comparable to that of 1914. The interests of Great Britain and the United States in Europe have since then become greater, hence, he believes, the conditions which have forced intervention in 1914 and 1917 are likely to return in the future. In order to avert such a contingency, the author believes, the United States and Great Britain must adopt and have in fact adopted a policy of consultation and cooperation without prior commitment.

CHILE—*Memorial del Ejercito de Chile*—June, 1933.

"German Tactics, French Tactics and Chilean Tactics," by Lieut. Col. Ernesto Salbach.

The author takes issue with the tendency of certain officers who advocate changes and innovations without

adequate reason or justification. He analyzes the basic principles of French tactics in great detail to demonstrate their impracticability under conditions such as prevail in Chile. For similar reasons he rejects the German plan and concludes, that organization and indoctrination of the Chilean or any other army must be in strict accord with national character and national needs.

Colonel Salbach's comments upon the French organization and conception of tactics are particularly enlightening. He states, that the French system is predicated exclusively upon the defensive plan of action. This defensive attitude, he states, is reflected by French regulations, system of issuing orders, method of advance, grouping of artillery, etc., etc. The French march exclusively at night, the author states, until they arrive within a day's march from the enemy. After that the approach is undertaken during daylight hours. The division marches during this final stage with two regiments in the first line, the third regiment in the second echelon. Each front line regiment detaches one battalion as an advance guard. The two battalions of the main body march abreast followed directly by the supporting artillery. This deployed formation is taken at a distance of 25 km. from the enemy. The advance is made by bounds with half of the artillery always in position to give immediate support. The rate of march is 2-3 km. per hour, and may in practice be reduced to 1-2 km. before actually contacting the enemy. The total depth of the deployed command is 10 km. The author finds fault with this deployment at a time when it is impossible to foresee the kind of combat that may ensue, or whether the enemy will accept battle at all. In case of action, the author points out, the third regiment is so close to the front line that it will be involved in the action from the very beginning. The French, he states, insist on providing in advance for all possible contingencies, hence when anything unforeseen happens it is difficult to effect a change.

In order to illustrate the French conception of command, the author cites an interesting example. An army corps advancing with two divisions abreast, the advance guards contact the enemy in position along a ridge. Local advance guard actions may ensue, but the order to coordinate these actions must come from the corps commander. This, the author states, will result in the loss of valuable time during which the situation might completely change. Thus, the corps commander may decide upon a heavy artillery concentration on the hostile position to begin at a certain hour and continue for a certain length of time. Conceivably the enemy may have accomplished its momentary mission by the delay it caused and may actually commence withdrawal a few minutes before the artillery bombardment. Although front line units might



observe the action of the enemy, subordinate commanders could not take the initiative to ask for a suspension of the scheduled artillery bombardment with a view of taking up the pursuit or even to carry out their mission by seizing the ridge evacuated by the enemy. The time required to get the appropriate orders from the corps would cause such a delay that the enemy could get away and prepare his defense elsewhere under more favorable circumstances. The author believes that subordinate commanders should be allowed greater initiative. On the other hand he finds fault with the German system which, in his opinion, allows too much initiative on the ground, that in the case of an emergency there may be a serious shortage of sufficiently trained subaltern officers and N.C.O.'s capable of arriving at sound tactical decisions.

AUSTRIA — *Militärwissenschaftliche Mitteilungen* — January, 1933.

"Brussilov and His Cavalry in 1916," by Lieut. Col. J. Diakov.

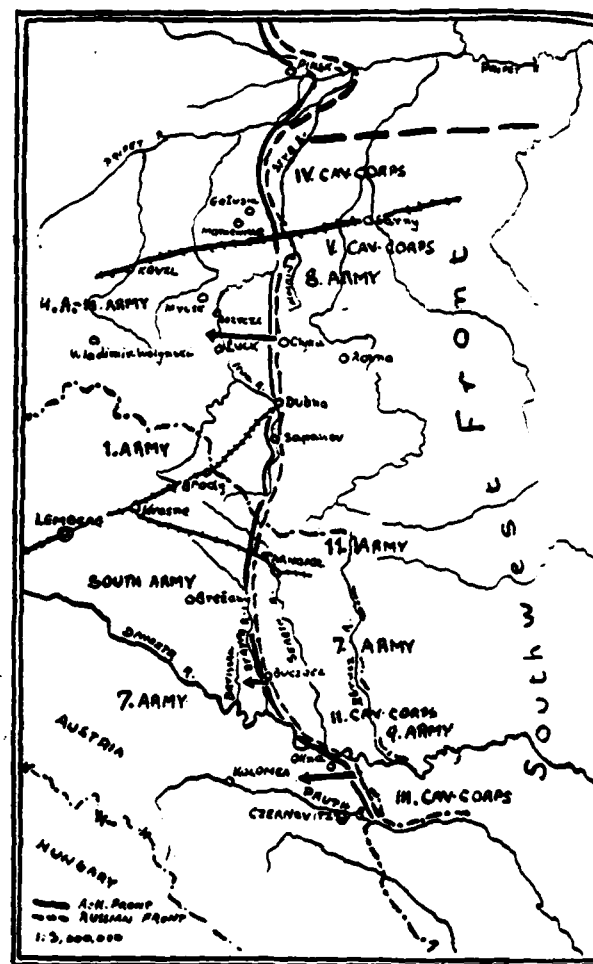
Brussilov prepared the plans of his offensive of June, 1916, with the most elaborate care, the author writes. Everything was prearranged to the minutest detail. The offensive was launched on June 4, between the Pripet and the Rumanian frontier. Six days later the Russian armies had penetrated the Austro-Hungarian front on both sides of the River Dniestre, and after months of position warfare, the Slavs were out in the open. For this campaign Brussilov had at his disposal a cavalry force of sixty-one regiments, a total of 60,000 sabres, organized into 16 cavalry divisions. The bulk of this cavalry was employed on the flanks. One cavalry division was held behind the center. Only the IV Cavalry Corps, under General Gillenschmidt, on the extreme right, was entrusted with a special mission. This corps was directed to penetrate the hostile front in conjunction with the infantry of the XLVI Corps, not later than June 5 or 6, and advancing along the Sarny-Kovel railroad, it was to harass the enemy's rear. Brussilov left the employment of the remainder of the cavalry to the army commanders within whose areas they happened to be.

General Kaledin, commander of the Eighth Army, himself a cavalryman, assigned the V Cavalry Corps to the trenches south of the Sarny-Kovel railroad, holding out the 12th Cavalry Division as a reserve prepared to take up the pursuit.

General Sacharov, commander of the Eleventh Army, likewise a cavalryman, directed the 3d Transamur Cavalry Division to take up the pursuit along the Brody-Krasne railroad as soon as the hostile front gave way. A special detachment was to take advantage of the first break in the hostile front to seek the capture of General Bothmer and his staff at Brzezany.

The Seventh Army held the 6th Don Cossack Division in readiness to support the main attack, while the 2d Cavalry Division took position in rear of the Army's left flank.

The commander of the Ninth Army left the III



The Brussilov Offensive, June, 1916.

Cavalry Corps of two divisions in defense positions along the River Pruth.

Thus only three cavalry divisions were actually in position and prepared to exploit the successes of the first day's operations. While the Eighth Army achieved splendid success, the IV Cavalry Corps suffered costly reverses in the Pripet marshes. The casualties of some of the cavalry regiments amounted to as much as 50 per cent. On June 10, Brussilov was compelled to suspend operations of the IV Cavalry Corps whose failure to a large extent was attributable to inadequate artillery support.

The author states, that even those cavalry divisions which had been especially earmarked for pursuit missions, failed in their task. The 12th Cavalry division was late in arriving on the battlefield south of Luck where it wasted two days without even attempting to cross the River Stry. It initiated the pursuit on June 9, in the direction of Wladimir-Wolynsky. The enemy promptly frustrated the attempt of the V Cavalry Corps, on June 12, to advance across the Stry near Rozyszcze.

Realizing its inability to score a success in its main attack along the line Tarnopol-Lemberg, the com-

mander of the Russian Eleventh Army directed his cavalry to try its luck on the right flank. Although some squadrons scored local successes against the Austrian infantry, the attempt, on the whole, proved a failure.

The three cavalry divisions of the Seventh Army, after some initial successes, were stopped in the angle of the rivers Dniestre-Baryszke, and there they remained inactive although favorable opportunities presented themselves on June 10, opposite the center, for cavalry operations. Only a single regiment was actually available for the pursuit.

On the front of the Russian Ninth Army the enemy held firmly until June 10. When the front gave way, one part of the Austrian forces retreated westward, the other southward. It was a favorable opportunity for aggressive cavalry action. Nevertheless, the bulk of the Russian cavalry in this sector remained inactive behind the Dniestre until June 12. When the Army commander finally decided to employ his cavalry, it was too late.

Although it possessed great numerical superiority, the Russian cavalry did not play that decisive part in the operations that it unquestionably should have. This is the more surprising because Brussilov was an experienced cavalry leader of enviable reputation, and it was he who planned the offensive with the greatest care and attention of details. Moreover, he had under his command some of Russia's ablest cavalry leaders. The troops were uniformly well trained, experienced veterans, first class horsemen and excellent fighters. The failure to employ the cavalry properly the author attributes to one factor: General Brussilov failed to anticipate the magnitude of his success, and the leaders under his command had no faith even in the possibility of success. As a consequence of this lack of foresight or confidence, the cavalry was left pinned to the ground in positions where it could not be utilized to advantage at the critical moment. This error, the author states, despite the initial successes of this offensive, deprived Russia of the real fruits of the victory.

—*Oesterreichische Wehrzeitung*—June 23, 1933.

"Franco-Italian Rivalry", by Anonymous.

The anonymous author undertakes to analyze the factors which tend to separate France and Italy. He finds that Italy is the classic example of a country unable to support its numerous and rapidly growing population amounting now to 42 millions. The annual increment amounts to about half a million. Italy's territory is about one half of that of France. In the past the surplus population emigrated to America and Australia, or sought employment in neighboring countries. Now these means of disposing of the surplus are barred, and the gravity of the situation prompted Mussolini to exclaim that "Italy must either expand or explode." The author points out that Italian expansion primarily affects France, in part because of the adjacent French territory which already has a substantial Italian population (Savoy, Nice), in part because of French colonial possessions with large

Italian populations (Tunis), and finally because of French influence in neighboring countries which are within the natural orbit of Italian expansion (Yugoslavia). French opposition to the Italian desire to expand aggravates the situation. The author cites as a notable example the French effort to assimilate the Italian population of Tunis in spite of promises to respect its nationality.

The author states that Italy is unable to assume the costs of a military establishment equal to that of France, hence Italian efforts to bring about a reduction of armaments. Italian interests in the revision of peace treaties, the author states, are actuated by the same desire to enhance Italian prestige at the expense of France. Italian interests in Berlin, according to the author, do not go beyond the desire to use Germany as a check against France. Mussolini does not, however, wish to have Germany as a next-door neighbor. Both French and Italian policies, the author states, are influenced by the attitude of Great Britain which neither of them can afford to disregard. Since neither of these powers is in a position to risk war at present, the author concludes, Europe is able to establish a sort of equilibrium that might justly arouse the envy of a tight-rope dancer.

BELGIUM—*Bulletin Belge des Sciences Militaires*—August, 1933.

"Some Thoughts on the Active Defense Against Low Flying Airplanes", by Lieut. Gen. Van de Putte, Commander, A.A. Defense.

Recent development in the effectiveness of A. A. artillery of medium caliber compels aircraft to seek altitudes less vulnerable to artillery fire. The choice lies between high and low altitudes. At high altitudes the accuracy of the bomber diminishes rapidly. The high angle fire of modern A.A. guns would compel bombers to seek an altitude of 9-10 km. The alternative is flying 25-30 meters above the ground. The advantages of flying at such low altitudes are: surprise; the drone of the propeller is hardly perceptible at a distance in excess of 500 meters; the plane can easily be masked by accidents of the terrain; diminished vulnerability against hostile pursuit aviation; increased accuracy of the bomber; possibility of attacking terrestrial targets with machine guns and small caliber cannon, and above all, diminished vulnerability against the fire of A.A. artillery. As a matter of fact, the author states, A.A. artillery of medium caliber becomes practically useless against planes flying at altitudes of less than 500 meters or at horizontal distances of less than 1000-1500 meters.

The author states that the consensus of military opinion favors the use of small arms against low flying planes. Although this scheme possesses some advantages, he declines to accept it as the final solution. As a matter of fact, he observes, studies are actually being undertaken in many quarters to determine the desirability of creating a special force with special equipment for that very purpose. According to the author, tactical considerations favor such solution as the only one which would permit a judicious distribution of

A.A. equipment over the sensitive area. He points out that technical considerations likewise favor such a solution in that it is impossible to obtain satisfactory results with weapons primarily designed for purposes other than A.A. defense. Moreover personnel is not likely to have sufficient training to use its equipment effectively against aircraft.

The author states that defense against low-flying planes requires guns which can be manipulated with greater speed and facility than the present medium caliber A.A. equipment. On the other hand, he believes, it must be more powerful than our machine guns. Such equipment, in his opinion, must be served by a highly trained specialized personnel. As between time-fuze and percussion fuzes, the author prefers the latter for antiaircraft defense on the ground that its use requires less time for adjustment. However, he adds, the present equipment is not suited for the effective use of percussion shells. He advocates the adoption of machine guns firing explosive shells of 20-40 mm. caliber, containing 150-1000 grams of explosive charge.

CZECHOSLOVAKIA—*Vojenske Rozhledy*—March, 1933.  
"Signal Communications for Antiaircraft Defense", by Major Karel Stransky.

Antiaircraft defense, the author writes, must necessarily be limited to the protection of sensitive points and areas. In order to make this defense really effective, an efficiently organized system of signal communications is indispensable. Moreover, the author believes, such signal communications net must be placed under the direct control of the antiaircraft defense commander. Its personnel must become thoroughly proficient in its use in time of peace, and should be thoroughly familiar with the air forces of neighboring nations, their insignia and location of their nearest landing fields. Meteorological observations must determine several times daily whether or not atmospheric conditions favor an aerial attack. Observers must keep on a constant lookout for approaching airplanes, identify them, determine their direction of flight and render prompt report. The efficacy of A.A. defense will largely depend upon the efficiency of observers and the rapidity with which the necessary data are transmitted to the guns. In any event, the author states emphatically, it is important to avoid false alarms, largely because of the paralyzing effect they have upon essential industries.

FRANCE—*La Revue D'Infanterie*—June, 1933.  
"Replacements and Training of Reserve Officers in the Soviet Army", by Captain Lalaquet.

The decree of 1930 on compulsory service in Soviet Russia provides new measures for the recruitment and training of reserve officers. These are obtained from three sources: 1. the student body of colleges and universities; 2. the ranks of the army, and 3. officers and N.C.O.'s transferred from the active list to the reserves.

Military training is compulsory in all colleges and universities. Only the physically unfit are excused.

Officers and N.C.O.'s of the army have charge of all military instruction. They may be assisted by reserve officers. Regional military commanders exercise general supervision over this training. Each school trains candidates for a specific arm or service. The training program covers 500 hours of theoretical instruction and three to four months of practical instruction in training camps. At the conclusion of the normal training cycle candidates are admitted to a rigorous examination for a commission as platoon leader.

Enlisted men of the army possessing the necessary secondary education are given a special course of instruction, and after serving with the colors for one year they may be admitted to examination for a commission in the reserves on the same terms as college and university men. Reserve officers of both categories may qualify for commissions in the regular army. Reserve officers of subaltern grade are subject to call until 40 years of age. General staff and general officers remain available until 45 and 50 years of age respectively. They are, as a rule, assigned to territorial organizations and do active duty not exceeding two months in any one year until they have a total of 12 months active duty to their credit. Reserve officers are, moreover, required to participate in short exercises of application (3 to 7 days), and practical exercises within their respective units during manoeuvres. In addition the army provides cadre exercises and correspondence courses. The Ossoaviachim likewise conducts evening schools, cadre exercises and correspondence schools for reserve officers.

The tactical training of junior officers is limited to the platoon and company within the battalion, while the training of senior officers extends to the battalion and regiment within the division. The instruction is applicatory and practical. Conferences are exceptional. The author directs particular attention to the energy and haste with which the soviet authorities push the reorganization and training of their army in order to attain the highest degree of efficiency at an early date.

GERMANY—*Wissen und Wehr*—November, 1932.  
"Problems of the Czechoslovak Cavalry," by Anonymous.

The organization of the Czechoslovak cavalry, the unnamed author writes, though brought into existence under French tutelage since the World War, is contrary to all expectations, not predicated upon the lessons taught by that great conflict, but rather upon some misconceptions which prevailed for a time immediately after the war. For this reason, and perhaps to some extent because of the character of the country, the Czechoslovak Army has been provided with a comparatively small cavalry component. It now consists of ten regiments organized into three brigades. Each brigade includes one cyclist troop and an Armored Car troop. Moreover, the regiment is subdivided into two squadrons (half-regiments) which has the tactical defect that reserves held out in action either reduce the combat strength of the regiment by one-half or it necessitates the breaking up of a tactical command. It is now

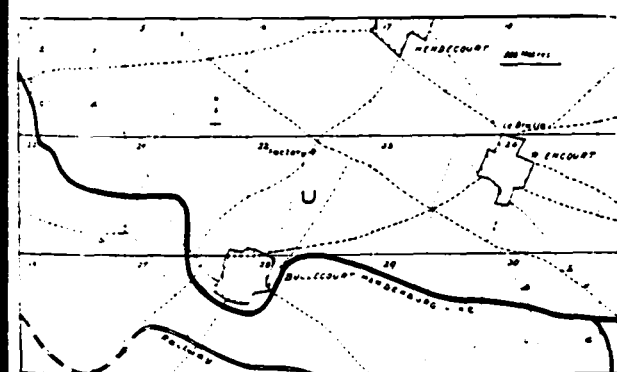
advocated that the regiment be provided with a machine-gun troop, a howitzer platoon and an armored car platoon. Opinion is, however, divided as to whether or not the present tactical organization be continued. If decided in the affirmative, it is held that each troop (escadron) be provided with heavy machine guns. At present the regiment has 24 light and 12 heavy machine guns. This is deemed inadequate.

There is considerable discussion relative to the proper organization of the troop. It is advocated that the troop consist of a reconnaissance section, a machine gun section with two heavy M. G.'s, and three platoons. The first of these should contain the best horses and the best adapted personnel. It should carry 6 automatic rifles. Each of the three platoons would under this plan carry six improved type light machine guns. The regiment would consist of four to five troops (escadron) of this type, a machine gun troop, a cavalry-howitzer platoon, an armored car platoon, a communications platoon and a pioneer platoon.

The reinforced cavalry brigade is considered as best adapted to the special needs of that country. The peace-time organization of the brigade includes a cyclist battalion. The war-organization will also include a motorized infantry battalion. It is also proposed to augment the effectiveness of the cavalry brigade by the addition of a battalion of horse artillery of 3-4 batteries, reinforced according to necessity by motorized heavy howitzers; an armored car company of 3-4 platoons; a mixed air squadron of pursuit planes and bombers; communications, pioneer and supply companies, all motorized. In all recent manoeuvres the cavalry brigades conformed to this general plan of organization.

It is anticipated that Czechoslovakian military authorities will undertake a far-reaching reorganization of cavalry irrespective of cost, in order to meet modern requirements.

GREAT BRITAIN—*The Royal Tank Corps Journal*—July, 1933.

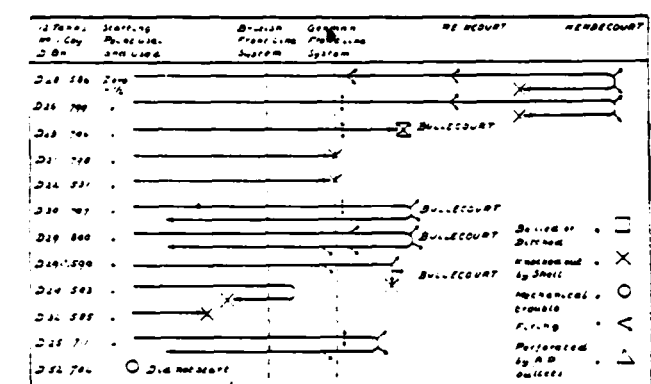


BATTLE FIELD IN BULLECOURT, APRIL 11, 1917

"The Tanks at the Battle of Bullecourt—April 11, 1917," by Major General J. F. C. Fuller, C. B., C. B. E., D. S. O.

The author presents a summary of the Australian,

the Tank Corps and the German versions of the action on April 11, 1917, at Bullecourt, a strongly held small salient in the Hindenburg line. Although the British attack proved a complete failure, the author, who at that time was G. S. O.-1 of the Tank Corps, states that the British Fifth Army was unable to mass sufficient number of guns for the bombardment of the Hindenburg line at Bullecourt and to the east of it, and that circumstance prompted it to decide upon the use of tanks. The author states that the Fifth Army had only 12 tanks available, and that the Third Army, on its left had 48 but of these quite a number were out of action as a result of the battle of April 9. The Tank Corps, the author states, suggested that serviceable tanks be shifted from the Third to the Fifth Army, but that this proposal was disapproved. In any event, the author doubts if more than 20 tanks could have been assembled in the area of the Fifth



TANK OPERATIONS 11th APRIL, 1917, 12 TANKS OF NO. 11 COMPANY "D" BATTALION

No. 586, 799, 593 — Objective Reincourt and Hendecourt  
No. 796, 797, 800, 590 — " Bullecourt  
No. 798, 531 — " U. 20.b.  
No. 585, 711 — " U. 30.d.

Army. In his opinion, the attack was unsound because of insufficient time for preparation, unfavorable weather conditions and insufficiency of the number of tanks available. He states that the ground was covered with snow which made each advancing man and tank loom like a bull's-eye. Notwithstanding the unfavorable conditions, the author states, there is evidence that at least two tanks had reached Hendecourt, about 2500 meters behind the Hindenburg line, and he quotes German testimony to show that in spite of the failure of the attack, the enemy was strongly impressed by the accomplishments of the tanks. Whether or not the tanks actually crossed the Hindenburg line, the author adds by way of conclusion, is immaterial. The fact remains that Tank Corps H. Q. rightly or wrongly believed so, and that the tactics of the great tank victory at Cambrai, on November 20, 1917, were based upon that belief.

## Organization Activities

### 117th Separate Squadron

Denver, Colorado

IT SHOULD be of interest to cavalymen of the United States to know something of the loss of the 117th Sep. Sq., Colo. N. G., to this arm of the service and its transfer to the Field Artillery Service on August 1, 1933. Consequently, the writer, who was Sq. Adj., has taken the liberty to forward a brief résumé of the Squadron to the Editor in hopes that something more of the Squadron may be noted on the records than a mere statement concerning its transfer.

Just a change to the Field Artillery Service would perhaps be not so radical, but shades of Frances Marion, Light Horse Harry Lee, Ashby, Stuart, Sheridan, and all those shadowy horsemen who have thrilled to the wild gallop of the charge, what a change! Not only to the Field Artillery Service, but to the Truck Drawn Artillery at that. From grooming horses to hosing and polishing Chevrolet trucks. Not to the lilt of "keep the caissons rolling" but to the theme song of the famous G. M. radio program will the *esprit* and *clan* of the future mechanical artilleryman be developed. Enough, however, of persiflage and levity.

The 117th Separate Squadron Cavalry, Colorado National Guard, can trace a continual existence as a unit in the country's fighting forces from November 2, 1873, until August 1, 1933, or a period of almost sixty years. While perhaps this is not a long time when compared with the records of organizations on the Atlantic Seaboard, it is a long period when it is contemplated that the origin of the unit antedates the admission of Colorado to statehood and is co-extensive with the great industrial and commercial growth of the country. Then, too, it dates back to Pioneer days and the definite metamorphosis from a frontier community to an organized and well settled interior of the country.

The Squadron, although not at all times organized as such but represented by separate troops for periods, participated in Colorow Campaign (1887), in which, at Rangeley, Colorado, an engagement was fought in several industrial disturbances, from this period to the Spanish-American War. In the Colorow Campaign the Squadron was commended by General Reed, the officer commanding in the field, and also by the Adjutant General in his report to the Governor in the following extract: "I desire to commend, in

Sept.-Oct., 1933

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the highest terms of praise, the officers and men • • • for the promptness and energy displayed." The latter phrase, "promptness and energy," was adopted by the Squadron as its motto.

In the Spanish War the Squadron was not fortunate in being selected for active service at the front but spent the period of the entire campaign in camp at Florida.

From the Spanish War until the Mexican Border troubles the Squadron preserved law and order in more industrial disputes, notably the Cripple Creek Strike, 1903-1904; the Telluride Strike, 1904, and the Colorado Mine Insurrection of 1913-14. Duty in these civil disturbances was arduous, perilous and exacting and allowed small opportunity for the acquisition of glory. Much of the work consisted of patrol duty in the deep snows of the mountain towns during the winter, all of which was well acquitted and in keeping with the highest traditions of this arm of the Service.

On June 18, 1916, the Squadron was mustered into United States service and ultimately landed on the Mexican border, where, with other units, it comprised the 1st Provisional Regiment of Cavalry. Border patrol duty was performed until March, 1917, when it was mustered out.

Shortly thereafter, April 6, 1917, a state of war having been declared to exist between Germany and this country, the Squadron again came into service and was enlarged to a regiment (1st Colo. Cav.). Its career as cavalry terminated on October 1, 1917, when it was consolidated with the 157th Infantry to form that organization and as a part of the 40th division it supplied replacements for combat units at the front.

Following its muster out at the end of the great war, the Squadron was reorganized on October 27, 1930.

In the fall of 1927 two of its troops were in the service of the state in the industrial disturbances in the northern Colorado mine fields.

On August 1, 1933, the officers and men of the Squadron were transferred from the Cavalry Service to form the 2d Battalion of the 168th F. A. (truck drawn) in line with the trend towards mechanization.

The organization and officer personnel on the date of transfer were as follows:

Sq. H. Q., Denver, Colorado.

Maj. R. W. Combs, Comdg.

Capt. Frederick F. Duggan, Cav. (D.O.L.), Unit Instructor.

1st Lt. Robert D. Charlton, Adj.

2nd Lt. Ralph D. Caldwell, S. O. (Monte Vista).

Medical Detachment, Denver, Colo.

Capt. Edgar Durbin, M. C.

Capt. Jay H. Bouton, V. C.

Troop A, Monte Vista, Colo.

Capt. Harry E. Kistler

1st Lt. Lloyd C. Haggard

2nd Lt. George Nicoll, Jr.

Troop B, Denver, Colo.

Capt. Elmer F. Arnbrecht

1st Lt. Fred L. Plachte

2nd Lt. Lawrence J. Ensor

Troop C, Loveland, Colo.

Capt. William F. Hunn

1st Lt. Howard E. Reed

2nd Lt. Edward M. Specht

While the Squadron has not secured much publicity beyond the borders of the state since its reorganization following the World War, it has been built into an efficient cavalry organization and one that well merited the motto of "Promptness and Energy." Its activities along the lines of horsemanship and marksmanship were particularly of merit. Many ribbons and trophies from the National Western Stock Show, and other local horse shows, are in the possession of the Denver troop. The Monte Vista Troop was always the main attraction of the annual Ski Hi Stamped of the San Juan Valley, and the Loveland Troop correspondingly of the Loveland Fair. The annual spring horseshow of the Denver Troop attracted local exhibitors and did much to create an interest in horsemanship.

The Monte Vista Troop in the last Denver Equestrian Association Horseshow astonished spectators and exhibitors by the manner in which its Government horse *Sandy* upset the dope and won the triple bar jump over a spread of 8½ feet with 5-foot bar. This horse, through the interest of Captain E. F. Hart, F. A. (D.O.L.), the Artillery Unit Instructor, is now at Fort Riley as a prospect for the Army Horse Show team. He was trained to jump by this troop and as a stunt will readily jump an automobile with passengers in it.

Some of the officers of the Squadron also played polo in local matches.

Each troop commander was a graduate of the National Guard Troop Officers' Course at Riley. Many of the enlisted men had also undergone the courses available for enlisted men at the school.

For the history of the Squadron the writer is indebted to Major John H. Nankivell, Inf. (D.O.L.), Senior Instructor, Colorado National Guard, as the highlights have been taken from the compilation by Major Nankivell.

ROBERT D. CHARLTON,

Formerly 1st Lt., 117th Sep. Sq. Cav.,

Colorado N. G., Adjutant,

Now 1st Lt., 16th F. A., (Truck Drawn).

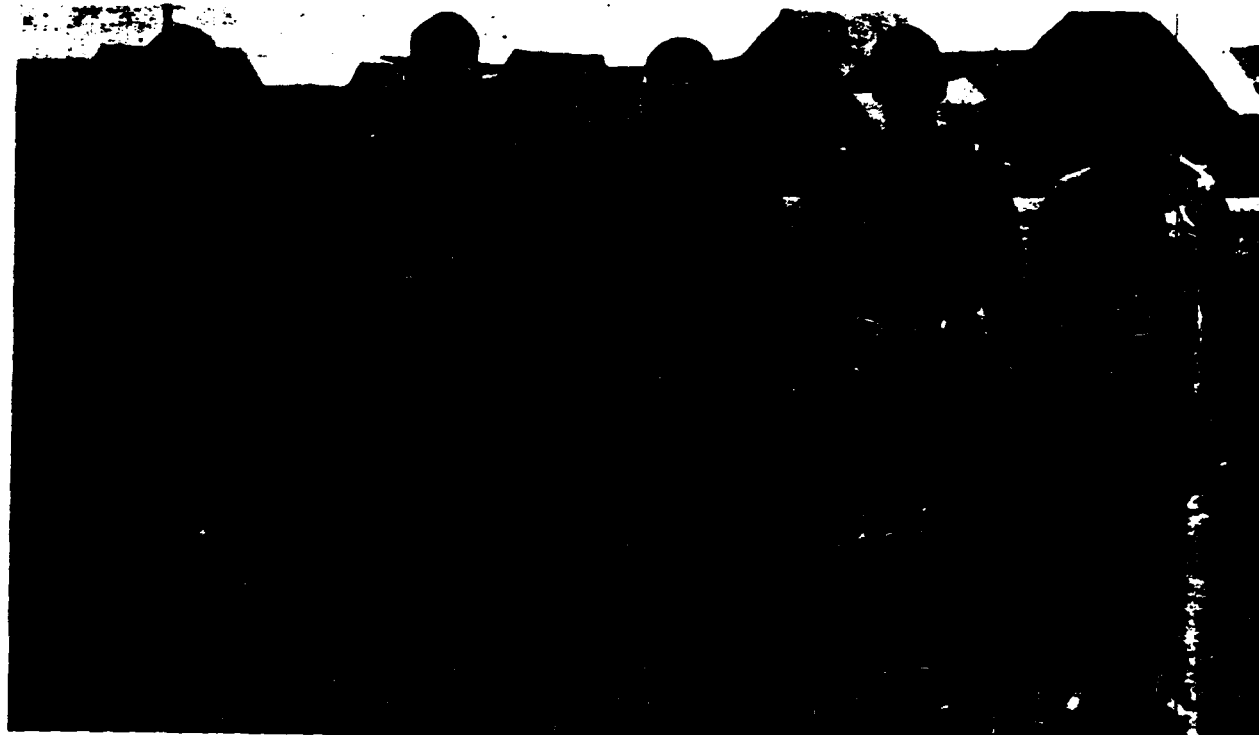
### 305th Cavalry

Philadelphia, Pennsylvania

THE appropriation made by the President for training of some seven thousand Reserve officers in addition to those previously authorized, resulted in ten troop officers of the regiment being ordered to Fort Myer, Virginia, from August 13 to 26. Officers who attended this period of training state that a good time and interesting training was enjoyed by all.

The 305th is now looking forward with interest to the resumption of inactive duty training.

The Extension School work of the regiment has started and, it is felt, will get into the old regular gait before the end of September.



SQUADRON HEADQUARTERS AND STAFF, 117TH SEPARATE SQUADRON.

Left to right: Captain Edgar Durbin, M.C.; Captain Jay H. Bouton, V.C.; Major R. W. Combs, commanding; 1st Lieut. Robert D. Charlton, Adjutant, and 2nd Lieut. Ralph D. Caldwell, Signal Officer.

In addition to two of our lieutenants who have been on C.C.C. duty since last spring, Captain R. M. Patterson, Jr., reported for a six-month tour of this duty at a camp in the western part of Virginia on September 6th.

### 306th Cavalry

Baltimore, Maryland

THIS year's active duty training season has ended for the 306th Cavalry with about fifteen officers of the regiment attending at Fort Myer, Virginia, during the period August 13th to 26th. The smallness of the number ordered to duty this year was made up for by added interest and enthusiasm, which assured the success of the camp and an enjoyable time for the officers. However, they were treated to a taste of real field duty when the storm broke over Fort Myer and vicinity during the week of August 20th and left in its wake mud, wet clothes and equipment, wrecked tents, wrecked tempers, etc.

Several active officers of the regiment, who have been assigned to six months' active duty with the Civilian Conservation Corps, will be missed when the inactive training season opens, October 1st. A very successful and large attendance is anticipated as the unit schools and classes in equitation and pistol marksmanship swing into action. No "let down" is expected in the high degree of interest and enthusiasm shown by the officers of the 306th in previous years.

### Second Squadron Machine Gun Troop, 306th Cavalry

Washington, D. C.

DUE to the curtailment of funds for summer training of Organized Reserves, only seven lieutenants from the Second Squadron, 306th Cavalry, received active duty training this year.

There are more than one hundred Cavalry Reserve officers residing in and around Washington, D. C., and it is hoped that a much larger percentage may secure training next year.

### 307th Cavalry

Richmond, Virginia

TWO field officers and twelve troop officers of the 307th Cavalry reported for active duty training at Fort Myer, Va., during the period August 13-26, 1933.

The lieutenants formed one group and the field officers and captains another. Training commensurate with the rank and experience of the officers comprising the two groups was carried out. A departure was made in the scheme of training used in past years in that designated Reserve officers were assigned tactical problems, in which all instruction was carried on by the officer. The success of this method of training recommends its adoption for future training.

Second Lieutenant Woods G. Talman, 307th Cavalry, has been designated for duty with the Civilian Conservation Corps for a period of six months beginning September 5, 1933.

Keen interest is being displayed in regard to the Army Extension Courses, which begin October 1st. 2nd Lt. George Cole Scott, Jr., has recently been promoted to the grade of 1st Lieutenant.

Captain Edward C. Harrison, Jr., Carterville, Va., has regained his active status in the Officers' Reserve Corps.

### 3d Squadron and Machine Gun Troop, 307th Cavalry

Norfolk, Virginia

MAJOR GENERAL Paul B. Malone, Commander of the Third Corps Area, was the guest of honor at a dance given at the Cavalier Hotel, Virginia Beach, Va., on July 11, 1933, by the Norfolk Chapter, Reserve Officers' Association. More than 50 couples were present and the party was a decided success.

One of the most successful periods of active duty training for members of the squadron was held at Fort Myer, Va., during the period August 13-26. The instruction included Cavalry Drill, Weapons, and Minor Tactics. A great deal of interest was shown by the Reserve officers participating and their progress was most gratifying. Officers of the Squadron who participated in this instruction were 1st Lieut. Ludwell L. Montague and 2nd Lieut. Elijah P. Montgomery.

Plans are being drawn for the inactive training season and the prospects are bright for a successful school year. A Troop School will be conducted in Norfolk for the benefit of the officers who reside in that vicinity and, in addition, a Group School will be conducted in Newport News and Suffolk. This will give approximately 80 per cent of the officers of the squadron a chance to personally contact the Unit Instructor and keep in touch with military affairs.

### 308th Cavalry

Pittsburgh, Pennsylvania

UPON the return of 308th Cavalry officers from camp, the interest of the regiment was centered upon progress of the 308th Cavalry Training Center at Aspinwall, Pa. Colonel Cherrington has been working on this project intensively throughout the summer. At a meeting held in the club house on Sunday, September 3rd, he presented to the assembled officers a résumé of what had been accomplished to date. It is believed that this regiment will soon be equipped with as fine a training center as any regiment in the Organized Reserves. There is a new stable capable of accommodating about 30 horses; a cottage which has been renovated and improved for the caretaker, as well as the officers' club house, which is being improved and thoroughly repaired. The whole property is being fenced. Riding classes are being organized among the Reserve officers, their families and guests, to support the stables.

The following officers of the regiment under Colonel Cherrington officiated at the Horse Show, which was a prominent feature at the Allegheny County Fair

from September 1st to 4th, inclusive: Capt. H. B. Peebles, Capt. J. H. Morehouse, 1st Lieut. H. A. Huhn, 1st Lieut. J. P. Barr, 1st Lieut. R. L. Thompson, 2nd Lieut. Morris Linton, 2nd Lieut. P. R. Gillespie and 2nd Lieut. S. K. Humphreys.

### 862nd Field Artillery (Horse)

Baltimore, Maryland

THE active duty training of the regiment this summer has been particularly interesting and instructive. Unfortunately, the reduced appropriations permitted only ten officers being ordered to active duty with the regiment. These officers conducted the training of the C.M.T.C. at Fort Hoyle, Maryland, from July 9th to 22nd. The officers prefer this service to any other because it gives them the most interesting element of all to work with—the soldier—and presents the problems of actual mobilization. They worked faithfully in preparation in order to give the C.M.T.C. boys the best instruction of which they were capable and the results were highly creditable.

During August, four other officers were ordered to active duty at Fort Hoyle for group training. Our officers have been to Fort Hoyle for training so many times that they feel thoroughly at home there. They have almost been adopted by that fine regiment, the 8th Field Artillery.

On August 22nd, Major J. W. Middendorf and Captain H. S. Middendorf gave a regimental smoker at the Elkridge Hounds, in honor of Colonel Walter H. Smith, F.A., who has been Unit Instructor of the 862nd Field Artillery for the past two years and who has recently been ordered to proceed to Washington, D. C., and to report to the Commandant, The Army War College, for duty in the historical section. The club house is located in the Green Spring Valley of Baltimore County, known the world over to lovers of hunting and hunters. It would be difficult to find another place so fitting for a meeting of officers of a mounted arm.

### 66th Cavalry Division

Kansas City, Missouri

*Cavalry Officers in a "New Deal!"*

TRAINING of infantry cadets at the C.M.T.C. camp, Fort Leavenworth, Kansas, for the first third of the camp period this year was carried on by officers of the 66th Cavalry Division. The closing day's exercises were most gratifying and one could not help feeling the pride which came with the thought, "I helped to start it!"

The new provisional I.D.R. was used for close and extended order formations. Simple formations, easily learned and as easily taught, take from the infantry its old disciplinary formations, but the redeeming feature of the new drill lies in its allowing greater time in training schedules for extended order drill, rifle marksmanship and musketry. Alas! Perhaps the Indian was right—under the old system he declared, "Too much 'Squads Right!' not enough how to fight!"

The cavalry arm may be proud that the essential elements of infantry's "new deal" apparently was copied from the cavalry formations—the new column of threes having been the normal dismounted fighting alignment of our arm for generations. Platoon, section and squad leaders are required to "think," "command" and practice leadership.

Even the "perfect parade line front" is gone. The reviewing officer sees his troops passing in columns of threes, sixes or masses. Line formations are not usual and are not resorted to in marching.

Your observers believe the good old "main arm" of the service has found great opportunity for improving itself in combat by using more training time for combat fundamentals, instead of so much time on the sins of executing "Forward, March!" from "Present, Arms!" and the like.

Those enjoying this novel detail from the 66th Cavalry Division were: Major T. C. Swanson, commanding 466th Armored Car Squadron, Kansas City, Mo.; Major Walter Malone, F. A. Res., Lawrence, Kansas; Major Ralph W. Page, 15th Cavalry, St. Louis, Mo.; Captain Edward Brown, 15th Cavalry, Minneapolis, Minn.; Captain Andrew Schwartz, 15th Cavalry, Kansas City, Mo.; 1st Lieut. Ed. McKim, F. A. Res., Omaha, Neb.; 1st Lieut. Milton B. Leith, 15th Cavalry, Kansas City, Mo.; 1st Lieut. R. O. Phipps, 15th Cavalry, Kansas City, Mo.; 1st Lieut. John Little, 321st Cavalry, Kansas City, Mo.; 2nd Lieut. Russell T. Boyle, 321st Cavalry, Kansas City, Mo.; 2nd Lieut. G. A. McNulty, 321st Cavalry, St. Louis, Mo.; 2nd Lieut. Harding Palmer, 321st Cavalry, Ft. Riley, Kansas; 2nd Lieut. D. A. Miller, 466th Armored Car Squadron, Kansas City, Mo.; 2nd Lieut. S. O. Slaughter, Jr., 466th Armored Car Squadron, Kansas City, Mo.; 2nd Lieut. J. D. Clemens, 466th Armored Car Squadron, Kansas City, Mo.

The above cadre was commanded by a mounted engineer reservist, Colonel Charles Fisher, Fort Scott, Kansas, 66th Cavalry Division.

The camp was conducted under the very able leadership of Major Sterling A. Wood, 17th U. S. Infantry, camp executive.

The approach of fall finds us all "champing at the bit" for the beginning of school with its sand table exercises, small arms school, equitation class and lectures on the military art. It is understood the "modern woodmen" will return to us around the first of October, and rumor has it that Major D. C. Richart, who has been our instructor for the past three years, is due to leave us. During his tour with us in Kansas City he has not only become endeared to the hearts of all cavalymen, but likewise with all the other branches represented in our Association. All wish him well and regret his leaving. This same rumor indicates our new executive will be none other than Major James C. R. Schwenck, Cavalry, U. S. A., and no more need be said, as that gentleman was the one to start the local cavalymen on their way to become the most active unit in the Kansas City Chapter of the Reserve Officers' Association.



# Officers of the 65th and 66th Cavalry Divisions, Organized Reserve

**65th CAVALRY DIVISION**, Room 918 Chicago Postoffice Building, Chicago, Ill.

**COLONEL**  
Davis, Edward, Cav., Chief of Staff.

**CAPTAIN**  
Correll, Ira S., Cav., Adjutant General.

**Unit Instructors**  
**COLONEL**  
Martin, I. S., Cav.

**CAPTAIN**  
Todd, W. N., Jr., Cav.

**DIVISION HEAD-QUARTERS**  
**COLONELS**  
Palmer, Walter E., Cav. Res.  
Harnshaw, Arthur C., Cav. Res.  
Chatterton, Edward W., O. M. Res.

**Lt. COLONELS**  
Campbell, Dolwin M., Vet. Res.  
Dwight, Charles L., A. G. Res.  
Pebate, Thomas L., J. A. G. Res.  
McKercher, R. M., Cav. Res.  
Ward, Vernon, C., Spec. Res.

**MAJORS**  
Bain, Albert J., Engr. Res.  
Cartland, Silas, O. M. Res.  
Currie, Henry L., Pta. Res.  
Hannock, Edwin, Cav. Res.  
Norman, Ryvind, O. M. Res.  
Leonard, William N., Cav. Res.  
Solar, Leslie S., Ord. Res.

**CAPTAINS**  
Cooper, Irvin E., O. M. Res.  
Deason, Allen D., M. I. Res.  
Holmes, D. M., Cav. Res.  
Jacobson, Hugo W., Sig. Res.  
Mandel, L. J., J. A. G. Res.  
Martell, R. F., J. A. G. Res.  
Shippy, W. B., Cav. Res.  
Smith, Carl P., Ord. Res.

**1st LIEUTENANTS**  
Bunker, W. S., Pta. Res.  
Flaming, J. B., Pta. Res.  
McCullough, P. E., A. G. Res.  
McHale, E. R., A. G. Res.  
Looy, M. D., Cav. Res.

**65th SIGNAL TROOP** (All Signal Reserve)  
**CAPTAINS**  
Adams, J. C.  
Hamilton, A. K.  
Osborne, H. F.

**LIEUTENANTS**  
Fay, Donald A.  
Fletcher, L. W.  
Ireland, F. W.

**McRae, M. W.**  
Rinaker, R. E.  
Stoll, I. C.  
Tunstall, D. P.

**65th LIGHT TANK COMPANY**  
**2ND LIEUTENANT**  
Stafford, C. J., Cav. Res.

**65th ORDNANCE COMPANY**  
**2ND LIEUTENANT**  
Van Schack, Harding, Ord. Res.

**65th ENGINEER SQUADRON** (All Engineer Reserve)  
**Lt. COLONEL**  
Logan, C. R.

**MAJORS**  
Hill, Roy W., Jeffrey, W. R.

**CAPTAINS**  
Fraser, D. R.  
Harris, E. C.  
Ingram, M. I.  
Kadlec, H. R.  
Morden, W. J.  
Salisbury, R. D.  
Stoll, H. M.

**LIEUTENANTS**  
Bell, John H.  
Bronson, W. D.  
Cooley, J. C.  
Darragh, A. L. H.  
Davis, J. S.  
Decker, J. E.  
Fahnestock, T. M.  
Fletcher, C. W.  
Ford, R. M.  
Graf, O. K.  
Kustner, C. G.  
Lange, F. C.  
Lerner, B. A.  
Lewis, H. E.  
Loeb, E. M.  
Matthews, M. W.  
Mudgett, J. S.  
Nelson, R. T.  
O'Leary, L. A.  
Oman, L. R.  
Papadopoulos, P.  
Rummel, C.  
Smith, W. R.  
Templeton, J. B.  
Utti, W. L.  
Wagner, H. H.  
Walsh, C. V.  
Zelma, E. P.  
Cohen, A. S.  
Fisher, J. R.  
Forsberg, R. A.  
Gasper, R. A.

**65th MEDICAL SQUADRON** (All Medical Reserve)  
**Lt. COLONEL**  
Gaff, J. H.

**MAJORS**  
Todd, R. H.  
Weber, A. T.  
Wollman, Israel.

**CAPTAIN**  
Albaugh, J. L.

**LIEUTENANTS**  
Barr, H. G.  
Bartlett, D. C.  
Klein, E. G.

**Q. M. TRAIN HQ.** (All Q. M. Res.)  
**CAPTAINS**  
Day, R. E.  
Jackson, R. V.

**LIEUTENANT**  
Carlson, A. B.

**65th FIELD ARTILLERY**  
**MAJORS**  
Carnahan, H. L.  
Gould, F. E.  
Sherman, S. M., Jr.

**CAPTAIN**  
Chesbro, I. A.

**LIEUTENANTS**  
Abrahamson, M. F.  
Angus, John, Jr.  
Bailes, L. W.  
Barwasser, N. C.  
Beckham, D. L.  
Bruyere, P. T.  
Carroll, W. C.  
Collins, F. S.  
Debow, R. M.  
Doherty, E. E.  
Edelman, B. L.  
Elich, F. H.  
Ernststein, Arthur  
Field, C. E.  
Pink, J. H.  
Frieder, G. J.  
Goldberg, J.  
Goode, I. B.  
Griswold, T.  
Haebele, J. L.  
Hamilton, J. L.  
Husband, Wm. T.  
Jurgens, P. G.  
Kirk, H. E.  
Lieberthal, L. J.  
Lockett, J.  
Manning, L. H.  
Miller, M. G.  
Munnecke, R. C.  
Munsterman, R. W.  
O'Meara, A. C.  
Nightingale, W. B.  
Palmer, R. M.  
Parker, H. D.  
Peterson, H. C.  
Reisenfeld, N. I.  
Rountree, H. B.  
Schneil, F. A.  
Scodfeld, T. C.  
Stevens, J. B.  
Stevenson, G. S.  
Sweeney, D. D.  
Tieken, T. Jr.  
Topic, P. L.  
Weber, N. S.  
Weinrich, C. R.  
Whitsett, R. C.  
Mallen, J. Z.

**Attached Medical (Dental)**  
**LIEUTENANTS**  
Cock, F. J.  
Rosenberg, E. S.

**65th CAVALRY BRIGADE HQ.**  
**MAJORS**  
Bradley, D. R., Cav. Res.  
Morse, G. B., Cav. Res.

**CAPTAINS**  
Clark, T. H., Cav. Res.  
Hecker, J. W., Cav. Res.  
Kennedy, K., Cav. Res.  
Morgridge, L. D., Cav. Res.

**LIEUTENANTS**  
Christofferson, C., Cav. Res.  
Sapora, G. E., Cav. Res.

**65th ARMORED CAR SQUADRON**  
**MAJORS**  
Murphy, J. E.

**CAPTAINS**  
Belanger, I. J.  
Broberg, J. A.  
White, H. S.

**1st LIEUTENANTS**  
Copp, F. W.  
Schmeltzer, J. H.

**2ND LIEUTENANTS**  
Cooper, F. S.  
Kershaw, W. B.  
Lorenso, L. S.  
McCormick, M. R.  
Strong, M. L.  
Talbot, R. H.  
Thierry, R. K.

**Attached**  
**1st LIEUTENANT**  
Collinson M. H.

**2ND LIEUTENANTS**  
Biers, H. J.  
Greer, M. J.  
Jencks, F. W.  
Martin, M. E.  
Woodworth, T. L.

**65th CAVALRY REGIMENT** (All Cavalry Reserve)  
**COLONEL**  
Siqueland, T. A.

**Lt. COLONEL**  
Graham, L. M.

**MAJORS**  
Densmore, C. A.  
Pine, H. E.  
Pinsenshaum, A.  
Troxell, W. H.

**CAPTAINS**  
Brandt, J. H.  
Burkhardt, H. S.  
Cooper, H. E.  
Haugan, J.  
Hopp, R. D.  
Lang, J. M.  
Schlimer, E. G.  
Schroeder, E. A.  
Snyder, J. G.  
Towne, A. E.

**LIEUTENANTS**  
Ackerman, J. V.  
Arford, C. W.  
Armstrong, R. F.  
Baker, E. H., Jr.  
Baker, G. R.  
Bennett, A. W.  
Bernico, C. F.  
Blickle, T. F.  
Best, J. H.  
Benson, R. O.  
Berliand, L. F.  
Bingley, C. K.  
Blake, W. L.  
Bland, W. W.  
Borling, E. G.  
Brauer, J. A.  
Brenner, C. E.  
Brence, F. E.  
Brown, E. V.  
Brudigan, M. J.  
Bruskin, T. R.  
Budd, H. B.  
Busswell, C. J.  
Buttner, L.  
Carre, E. R.  
Cleveland, W. C.  
Collins, H. W.  
Collins, W. A.  
Colwell, R. F.  
Comstock, P. H.  
Cooper, W. O.  
Cox, B. A.  
Damians, F. Q.  
Deutsch, M. J.  
Deutsch, M. J.  
Dick, D. J.  
Dickson, L. E.  
Dinsmore, G. R.  
Doyle, G. A.  
Doyle, W. S.  
Durand, E.  
Durant, J. W.  
Ellinger, A. G.  
Fisher, L. V.  
Fisher, T. B.  
Frank, R. B.  
Fraser, S.  
Freda, A. A.  
Freestrom, J. B.

**Frederick, M.**  
Gardner, B. J.  
Gartin, J. W.  
Goldman, H. P.  
Graham, L. D.  
Granlund, M. F.  
Grant, S.  
Grant, F. R.  
Greer, R. A.  
Grimes, A. P.  
Hager, E. F.  
Hall, A. A., Jr.  
Hall, W. E.  
Hermes, D. F.  
Heylin, R. H.  
Hubbard, L. A.  
Huguleit, W. E.  
Hunt, L. H.  
Hussey, R. E.  
Ingeman, M. J.  
Jensen, F. W.  
Jerrems, A. W., Jr.  
Johansson, A.  
Johnson, E. S.  
Jones, P. W.  
Jump, B. E.  
Kappus, G. A.  
Karpaker, J. W.  
Kempston, J. R.  
Klock, F.  
Kurz, W. C.  
Kuebler, J. G.  
Labahn, R. F.  
Lambert, R. R.  
Lauer, C. W.  
Lee, G. B.  
Leet, G. F.  
Levy, S. B.  
Livingston, P. C.  
Long, J. B.  
Mandell, L. D., Jr.  
MacMurray, A. E.  
MacPherson, W. M.  
McDonnell, A. B.  
McGary, F.  
McNair, G. B.  
Marshall, C. L.  
Martin, E. S.  
Masoth, J. B.  
Miley, C. H.  
Mitchell, W. A.  
Mohler, J. W.  
Muir, L.  
Nolte, L. W.  
Palmee, R. C.  
Patterson, T. D.  
Perkins, R. A.  
Peterson, T. R.  
Phelps, A. M.  
Podlesak, R. W.  
Porter, J. L.  
Prestler, T. H.  
Pritchard, G. R.  
Prosterman, I. S.  
Randecker, T. H.  
Reeda, W.  
Reiter, E. M.  
Roberts, J. R.  
Robinson, R. L.  
Rogier, J. W.  
Root, R. M.  
Rossiter, J. H.  
Rothenberg, H. B.  
Russell, W. C.  
Schein, E.  
Schroeder, W. E.  
Schuler, L. J.  
Scully, J. C.  
Schultz, C. E.  
Schwertfeger, E. E.  
Spencer, L. F.  
Stern, C. J.  
Sweeney, A. L. P.  
Taylor, H. B., Jr.  
Taylor, J. T.  
Van Thienen, P. R.  
Tighe, H. F.  
Tomkins, N. C.  
Trenkenschuh, P. W.  
Turner, R. J.  
Ulrich, J.  
Waddell, F. J.  
Wadsworth, H.  
Wadsworth, H.  
Wadsworth, H.  
Whitaker, W. R.  
Williams, E. F.  
Wold, R. M.  
Woollett, W.  
Zingarelli, J. D.  
Zitzewitz, W. W.

**Attached Medical**  
**CAPTAIN**  
Nachtigall, Hans W.

**1st LIEUTENANTS**  
Siegrist, B. J., Dent. Res.

**DeHaven, Wm. A.**  
Dent. Res.

**65th CAVALRY** (All Cavalry Reserve)  
**Lt. COLONEL**  
Peterson, W. A.

**MAJORS**  
Brown, K.  
McCullough, O. C.  
Okin, Harry.  
Swindler, R. L.

**CAPTAINS**  
Austin, J. J.  
Beamish, H. L.  
Church, W. R.  
Curry, R. E.  
Dexter, W.  
Edwards, C. H.  
Graham, T. P.  
Hopp, H. M.  
Hufford, F. G.  
Jurgensohn, E.  
Kastenbaum, H.  
Kufewski, T. F.  
Miller, T. J.  
McBride, J. C.  
McClane, J. B.  
Seaman, John T.  
Shadford, E. S.  
Smith, G. L.  
Tilay, John W.

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Anderson, M. A.  
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Apfelbaum, D. L.  
Appelman, J. A.  
Bartheimess, K. T.  
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Bills, R. A.  
Blaisdell, W. S.  
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Bruce, R. F.  
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Budinger, W. G.  
Bunse, W. A.  
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Cave, W. H.  
Caylor, A. C.  
Chalstrom, G. E.  
Clayton, S. B.  
Cole, R. I.  
Colwell, R. H.  
Comings, R. C.  
Connor, J. M.  
Conwell, G. A.  
Cook, J. R.  
Cox, H. E.  
Crenshaw, Vaden D.  
Cook, W. H.  
Crummer, W. P.  
Cummings, F. A.  
Curry, F. E.  
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Daubek, G. G.  
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Dohme, C. G.  
Dollahan, H. A.  
Dorfman, S. G.  
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Egbert, M. G.  
Elkenberry, R. C.  
Evoaldi, L.  
Evoaldi, W. J.  
Everett, C. A.

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**Lt. COLONEL**  
Peterson, W. A.

**MAJORS**  
Brown, K.  
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Okin, Harry.  
Swindler, R. L.

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# D

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*extends to the  
OFFICERS and ENLISTED  
MEN of the CAVALRY  
the Season's Greetings  
and his best wishes  
for the Ensuing Year*



(CHRISTMAS ON THE OUTPOST)

## The German Cavalry in the Roumanian Campaign—1916

By Colonel Edward Davis, Cavalry, Chief of Staff, 65th Cavalry Division

THE work of the German Cavalry in the Roumanian Campaign of 1916 has not received, as yet, in this country, the attention which it deserves. The same observation may correctly be made with regard to the operations of the other arms in this swift, crushing campaign so ably directed by such battle-masters as Mackensen, Falkenhayn and Seeckt.

The sources of information used in this article are, to some extent, personal as well as official. During 1916, 1917 and 1918, I was on all the fronts of the World War except those of Russia and Roumania but during this Roumanian campaign I was not far away, being, in fact, on the near-by Macedonian front where there were definite repercussions and where actual plans were considered for a thrust in the direction of Roumania. As we had a Russian division with us in Macedonia the eagerness for an advance toward Roumania may easily be imagined by those who participated in the war as early as 1916. Actually we were not strong enough in Macedonia to embark on any such adventure. After the war, when on duty as Military Attaché in Berlin, the German point of view and German sources as to the Roumanian campaign came to my attention. All of these I have drawn upon for what may be called the human side of this story.

There is no need, in this article, to describe the very complicated political situation and the intricate diplomatic maneuvers which preceded the outbreak of war between Roumania and the Central Powers. But the general situation and the maneuver of the two opposing groups of armies should be described fully in order that one may definitely understand the contributory effect of the German Cavalry. Also, as a preliminary, certain general observations may appropriately be made as to the composition and the leadership of the Cavalry itself.

As in most of the many instances of effective cavalry employment during the World War, the unit used on this front was a cavalry corps. The German cavalry corps in this instance was constant in its composition only as to the Corps Commander and the Corps Headquarters Staff, the two divisions employed during the Transylvania operations (19th September to 30th October), the German 3rd Cavalry Division and the Austrian 1st Cavalry Division, being replaced for the Wallachia operations (11th November to 6th December) by the German 6th and 7th Cavalry Divisions. The divisions first mentioned above were replaced because they were literally worn out as a result of their faithful execution of missions which seemingly had better been left to the infantry, as will appear more in detail in subsequent paragraphs of this account.

The commander of the Cavalry Corps, General Graf

Schmettow, was well prepared by his previous successive experiences as a Colonel of Cuirassiers, Brigade Commander of the Death's Head Hussars and Commander of a cavalry division during the early days in France. Tall, slender, erect in posture, direct and brief in expression, he seemed a replica of the great Seydlitz. Among the division commanders there was Mutius, the Silesian, whose squadrons eventually broke out into the Wallachian plains; Mutius, thick-set, swarthy, student as well as soldier, whose command always bore the stamp of cohesion.

In analyzing the general situation of the opposing groups of armies at the outbreak of hostilities, attention is invited to the relief map which accompanies this account. It is a map of German origin, modified for the purposes of this article. It presents graphically the physical difficulties of the campaign. Although the place-names are in German, their equivalents in English are generally quite obvious.

Beginning at the line Turnu Severin-Orsova. The Iron Gate on the Danube (Donau), the great massif of the Transylvanian Alps (Transylvanische Alpen) is seen trending eastward until beyond Kronstadt where it turns north eventually blending with the Carpathians (Karpaten). In this northern projection of the Transylvanian Alps, among the western tributaries of the River Sereth, there lies, by the way, the scene of "Dracula," the great vampire story, a remote region where the peasants to this day believe in vampires. Right along the crest of those Transylvanian Alps the old international boundary (Landesgrenzen) between Roumania and Hungary (Ungarn) marches from Orsova on the Danube to near Czernowitz where it meets the boundary of old Imperial Austria.

On the 27th of August, 1916, the day Roumania declared war, her Fourth Army was already up to this frontier, in liaison on the north with the Russian formations which then extended from the North Sea clear down to the Roumanian border at Dorma Watra, some sixty miles southwest of Czernowitz. On the same day the Roumanian Second Army stood on the frontier south of Kronstadt; the First Army south of Hermannstadt; one infantry division, reinforced, constituted a security detachment along the remainder of the western frontier; the Third Army was near the southern frontier of the Dobrudja (Dobrujscha) and a group of infantry divisions was in reserve near Bukarest.

To meet this show of aggression Austria was very dilatory. A few infantry divisions, assembled hastily and formed into the Austrian First Army, took over the entire front from the Danube to the right of the Archduke Carl's Army Group in Bukowina. Then



German ability and energy changed the situation. On the relief map, in the upper left quarter, is seen the Maros River flowing from the northeast and then turning to the west eventually to empty into the Tisa River southeast of Budapest. In a very general sense it parallels the crest of the Transylvanian Alps. The valley of the River Maros was selected as the line of deployment of the German-Austrian main forces, a deployment which was not completed until near the end of September.

Meanwhile there was an actual collision of the adversaries in another quarter of this front. On the 2nd September Field Marshal Mackensen with a mixed force of Germans, Turks and Bulgars, crossed from Bulgaria into the Dobrudja, bordering the Black Sea (Schwarzes Meer), steadily driving back the Roumanian Third Army, until by the 15th September he was half way between the frontier and the Cernavoda-Constanza Railway.

Though this diversion doubtless confused the Roumanian High Command, they caused their main forces (Fourth, Second and First Armies in order from right to left) in the region of the Transylvanian Alps to assume the offensive, and by the 10th September they had crossed the old Roumanian frontier and were on the approximate line Col de Gyimes-Fogaras-Aluta (Alt) River—approaches to Hermannstadt-Petroseny.

Regarding the situation just at this time, General Ludendorff remarks as follows:

"The deployment on the Maros was not complete until the end of September. A rapid advance on the part of the Roumanians would have utterly upset it. The Roumanian Army moved forward at a snail's pace partly because their attention had been diverted by Field Marshal von Mackensen's great successes in his invasion of the Dobrudja, and also because they were waiting for the Russians to cross the Carpathians."

Falkenhayn, advancing from the Maros during the latter half of September, drove the Roumanians out of the Petroseny coal fields and from other areas southwest of Hermannstadt and then faced east to begin his main operation which will hereafter be referred to herein as the Transylvania Maneuver. This reached full momentum by the 26th September and was broken and brought to a standstill by the Roumanians, assisted by the Russians, on the 12th October.

Let us analyze this Transylvania Maneuver for a moment. Referring to the relief map we see that this thrust directly eastward from the Maros, through Hermannstadt and Kronstadt, was across the widest part of the massif while an advance southward through Petroseny, for example, would have been across the narrowest part. But the maneuver, as undertaken, insured the quickest sweeping of all the Roumanians out of Hungary, which local conditions made desirable, and definitely smashed the Roumanians' plan, if they had one, either to advance westward on a continuous line with the Russians or to unite with the latter in a thrust immediately south of the Carpathians which, if successful, would have created an Austrian disaster.

Furthermore, this maneuver, if successful, promised maximum results for the German-Austrian Cavalry in exploitation. The relief map shows vividly the mountain passes along the western frontier (landesgrænzen marked by the letters A to N inclusive and identified in the legend. These passes have an altitude of almost 6000 feet on the average. Through them lead all the roads, trails and railways which give entrance to the great Wallachian Plain in the center of which lies the capital, Bukarest. The Transylvania Maneuver sought a break-through by Falkenhayn's infantry at one or more of the passes K, L, M, followed by an interruption of the cavalry into the valley of the River Sereth and thence into the Wallachian Plain east of Bukarest. This exploitation, followed by infantry support and with Mackensen assisting from the Dobrudja would have bottled up practically all the Roumanian forces west and northwest of Bukarest and would have been a victory of annihilating character. But such was not the result. Falkenhayn's eastward push, made with insufficient troops, was rapidly executed but, in the critical, final phase, just lacked the strength to execute the break-through, the Roumanians having been reinforced by the Russians. The Cavalry Corps was the only great unit to attain its designated objective—the region of Ocna—but it was left there without support, just like a base-ball player "left on base" at the end of an inning. The details of the Cavalry operations in the Transylvania Maneuver will be presented in later paragraphs.

Blocked toward the east and with winter rapidly approaching, Falkenhayn now decided to attempt a break-through at one or more of the mountain passes farther west; specifically the Vulkan and Szurdok Passes (A and B). Reinforcements arrived, new groups were formed and, after a false start in October, the push to the south attained full momentum on the 11th November. Among the new groups was the reconstituted Cavalry Corps, its divisions now being the 6th, released from the Russian front, and the 17th, brought down from Belgium. Graf Schmettow continued as Corps Commander. This operation, referred to hereafter as the Wallachia Maneuver, resulted in a break-through. The Cavalry Corps, itself finally assisting in breaking the enemy line, crossed the Szurdok defile and cleared the mountain country the 18th November, and "the pennants of the German lancers floated on the Plain of Wallachia" the same day. Bukarest fell the 6th December. The details of the Cavalry operations in this Wallachia Maneuver will appear in later paragraphs.

#### German Cavalry in the Transylvania Maneuver

We have seen that the Cavalry Corps participating in these operations consisted of the German 3rd Cavalry Division and the Austrian 1st Cavalry Division without organic artillery or other auxiliaries normally pertaining in an organic sense to great units. It was an improvised corps with no training in corps team-work. During the period of these operations it participated, first, in covering operations and next in the main battle, fighting on foot practically all the



time. It had no opportunity to execute its exploitation mission, owing to the partial failure of the main operation, as we have seen above.

The covering operations, above referred to, were carried out shortly after the first advance from the Maros, while Falkenhayn's right group under General Staabs was driving the Roumanians out of the Petro-seny coal fields and from the entire region southwest of Hermannstadt. During these covering operations the Cavalry Corps was established in observation on the River Aluta (Alt), from Fogaras to the heights northeast and east of Hermannstadt. Its mission was to stop the advance of the Roumanians and to prevent a junction of the Roumanian Second Army, which was operating toward Fogaras, and the Roumanian First Army, which held Hermannstadt. Outpost and patrol duty with occasional reconnaissances constituted the activity of the Cavalry until the withdrawal of the Roumanian left wing southwest of Hermannstadt and Falkenhayn's attack on that city automatically terminated Schmettow's defensive mission.

In the attacks on Hermannstadt and on Kronstadt which followed, the Cavalry Corps with its supporting Infantry Division fought continuously from 21st September to the 9th October when Kronstadt fell. During the attack on Hermannstadt the Corps was supported by one battery of 10-centimeter guns and five 6-inch mortars. Referring to the Roumanian attack of the 21st and 22nd September, against Schmettow's two Cavalry Divisions, the German account reads as follows: "The 3rd Cavalry Division defended with remarkable stubbornness the heights situated to the east of Hermannstadt; lighthorse and hussars distinguished themselves in hand-to-hand fighting and executed counter attacks with the grenade, the carbine and the saber. This division did not yield one inch of ground despite strong Roumanian attacks which lasted all day. They took 450 prisoners belonging to four different regiments. Likewise the 7th Austro-Hungarian Brigade, right wing of the Austrian First Cavalry Division, repulsed all attacks. It was then that a strong detachment of enemy infantry succeeded in crossing the Alt at Glimboka and in advancing toward the north. The elements of the Austrian 1st Cavalry Division engaged between the Haarbach and Glimboka were forced to withdraw toward the northeast and, during the night, occupied a new position to the south of the Haarbach."

On the 23rd and 24th September the Roumanians not only failed to renew their attacks against the cavalry but actually evacuated part of the terrain they had won. On the 26th a detachment of Schmettow's Cavalry, formed into an attack group, crossed the River Aluta at Kerez and fought their way to the southwest as far as a point southwest of Glimboka, driving back a Roumanian Cavalry force. The 27th, 28th and 29th September strong Roumanian detachments sought to repel the cavalry. On the 29th "several Roumanian infantry divisions started a new attack against the Austrian 1st Cavalry Division, which, after bitter hand-to-hand fighting, had to withdraw yielding step by step," according to a German account.

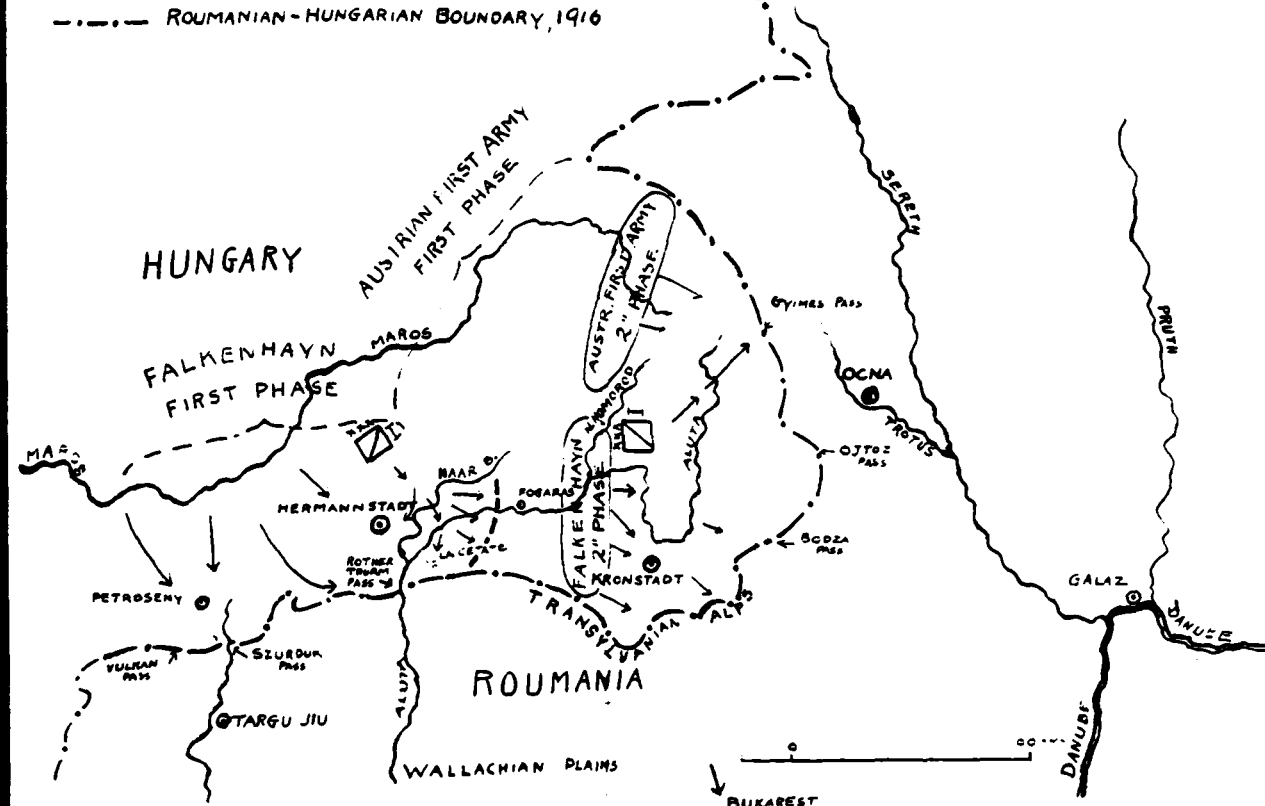
During those days the Cavalry Corps found itself more than once in a critical situation, and the intervention of the 89th Infantry Division was necessary finally to disengage the Austrian 1st Cavalry Division. However, on the 28th September, elements of the German 3rd Cavalry Division had seized La Cetate, a prominent elevation about 12 miles southeast of Hermannstadt. They held on here against all comers, including a regiment of Roumanian Cavalry which "suffered a violent and murderous fire from our (German) dismounted troops." By holding La Cetate, Schmettow made complete the encirclement of the Roumanian forces in Hermannstadt and by facing the remainder of his troops to the east he prevented the intervention of new forces from the Roumanian Second Army.

Having taken Hermannstadt, Falkenhayn on the 29th September gave orders to face the Ninth Army to the east against the new objective, Kronstadt. The mission given the Cavalry Corps was to "mask and cover, faced to the east, the re-groupment of the Army and to delay the march of the enemy, in case he should attempt to advance." It was given to understand that it was to maintain "an impenetrable screen." This it did despite the attacks of the Roumanian Second Army, both north and south of the River Alt, between the 29th September and the 3rd October. Assisted by General Morgen's Group of two infantry divisions—the south wing of the Austrian First Army—the Cavalry Corps stopped the advance of the Roumanian Second Army while the preparatory maneuvers of the German Ninth Army for the battle of Kronstadt proceeded in all security.

During the attack on Kronstadt the Cavalry Corps covered the north flank of the Ninth Army, which had borrowed Morgen's Group—two infantry divisions—from the Austrian First Army. On the 6th October contact was gained with a large body of Roumanian Cavalry, thought to be the Roumanian 2nd Cavalry Division, but the latter avoided combat. This was about 20 miles northwest of Kronstadt where the Homorod flows into the Aluta. The 7th, 8th and 9th October, while Falkenhayn was delivering his final assaults on Kronstadt the Cavalry Corps, keeping in touch with the Austrian First Army as the latter pushed eastward, swung around through N. Baczon about 30 miles north of Kronstadt and then on to the upper waters of the Aluta where it flows south toward Kronstadt, parallel to the frontier.

After the capture of Kronstadt came the battle of the defiles, Falkenhayn seeking to force open one or more of the Eastern passes in order that he might descend into Roumania, preferably east of Bukarest as has been mentioned in an earlier paragraph. The Cavalry Corps from its position on the upper Aluta and reinforced by the Austrian 71st Infantry Division was ordered to march on Ocna, on the Trotus River. Apparently it was the only unit of the Ninth Army to accomplish its mission. The 20th October the Cavalry Corps was very near the frontier and ready for the march down into the plain. But the Austrian 71st Infantry Division was too exhausted to effect the break-through at Ocna and had to stop.

THE TRANSYLVANIA MANEUVER; SEPT-OCT 1916.  
1st PHASE: AGAINST PETROSENY AND HERMANNSTADT  
2nd PHASE: AGAINST KRONSTADT AND THE EASTERN PASSES  
--- ROUMANIAN-HUNGARIAN BOUNDARY, 1916



On all the rest of the front the offensive had been checked, and this, together with the arrival of Roumanian reinforcements, caused Falkenhayn to abandon the idea of forcing the Eastern passes and to seek an opening toward the west.

The German 3rd Cavalry Division passed into Army Reserve, to appear later as the Transylvanian Cavalry Brigade, inserted between Staabs and Morgen's Groups. The Austrian 1st Cavalry Division returned to the Austrian forces.

#### German Cavalry in the Wallachia Maneuver

When Falkenhayn, having been checked in his eastern effort, decided to break through the western passes, his right rested, in strength, south of Hermannstadt in the region of the Rother Thurm Pass, letter "C" on the relief map. West of this point, substantial reinforcements were advancing from the Maros valley and were coming into line north of the Vulkan and Szurdok Passes, letters "A" and "B" on the relief map. Among those reinforcements the greater units were two infantry divisions and the German 6th and 7th Cavalry Divisions commanded respectively by Major General Saenger, a former Inspector of Cavalry, and Major General von Mutius to whom reference has already been made.

At first these infantry and cavalry divisions were organized into a Group under Major General von

Kneussel. The formation of a new cavalry corps was to come later. Kneussel's Group made the first attempt to force the western passes. Reconnaissance discovered a small pass west of the Vulkan and through this were sent a battalion of Austro-Hungarian Landsturm and a detachment of Hussars, from the 6th Cavalry Division, reinforced by machine guns. They got through the first throat of the pass, occupied the outlet south of it and by the 25th of October had advanced about as far as Borosteni, a point in the mountains about thirteen miles due west of Targu Jiu.

Behind this advanced detachment came the 3rd Cavalry Brigade, "which was only able to bring up one piece of artillery through the snow covered ravines and over the icy hilltops." The leading dismounted troopers and their machine guns attacked the 26th October, reinforcing the Landsturm. They arrived just in time to repulse some Roumanian counter attacks. The evening of the 27th the 8th Cavalry Brigade was ready to intervene and, with it, two batteries of the 11th Horse Artillery. The morning of the 28th the dismounted troopers of the 5th Cavalry Brigade arrived. The situation appeared favorable for an attack in force against the Roumanians who held the outlet into the plain in the direction of Targu Jiu, and orders were given accordingly. However, action by the entire 6th Cavalry Division did not take place;

it was rendered impossible by the resistance which General Kneussel met on the rest of his front. On the 29th October, the Roumanians recaptured the heights 8 miles southwest of the Vulkan Pass. While elements of the 7th Cavalry Division, hurriedly engaged, together with a battalion of Wurtemberg mountain troops, filled the gap resulting from this Roumanian advance, the 6th Cavalry Division had to be withdrawn from the positions it had occupied northeast of Borosteni. "It was in the midst of difficulties particularly hard that the latter began its retreat the 30th October in a beating rain, without being disturbed by the enemy but suffering enormously as a result of conditions of terrain: horses, guns and wagons slipping and falling." In fact they had to abandon the greater part of their artillery, blowing up the guns and rolling them over the mountainside.

As a result of this failure, Falkenhayn decided to group his cavalry divisions into a Cavalry Corps. It consisted of the 6th Cavalry Division (3rd, 5th & 8th Brigades) and the 7th Cavalry Division (26th, 30th & 41st Brigades), under Graf von Schmettow as Corps Commander. The mission of this Cavalry Corps was to exploit the break-through which would be made by General Kuhne's Group, to continue to lead the pursuit after debouching into the Plains of Wallachia and at the same time to protect Falkenhayn's right flank until liaison was established with Mackensen's left flank after the latter crossed to the north bank of the Danube, coming over from Bulgaria. The execution of the first part of this mission was destined to be extremely difficult.

To retain our perspective as to the current situation, it is advisable to pause now and take stock of formations, locations, directions, and zones of action. The greater elements of Falkenhayn's IX Army stood along the heights of the south slope of the Transylvanian Alps in the following order from right to left. Cavalry Corps with Kuhne's Group in the region of the Vulkan and Szurduk passes ("A" and "B") facing the Roumanian forces at Targu Jiu; Krafft von Dellmensingen's Group south of the Rother Thurm pass ("C"); Morgen's Group south of the Torzburger Pass ("D") and Staabs' Group at the Tomoser Pass ("E"). They would debouch into the plains respectively through the valleys of the Rivers Jiu, Aluta (Alt) and Argesh, Dambrovita, and Prahova; Staabs' Group the pivot. Cavalry Corps the marching flank, the latter, once into the plain, by a northeasterly thrust to facilitate the exit of all the others from the mountain passes by taking Roumanian elements in flank and rear. In a very general comparative sense all these groups would advance from the edge of a quarter opened fan, converging along its ribs toward the metal ring in the handle, Bukarest. To complete the operation, Mackensen's Danube Army would cross the Danube at Sistov, unite with Falkenhayn's right and drive northeast on Bukarest. On the left of Mackensen's formations rode the Cavalry Division von der Goltz, composed of German, Bulgar and Austrian units. The Roumanian First and Second Armies faced Falkenhayn's groups but, poorly informed, were rein-

forcing in front of Morgen's rather than in front of Kuhne's Group from whence the blow was to come.

The attack began the 7th November, Krafft von Dellmensingen's Group taking the initiative. This day was killed Prince Henry of Bavaria, while commanding, as a major, the Bavarian Infantry Life-Regiment which he was leading to the attack on Mount Sata. A Cavalry officer in the early days of the war, he had served in France, in Serbia and again in France before coming to Roumania. He had previously been twice wounded, the last time before Verdun in the summer of 1916.

Kuhne attacked the 11th November and on the 13th seized the crests constituting the outlet south of Szurduk Pass. Elements of the 6th Cavalry Division covered Kuhne's left but the main body of the Cavalry Corps was held north of the frontier crests awaiting the completion of the break-through. One regiment, the 4th Uhlans (reinforced) had been detached toward the Szurduk Pass charged with furnishing reconnaissance and demolition parties.

Information, afterwards found to be incorrect, was received the 14th November indicating that the Roumanians were in full retreat from Targu Jiu. Headquarters IX Army, acting on this information, ordered the Cavalry Corps forward to begin the pursuit. On the 15th November the Corps crossed the Szurduk Pass at a trot. In 24 hours they marched 30 miles along the single road which, nowhere very good, traverses this pass. Upon reaching the region south and southeast of Targu Jiu they found the enemy in occupation of the heights between the Rivers Jiu and Gilort. The 6th Cavalry Division was immediately engaged in hard fighting with what they thought were strong rear guard detachments, which they expected to overcome the next morning by a double enveloping movement. Actually the Roumanians had received important reinforcements and had re-established themselves on a wide front on the heights dominating Targu Jiu on the south. By the evening of the 16th the entire Cavalry Corps and most of Kuhne's Group were engaged. The difficulties of the terrain were indescribable, and a thick downfall of snow greatly impeded all movement. The enemy resisted stoutly and, in fact, launched several counter attacks. On the extreme left the 4th Uhlans, who had cut the railway east of Targu Jiu, were seriously engaged. As night came on the snowfall became so thick that "the hand could not be seen before the face." Taking advantage of this circumstance the 6th Cavalry Division was disengaged, relieved by Infantry and withdrawn to Targu Jiu. This was certainly an inauspicious beginning for so precise an operation as a break-through followed by exploitation.

But Falkenhayn and his cavalry proved equal to the occasion, and the enemy was about on his last legs. Orders of IX Army for the 17th November prescribed a resumption of the enveloping maneuver, but with a wider extension in so far as the Cavalry movement was concerned. This extension, accomplished the night of the 16th and during the 17th, was an extraordinary performance carrying the right of the Cavalry Corps

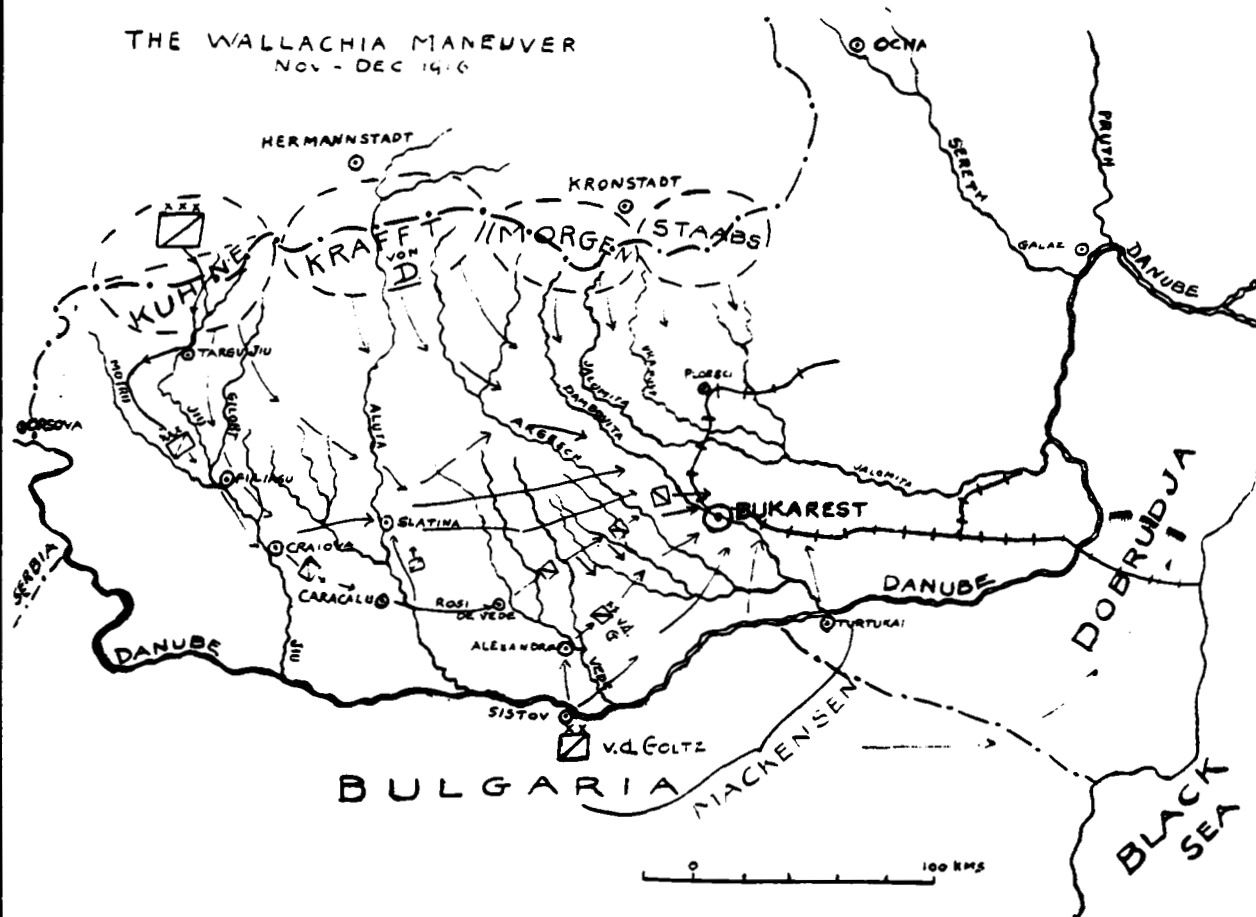
clear to the Motru River a distance of 21 miles to the southwest within 24 hours after the 6th Cavalry Division disengaged southeast of Targu Jiu. Fortunately, the condition of the roads between the rivers Tismana and Motru permitted the use of armored cars. The Roumanians brought up reinforcements and counter-attacked on the front of the 7th Cavalry Division, but the advance of the 6th Cavalry Division to the south and west and increased pressure by Kuhne broke the last resistance of the Roumanians.

Finally on the 18th November "the trumpets of the Cavalry Corps sounded the pursuit, to the last breath of man and horses. The pennants of the German lance floated on the plains of Wallachia. After short engagements against enemy detachments in the mountainous mass between the Motru and the Jiu, the regiment of Generals Saenger and Mutius, riding west of the Jiu, took the direction of Filiasu and Craiova. On account of the condition of the roads it was necessary first to maintain very close liaison laterally with Kuhne's Group. At the head of the Cavalry Corps marched the detachments charged with the exploration of the banks of the Aluta River south of Slatina and those designated to cut the Pitesti-Slatina-Craiova railway."

On the 19th and 20th November the 7th Cavalry Division allowed itself to be delayed by the task of

cleaning up the Roumanian forces which had been cut off between the Jiu and the Danube. These enemy troops, finding their communications cut, had attacked the Cavalry with considerable resolution. As their strength was finally determined to be about 3 battalions, 2 squadrons and several batteries, their fate was left to the 5th Regiment of Cuirassiers and three squadrons detailed from other regiments, the 7th Cavalry Division resuming its eastward advance. The 21st November about 9:00 A. M. Captain von Boreke's covering squadron of the 2nd Cuirassiers entered Craiova and took prisoner several officers, 200 men and a section of machine guns with pack animals. On the 22nd the greater part of the detachments that had been dealing with the isolated groups of Roumanians in the direction of Orsova were recalled to the 7th Cavalry Division.

During the ensuing week the employment of the Cavalry Corps was normal in character. The two divisions swept the enemy off the west bank of the Aluta River, which was then swollen by a flood, and crossed to the east bank near Caracal. Engagements with Roumanian detachments of all arms were constant. The town of Rosi de Vede was occupied by the 6th Cavalry Division, after some fighting, on the 27th November. On the same day the town of Alexandria, 20 miles down the river Vede, was occupied by Macken-





sen's Cavalry, under von der Goltz, who had crossed the Danube at Sistov.

On the 1st December there existed a gap of 25 miles between Falkenhayn's right and Mackensen's left. The Cavalry Corps, with one infantry division of Kuhne's Group, filled this gap, screening at the same time the advance of Kuhne's main body. It was this operation which resulted in the complete repulse of the Roumanians' last and somewhat incomprehensible offensive. The German operation in this instance was facilitated by their capture of an order of the Roumanian I Army which revealed the enemy's intention and disposition.

The 6th Cavalry Division, supporting the 11th Bavarian Division, advanced on Mihalesci, seven miles southwest of Bukarest, on the 3rd December, while the 7th Cavalry Division helped to establish two bridge-heads for the 109th Infantry Division on the river northwest of Bukarest. On the 4th December Mackensen, now commanding the IXth Army as well as the Danube Army, issued the following order: "The main body of the Cavalry, turning Bukarest by the north will proceed toward the railroad which leads to the east, with a view to rendering it useless. It will act in liaison with a strong force of Bulgarian Cavalry which is to cross the Danube at Turtukai, so as to interrupt all communication between the capital and the regions to the east."

On the morning of the 5th December Mackensen sent an officer into the Roumanian lines to demand the surrender of the Fortress of Bukarest. It was 4:00 A. M., the 6th December, before this officer returned with the Roumanian reply to the effect that Bukarest was now actually an open city, having been evacuated by the Roumanian Troops. Meanwhile, toward midnight, the 5th-6th December, troops of the Cavalry Corps by a surprise attack had taken one of the forts of the inner defenses of Bukarest on the northwest side. During the following morning the 7th Cavalry Division, supported by the 109th and 115th Infantry Divisions took all the northwest sector of the defenses. One of General Mutius' patrols (7th Cavalry Division) was the first to enter the city.

The capture of Bukarest terminated that part of the campaign in which the cavalry played an important part. There remained the slower pursuit of the Roumanian-Russian forces to the Danube-Sereth line where the lines were stabilized and movement warfare ceased on this front.

During the Wallachia Maneuver the German Cavalry contributed its full share toward the total capture achieved by the German forces, namely, over 75,000 Roumanian officers and men, 164 pieces of artillery and 150 machine guns, in addition to Roumania's heavy losses of personnel killed in action and armament lost and destroyed.

#### Comment

My comment on these cavalry operations is naturally in the nature of a comparison with those far greater and far more brilliant Cavalry operations in which I personally participated during the World War. If

my remarks seem at times to be rather direct and positive, they are at least based on full personal knowledge of the circumstances under which great cavalry units operate in time of war. They are also based on first hand knowledge of Balkan terrain, hundreds of miles of which I have personally reconnoitered, in war and in peace.

1. *Quality:* The German cavalry in these operations displayed superior tenacity and fortitude, excellent horsemanship, and "above average" versatility and resourcefulness in dismounted action. Their horse mastership did not receive a complete test because their various missions, as prescribed by higher authority, included no series of forced marches of very great length. In short marches, say of twenty miles, over wretched roads, in the foulest weather and under high battle tension, their horsemanship was excellent. How they would have rated in mounted action we do not know because there is insufficient evidence.

2. *Organization:* In both the Transylvania and the Wallachia Maneuvers the cavalry was ultimately organized into what was called a Cavalry Corps. In neither case was it a true cavalry corps. It was merely two cavalry divisions brought together under a single commander and staff but lacking in appropriate and sufficient auxiliaries and lacking in the corps training necessary to secure the team-work essential in the case of a cavalry corps. The true cavalry corps should be viewed, preferably in conjunction with the Air Division, as the great mobile strategic reserve of the Army Commander or of the Commander of a Group of Armies. Thus, in addition to its great functions in covering, screening and filling the gap, it also has the status of the great triple threat on the offensive in that it is at once the "forward pass attack" in exploiting a break-through, the "lateral pass attack" and the "end run attack" in flank operations; and in the pursuit. When you aim at less than that with your cavalry, your aim is too low. Nor is this an individual opinion. It is the unanimous opinion of all officers who have served in campaign with a very successful cavalry corps.

The German forces for the Roumanian campaign were assembled hastily and under the greatest stress. This was one reason why their Cavalry had no opportunity to secure the corps training necessary to secure close integration of great units, precise timing in operations and other qualities of Corps team-work.

3. *Control:* In both phases of these operations, the cavalry was initially combined with infantry divisions in a "Group." Awkwardness in execution ensued in each case. This kind of control suffices on a flank under appropriate circumstances, but it is very poor when you are "going places." In each of these cases there was a distinct increase of rapidity of action and flexibility when the "Cavalry Corps" was organized.

4. *Execution of Mission:* (a) In its screening operations in the Transylvania Maneuver and in its covering operations in the Wallachia Maneuver, the German Cavalry was unquestionably excellent. It

does not necessarily detract from their performance if one observes that their opponent was by no means clever. They attained the desired result.

(b) In exploiting the final break-through at Targu Jiu it was not the fault of the cavalry that they had to assist so extensively in making the break-through and were thus apparently slowed down in their exploitation and pursuit. The truth is that IX Army Headquarters acted on unconfirmed information and ordered the Cavalry advance prematurely. Furthermore, a basic principle was violated in the plan for effecting the break-through, in that detachments were made from the exploiting force which were to act with the breaking-through force and then change over to the exploitation role. About the only elements that can thus be used with a reasonable degree of assurance are the horse batteries. These, owing to their very definite role and their capacity for quick disengagement and rapid displacement, may be in action along the routes of the exploiting force joining it as it goes through. But any other detachment will almost certainly result in the exploiting force going through as a force that is forming instead of being already formed, with great and unnecessary hazard to the entire undertaking. At Targu Jiu this maneuver was very crudely managed. It was not, however, a cavalry responsibility.

(c) The very gallant but unsuccessful first effort to break through at Targu Jiu has already been commented on under the head of the awkwardness of "Group" control. Von Kneussel's Group was sent on this mission prematurely; they encountered most unfortunate weather conditions, and their flank was left without support at a critical moment.

(d) The pursuit to Bukarest would have been more of an exploitation and would have garnered more of the "fruits of victory," had the cavalry been bolder and less methodical. But in their careful method and lack of speed they were true to their own national traditions and teachings and, after all, they did achieve substantial results. They were undoubtedly slowed down by an exceptional terrain feature, that is to say the unusual number of rivers that had to be crossed between the mountains and Bukarest.

5. *A Comparison:* A French commentator, referring to the break-through at Targu Jiu, states, "This conception resembled that which Allenby had two years afterward in Palestine when he delivered his break-through battle, in order to permit the cavalry to pass through \* \* \*"

The conception was the same, but the circumstances and the execution differed widely. The Balkan terrain was far more difficult; Falkenhayn's opponents were not nearly so experienced as Allenby's, but the density of their formations and the excellent successive positions available to the Roumanians made up for this to some extent. Allenby's operation was a classic in the precision of its execution and in its clean cut differentiation between units having the break-through function and those having the exploitation function. He operated with a veteran Cavalry Corps, a real Cavalry Corps, trained to the minute. Falkenhayn's effort was loose in plan, violated the principle of unity of function and lacked precision in timing, these being absolute essentials of the break-through and exploitation operation.

## The Ideas of One Corps Area Commander on Cavalry Officers

THERE is no doubt in my mind that men of this type should represent our Cavalry as students in the schools for the higher training of our Army. A man's record should first be with his arm, and these three men are the type whom I should select for this recognition. Physical activity and energy are particularly essential to the Cavalry officer. To my mind they are the very base of cavalry efficiency. Knowledge of and interest in the horse are the next elements in order. Until we recognize these characteristics of the Cavalry by some adequate reward, we shall not give the proper stimulation to our Cavalry.



## Notice of Annual Meeting

THE annual meeting of the United States Cavalry Association will be held at the Army and Navy Club, Washington, D. C., at 8:00 p. m., Monday, January 29, 1934.

Members who do not expect to be present may send their proxies to the Secretary, U. S. Cavalry Association, 1624 H Street, N. W., Washington, D. C.



# Is This the Man Who Won the World War?

By Lieutenant Colonel N. G. Thwaites, C.B.E., M.V.O., M.C.

**Editor's Note:** Colonel Thwaites served in the World War with distinguished courage. He was incapacitated for active combat by wounds. He came on a mission to the United States when he recovered, and later, until the end of the war, was Provost Marshal for Great Britain.

**I**N March, 1918, the Germans had won the war. They had all but crushed the British Fifth Army. They had only to march into the wide gap left between the British and the French to crumble up the Allied line and roll it back on Paris and the Channel ports.

The French and British were too weary and too few to fend off defeat. The bulk of the American forces were far away. They could not possibly arrive in time.

The Germans were tired but still aggressive. They had only to push on. But they paused to catch their breaths, to let their big guns come up from the rear.

And in that critical moment a brigadier general ordered a cavalry charge!

Infantrymen armed with the latest scientific weapons had charged those gray soldiers, and had been piled up in windrows. Men in armored tanks had charged, and had failed. Aviators had dived, shooting and bombing, and had failed. Great guns had thundered day and night, and had failed. The bayonet had failed. Gas had failed. All the modern methods had failed.

Could cavalry succeed? Could an outmoded, outdated, straightforward battle maneuver prove of value?

Thundering hoofs and men with sabers! As well call back the ghosts of the Light Brigade.

A year or so ago Major General John Bernard Seely, who ordered that charge, wrote something about it in his book, *Adventure*. Later he told some further particulars of the affair to a great audience at the clubhouse of the Royal Canadians in London.

The story raised such a discussion in the British Empire, and such an official verification, that I determined to secure from the general all he was able to tell.

General Seely has been made a baronet since then, and now he is Lord Seely of Mottistone.

The young man who led the charge, and died smiling, was decorated with the Victoria Cross—fifteen years after his death. He was Lieutenant Gordon Muriel Flowerdew of Strathcona's Royal Canadian Horse, the son of an English gentleman farmer.

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† Editor, Liberty.

In March, 1918, Lord Seely was a brigadier in command of the Canadian Horse.

"On March 20," he informed me, "I was summoned to London; and on the following evening the Prime Minister and Sir Maurice Hankey dined with Mrs. Seely and me. At the dinner I learned there had been a German attack that morning which had resulted in a great disaster, perhaps the greatest disaster ever sustained by British arms.

"I went back to my brigade the next morning to learn that indeed the defeat had been unparalleled. The Fifth Army was all but destroyed.

"Ludendorff in his memoirs speaks of the capture of us as we galloped toward the wood this side of the ridge. Five out of twelve of my signal troop were shot, but the remaining seven reached the wood, jumped off their horses and opened fire. My orderly jammed the red pennant into the ground at the point of the wood, and I looked back to see my brigade coming on.

"I am curious how galloping horses seem to magnify in power and number as they charge. My brigade looked like a mighty host sweeping over the open country.

"I galloped up to Lieutenant Flowerdew, who commanded the leading squadron, and as we rode along together I told him his task was the most adventurous of all, but that I was confident he would succeed. "The dragoons just ahead of us had suffered heavily before reaching the northeast corner of the ridge. But they had turned into the wood and engaged the enemy.

"Bullets hummed like insects all about us. Horses plunged, screamed. Men fell from horses' backs and lay still or ran forward to catch the stirrups of their comrades. It all seemed strange, yet natural. "I went with Flowerdew to a point where we could see past the corner of the wood. He looked fresh, fit, ready for any desperate deed. I pointed to a long thin column of Germans marching into the wood.

"He said, with his gentle smile, 'It is a splendid moment, sir. I will try not to fail you.' "He wheeled his men into line, and then with a wild shout he started, his saber raised and shining. "There were two lines of Germans facing him. Each column was about sixty strong, and equipped with machine guns. One was two hundred and twenty yards behind the other.

"Flowerdew checked his horse and pivoted to give orders to Lieutenant Harvey. "Dismount your men," he said, "and after we've charged seize the machine guns." "Then the squadron, less one troop, went forward at the charge, slashing and stabbing with sabers. Machine guns and rifles spattered them, thinned them.

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"A brigade take Moreuil Ridge? Impossible! The

Germans have a whole division in the wood this side of it."

"I have the whole of the British cavalry coming to support me," I replied. "And following me, Foch."

"Foch had been appointed commander-in-chief of the Allied armies three days before—and rumor had it that he was coming with great masses of new men.

"I do not think the French general believed me." General Seely went on, "but he sent his orderly off with precise orders: 'Hold Moreuil at all costs.'

"I galloped down the hill with my aide, my orderly—holding a little red pennant—and my signal troop. As I rode through our front line I met a young captain. 'We're going to retake the ridge,' I said. 'Fire on both sides of us, as closely as you can, while the rest of us go up.' The captain grinned and shouted, 'Good luck to you, sir!' and began giving orders to his men.

"The infantry opened a glorious fire on both sides of us as we galloped toward the wood this side of the ridge. Five out of twelve of my signal troop were shot, but the remaining seven reached the wood, jumped off their horses and opened fire. My orderly jammed the red pennant into the ground at the point of the wood, and I looked back to see my brigade coming on.

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knocked men out of saddles, dropped horses. Those who were left went on, trampling the gunners and riflemen; rode over the first gray column and into and over the second.

"Flowerdew, with two bullets in his chest and a gaping wound in each thigh, wheeled his men and led them back to saber the Germans who had survived.

"Seventy per cent of his men were dead or wounded.

"Flowerdew grinned, and crashed to the ground, dying.

"We've won!" he shouted. "Carry on!"

"His men established themselves in a little ditch that bordered the wood; and Harvey's troopers, who had captured the machine guns, joined them there.

"When I arrived with the supporting squadron, I found what was left of Flowerdew's men, huddled in twos or threes, each group with a captured machine gun, three or four dead Germans lying near each man. Seventy Germans had been killed by the sword. Probably in no other engagement in the war did the sword take such toll of dead.

"I saw two or three hundred others who had been killed by fire from their own machine guns. They lay in the wood and outside it. Our losses, in the few brief moments of the engagement, were three hundred men and more than eight hundred horses killed and wounded.

"Our Canadians fought with fanatic valor; but the enemy, now surrounded in the wood, fought equally well. Not one man surrendered. Hundreds were mowed down as they ran to join their comrades holding on to the southeast corner. Hundreds more stood their ground and were shot or bayoneted.

"As I rode through the woods on my charger Warrior, with the dismounted squadrons of Strathcona's Horse, I saw a handsome young Bavarian fire at a Canadian and miss. The next moment a bayonet was thrust through his neck. He sank down, his back to a tree.

"Lie down!" I shouted to him in German. 'A stretcher bearer will look after you.' His eyes blazed and color came into his ashen face. He snatched up a rifle and cried to me, even as he fired his last shot, 'Nein, nein! Ich will ungefangen sterben!' Then he collapsed and died as he had wished, free, untouched by enemy hands. The German assault collapsed with him, then and there."

The Germans didn't understand that charge of Flowerdew's. They interpreted it incorrectly. They didn't know those few hundred reckless Canadians were all that stood between them and overwhelming victory.

They didn't understand that their charge was sheer offontery, the last resource of armies facing chaos.

But—does a squadron of a beaten and retreating army fling itself, without hope, upon the oncoming mass of the enemy? Do a few hundred men attack hundreds of thousands in a vain effort to stay their march? Ridiculous.

(Concluded on Page 64. Comment on Page 18)

# The German Intelligence Service During the World War

By Baron Guido Errante

**I**N recent times, particularly in America, we have seen an almost extravagant outpouring of so-called war literature. While official historians of the various staffs are laboriously building up still confused facts of the great tragedy, popular fancy likes to see the events with a romantic background. To the innocent minds of a new generation the martyrdom of men, who fought against death for many long years, every hour of every day, is represented as a joy and an exaltation, or as a terrible and useless punishment.

A subject about which the imagination of ignorant writers has had the widest field for expansion, is that of espionage. We have been overrun with improbable and puerile tales, wherein beautiful, perfidious and astute ladies, with incomparable finesse and poisoned kisses, extract the most vital secrets from diplomats and generals.

The truth is very different. The romantic spy, sacred to legend and tradition from the Napoleonic era, has now almost disappeared. That infamous species, abounding during the great war, was very democratic and not at all brilliant. Suffice it to recall that the class of persons, regularly employed, and forming the vast number of operators, were recruited from soldiers of low rank, commercial travelers, smugglers, small merchants, mountebanks, etc.

An authentic history of espionage during the years 1914-19 can never be written. The methods employed, the individuals enrolled, the results obtained are veiled in mystery. Documents pertaining thereto will certainly never leave the archives where they are filed. But it is possible today for anyone, who was part of the Intelligence Service of one of the belligerents, to reconstruct the general lines of the great enterprise without betraying any secret.

The organization of the Service, which functioned perfectly in Germany even before the war, was created by the staffs of the Entente armies only during the conflict. Obviously, therefore, to give an exact idea of the innumerable ramifications and of the technique of the Service, it is advisable to describe the intricate network of the German system, passing over the others, improvised at the beginning of hostilities, and which, almost to the end of the war, served more for purpose of defense than of attack.

The inadequacy of the Entente's organization is illustrated by this anecdote. I remember at Berne, one night in March, 1918, that the head of a department in the Allied Information Service awoke his Italian colleague from deep sleep, because of some newly arrived "important" and "urgent" information. A trusted agent, returned from scouting in enemy terri-

tory, he said excitedly, had received exact data about a large scale offensive which the Austro-Germans intended to launch against the Italian front that April. Gorizia was to be the objective! Yet Gorizia, since October, 1917, had been some twenty miles inside the Austrian lines! I remember the kindly smile and the affable manner with which the Italian Colonel showed his colleague the actual situation of the troops on a large wall map, and the latter's fury at having paid hard cash for the trusted informant's pretended journey.

Gradually, however, the Allied Services, and especially the French, were able to build up an efficient organization, particularly for the defensive work of counter-espionage, and were finally able to discover the network of an enormous German spy system.

Let us pass over the Austro-Hungarian service briefly. It was affiliated with the German one, and although it enjoyed a much older and more famous tradition than the latter, was but poorly prepared for military purposes. In fact, for decades its organization had been completely absorbed by the Foreign Ministry for political purposes and by the Ministry of the Interior for police purposes. Consequently, the Austro-Hungarian espionage assumed, during the war, a predominantly political character. In this field, it was very competent and it supplied what was lacking in the German organization.

The German General Staff organized the Intelligence Service in a scientific manner, without fantasy or romance, but with the most vigilant, careful and frequently the most humble and patient work. Every minute part was studied in detail, and each connecting link was organized with mechanical precision.

One of the most difficult tasks of the German Secret Service heads was, naturally, the recruiting and training of spies. A special class of agents, generally made up of petty officers unable to go to war, took care of that. Their position required them to work among the deserters and the interned. All internment camps, not only in Austria and in Germany, but also in Holland and Switzerland, were the scene of continual search. Deserters were plentiful, especially in Switzerland. Outside the law and because of their moral predisposition to treachery, they were an easy prey to the inducements offered by enemy Intelligence Services. Their knowledge of their own country and of the war zone in which they had been stationed made them potentially good material.

Exact information is at hand concerning the compensation allowed for decoying the spies into the service. After an initial payment, varying from 500

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to 2,000 francs, fifty francs daily were given to the travelling personnel of inferior position. Then a fixed sum of from 500 to 5,000 francs was paid for each journey, where the services were of an ordinary nature. For extraordinary services, the compensation was apt to be much more, the highest reward being reserved for the terrorist agents. There was an established rate, for instance, for sinking ships, the amount fluctuating from 300,000 to a million francs, according to the type and efficiency of the vessel.

It has been possible to collect a good deal of information on the terrorist attempts which took place during the first years of the war, particularly in Italy, after Italian counter-espionage ascertained that the center for planning such attacks was located at the Austro-Hungarian Consulate in Zurich. It was there that one of the most brilliant coups of which the Entente Services could boast was conceived and executed. On the last night of the Carnival in 1917, two sailors from Italy were smuggled into the offices of the Austro-Hungarian Consulate in Zurich, located in the very center of the city. There they blew open the safe, extracting from it voluminous and very valuable information, which they entrusted to a faithful messenger, who before dawn made his way to Italy. From the documents we obtained at that time, we were able to recognize the latest acts of the enemy, including the recent destruction of the dreadnought "Leonardo Da Vinci" in an Italian port; to identify many German and Austrian spies, to take adequate measures for apprehending them in the act and to adopt all possible means of defense.

Neither the interned nor the deserters, spies by compulsion, were ever used on missions of trust and confidence and they always remained in a low grade of the service. The choice of reputable agents presented even greater difficulties and had to be based on still other means. One method generally used, especially in neutral countries, was the insertion of a newspaper advertisement offering well paid employment for men and women knowing foreign languages and willing to travel. There appeared in the "Algemeen Handelsblad" of Amsterdam, in November, 1916, an advertisement for a person of Dutch nationality, willing to travel abroad for some weeks. Subsequently, it was discovered that the advertisement had been inserted by a German, manager of an industrial organization at Utrecht. The intention was to send the Dutch applicant to Italy. There he would pretend to be engaged in buying and shipping raw materials needed in construction work. In reality, however, he was to tour the ports of the Tyrranean Sea, forwarding to a Swiss address given him upon his departure news of the movements of Italian ships.

The recruiting of high grade type of agents was preferably conducted where national sentiment was not involved and there was no fixed political opinion on the war issues, in milieus where the prospect of entering the service of a foreign power might appear picturesque and romantic, even to honorable people. In order that the temptation to enter the service might be greater, recruiting in such countries was not in-

frequently directed by persons high in the diplomatic service. Operations of this kind were successful chiefly in countries far from the theatre of the war, such as America, Scandinavia and Japan. The candidate, selected from the upper classes of society, was the recipient of liberal favors and attentions and was treated as a political aide, equal to any other. Invited to dine, introduced to persons occupying high positions and leading luxurious lives in palaces adorned by the coats of arms of sovereigns, received by a crowd of secretaries and servants, the dazzled new recruit was generally won over completely.

Agents speaking Serbian were much in demand, above all in Austria. Many Croats and Czechs were able to travel freely in the Entente countries, passing themselves off as Serbian refugees, supplied as they were with Serbian passports, for which, (before the invasion of Serbia) the Austrian service paid as high as 10,000 Kronen each.

Once the agents were recruited, it was necessary to instruct them before they could be used. For this purpose, the Germans had organized real schools, functioning admirably. After the invasion of Belgium a school of this type was established at Antwerp, located in a fashionable section of the city. Directly opposite was a public toilet, the matron of which was a German, charged with watching the house and anything suspicious that might go on in the neighborhood. The school was directed by a major and various officers taught there, but the most important member of the faculty was, strange to say, a beautiful Norwegian girl. She spoke many languages fluently, and was very active and very intelligent. The clients of the house used to call her "Fraulein Doctor". The initiation of recruits to the service was attended to with infinite precaution. The new agents were not permitted to see any of their future colleagues, nor to be seen by them. They were introduced directly into one of the many rooms in the school, each one of which, marked with a letter of the alphabet, was dedicated to a special group of agents.

It has been impossible to ascertain on what basis a countersign was given to each candidate. It is apparent, however, that the letter designating the room frequented by the particular pupil, together with another letter (indicating probably the country of origin) and the number of matriculation, formed the sign afterwards attached by the pupil to his reports in lieu of his name; for example, L.S. 52, F.A. 54, etc.

The beautiful Norwegian first ascertained by an examination the capability, culture and memory of the new recruit, and then assigned him to a course of study, varying in length according to the results expected, or the tasks which she wished to allot to him. For one or two weeks the scholar spent several hours of the day before maps and colored tables, representing uniforms of the enemy armies, models of warships, types of dirigibles and airplanes, etc. He then proceeded to study the particular matters which were to form the subject of his investigation; numbers and kinds of troops stationed in the locality to be visited, armies and their distribution, names of the superior

officers, electric plants, telegraph and telephone lines, etc. The agent had to learn by heart detailed and specific questionnaires on all these matters. Particular attention was given to everything pertaining to munition plants and to the transportation of troops. The agent's reports in this line assumed the proportion of veritable monographs. The mere list of possible subjects was long enough in itself, but each one of them contained besides a series of subdivisions constituting a real and systematic treatise on the matter. On the subject of troop transportation the questionnaire was interminable. In order to enable the pupil to judge the quantity of moving troops, he was trained to note the minutes which a column takes to traverse a certain distance in all possible formations of march.

The technical course was accompanied by a general and psychological one. In every report the agent was required primarily to refer to things he had seen and to reply to three inevitable questions: How? Where? When? Referring to things seen by others, he had to state if these third parties had or had not been eyewitnesses, and to give a biographical sketch of these outsiders.

He was absolutely forbidden to take notes from newspapers or magazines. In order to invite others to confide important information, pupils were instructed to invent something very sensational in the course of conversation and to invest it with an air of great mystery. They were directed also to pretend, if possible, ignorance of a language, so that they might overhear the conversation of others. They were finally instructed that it was more satisfactory to ascertain a half dozen facts than to listen to a hundred opinions.

The course at the Antwerp school, necessarily brief, lasted from four to six weeks. When it was finished the agent was given a specific and limited task, involving a very short journey, and he was instructed to

return immediately, after having completed his work for new orders. Such a system was most efficient. These missions, although not producing long general reports, were none the less useful for the purposes of the service, for the information centers had constantly on hand small problems, whose solution was of immediate and urgent necessity.

For example, when the submarine U 29 was sunk, many agents were sent through France and England to find out how the disaster occurred, what happened to the commander, and what system the English would adopt for the capture of submarines. When the presence of English submarines in the Baltic became known, other agents were charged with establishing how they had found a passage from the North Sea into the Baltic. During the battle of Verdun it was the task of various agents to ascertain what changes had been made in orders to munition factories.

In this way, by clearly limiting the scope of the inquiry to specific objects, it was possible to obtain correct information and at the same time to prevent the spy from being evasive and from giving general and inaccurate data—a possibility which the service heads feared more than any other.

The candidate left school on his first mission equipped with a personal countersign for identification, which might be useful with the police. From that moment the agent began to be active within the orbit of one of the information centers of the service, scattered along the frontier or abroad. His direct contact with any central organization ceased almost completely.

The recruiting and training of spies was, it is apparent, conducted by the Germans methodically and uniformly. They knew how to give a scientific turn to their system, distributing the various branches all over the world, and adapting their function and importance to the nature and progress of military operations.

### Comment on "Is This the Man Who Won the World War?" pages 14 and 15 of this issue.

*Liberty*, through Mr. George Sylvester Viereck, called the attention of Emperor William II, Supreme Commander of the German Armies in the World War, to the claim that Lieutenant Flowerdew was the man who won the war for the Allies. The Emperor's spokesman, Baron von Sell, replies:

"Reports of the Flowerdew incident were published in several German newspapers. There is at least a grain of truth in the story, since on the 27th of March, 1918, the Ninth Infantry Division of the Eighteenth Army had succeeded tactically in breaking through the enemy lines at Montdidier. If a push backed by ample reserves had followed, it is probable that an actual break between the French and British armies would have resulted.

"If the favor of the moment was not exploited by the Germans, the reason must be sought in the fact that the German command and the troops in the field did not suspect the significance of their achievement in occupying Montdidier and the surrounding heights. It seems quite feasible that the heroic deed of the British lieutenant contributed to this mistaken impression.

"Major (sic) Seely's words glorify a man who did his duty as a brave soldier, probably without suspecting the immensity of the stake involved for his own side. It is not possible to reject entirely the construction placed upon the question by the British major general."

This comment is also reprinted from *Liberty*, November 4, 1933.

## The Grand Strategy of the World War

From the Point of View of an "Easterner"

By Captain Gordon Gordon-Smith

### PART II

WITH the over-running of Serbia and the establishment of direct communication between Germany and Turkey, as described in the previous article, the World War entered upon a new phase. The Central Powers had ceased to be a besieged fortress, they had broken through the lines encircling them and, through their possession of the Dardanelles, they still maintained their strangle-hold on Russia.

There was only one "fly in the ointment," as far as the position of the Central Powers and their Bulgarian ally was concerned. This was the Salonica front, which, as long as it existed, was a standing menace to the modified form of "United Europa" which Germany had at last achieved.

The creation of the Salonica front was not a voluntary act on the part of the Entente Powers. It had been imposed upon them by the enemy. In the first eighteen months of the war all initiative had been in the hands of the Central Powers. This was inevitable, owing to the fashion in which the Entente Powers had organized the conduct of the war. They possessed no central authority, no common council empowered to carry on the war as a whole.

Each time some German success placed them face to face with a *fait accompli* they began hastily to take counsel. Paris consulted London, London got in touch with Petrograd and Petrograd sought the views of Rome. But while the Allies were thus, to use a vulgar but expressive phrase, "chewing the rag," events were moving swiftly. The contrast in the enemy camp was complete. There the will of the Kaiser was supreme. When he "pressed the button" Vienna, Sofia and Constantinople moved like one man. Napoleon once said "*l'Autriche est toujours en arrière, d'une idée, d'une année, d'un corps d'armée.*" This ironical phrase of the great captain completely described the situation and policy of the Entente Powers.

As stated in my first article, when the Austro-German break-through took place on the Danube front,

the Allies began hastily landing troops at Salonica in a vain effort to come to the assistance of the Serbs. They considered they had a perfect right to make use of that Aegean port since Greece and Serbia were allies, in virtue of the treaty signed in 1913, after the

Turco-Balkan war. By this treaty Greece and Serbia agreed to act together in case of an attack by Bulgaria. The Belgrade Government, in such a contingency, undertook to place 150,000 men on the Serbo-Bulgarian frontier. In view, however, of the Austro-German attack on the Danube front, Serbia was unable to spare such a force. This being so, M. Venizelos, the Greek Premier, suggested that the Entente Powers should furnish them. This they consented to do and in October 1915 began disembarking troops at Salonica. Simultaneously M. Venizelos ordered the mobilization of the Greek army. But at this point the first complications arose. Though Bulgaria had mobilized her army she had not yet attacked Serbia, so that the *causa fœderis* provided for in the treaty did not actually exist and Greece was still nominally neutral. M. Venizelos was, therefore, forced, as a matter of form, to issue a protest against

the landing of the Franco-British troops. But at the same time he issued orders to the Greek officer commanding at Salonica, General Moschopoulou, to make no opposition to the landing of the Allied troops but on the contrary to show the French and British commanders every courtesy.

But both the Allies and M. Venizelos reckoned without Greece's pro-German King. A week later he dismissed M. Venizelos from office and replaced him by M. Zaimis, who was pledged to a repudiation of the Graeco-Serbian treaty and the continuation of so-called neutrality on the part of Greece. This secession of Greece radically changed the military situation of the Allies. Instead of being flanked and aided by 300,000 Greek allied troops, the handful of men landed (about 20,000) constituted the entire force that was



King Constantine of Greece

to save Serbia. These were shortly afterwards reinforced by the 10th Irish Division, 13,000 men, from Gallipoli, while France sent additional troops, so that at the opening of the campaign this force, later to be known as the Army of the Orient, numbered nearly 40,000 men.

This army was placed under the command of General Sarrail, a soldier of eminence, who had played an active and brilliant part on the Western front in France. He had the reputation of being an energetic and resourceful leader. During the retreat to the Marne he commanded the Third French Army, which held the sector around Verdun. He was chiefly responsible for the field entrenchments around that city (he belonged to the engineer arm of the French army) which afterwards enabled the French successfully to resist the attack of the German Crown Prince's army.

He had, however, the reputation of taking a more active part in French party politics than was advisable in a soldier. By many his rapid advance in rank and the confidence he enjoyed were ascribed to the support he received from the Radical Socialist party. This made him many enemies among military men and caused much division of opinion as to his real merits as a soldier. When he first arrived in Salonica he organized a Political Bureau, as part of the General Headquarters Staff, composed of militarized deputies from the French Chamber. This was later dissolved, by orders from Paris, and the soldier-deputies recalled. Many people believed further that he occupied himself too much with political moves in Athens and in Greek Macedonia, to the detriment of his military effort.

At the same time, from the very start, his task was no easy one. Though General Sarrail was nominally in supreme command, the commander of the British contingent, General Sir Bryan Mahon, was subordinated to General C. C. Monro, the Commander-in-Chief of the British Mediterranean Expeditionary Force, with headquarters at Malta.

Each time the British commander at Salonica received an order from General Sarrail he submitted it by cable to General Monro for his approval before carrying it out. It would be difficult to find a better example of how not to run a campaign than the situation thus created.

In October 1915, when the Salonica force first began active operations, it soon became clear that all hope of joining forces with the Serbian army and undertaking a successful offensive against the Austro-Germano-Bulgarian invasion was out of the question. The most that the army under General Sarrail could hope

to do was to push forward and capture Uskub (Skopje), the point where the Salonica-Nish railway has its junction with the branch line to Mitrovitz, in the Sandjak of Novi-Bazaar, the line along which the Serbian armies were retreating. If the Franco-British force could have captured and held Uskub, a safe line of retreat would have been secured for the Serbs.

But it was not to be; events were moving too fast. On October 20th the Bulgarian army under General Todoroff captured Veles (Kuprulu) and two days later made its triumphant entry into Uskub. A last effort was then made to effect a junction at Veles with the Serbs who were operating down the Babuna Pass. The difficulties, however, proved insurmountable and with the failure of this effort the last chance of establishing contact with the Serbian army was at an end and King Peter's armies were forced to resume their retreat and take refuge in Albania.

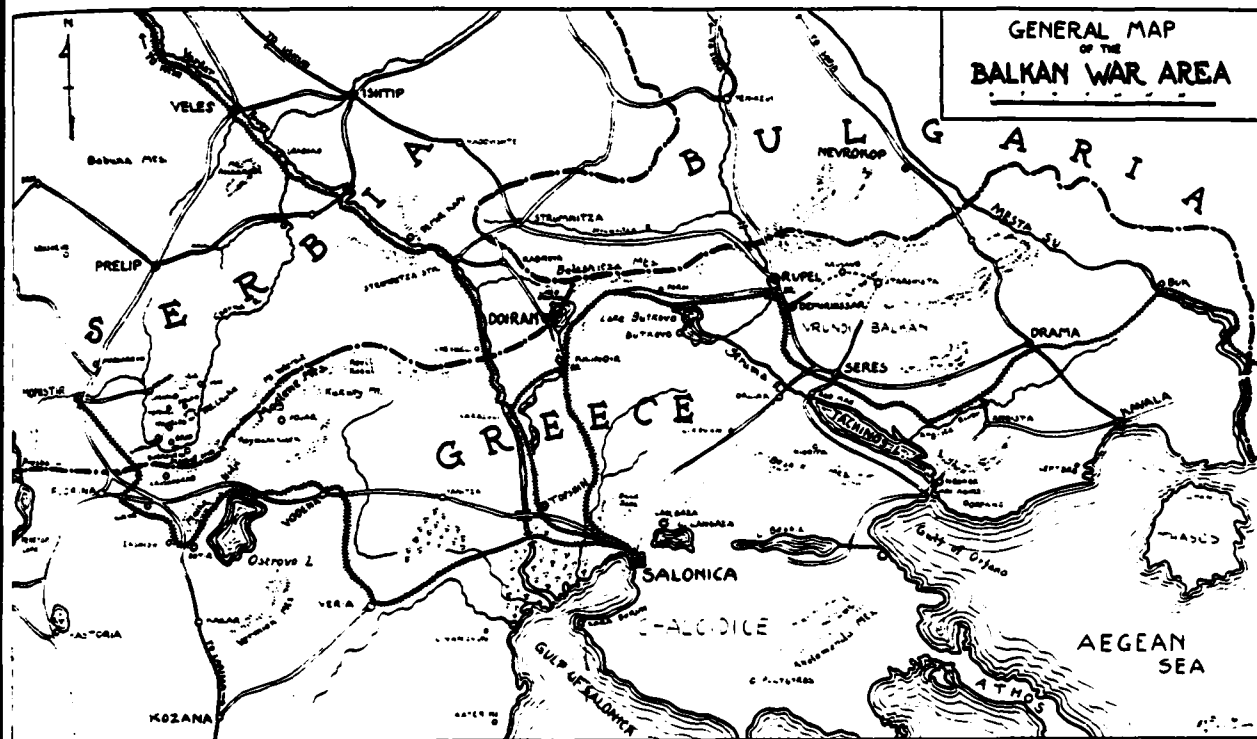
The Allied forces were, therefore, forced to abandon all efforts to aid the Serbs and had to fall back on the Salonica base. The attack of the Bulgarians was so violent that the retreat became a difficult and delicate operation, as they had to fall back through the pass known as the Demir Kapu. Though this defile is fairly broad at its entrance, its exit, twelve miles distant, is a narrow, rocky gorge, 500 yards long, from which the pass takes its name, Demir Kapu being Turkish for Iron Gate.

But the army could not remain on Serbian soil. It was too much en l'air, too far removed from its base at Salonica. It, therefore, became necessary to return to Greek territory. This at once raised political difficulties. The Greeks pretended to be afraid that the Germano-Bulgarian armies might invade Greece in pursuit of the Franco-British force. A large number of Greek troops were concentrated around Salonica and it became known that in certain circles in Athens the idea of disarming and interning the retreating Franco-British army was gaining ground.

This caused the Allies to take drastic measures, and on November 23, 1915, they presented the Skouloudia Government (which on November 7 had replaced the Zaimis Cabinet) with a note stating that "in view of the attitude adopted by the Hellenic Government toward certain questions affecting the security of the Allied troops and their freedom of action (two privileges to which they are entitled in the circumstances in which they landed on Greek territory) the Allied Powers have deemed it necessary to take certain measures, the effect of which is to suspend the economic and commercial facilities which Greece has hitherto enjoyed at their hands."



Von Mackensen



King Constantine and his Government disavowed any intention of attacking or internment the Franco-British troops. They were, however, much opposed to withdrawing the Greek troops from the zone of the Allied army or conceding to the latter the full use of the railways and harbor.

The Greek Government offered to establish a "corridor" by which the Allied troops could retire on Salonica and embark there. Missions from France and England, headed by M. Denys Cochin and Lord Kitchener, failed to get anything but vague assurances from King Constantine. The blockade was accordingly maintained until December 12 when the Athens Government gave way and consented to withdraw all the Greek troops, except one division, from Salonica.

On that date all the Franco-British forces were on Greek territory, holding a front running from Karasuli, on the Vardar railway, to Kilindir, on the Salonica-Dedeagatch railway. These two points were connected by a branch line of railway. It was on this line that the Allies prepared for the supreme attack by the enemy. But this never came. Why the Central Powers failed to take advantage of their opportunity finally to crush the Allied resistance and capture Salonica has never been explained. It was one of the major errors of German strategy and contributed not a little to their losing the war.

The Athens Government pretended that it deserved credit for this, alleging that the Bulgarians feared the intervention of Greece if they invaded Greek territory, but in view of the subsequent treason of the Greek King and Government in surrendering Fort Rupel to the Bulgarians without firing a shot, this seems hardly

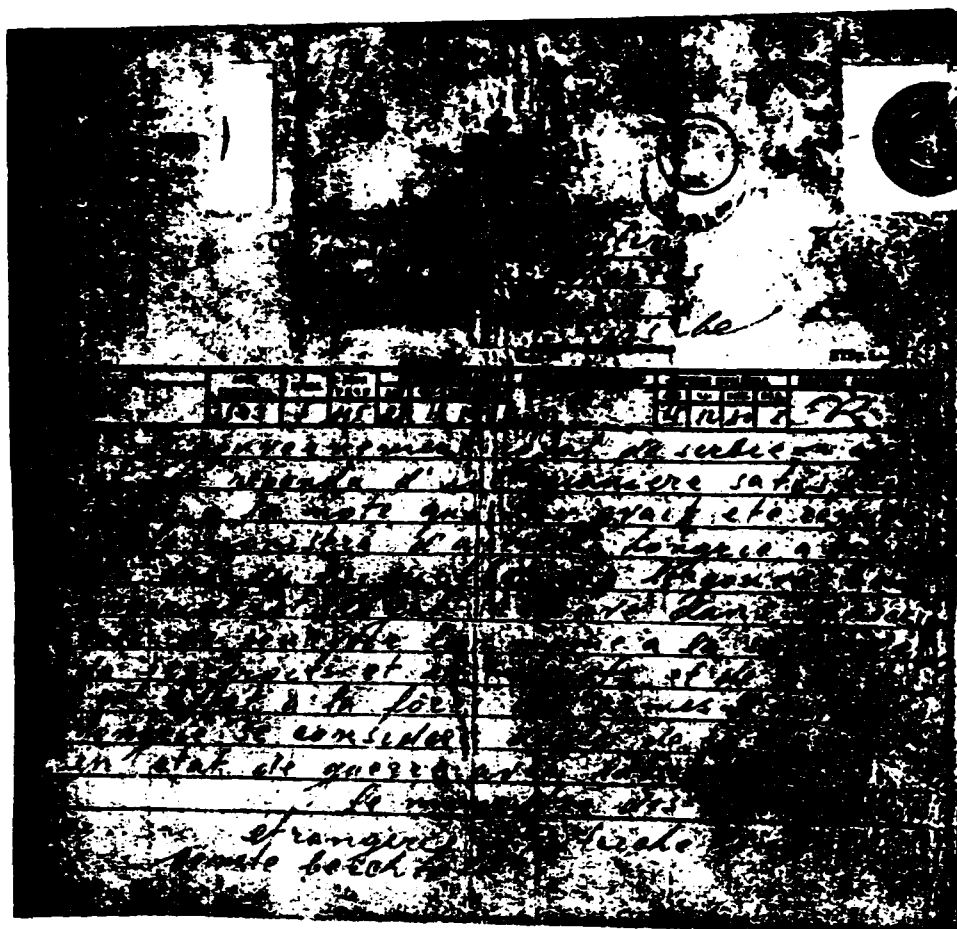
probable. It is more probable that the Kaiser counted on the "neutrality" of his royal brother-in-law to render the position of the Allies untenable and lead them to abandon the whole Salonica front, the more so as the Germans were openly boasting of the coming invasion of Egypt by their Turkish allies, now completely re-provisioned and re-munitioned, as the result of the crushing of Serbia. In addition there was wrangling between Berlin and Sofia as to whether the forces in the Balkans should be under the supreme command of a Bulgarian or a German general. Vienna and Sofia were further in hot dispute as to the ultimate fate of Salonica, both Austria and Bulgaria claiming the right to annex it when captured. Whatever may have been the reason for the hesitation of the Central Powers, the fact remains that the Franco-British army was able, unmolested, to take over its new positions on Greek territory.

When this was accomplished the whole mission and scope of the Army of the Orient had changed. Its original objective had been an energetic offensive to save the Serbian army and prevent the Austro-German forces under General von Mackensen from joining hands with the Bulgarians. In this it had failed. The Serbian army had been forced to quit Serbian territory and retreat into Albania. Salonica, from being a mere port of disembarkation, had now changed to the base of a new defensive front. The task of General Sarrail's army was no longer that of driving out the Germano-Bulgarian army but was to prevent the port of Salonica falling into the hands of the enemy.

The first care of the Allied Commander-in-Chief was to prepare the defence of the entrenched camp of



### The Paper that Started the World War



Photostatic copy of the actual telegram from Count Berchtold to the Serbian Minister of Foreign Affairs. Contributed by Captain Gordon Gordon-Smith of the Royal Yugoslav Legation.

#### Translation

The Royal Serbian Government not having replied in a satisfactory manner to the note which was handed to it by the Austro-Hungarian Minister in Belgrade on the date of 23rd July 1914, the Imperial and Royal Government finds itself under the necessity of itself taking steps to safeguard its rights and interests and in order to do so to have recourse to the force of arms. Austria-Hungary therefore considers itself from this moment in a state of war with Serbia.

The Minister of Foreign Affairs of Austria-Hungary  
Count Berchtold

Salonica. This was no easy task as the total number of troops at his disposal at this date did not exceed 200,000 men. On account of the smallness of his army General Sarrail could not dream of holding either the outer or the inner ring of mountains which surround the city and plain of Salonica.

As a consequence the western line of defense was established on the Vardar. Toward its mouth that river forms a marshy delta, providing a natural obstacle to enemy attack. This made it possible for the line to be held by a minimum number of men. But this sector had one serious drawback, namely, that malaria of the most virulent kind raged there six months of the year. From the village of Topshin, on the Vardar, the line ran east to the Langhaza and Besina Lakes, reaching the Gulf of Orfano at Stavros. The total length of the line was fifty miles.

Behind this line lay the Chalcidice Peninsula, into which, if hard pressed, the Army of the Orient could have retired. As this is bounded on the western side by the Gulf of Salonica and on the eastern side by the Gulf of Orfano, the guns of the fleets could have powerfully aided the land forces and rendered the peninsula practically impregnable. General Castelnau, Field Marshal Joffre's Chief of Staff, who made a tour of inspection on December 20, 1915, gave it as his opinion that the entrenched camp of Salonica was safe from capture.

Nothing was neglected to still further strengthen the natural advantages of the position. A deep and elaborate system of trenches, with formidable barbed wire entanglements, was constructed, from which numerous machine gun batteries commanded all the points from which the enemy could attack.

But if the military situation was fairly satisfactory it was more than could be said of the political one. As the Army of the Orient was on what was technically neutral territory, the French and British politically enjoyed no more rights than the enemy. The presence in Salonica of Austrian, German, Bulgarian and Turkish consulates, together with hundreds of German and Austrian civilians and thousands of Turks and Bulgarians, was a constant menace, against which a large force of military police had to be employed.

This soon found evidence that the various consulates, as was to be expected, were centers of enemy espionage. Their activities were undoubtedly at the bottom of the enemy air raids and after one of these General Sarrail ordered the consuls to be arrested. This action on the part of the French Commander-in-Chief caused loud protest from the Greek Government. This, however, died away when the French were able to bring proof that the consulates were not only the headquarters of enemy propaganda and espionage, but were actually used as storehouses for arms and munitions, with which it was evidently the intention of the enemy to arm the hostile section of the population in the event of a serious reverse to the Allies.

In spite of the loud assurances by the Greeks of their "benevolent" neutrality, the policy of the Athens Government was viewed with profound (and, as it

afterwards turned out, well merited) suspicion. The defence of Eastern Macedonia, of which the vital point was the great iron girder bridge of Demirhissar, on which the railway from Doiran to Seres crossed the Struma, was in Greek hands. The northern extremity of the bridge was guarded by Fort Rupel, the key position of the Struma entrance into Greece. Fort Rupel was the most powerful fortress on Greek soil. But as General Sarrail had no confidence that the Greek garrison would put up an energetic defense against the Bulgarians, he gave orders that the bridge at Demirhissar and a smaller one at Kilindir, near Doiran, should be blown up. This was done on January 12.

A week later General Sarrail was officially entrusted with the supreme command of the Army of the Orient. This automatically put an end to the extraordinary situation of the general commanding the British contingent being responsible to Malta for all his operations.

During the winter months operations were chiefly confined to skirmishes between the cavalry of both sides, occasionally reinforced by light artillery. Reinforcements, both British and French, meanwhile were arriving steadily, so that by the end of winter the Army of the Orient had increased to over 200,000 men.

Such was the position when, in the spring of 1916, the transportation of the Serbian army from the island of Corfu was begun. This force had, in the interval, been thoroughly re-equipped and re-organized. The new material had been assembled at Orange, Lunel and Montauban in the south of France. As the entire artillery, pontoon trains, field telegraphy, ambulance, transport, motors, horses and all the thousand and one things that make up the impedimenta of a modern army in the field had to be transported to Salonica, the task was a formidable one.

But if the military part of the transportation ran smoothly enough, it was more than could be said of the political side. The Entente Powers knew that the Mediterranean was swarming with enemy submarines. They, therefore, proposed that the transports, instead of making the long voyage around Cape Matapan, should proceed to Itea in the Gulf of Corinth and land the troops there to be sent on by the Larissa railway to Salonica.

To this the Skouloudis Government raised endless objections. It claimed that the passage of the army would disorganize the ordinary traffic and that the Serbs might bring infectious diseases into the country and, last but not least, the permission to cross Greek territory might be regarded as a breach of Greek neutrality, which might embroil Greece with the Central Powers. The real reason was, of course, that the pro-German Greek King desired to put every obstacle in the way of the Allies and, in the interest of his imperial brother-in-law, delay as long as possible the arrival of the Serbian reinforcements on the Macedonian front.

But while these long-drawn-out negotiations were going on at Athens, the Serbian Headquarters Staff

began the transport of the troops by sea, preferring to take the risk of submarine attack rather than lose any more time. For the transportation France provided 21 vessels, Italy 5 and Great Britain 3. The transportation, thanks to the tireless vigilance of the convoying fleets, was accomplished without the loss of a single man.

The first transport left Corfu on April 8 and by June 6 the entire Serbian army, re-clothed, re-shod and re-equipped, was on Macedonian soil, ready to take the field once more. Its strength was about 100,000 men.

It consisted of three armies and an independent cavalry division. The First Army, was under the command of Field Marshal Misitch. It consisted of the Vardar Division, under the command of Colonel Lutsakovitch and the Morava Division, under Colonel C. Milovanovitch.

The Second Army was under the command of Field Marshal Stepa Stepanovitch. It consisted of the Shumadia Division, under the command of Colonel Zivko Pavovitch (who, in the preceding campaign had been Assistant Chief of Staff) and the Timok Division, under the command of General Militch.

The Third Army was under the command of General Milosh Vasitch. It consisted of the Drina Division, under the command of Colonel Smilavitch and the Danube Division, under the command of Colonel Angelovitch.

The divisions of infantry consisted of four regiments, each of three battalions, the divisional cavalry, the divisional artillery (field, mountain and howitzer batteries) and the necessary sanitary and commissariat sections and the transport service.

The whole army was under the command of the Prince-Regent Alexander, with General Boyovitch as Chief of the Headquarters Staff.

On July 30th a division of Russian troops, under the command of General Leontieff arrived and was followed shortly afterwards by 30,000 Italians, under the command of General Alfonso Petitti de Roreto. With their arrival the Army of the Orient was now definitely constituted. It was, in many respects, the most remarkable force in military annals, consisting as it did of French, British, Serbian, Russian and Italian troops. Though this certainly made for picturesque it did not make it as efficient a fighting machine as it would have been if it had consisted of troops of a single nationality. Each army enjoyed military and administrative autonomy. Each had its own Commander-in-Chief and its own Headquarters Staff. The French contingent was under the command of General Cordonnier while General Sir Bryan Mahon had been succeeded in command of the British force by General G. F. Milne.

Up to the arrival of the final contingents of the Army of the Orient there had been more or less a lull in the operations on the Salonica front. But in the meantime events of great political importance had taken place. The complete abandonment of the offensive by the Allies and their retirement within the entrenched camp of Salonica had greatly encouraged the

enemy and had caused him to decide to attack. The weak point of the Allied line was the position to the east of the Struma. The right bank of that river and the Greek frontier were guarded by French troops but, except for the destruction of the Demirhisar bridge, nothing had been done to cover the eastern flank. It is true that this was occupied by Greek troops, but General Sarrail was filled with deep distrust of the soldiers of King Constantine. The positions they held should have guarded the Allies from attack through the Struma valley. The entrance to this was commanded by Fort Rupel, the most formidable fortress in Greece. This fortress was strongly garrisoned by Greek troops and behind it lay two Greek army corps, one having its headquarters at Seres and the other at Kavala.

A few days later General Sarrail's fears were justified. On May 26th the Bulgarian army suddenly advanced on Fort Rupel. The commandant of that fort, after the merest pretence at resistance, surrendered to the enemy. The key of the Struma valley was, therefore, now in the hands of the Bulgarians. It was subsequently discovered that this act of betrayal by the Greeks had been plotted months before. As far back as March, General Yanakitsas, the Greek Minister of War, had sent instructions to all the commandants of fortresses in Greece, ordering them not to offer any resistance to the Bulgarian or German armies.

Needless to say, this act of treachery led to an instant and irremediable breach between the Allies and the Skouloudis Government. A strict blockade of all Greek ports was at once established and this was followed by a peremptory demand for the immediate dismissal of M. Skouloudis and his Cabinet and its replacement by a *cabinet d'affaires*, which should be entirely without political color and which should guarantee the continuance of a "benevolent neutrality" vis-a-vis the Entente Powers. In addition, the latter demanded the complete demobilization of the Greek army, the dissolution of the Greek parliament and the dismissal of certain objectionable police officials. As a result of these measures M. Zaimis was recalled to the premiership.

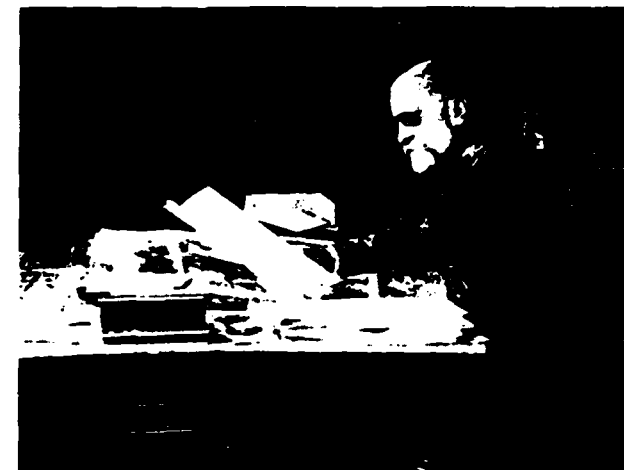
The Greek opposition being, for the time being at least, "steam-rollered", General Sarrail started the organization of his front. To the British was entrusted the part to the east and northeast of Salonica, along the Struma from Lake Butkovo to the northern extremity of Lake Tachinos. The French held the centre of the front, the line running from Lake Doiran to a point west of the Vardar, where it joined the sector held by the Serbian army. The French sector was the shortest but strategically the most important of the three, as it extended along the valley of the Vardar, the direct line of route of an invading army marching on Salonica. It was opposed by a Germano-Bulgarian army under General von Winckler. The British and Serbian contingents were at first faced by purely Bulgarian armies under the command of General Lodoroff, but later the line facing the Serbs was reinforced by German troops.

General Sarrail paid the Serbian army the high compliment of assigning to it, as its field of operations, the most formidable portion of the whole front, the towering Moglene mountain range, a natural fortress of almost impregnable strength. This mountain range is the natural barrier defending the plain of Monastir. The average height of the mountains is about 5000 feet, though at several points this is exceeded, the cloud-capped summit of the gigantic Kaymakchalan towering up over 8000 feet above the plain. These mountains are, for the most part, bare masses of granite, denuded of all vegetation and rising, step by step, by precipitous cliffs, up which the attacking force had to climb, often on hands and knees.

It was in this region that the Serbs began their attack on July 26. On that day the Shumadia Division drove the enemy from a number of positions, notably the villages of Pojar and Strujisino. On the following day the Bulgarians counter-attacked. The battle raged violently for 28 hours but in spite of all their efforts the Bulgarians were unable to regain the lost positions. The vigor and precision of the fire of the Serbian artillery proved too much for the enemy. But at the same time, the Serbian success was only partial, for though they had succeeded in gaining a footing on the rocky sides of the mountain range, the Bulgarians still held the summits. The operations in the last week of July were, therefore, chiefly of a preparatory character and paved the way for the second phase.

During the first half of August there was a lull in the fighting which the Bulgarians made use of to entrench themselves strongly and line their front with barbed wire entanglements. Hostilities were resumed on August 17 with a furious Bulgarian attack all along the front. This was developed in two directions, on the one hand they attacked the Serbian positions on the Moglene range, held by the Shumadia and Timok Divisions, trying to hurl them back on the plain, and on the other they attacked the troops of the First Army holding Florina, with the object of driving them to the other side of Lake Ostrovo. This offensive coincided with the entry of Roumania into the war, the object being to inflict a crushing defeat on the Serbs, so as to be able to send troops from the Macedonian front to reinforce the Bulgarian army facing the Roumanians on the Dobrudja front. The effort, however, proved disastrous for them. Not only did their attack on the Katunatz and the Pojar, held by the Second Army, though executed by 7000 men, fail completely, but the Bulgarians were driven from a number of their positions by the furious counter-attack of the Serbs. By August 21st they were driven almost completely from Mount Veternik and Mount Kukurus.

The Bulgarian losses were very great. The first day they had 400 killed and 600 wounded. The following day whole regiments were decimated. The Bulgarian dead were piled up by hundreds and the army was greatly discouraged. They had more success, however, in the direction of Florina. They were able to seize that town as well as the important position of Malka-Nidje. Florina was only held by a weak advance



Field Marshal Putnik, Chief of Staff of the Serbian Army During the Campaigns of 1914-15.

guard of the Serbian First Army, which was unable to resist the onslaught of the Bulgarian main body. A Serbian division sent to the assistance of the troops holding Florina, resisted for several days the attacks of two and a half Bulgarian divisions. The Bulgarian success at Florina was dearly bought as they lost 10,000 to 12,000 men in the operations. The Serbs, however, also lost heavily, having about 5000 men *hors de combat*. But the partial success at Florina did not justify the Bulgarians withdrawing a single battalion from the Macedonian front to reinforce their troops facing the Roumanians. This marked the end of the second phase of the operations.

The third phase began on September 12th. On that date the Serbian First Army, reinforced by French and Russian troops, undertook a strong offensive toward Florina. At the same time the Second Army began an attack on the Moglene front, but this was merely a demonstration, the real attack being on Florina. After two days' artillery preparation, the Serbs, by a vigorous attack, carried the Bulgarian positions. In this attack they captured 40 guns and a large quantity of material of all kinds. The Bulgarians retired on the line Krushograd-Sovicet Starkoff Grob-Kaymakchalan.

But the Serbs did not give them any rest even on this new line. On September 17th, they gained a footing on the lower slopes of the Kaymakchalan. The Bulgarians had always attached great importance to this position. During the whole summer they had worked on its fortification, till it bristled, from base to summit, with lines of trenches and barbed wire entanglements so that the position, naturally extremely strong (at the highest point it reached over 8000 feet and on the eastern slope it was almost precipitous) was made seemingly impregnable. The Bulgarians knew that as long as they held the Kaymakchalan they could prevent the Serbs debouching on the Czerna Reka (Black River) and the plain of Monastir, either by Florina or the Moglene front.

In spite of the enormous difficulties the Serbs swarmed up the face of the mountain, capturing one line of trenches after the other and by the evening of September 18th they seized the summit. In view of the importance of this key position it became necessary for the Bulgarians to recapture it at any cost. With this end in view on September 23rd they resumed the struggle, with fresh troops brought from four different divisions and began a desperate attack on the Serbian positions.

The main attack began on September 24th and reached its fiercest phase on September 26th. This was, up to that time, the bloodiest battle of the whole campaign. The result of the effort was small, however. They only succeeded in gaining a footing in the Serbian advanced trenches but at such a cost that they were incapable of further effort. Their losses had been tremendous. Their companies of 280 men had shrunk to 90 men, and of 15 officers per battalion only an average of four were left. The 2nd Bulgarian Infantry Regiment had 73 officers and nearly 3000 men *hors de combat*.

In addition to being exhausted the Bulgarians were demoralized and the soldiers refused to make any further assaults which they saw could only end in their being annihilated. When the Serbs counter-attacked on September 30th the Bulgarians fled in confusion, abandoning five guns. On October 3rd they voluntarily abandoned the positions of Starkoff Grob, Soviet and Krushograd. The Serbian troops, who were following close on their heels, crossed the Greek frontier, passed on to Serbian soil and debouched on the Czerna Reka, which they crossed at various points, reaching the Bulgarian lines which directly defended Monastir.

The French and Russians also advanced successfully to the north of Florina and soon the whole of Greek Macedonia on the right of the Vardar, with the exception of the crests of that part of the Moglene range against which the Second Army was operating, was completely cleared of Bulgarians. Up to September 23rd, that is to say, before the last effort of the Bulgarians to recapture the Kaymakchalan, the Serbian losses amounted to 10,000 killed and wounded.



## Tribute to Two Army Officers from the Legislature of Oklahoma

### ENROLLED

House Resolution No. 16. By: Knight.

A resolution Memorializing the War Department to Suspend Its Rules and Permit Major Phillip C. Clayton, Major of Cavalry, Assigned to The Oklahoma Military Academy by The War Department and Lieutenant James Hamilton, Lieutenant of Infantry, Assigned to the Oklahoma Military Academy by the War Department, to Remain with the Oklahoma Military Academy for at Least a Period of Two Years After Their Term Expires. As Fixed by the Rules of the War Department.

Be It Resolved by The House of Representatives of The Fourteenth Session of The Oklahoma Legislature in Extraordinary Session:

Section 1. Whereas, the Oklahoma Military Academy, in the last few years, under the leadership and instructions of Major Phillip C. Clayton, Major of Cavalry, and Lieutenant James Hamilton, Lieutenant of Infantry, in charge of Military Science and Tactics at said Academy, has made considerable progressive strides, and has been recognized as one of the few institutions in America entitled to Honor rating, and

Whereas, their service in connection with the said Military School has been of untold value and assistance to such institution, on account of their peculiar qualifications along the lines and pursuits followed by them, and

Whereas, we are advised that it is a policy of the War Department to permit assigned officers to remain at such institutions for a period of four years only, and

Whereas, their period of time will run with the institution before another session of the Oklahoma Legislature;

Therefore, Be It Resolved By The House of Representatives of The Fourteenth Legislature of the State of Oklahoma, assembled in Extraordinary Session, that the War Department of the United States be, and it is hereby memorialized to suspend its rules and permit Major Phillip C. Clayton and Lieutenant James Hamilton to remain with said institution for at least a period of two additional years.

Be It Resolved Further that a copy of this resolution, in enrolled form, be forwarded to the War Department in Washington, D. C.

Adopted by the House of Representatives the 14th day of July, 1933.

TOM ANGLIN.

Speaker of the House of Representatives.

Correctly Enrolled.

BOB CAVINS,

Chairman, Committee of Enrolled and

Engrossed Bills.

## Washington's Adventure to the Ohio

By Lieutenant Colonel William Waller Edwards, Cavalry

ON a bleak November day in the year 1753, there stood on a plateau between the Monongahela and Allegheny Rivers and gazed thoughtfully over the wooded shores of the beautiful Ohio, a young Virginian of twenty-two, tall and broad shouldered, who, despite his extreme youth, had shown military ability to warrant his having been twice appointed Adjutant General of his native state, and whose uprightness of character was united with a knowledge of woodcraft gained by surveying the wild western lands of his native colony, outside of which his name, Major George Washington, was scarcely known.

He had been sent by Governor Dinwiddie to the Ohio (which was then considered a part of the Colony of Virginia) to find out what the French were doing there and why they had expelled a number of English traders belonging to the Ohio Company, of which Governor Dinwiddie was himself a member. When Washington and his carefully selected little band of pioneers reached the lonely wilderness cabin on the Monongahela of John Frazer, one of the English traders who had been driven back by the French, it was thought best as the rivers were so high from the excessive rains and snows through which they had laboriously traveled from Williamsburg, to borrow a canoe from Trader Frazer, place two men in it with the impedimenta, and send it, scudding like an autumn leaf, down the impetuous current, while the rest of the party proceeded to the confluence of the two rivers on foot. "As I got down before the canoe," writes Washington in his journal, "I spent sometime in viewing the rivers and the land at the fork, which I think extremely well situated for a fort, as it has absolute command of both rivers. The land at the point is twenty or twenty-five feet above the common surface of the water, and a considerable bottom of flat, well timbered land all around it, very convenient for building. The rivers are each a quarter of a mile or more across and run here very nearly at right angles. The Allegheny is a very rapid and swift running stream and the Monongahela deep and still."

Within a year from the time these words were written, French engineers chose this identical spot upon which to erect Fort Duquesne, against which was directed soon afterwards, the ill-fated expedition of General James Braddock.

So formidable had been the obstacles, of route and

weather, that twenty-five days had elapsed since they had left the old Colonial Capital of Williamsburg,\* when one evening "between sun setting and dark," our adventurers arrived at the Indian trading post on the Ohio, popularly known along the frontier, because of its primitive construction, as "Logstown." It was one of the places to which Washington had been ordered to repair. Built by the French as a trading post for the Indians, it was situated at the mouth of a stream known as "Big Beaver Creek," seventeen miles below the junction of the Monongahela and the Allegheny.

In single file, following their leader, their horses very much fagged with the journey, were Christopher Gist, hunter, trader and best known frontiersman of his time, who was the guide, Jacob Van Braam, whom Washington first knew as his fencing master and who was now engaged as an interpreter of French, John Davison, the Indian interpreter and four "servitors" or camp helpers. On the way to Logstown they met Shingiss, the Chief of the Delawares, who accompanied them into Logstown and there introduced them to Monakatoeha, an Oneida Chief and one of the Indian notables friendly to the English, with whom the Governor had given Washington particular orders to hold communication, inform of the purport of his mission and request an escort to the headquarters of the French commander at Fort Le Boeuf. The Oneidas belonged to the powerful Indian Confederation of the Six Nations, which laid a prior and different claim to the Ohio from either the French or the English at that time, namely the right of conquest.

Monakatoeha was given a string of wampum and by means of this symbol of Indian diplomacy, acted as Washington's ambassador to all the Sachems living in the vicinity who were avowedly friendly to the English, to meet together in council. It was already known to the Governor of Virginia and the House of Burgesses that France had intrenched herself on the Mississippi, as well as the Ohio, and it was suspected that their plan was to connect this line of fortifications in a continuous chain to the northeast.

A fortuitous circumstance during Washington's stay in Logstown while he was waiting for the dilatory Indians to come to his council, confirmed this suspicion. Several French soldiers drifted into the town who said they had deserted from a company of one hundred

\*In 1753, the Old Williamsburg, which the wealth of John D. Rockefeller is now attempting to restore, was the capital of an English colony, Virginia, which claimed wild lands westward as far as the Mississippi River. The Ohio Company, of which Governor Dinwiddie and Washington's two brothers were among the prominent Virginia stockholders, had for its avowed objects to speculate in lands and carry on an extensive trade west of the Alleghenies. The Company obtained from the Crown a conditional grant of 500,000 acres in the Ohio Valley and it had ordered large shipments of goods for the Indian trade from London.

The Iroquois had long claimed, by right of conquest, all this country extending from the Great Lakes to the Mississippi. Although the French at the treaty of Utrecht (concluding Queen Anne's War) acknowledged the claim of the English, as allies of the Iroquois, to all the land which the Iroquois ruled, the French also laid claim to the valleys of all streams flowing into the

Saint Lawrence and the Mississippi which Champlain and La Salle had discovered for France.

When rumors began to reach the attentive ears of Governor Dinwiddie that the French had built forts on the Ohio and were expelling English traders, he obtained authority from England to send Major George Washington (a young man in his early twenties), a newly appointed Adjutant General of the State of Virginia, for a journey over the mountains and through the forest, to the Commandant of the French fort on the Ohio to command him to depart with his forces and not trespass longer on English claims.

In his letter to the French Commandant, Governor Dinwiddie wrote that "the lands upon the River Ohio in the western part of the Colony of Virginia are so notoriously known to be the property of Great Britain that it is a matter of equal concern and surprise to me to hear that a body of French forces are erecting fortresses and making settlements upon that river, within His Majesty's dominions."

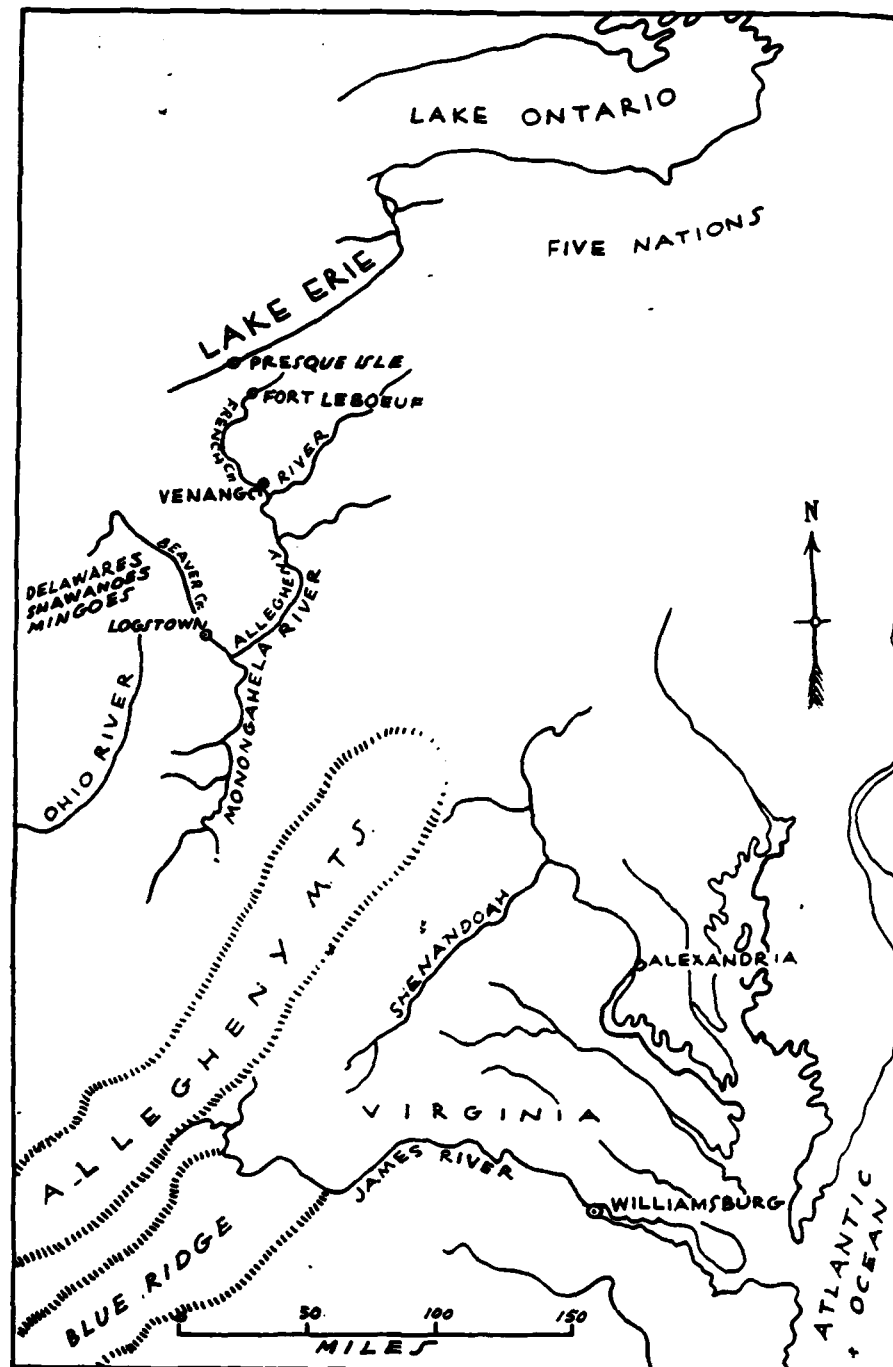
men sent from New Orleans to the Ohio, where they expected to meet the same number of men from the French forts on Lake Erie. The hardships of the trip, the non-arrival of the contingent they were to meet and the inevitable prospect of a fast approaching northern winter had caused these desertions which threw valuable military information into Washington's hands. In his hunting cabin on Beaver Creek, fifteen miles from Logstown, dwelt the Half King, a Seneca Chief so called because he owed allegiance to the Six Nations. He too came to the council. Being questioned by Washington's interpreter, Davison, he cheerfully gave an illuminating account of a recent visit he had made to the very French Fort, Le Boeuf, whither Washington was himself ultimately bound.

This Iroquois Chief then seized the opportunity to rehearse the speech which he had made upon this occasion, when asked abruptly by the French Commandant what he had come for: "If you Frenchmen had come in a peaceable manner," he had said, "like our brothers the English, we should not have been against your trading with us, but to come and build houses upon our land, and to take it by force, is what we cannot submit to. The country belongs to neither of you. The Great Spirit allowed it as a place of residence for us," to which," continued the Half King, "the French General replied: 'You will not put yourself to the trouble of speaking for I will not hear you. I am not afraid of flies or mosquitoes, for Indians are such as these. My force is as the sand upon the sea shore. The French will tread under their feet all that stand in opposition. La Salle went down and took possession of that river and it belonged to the French ever since. It was their land and they would have it.'"

All of which must have demonstrated most conclusively to the youthful Washington that the French, in pursuance of their land grabbing designs, were not

wasting any diplomacy upon the Indians. The loquacious Half King, then drew his hunting knife from its sheath and with it traced upon a piece of bark a crude plan, which he said was of two French forts exactly alike, but differing in size. The larger, Fort Presque Isle, was on Lake Erie; the other, Fort Le Boeuf, the nearer one and that to which Washington's orders were taking him, was on French Creek, a tributary to the Allegheny, with a good wagon road leading to it.

Early the following morning, through the service



of Monakatoocha's messengers, who carried to them Washington's strings of wampum, the friendly Indian Chiefs in the immediate vicinity assembled in the council house. The "Long House" where they met was the largest house in the village. It was a community building used by the Iroquois particularly for councils. It was built of logs, of ample dimensions, covered with rows or sections of bark overlapped like shingles. It had no windows. At each end there was a door made of bark boards hung on wooden hinges. In the roof along the ridge was cut a series of square openings designed to admit light and permit the escape of smoke from the council fire in the center. Around this fire Washington was pleased to see a goodly number of Indian Chiefs who had gathered in answer to his invitation, and predisposed in their friendly attitude to the English, no doubt, by the dismay with which they viewed the encroachments of the French upon their hunting grounds.

Looking round upon the expectant, painted faces which reflected the glow of the fire, Washington, through his interpreter, Davison, told his auditors in simple, straightforward fashion that he was sent by their Brother, the Governor of Virginia, to visit and deliver with all possible despatch, a letter to the French Commandant of Fort Le Boeuf. This letter, he said, was of the greatest importance, both to their Brothers, the English, and to themselves. Unfortunately, being unacquainted with the wilderness, he did not know the way to Fort Le Boeuf and he would have to call upon his friends, the Sachems of the Six Nations, to ask their advice to proceed by the shortest and best road to the fulfillment of his mission.

The Half King, who acted as the spokesman for the assembled Sachems, replied that to prove their love and loyalty to their Brother, the Governor, he would send with his emissaries, a guard of Mingoes. He modified his promise, however, by adding that as the young men who were to compose the escort were scattered through the woods on hunting expeditions it would probably take several days for couriers to find them, and furthermore, he wished himself to go to his hunting cabin and get the speech belt which the French Commandant had given him, for he wished to take advantage of the forthcoming visit to Fort Le Boeuf to return it.

Finding it impracticable to get off without affronting the Indians in the most egregious manner, the reluctant Washington consented to stay in Logstown and await the uncertain gathering of the hunters, the chiefs and the speech belt. On the part of the Indians, there was, however, a much more far reaching reason for this cautious delay. The Half King obtained the French speech belt with much more alacrity than Washington had anticipated and returned the next evening (November 28) with Monakatoocha, to Washington's tent to report the additional tidings that Captain Joincaire, who commanded a French garrison at the neighboring Indian town of Venango, where the waters of French Creek mingled with the Allegheny, had called the Sachems in council there within the past few days and made them an impressive

and ominous speech in which he told them that, while the French had at present gone into winter quarters, they intended to descend the river in the spring with a far greater army and they were going to fight the English for three years, in which time they expected to conquer, but if perchance the English proved equally strong, the French and English would join together to cut the Indians all off and divide the land between them.

When the Half King and the other Chiefs, being in somewhat of a quandary after listening to Joincaire's words, as to what they might expect, inquired of Washington if what he had stated was the real purport of his mission, the latter was able to answer truthfully that the ways of the French and English were so different that they could never be friends.

Four irritating days of delay passed at Logstown, which might have exhausted even Washington's great store of patience, had he not been buoyed up by the thought that the return of the speech belt by the Indians would abolish all dependence of the Indians upon the French. At last the prosecution of their journey was no longer materially retarded from Indian sources and they were able to set off again with their party augmented by not only one of the best young Iroquois hunters who could be found but three Chiefs, besides Jeskakake, who was to make the speech which the Half King had rehearsed; White Thunder, officially appointed as the Keeper of the speech belt, including that one of transcendent importance in Indian estimation which had the names of the towns on it, and last but by no means least, the wily old Half King himself. Shingiss did not go, giving as an excuse the sickness of his wife, but in Washington's opinion, he was more influenced by the fear of the French. He sent a string of wampum to be delivered into French hands by old Jeskakake, who beside other strings intended for the same destination, was carrying a string of black and white wampum intended as a war gesture to the great Six Nations, if for the third and last warning the French refused to quit the land. All of which must have looked to the earnest young militia man, completely absorbed in the interests of his own colony, as if the dusky brothers of the Governor really meant business.

It was perhaps rather a stroke of good fortune from the standpoint of enabling Washington to round out his estimate of the situation, that the "miry savannahs" precluded the shortest route to Fort Le Boeuf and forced him to go by way of Venango. Following the course of Beaver Creek, they arrived in five "sleeps," (as their Indian friends had predicted, the distance being about seventy miles) at Joincaire's Headquarters at Venango. Thither Washington boldly repaired on his arrival, being attracted by the French colors flying above a log house from which he was told had been driven his friend, John Frazier, the English trader.

Joincaire, the Commandant, whom he met there, was a famous intriguer of the frontier, the son of a French father and a Seneca squaw. He invited Washington's party to sup with him. He told Washington he was



in command of the Ohio. The supper proved to be quite a jovial one. The French officers, following the example of Joincaire, after "dosing themselves pretty plentifully with wine," made no secret of the fact that it was their absolute design to take possession of the Ohio and "by G—d they would do it," for though they realized the English could raise two men for their one, yet the French knew their motions were too slow and dilatory to prevent any undertaking of theirs.

These revelations from the licensed tongue of Joincaire furnished excellent material for the journal of Washington, whose example of sobriety was entirely lost upon some of the members of his party. This was particularly true of his Indians. The Half King was soon incapacitated and Jeskakake and White



GEORGE WASHINGTON

Thunder were not much better. The wine indeed flowed so fast that they forgot for the time being all about their wrongs and their speeches.

The next morning the Half King came to Washington's tent, very sober and very repentant. He wished, in contradiction to his previous night's conduct, to give reassurances of his loyalty. He again announced his determined intention of returning the French speech belt. Joincaire was about to have kindled a council fire for the Indians that very afternoon. He would seize the opportunity of returning the speech

belt at this council! So great was his desire to regain the good will of Washington, which he believed he had forfeited, that the crestfallen Half King was even willing to practice the speech he purposed to deliver to Joincaire. Washington advised him not to waste his ammunition on such small fry as Joincaire, but to wait until he should visit the Commandant of Fort Le Boeuf. The Half King, however, insisted that Washington attend the council and hear the Half King's speech. It was the same in substance as the former one which he had reported as having been made to the French general, but having finished his last rendition of it, when he offered to return to Joincaire the French speech belt (which had the names of the Indian towns on it, supposed to pledge fealty to the French) the latter refused to receive it, but told its bearer to take it to Fort Le Boeuf.

It took the combined efforts of John Davison and Christopher Gist to wrest the Half King and his associates, full of reiterated protestations and promises, from the strategic wiles of Joincaire.

Just at sunset on the 11th of December a tall youth on horseback emerged from the snow-clad forest, attended by a companion much older and rougher than himself, followed by several Indians and four or five white men bringing up the rear with packhorses, and stood before the gates of Fort Le Boeuf. The fort was situated as they observed on a sort of island on the west fork of French Creek. It was built of squared chestnut logs and consisted of four houses forming a hollow square, defended by bastions made of palisades, some twelve feet high, picketed on top and pierced for cannon as well as small arms. Within the bastions were a number of buildings built of logs, including a guard house and a chapel.

The reception which Washington received here was very different from the unceremonious one he had recently experienced at Venango. Presenting himself at the gate, with his interpreter, the Dutch Fencing Master Van Braam, he was most courteously met by a French officer whose uniform indicated that he was second in command and was conducted with due military form and ceremony to General Le Gardeur de St. Pierre, who had but recently arrived from France to assume command of this small fort buried in the Western American wilderness. He was an elderly French gentleman of noble family and with the air of a soldier. When Major Washington would have offered his credentials, he begged him to await the coming of the Commandant of the next post, Fort Presque Isle, who was hourly expected.

At two o'clock, his worthy colleague having arrived, the letter of Governor Dinwiddie, with the accompanying documents, were officially received and opened. When St. Pierre had caused these to be translated, he graciously and with a keen sense of justice, invited Washington to come into his private apartment with Van Braam in order to peruse and correct the translation. Van Braam, at this critical juncture, greatly to Washington's embarrassment, showed that his ability as an interpreter had been overestimated, for he proved not so good at either French or English

as he was at fencing. His services were indeed quickly dispensed with as non-essential.

The next two days were consumed by the officers of Saint Pierre's staff in holding a council upon the contents of the important message, which had been placed in their hands, whose purport demanded, before sending back an answer, their most serious consideration. Part of Washington's orders from Governor Dinwiddie contemplated acquainting himself with the numbers and force of the French stationed on the Ohio and how the forts were garrisoned, and during the council at Fort Le Boeuf, being left entirely to his own devices, he had a rare opportunity for observation of the fort itself, from which he made some valuable inferences for his meticulous journal. He found the log fortification amply strong for the needs of the wilderness and capable of sustaining a garrison of about one hundred men. Close by were ample evidences of the intention and means of the French, as recently announced by Joincaire, to convey a large force down the river in the spring, for there along the banks of the muddy stream, was a cluster of fifty birch bark canoes with one hundred and seventy of the "dug out" variety made of logs. While many others besides were blocked out in readiness from trees felled on the edge of the neighboring forest.

During the period of Saint Pierre's conference, Washington also discovered that the Commandant, with all his military methods and gracious manner, was not above the intrigues which Joincaire had practiced at Venango, to persuade the Half King and the other Indians to abandon him. Washington was, however, better prepared to meet a situation of the kind than he was before, and such was the influence which he had by this time obtained over his Indian colleagues, that at his urgent request they obtained an audience with Chevalier de Saint Pierre and made a valiant attempt to yield up the mooted speech belt. The venerable and astute Chevalier, however, avoided as had Joincaire the acceptance of the proffered wampum. With many professions of Indian friendship, he said that he wished to live in peace with the tribes of the Ohio and to trade amicably with them, in proof of which he would send a gift of goods from his Lord the King. This being reported to Washington, he immediately suspected St. Pierre's design of a well considered scheme to continue the ejection of English traders, of which his predecessor had been guilty, for it had reached his alert young ears that a French officer was going with the party which was carrying the Indian goods.

Upon receipt of this disturbing bit of news, which his Indians brought to him, he took occasion to inquire of the oily commandant by what authority he had made prisoners of several English subjects and sent them to Canada, while driving out others, conclusive evidence of which acts had from time to time drifted into old Williamsburg, the capital of Virginia. Upon this matter, our young diplomat received no more satisfaction than he had expected, but only a repetition of the statement that the country belonged to the French and no Englishman had a right to trade upon

those waters, and furthermore he had orders to make every person prisoner who might be so bold and injudicious as to attempt it.

After several days' close consideration, St. Pierre at length delivered to Washington his sealed reply to the letter brought to him from Governor Dinwiddie and as though to speed his parting guest, he announced that two canoes were at the young Virginian's service, laden with provisions for his departure.

Coincident nevertheless with this act of seeming courtesy, St. Pierre and his subordinates were assiduously using every practicable means their fruitful brains could devise to detain and win over the Indians. Despite all their clever wiles and bribes of guns, ammunition, traps, tomahawks, red cloth, shining trinkets, bottles of liquor and numerous other presents of a similar nature, dazzling to Indian eyes and attractive to Indian hearts, let it be recorded to the everlasting credit of Half King and his associates and to their Iroquois affiliations, that they remained true to their promise to the very remarkable young leader from over the Alleghenies, whose acquaintance they had made for the first time, and he in turn, still trusting his red allies, put them in the first birch canoe which St. Pierre had furnished him, together with the speech belts the French had scorned and himself, his faithful, reliable guide, Christopher Gist, and the other "servitors" in the second, set their paddles in the tortuous rapid current and glided away from the dark and sinister walls of Fort Le Boeuf.

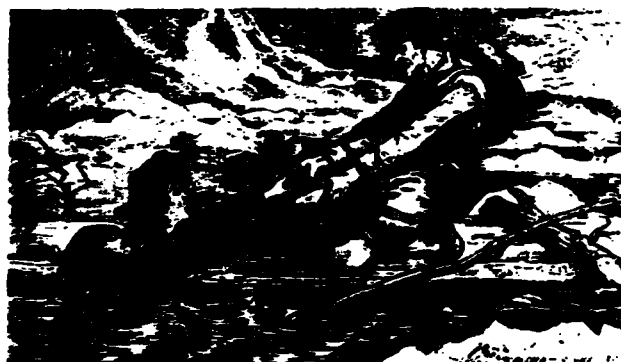
French Creek lay before them, all amber and bronze, brawling along tumultuously with frequent snow-white foam betokening treacherous cascades. A French canoe pursuing them, still persistent in its efforts to influence the fickle Indians, met the fate it deserved by being dashed upon the rocks which scattered its treasured contents upon the seething tide.

Bitter cold, hard traveling and scant forage—these spectres of ill-omen had transformed Washington's horses into emaciated skeletons. To spare them as much as possible, they had been sent without loads to meet the canoes at Venango, where with every assurance of undying friendship from Half King, Jeskakake and White Thunder, the Indians said good-bye.

Soon after leaving Venango, the horses became so weak that Washington, giving up his own mount, donned Indian dress of buckskin moccasins, leggings and hunting shirt and set the example in meeting the emergency by forging forward on foot. The cold increased very fast, while from the sullen, interminable sky came myriad flakes of snow, multiplying and freezing as they fell. The drifts of hard snow, which rapidly deepened through the forbidding woods, presented such a constant and formidable obstacle to the heavily laden and weakened animals that there appeared to our young adventurer not even a remote chance that they would reach home in any reasonable time.

His orders from Governor Dinwiddie indicated that he was expected to make all possible haste. The delays he had already experienced had caused him untold anxiety. It was time he was getting back to give his report. The documentary evidence of the results of

his mission was fraught, he knew, with great import. To expedite their transmission to the Virginia capital was now naturally his foremost thought. He determined to leave his party and wayworn beasts to follow as best they could, under the leadership of the Hollander, Van Braam, who by his shortcomings as a French interpreter had not forfeited all the confidence of his young chief, and in this new sphere of usefulness was given a new opportunity of redeeming his damaged reputation. Young Washington himself set out warmly clad in a fur coat of matched skins, known in the parlance of the frontier as a "match-coat," with his trusty long flintlock rifle in his hand and with knapsack of provisions on his back, at the bottom of which were his precious papers, while at his side strode his faithful frontiersman, Gist, similarly clad, as his sole companion. The two boldly marched on foot through the treacherous wintry woods to make their way by



Young George Washington Hurled into the Icy Allegheny

the shortest route back to Williamsburg. Their makeshift tents proved an insufficient screen from the cruel cold. During their first nights the cold drove them back on the trail at the early hour of two.

Before them stretched a wide dazzling wooded waste. Through it there was not even a path. For guides, the sun, a pocket compass and Gist. After traveling all day, a fire was made with difficulty by the Indian fashion of flint and steel.

Falling in with a party of French Indians, who concealed their identity, he and Gist unsuspectingly engaged one for a guide. Emerging from the deep shadows of the woods, into an open meadow, the Indian guide, who was about fifteen paces ahead of Washington, turned suddenly, deliberately leveled his gun at him and fired, but the powder, as though conscious that the object of its aim was reserved for more momentous events, flashed harmlessly in the pan. Gist would have killed the treacherous savage on the spot, but Washington's humanity intervened and that evening after the dark the rascal was taken some distance off the route by Gist, who pointed the direction he was to go, and then followed him cautiously and waited till the crunch of his moccasins on the hard snow died away in the distance. Then hastily returning to his anxious comrade, the two adventurers lit a camp fire and by its flickering light set their compasses so as to fix their course on the distant Allegheny and pushed

on with all haste, through the entire night, in order to reach there before they could be prevented by an Indian ambushade.

Their steps were quickened by the hope that they would find the river frozen, but when they reached it they saw with blanched faces that it was alive and its sweeping current filled with floating ice. Having only one small hatchet between them to work with, a whole precious day was consumed in building a raft, their only means of negotiating the stream. Their rude craft, being completed at dusk, was launched into the tumultuous waters. When half way over it became so tightly jammed between the huge masses of whirling ice that it was caught helplessly and expected to sink at any moment. In order to stop the raft so that the ice floe might pass by and relieve them of their hazardous predicament, Washington, in pushing hard with the "setting pole," lost his footing and was jerked into the icy water. Catching hold of one of the raft logs as he fell, he was saved from drowning only by the prompt activity of his companion.

It being impossible to reach either bank, the raft was at length dashed, like so much driftwood, against an island in mid-stream, where it was abandoned to the current, its occupants being marooned on the barren shore to which fate had consigned them, with the icy air of a frigid night cutting at them like a knife. The cold, which was so intense that night as to freeze Gist's toes and fingers, also froze the river and so they were fortunately able to make off the next morning over the firm glassy surface to the opposite shore.

The Blue Ridge, though bleak and forbidding enough in its winter garb, was crossed without mishap and never, I ween, had the stately old buildings of Williamsburg looked more hospitable to a jaded wayfarer than they did on the 16th of January, 1754, to George Washington. He found that only a day remained until the meeting of the Houses of Burgesses. During this brief interim he was required to prepare his report, which, having been read before the House of Burgesses, was ordered printed and was read, with breathless interest, throughout the Colonies and in England. Nor did St. Pierre's answer, which Washington brought, tend to relieve the tense situation which resulted finally in the struggle between France and England for supremacy in the New World. The seal of his message was broken before Governor Dinwiddie, who read its contents as follows:

"I shall transmit the letter of Governor Dinwiddie to my General, the Marquis Du Quesne, to whom it belongs better than to me, to set forth the evidence and reality of the rights of the King, my master, upon the lands situated along the river Ohio and to contest the pretensions of the King of Great Britain thereto. His answer shall be a law to me. As to the summons you sent me to retire, I do not think myself obliged to obey it. Whatever may be your instructions, I am here by virtue of the orders of my General and I entreat you, sir, not to doubt one moment but that I am determined to conform myself to them with all the exactness and resolution which can be expected from the best officer."

## Field Marshal Radomir Putnik, Serbian Army

By Captain Gordon Gordon-Smith, Attaché, Yugoslav Legation, Washington

THE State of Indiana on the occasion of the fiftieth anniversary of the signing of the Armistice on November 11, 1918, inaugurated the World War Memorial at Indianapolis.

One of the features of this monument is portraits of the Allied Commander-in-Chief, Foch, King Albert, Pershing, Haig, General Diaz for Italy, and Field Marshal Putnik for Serbia. These portraits are the work of Mr. Walter Brough, the well known painter.

Though less known than the other Commanders-in-Chief, Field Marshal Radomir Putnik was one of the most remarkable soldiers of the century and possessed of military talents of the very highest order.

The future generalissimo of the Serbian army was born in 1847 and began his military career as a cadet of the Military Academy in Belgrade. When the Russo-Serbian War of 1876 broke out he was still a first lieutenant. A year later, when Russia took the field against Turkey, he was promoted captain. When Serbia in 1885 declared war on Bulgaria, he was a lieutenant colonel and Chief of Staff of the Danube Division. On being promoted colonel he became Chief of the Headquarters Staff of the Army and shortly after the commander of the Shumadia Division.

On account of his political sympathies he was forced by King Milan to relinquish his command. From that moment until the accession of King Peter in 1903, Colonel Putnik lived in retirement and devoted himself exclusively to military studies. When the Karageorgevichs remounted the throne of their ancestors, King Peter recalled Colonel Putnik to active service and promoted him to the rank of general. From that moment his prestige did not cease to increase. When he was not in active command of a division, he held the portfolio of Minister of War.

Small and spare of stature, General Putnik had not that outward expression of physical vigor which one associates with military energy. His grey beard, trimmed to a point, was whitened by the silver threads of long nights of anxious vigil and the weight of illness. Only the two vertical lines between his heavy eyebrows denoted the iron will of the Head of the Serbian Army. When his eyes lighted up, his whole face was illuminated with a flash of energy.

When the first Balkan War, the campaign against Turkey in 1912, was declared General Putnik was naturally put at the head of the Army. On this occasion King Peter revived an old Serbian military title that of Voivode, of which the equivalent in a modern army is that of Field Marshal.

The man who from his youngest years had not ceased to awaken ever-growing confidence and devotion among his countrymen had a constitution undermined by illness. His advanced age forced him to take every precaution. Attacked by severe chronic asthma, he rarely left his room, living in an apartment kept constantly at hot-house temperature. His manner was brusque and on all occasions he expressed himself with outspoken soldierly frankness.

From the point of view of military science the dis-



Field Marshal Radomir Putnik.

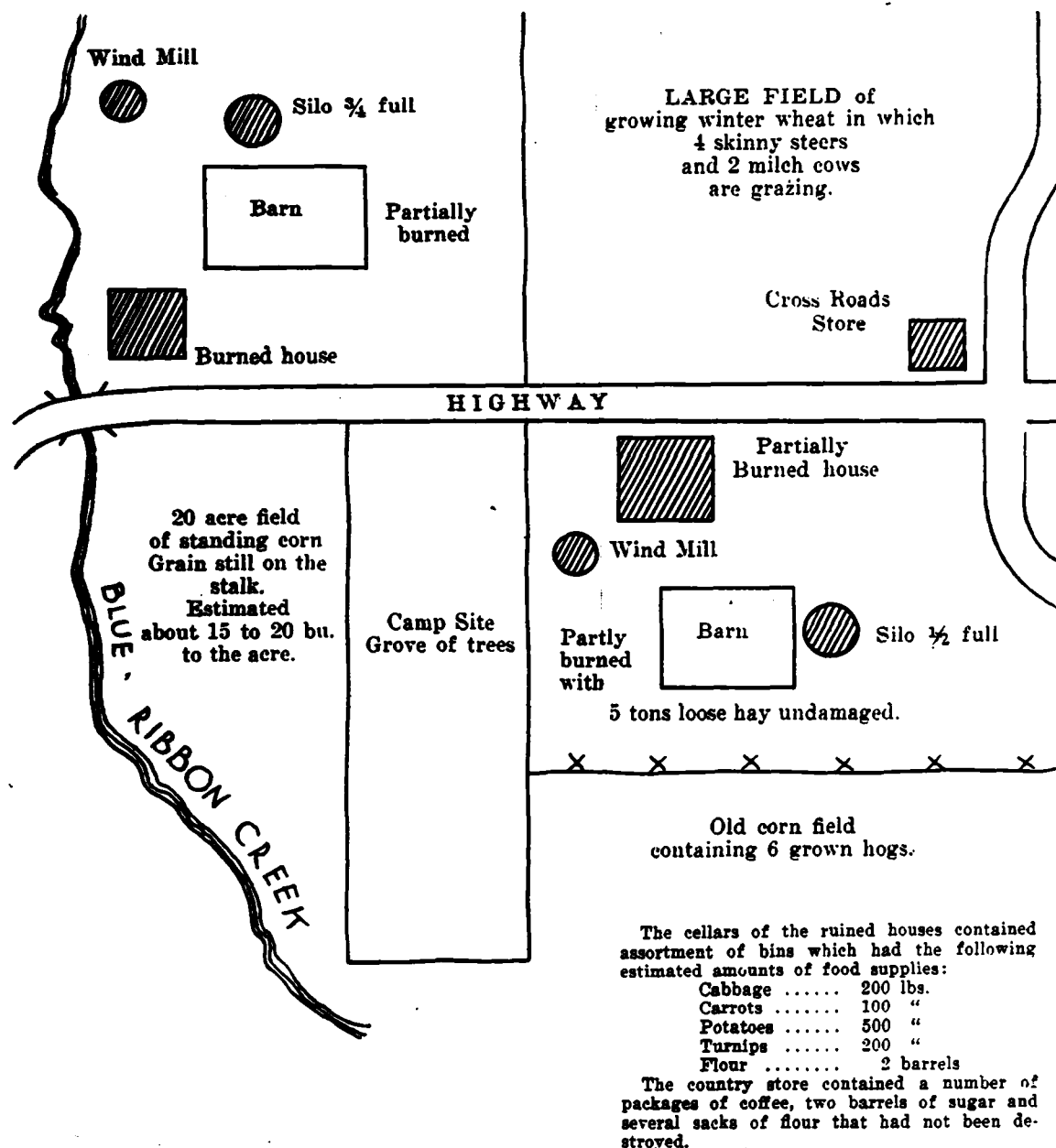
tinguishing characteristic of Field Marshal Putnik was his marvellous gift of topography. Thanks to this precious faculty, without quitting his room, he could follow and direct the movement of the troops under his command and even maneuver them with a perfect knowledge of the country in which they were operating. His soldiers had blind confidence in his powers.

Field Marshal Putnik began life a poor man, and poor he remained. After the conclusion of the first Balkan War, in recognition of the immense services he had rendered to his country, a number of wealthy Serbs desired to present him with a fortune. This the Field Marshal refused. "I thank you," he said, "your offer has deeply touched me. But what I have done does not require any material reward. I am poor. I have always been poor, and poor I will remain. I ask only one thing. I have many children. If ever one of them should be in need of help, I hope that in memory of me he will find a helping hand."

The Field Marshal was literally adored by the whole Army. The Crown Prince surrounded him with every care. Nothing was left undone to promote the well-being of the man who incarnated the soul of the Serbian nation.

# NOTES FROM THE CHIEF OF CAVALRY

## What Would You Do in a Situation like This?



Nov.-Dec., 1933

Notes from the Chief of Cavalry

35

MAJOR Heelcock turned in his saddle and looked back over the main body of his marching squadron. As always when he looked at the outfit, he felt a surge of pride. A fine lot of horses and men—fit, trained, and keen for action. But the sensation of pride quickly failed before the realization that food and forage must be had if the squadron was to retain its efficiency. Food and forage. Not just occasionally, as with the fighting, but today, tomorrow, every day. Food and forage. As the major thought about it, his beloved squadron became just so many human and equine maws that had to be filled daily.

Up to today it had been easy. The squadron had been covering the flank of the 1st Division, and the field trains could make their daily rounds to the division installations for supply. But this morning the squadron had been sent far from supporting troops, into hostile territory on a mission that would certainly require maximum mobility and would probably involve some fighting. Hence the escort wagons had been left behind with the division, and the only wheeled transport, the spring wagons, had been filled with ammunition.

"Food and forage," mused the major. "Well, let's take stock. At the noon halt—horses had been watered and fed, and the men had eaten the cooked lunch they had carried in their saddle pockets. The ration packs have rations for one meal. Each man has his reserve (individual) rations in his saddle pocket. That's a day and one-third for rations. For forage we have only the two feeds of grain (supper tonight and breakfast tomorrow) in the grain bag on each animal."

At this point Major Heelcock's meditation was interrupted by a messenger from the squadron supply officer, Lieutenant Toeklip, who had accompanied a patrol to the front in search of a camp site. The messenger enclosed a sketch (see opposite page) and stated in effect:

That about 3 miles to the front was a good camp site providing shelter and concealment on the partially damaged farm of a Blue sympathizer.

That water for men and animals was available in sufficient quantity.

That some supplies were available as shown on the sketch and that the Blue sympathizer had informed him that he would sell anything on the place to the Blue command.

Lieutenant Toeklip recommended that the command water after arrival at the farm and bivouac at that place.

A half hour later the squadron was entering the farm to water and bivouac. Major Heelcock was talking to Lieutenant Toeklip.

"The squadron will bivouac here tonight and will probably remain in this locality tomorrow, unless the enemy situation unexpectedly requires us to move. I am going to supervise the assignment of bivouac areas. Please let me have, in about a half hour, your recom-

mendations for supply of forage and rations for tonight and tomorrow."

Lieutenant Toeklip sat down on a convenient fence, surveyed the farm yard with its roothouse, the store, silo and smokehouse, the field of growing winter wheat, the hogs, steers, and cows, thumbed through his new Cavalry Manual until he found the following data:

### LOCAL PROCUREMENT

Rations. When procuring supplies locally the following quantities of ration commodities are required for a troop of cavalry (123 officers and men) authorized War Department, Table of Organization (Peace Strength).

Commodity	Weight required per man per meal	Troop requirement per meal
Beef	1/2 pound	1/2 quarter (either fore or hind, averaging 116 pounds)
Pork	1/2 pound	1/2 carcass of hog weighing about 165 pounds dressed
Chickens	1/2 pound	40 chickens averaging 4 lbs., dressed and drawn
Hams	1/2 pound	4 hams averaging 12 pounds each
Bacon	1/2 pound	3 sides averaging 10 pounds each
Vegetables	1 pound	123 pounds
Potatoes		2 1/2 bushels, 50 lbs. per bu.
Other Vegetables		When used with potatoes reduce weight of potatoes by weight of other vegetables used
Flour or corn meal	1 1/2 lb. (in lieu of bread)	40 lbs. (in lieu of bread)
Bread	1 pound	123 pounds
Coffee	1/2 oz. = 1 pint	5 lbs. = 15 gallons (1 lb. coffee makes 3 gallons)
Sugar	1/2 oz.	5 pounds
Milk (canned)		5 pints (condensed)
Milk (fresh)		2 gallons fresh for coffee and cooking

### NOTES:

Animal meat should be out of fresh meat before using, and not used to eating green meat.  
Chickens should be killed 1 to 2 hours before eating.  
Hogs should be killed about 12 hours before eating.  
Beef should be killed about 24 hours before eating.  
By cutting into small pieces the time may be shortened.

Forage. When giving off supplies procured locally, the following quantities of forage will be required for one feeding in the amounts of substitutive articles in lieu of regular forage for a troop of cavalry (123 animals, authorized Peace Strength):

Commodity	Per feeding per animal	Per troop	Weight
Oats	3/4 pounds	474	32 lbs. per bu.
Wheat (a)	3/4 lbs.	474	60 lbs. per bu.
Corn shelled	3/4 lb.	474	56 lbs. per bu.
Corn on cob	6 large or 12 small ears	690	Average 7 1/2 lbs. per bu. Buns 7 1/2 to 100 ears per bu.
Rye (b)	1/2 lbs.	474	56 lbs. per bu.
Shlage	1/2 lbs.	474	
Bran (c)	1/2 lbs.	474	4.2
Corn meal	1/2 lbs.	474	100 lbs. per bu.
Barley	1/2 lbs.	474	46 lbs. per bu.
Rice (unhusked)	1/2 lbs.	474	35 lbs. per bu.
Rice (milled)	1 lb.	474	100 lbs. per bu.
Millet	1/2 lbs.	474	30 lbs. per bu.
Hay	4 lbs. per day	572	

(a) Wheat: Should be used as emergency feed only. Amount shown is for maximum when fed alone. Better combined with oats, corn, bran, or other grains in proportion 1 to 1.  
(b) Rye: Should not be fed alone except under emergency. Combine if possible, with other concentrates. May cause diarrhea.  
(c) Bran: When used alone is continued, it is too laxative and lacking in nutrients. Can be combined well with any of other concentrates.  
(d) Rice: Paddy Rice (unhusked) better form. Small amount. 1 pound, of milled rice can be combined with more bulky concentrates.  
Oats, corn, (on cob or shelled), barley and millet are the only grains of the above list that might be considered fairly satisfactory feeds of horses when used singly as the concentrate for extended feeding. Under campaign conditions where the necessity for nutrients outweighs the disadvantages, any of the other listed grains should be used as feed.

and began on the solution of his problem.

What would you do in a situation like this?

## A Solution

Lieutenant Toeklip recommended that:

The command subsist generally from supplies procured locally, using only the necessary condiments from the supplies now carried on the ration packs.

To keep the reserve ration (individual) intact for future use.

To procure from farms at once a total of 500 pounds of potatoes, 150 pounds of cabbage, 50 pounds of carrots, 50 pounds of turnips, and 6 hams, and issue same to the command.

To procure from the store 30 pounds of sugar, 30 pounds of coffee, and as much flour up to 250 pounds as can be obtained, and issue it to the command.

To obtain 8 gallons fresh milk from the farmer for issue to the squadron.

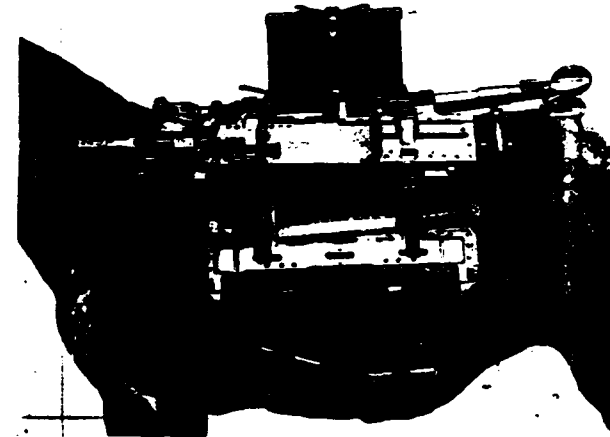
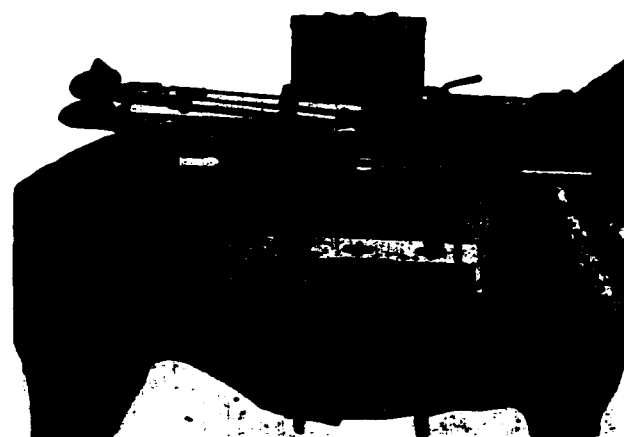
To procure 2 hogs from the farmer, kill and dress them as soon as practicable, and issue meat to the troops for consumption beginning at breakfast tomorrow.

To have details procure loose hay (about 2 tons) for feeding tonight, and approximately 55 bushels of corn on the cob, and issue to troops for feeding tonight and tomorrow, conserving for future use the two feeds of oats now in the grain bag.

To have breakfast tomorrow in camp.

## Machine Gun Pack Equipment

**C**OLONEL Albert E. Phillips, Cavalry, and Captain Thomas J. Heavey, Cavalry, at the request of the Ordnance Department, were recently sent to report to the Commanding Officer, Rock Island Arsenal, for a conference with ordnance manufacturing experts on the light .30-caliber machine gun and the .50-caliber machine gun tripods and pack accessories that are soon to be manufactured for the Cavalry. Through an exchange of ideas between these Cavalry and Ordnance experts all difficulties in design and manufacture of these items have been eliminated. Some important improvements were incorporated and all the essential characteristics determined necessary by the Cavalry Board for these items were retained. (Herewith are two photographs showing the .50-caliber antitank gun in pack.)



Light Machine Gun Mount, Cal. .50, T12, Pack Load

To have cooked lunches prepared for issue to men in the event the command has to move.

To save the present load of the ration pack for transportation on the ration packs if the command moves.

To have troopers fill the remaining amount of space in the grain bag (about 3 pounds) with shelled corn.

## Discussion

The problem is to conserve the supplies on hand as much as possible, subsisting the command on local supplies. The load on the ration pack will be kept intact except for necessary condiments not otherwise procurable.

Ham is procured for supper tonight. The hogs are butchered at once but are not made available until tomorrow morning in order that the animal heat may be entirely out. Beef was not used due to the length of time required for it to cool out. It could be used, if necessary, but would have a bad effect on troops not hardened to freshly killed meat.

Corn is preferable to silage for feed for horses and should be so used. The corn is best shelled from the cob and mixed with some oats for each feed. Hay is preferable to growing winter wheat, particularly for animals not used to green roughage. (*Department of Tactics, Cavalry School.*)

### Negrotto All-Purpose Cradle

At the time Captain Heavey was at Rock Island, Captain G. H. Negrotto, Infantry, reported for duty there in connection with the manufacture of an all-purpose mount which he had designed for the .30-caliber water-cooled machine gun. On this mount an all-purpose cradle is interposed between the gun and the mount which will greatly facilitate antiaircraft fire. Since the Cavalry has designed a very similar mount, capable of being packed and since the Infantry on many occasions will desire to pack their mount, advantage was taken of the presence of Captain Heavey and Captain Negrotto at Rock Island to coordinate and incorporate their ideas into a mount which could be packed and which would meet both Infantry and Cavalry requirements.



## BOOK REVIEWS



**THUNDER SHIELD**—Frederick F. Van De Water—The Bobbs-Merrill Company—\$2.00.

This is a grand story of the last frontier. It recounts the adventures of Hiram Shaw, a young white boy, lost from a wagon train and captured by the Cheyennes. A proud chief of the tribe sees in the lad an incarnation of his own dead son, Badger Heart, and naïvely accepts him as such: for that was the prophecy. Hiram goes native with a vengeance, worshipping with his foster father the great battle shield that gives the line of chiefs its name as it is handed down from father to son. He grows up a proud leader of the Indian boys, beating them at their own games and becoming more and more steeped in their lore and beliefs. He sees the whites again and again repudiating treaties that were to endure "While grass grows and water runs." He learns that when the whites win an action it is a "battle" won; when the Indians win it is a "massacre." Gradually bitterness and hostility for his own race grow in him as he compares their greed and complex venality with the forthright honesty of the leaders among the Cheyennes. This bitterness reaches a dramatic culmination when, captured by cavalry soldiers, he among others is flaunted almost naked through the streets of Denver and displayed on a local stage like some savage animal. He escapes, aided by the girl Linnet, whom as a child with the wagon train he had known and loved.

Linnet's influence is so strong young Badger Heart renounces his tribe and joins the Seventh Cavalry under Custer. For her sake he endures the bitter recruit training so difficult for one accustomed to the untrammelled freedom of the native life. Once again he is subjected to the white man's unfairness. He is imprisoned for a deed of vengeance that to his simple mind is justified. But he is pardoned by President Grant and once again goes back to the tribe. Here he is disillusioned once more, his tribe mates looking upon him as a renegade because of his service with the whites.

From here the tale moves with a breath-taking drama and pathos. And the medicine man's prophecy is fulfilled. Hiram goes into action for the last time with the glorious Thunder Shield on his arm.

This book is a serious survey of the times; but it is crammed with wit, swift moving action and colorful character portrayal. It is truly an epic of the most stirring period of the winning of the west.

It should be of great interest to all cavalymen especially, for, clanking through its moving pages, are the old-timers whom we all know and love. Fort Leavenworth and Riley are there and many other western posts that are now almost forgotten.

The great climax of the book is Custer's heroic action on the Little Big Horn. This fight is portrayed with historical faithfulness and yet has the color and grip-

ping intensity of romantic adventure fiction. A new and not too pleasant light is thrown on Custer's ruthless attitude towards some of his officers. We see jealousy, favoritism and, at times, open disloyalty stalking through the ranks of the old Garry Owens. And, incidentally we learn how the grand old song came into being as the battle tune of the famous regiment.

All officers of the army should read this book: especially will it give chuckles and a stirring of the heart to cavalymen.

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**JACKA'S MOB**—By E. J. Rule, M.C.M.M., 346 pp. Angus & Robertson, Sydney, Australia—\$2.00.

This story answers the question "How much of the world war did the soldier in ranks actually see?" The author, by limiting his material to that which came within range of his own eyes, gives a valuable and graphic picture of the daily life of the front line soldier in active operations.

The reader gathers from this volume a principle of war which many military men seem to forget in peace time, the principle that success in battle depends upon leaders of small units. High command can move, supply ammunition and feed troops, but cannot win battles without capable sergeants and lieutenants. All plans must, in the end, be carried out by squads and platoons—without them plans are but plans and objectives only marks on maps.

The man in ranks is but little concerned with any officer above his captain, and the author of "Jacka's Mob" shows this very clearly. The military man who has attained high rank and forgotten his youth will gain in knowledge of soldier psychology by thoughtful reading of this story.

From new recruit to company officer, from Gallipoli to Amiens, the story is complete within its scope and attains a well defined objective, a picture of the war from the actual viewpoint of the men who did the dirty work.

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**THE HORSE IN THE MOTOR ERA** *Le Cheval à l'Epoque du Moteur*—by A. Spindler, Editions Berger-Levrault, Paris, 1933.

How shall the horse industry meet the competition of the motor? The author studies the subject from all angles and proposes means of improving production and of putting better values on the horse. Very good reasons are given for the retention of the horse for military purposes, and the *CAVALRY JOURNAL* intends, in a later issue, to publish a translation in full of this part, which discusses horse and motor in campaign very logically and convincingly.



# SPORTS

## The International Horse Shows

By Major John Tupper Cole, Cavalry

FOR the military teams of Sweden, Czecho-Slovakia, Irish Free State, and the United States, the World's Fair Horse Show in Chicago opened with a great deal of pressure on both horses and men. The first class was the first round of a four session team class, the total score of the various teams of three deciding the owner of the cup. Without a class to warm up on, the course chosen, while not at all unfair, proved to be the downfall of several good horses and left on the audience the impression of rather bad jumping.

Our team was severely handicapped by the fact that *Joe Aleshire*, a certain "cup horse," was lame and could not be used. Finally it was decided to use *Tan Bark*, Lieut. Thomson riding, *Ugly* with Lieut. Raguse and *Clismic* with Captain Argo. These three horses made the course and gave the U. S. team a good lead, as each of the other competing nations had one or more horses eliminated at a fence which, placed as it was, required more courage than the eliminated horses were willing to display.

This class continued every other night with a change each time of the leading team. The fence which caused all the initial grief, (a 4 foot post and rail with a 4 feet 6 inch bank 4 feet behind it, the spread of the bank being 6 feet; thus making the total spread before the obstacle was cleared, seven feet), was moved from the first jump of a diagonal to the second obstacle and in this position with a little room to get at it, gave no more serious trouble.

The second round was won by Ireland and *Clismic* turned in such a bad performance that the United States lost their commanding lead of the first night, moving into second place with Sweden third and the Czechs fourth.

This same evening *Clismic* worked his way back to favor by winning the open "touch and out" under a beautiful ride by Captain Argo over quite a complicated course for such an event.

The third team event was a brilliant victory for Sweden—three clear rounds which overcame the lead the U. S. had by  $3\frac{1}{2}$  points, as on this night *Ugly* and *Clismic* had one fence down each, *Tan Bark* going clear. Ireland had a bad night of it, dropping to third place.

The final trial for the cup provided the spectators with plenty of excitement. *Clismic* hit one fence, giving him four faults. *Kornett*, ridden by Captain Count von Rosen of Sweden went clear. *Tan Bark* went clear. *Aida* with Captain Hallburg up for Sweden scored four faults. *Ugly* under a perfect ride went clear. *Marokan* was Sweden's last horse and

through no fault of his young rider, Lieut. Neublans, took out one fence, thus giving the cup to the United States by three-quarters of a point.

While the cup class was half the international show, the other events were hotly contested with the various teams being well represented in each jump off. The closest decision being between Sweden's *Orcilla*, owned and ridden by Lieut. Sachs, and Lieut. Thomson on *Tan Bark*. Both were clear in the jump-off with the Swedish horse having an advantage of one-fifth of a second.

With *Slievanamon* and *Blarney Castle* Ireland won the pairs from U. S. *Ansonia* and *Avocat*, both pairs going clear and in stride but the U. S. team being scored in a corner for separation.

The Fort Sheridan officers had unusually good horses and had good success in winning the International handy with Lieut. Smith's *Silver Belle*; this mare also won the novice. *Juror* with Capt. C. E. Davis up, defeated U. S. Army team's *Ansonia* in the pen jump and Major Carpenter's *Lad* put up a most finished performance in his battle with *Watch Me*, a Canadian horse in the knock-down and out class. After several jump-offs with the fences raised each time, *Watch Me* finally won, getting over a single rail in and out, 4 feet 6 inches in and 5 feet out with *Lad*, faulting on the "out" rail.

Few indeed are the thorough-bred horses that jump with the calmness and absolute precision displayed by *Lad* in this really memorable class. His rider gave him the maximum of support throughout the several trying rounds in that he was perfectly in balance, used his legs quietly and firmly and followed every movement of the horse's head with a soft, sympathetic hand.

The International Military Stake was designated over a special course, but the committee chose to use the course of the "Military Handy Class." The horses having jumped this course once before handled with great ease that which was difficult for them before, and eight clean rounds resulted, the jump-off resulting in four clear, *Orcilla*, Lieut. Sachs of Sweden, *Limerick Lace*, Capt. Harty of Ireland, *Babe Warham*, Lieut. Raguse, U. S., and *Avocat*, Major Cole, U. S. finishing in that order, time being the deciding factor. Fifth, sixth, seventh and eighth places going to *Tan Bark*, U. S., four faults; *Fakir*, Czecho-Slovak, four points; *Ansonia*, U. S., four faults, and *Lad*, Major Carpenter, twelve faults.

In the open classes the best military horses were not used, as all teams saved them as much as possible for purely International competitions. Only in the triple bar did the military mounts make a clean sweep, with Capt. Corry of Ireland on *Shannon Power* rising out Lieut. Sachs' brilliant grey *Orient*, Capt. Stacey of the Czechs on *Fakir* and Capt. Argo's *Whirligig*, with the bars set at a ten-foot spread.

Before leaving the Chicago Show, tribute must be paid that wonderful little clean-bred horse *Rollo Reed*. Twenty-three years old, scarcely the substance of a light-weight polo mount, so nervous he has to be forced on eggs during shows, this gallant little horse won the five-foot class with a clear round at five feet, nine inches, the bars having been raised three inches each jump-off. He came back two days later to high jump seven feet, having made but one or two mistakes on his way up from five feet.

Throughout the Chicago Show and subsequently during the New York and Toronto classes, the U. S. team was deprived of the use of *Joe Aleshire*, one of the three best horses, and *Wampus*, a fine big young horse doing his first year with the team.

After a week's rest the New York Show opened, and proved to be the most successful in years. A hard working committee and excellent publicity packed the Garden night after night, and the tireless efforts of the new manager, Mr. Ned King, kept the show on time and running to the satisfaction of all.

The International classes opened with a three event cup class. First night, pairs abreast over a diagonal course in which Ireland and the U. S. tied for first, Sweden was third and a second U. S. team was fourth. The second round was one of the three abreast over the same course. It was rather difficult jumping, as the panels were only fourteen feet wide. Sweden won with an excellent performance, Ireland was second and the U. S. third and fourth. Our faults were heavy, (12½), and we were practically certain of being unable to cut the lead Ireland had in points, unless they had unheard of bad luck the following night. The final contest for this cup was rather interesting, being teams of four horses, one following the other, with the requirement that the last horse must finish in fifty seconds after the start of the first horse. As a horse galloping quite freely could just make the round in thirty-five seconds, spacing had to be accurate and not over three seconds to be at all safe. Canada, who had not been with the teams in Chicago, won with 0 faults. U. S. was second with 4 faults, and Sweden and Ireland tied for third and fourth with 8 faults each. When all faults were added, Ireland was on top, Sweden second and the U. S. third and fourth. It is my recollection that 1½ points separated the first from third place in this event.

The following night the U. S. team got started winning the only two places awarded in the Bowman Cup. *Ugly*, ridden by Lieut. Raguse, being the winner while *Tan Bark* with Lieut. Thomson in the saddle was reserve. This win was followed by a victory for *Tan Bark* the next night in the Military Stake. Sweden, Ireland and Canada dividing the remainder of the ribbons.

Up to this time, we had been unable to test *Whirligig*, Capt. Argo's powerful jumper from Fort Sill. We all knew he had a tremendous jump in him but had not seen him in action over the types of courses used in New York. The reason for this was the most amazing run of bad luck that it has been



Top: Members of the Swedish Army team who won the International Military Trophy at the National Horse Show at the Madison Square Garden. Left to Right: Capt. Ernest Hallberg with "Aida," Count Frederik von Rosen with "Kornett" and Lieut. Herbert Sachs with "Orient."

Center: A view of the parade of the international army teams, escorted by Squadron A and the 16th Infantry Band, at

Bottom: Capt. Frederick A. Abern, right, who won the International Individual Military Championship Challenge Trophy at the National Horse Show, with Lieut. E. F. Thomson of the United States Army team, who finished second.



Photo from Wide World  
Lieut. W. M. Cleland of the Canadian Team with "Roxana,"  
Winner of the Brooks Bright Challenge Cup

my misfortune to witness. He picked up three nails during the show and was never sound between accidents for over fifteen minutes!

We had to have a look at him, however, as it was felt he might be better than either *Avocat* or *Ansonia*, the only other two horses I should care to think of teaming with *Tan Bark* and *Ugly*, the next night for the team class.

He was consequently entered in the individual championship on Monday night along with *Tan Bark* and *Ugly*. *Whirligig* hit two fences, *Ugly* and *Tan Bark* going clear. In the jump-off of seven clean horses, *Tan Bark* was 2 1/5 seconds better than the two others who had survived the round with no faults. Then came Capt. Fred Ahearn of Ireland on *Gallowglass*, the eighth clear horse. His only chance was to fly the course to beat Thomson's time. This he did with true Irish abandon and though he had two narrow escapes, when he finished the fences were all up and *Gallowglass* was champion and *Tan Bark* reserve.

On Monday evening, *Avocat* won a nice charger class over Capt. Count von Rosen's *Judge*, Irish Free State's *Shannon Power* and Col. J. K. Brown's *Russellson*. He felt so light and springy I determined to use him as a cup horse that night. Sweden sent out *Kornett* with Capt. Count von Rosen, *Aida* with Capt. Hallberg and *Orient* with Lieut. Sachs to win brilliantly with three clean rounds. The U. S. was second. *Tan Bark*, with Lieut. Thomson up, clear; *Ugly*, with Lieut. Raguse up, 4 faults; *Avocat*, with Major Cole up, clear.

Ireland was third, Capt. Ahearn riding *Gallowglass*, 11 faults. Capt. Harty on *Limerick Lace*, 4 faults and Capt. Corry on *Slieranamon* clear. The Czech team was fourth when Canada was eliminated after Capt. Bate was badly injured as *Spats* fell.

In the open classes, it was again necessary for many of the best military horses to be withdrawn in order to save them for their own division of the show. When they were allowed to start, however, there was generally someone from one team or another knocking at the door and often enough forcing it open.

After another rest of a week the teams arrived in Toronto to compete in the horse show held in connection with the Royal Winter Fair. Here we had comparatively little jumping to do, as we limited our entries to only two open classes in addition to the Military class each night. The military competition was augmented by many excellent horses from the Canadian Dragoons of Stanley Barracks and the Governor General's Body-guard of Toronto.

The Royal Winter Fair has not adopted "F. E. I." rules in so much as time is no factor. Hence the chance of jumping a good horse to death always confronts one. This nearly happened the opening night in the military stake when Sweden's *Kornett* and the U. S. *Ugly* had it out with a vengeance. Finally the fences were raised to the tops of the standards, some with blocks under them and still these two "wild bloods" turned in a clear round. The ring was very hard and rather than further risk two good horses, it was decided to toss a coin. Lt. Raguse won the toss. The second night produced a second toss but under less happy circumstances. The course was made quite hard by one rather difficult fence, parallel single rails at 4 feet, 6 inches with a 4 foot spread and placed in a corner of the ring. Capt. Churchill Mann of the Canadian team riding *Spats* for the injured Capt. Bate was the first horse in the ring and went clear. Subsequently Lt. Sachs of Sweden on *Orient* and *Avocat* of the U. S. team went clear. Capt. Mann then rode *Bronte*, the last horse to jump, and at the last fence, a "Liverpool," had a crash that gave him a severe concussion and broke his leg.

Since *Spats* was left without a rider, it was only fair that places be drawn for. Lt. Sachs winning the toss, *Avocat* being next and the still unconscious Canadian getting the short end of third.

The next military class was for teams of three abreast. We have always been afraid to enter our best horses because of the very good chance of having a horse badly injured due to another's mistake. Nevertheless, with second string horses we were tied with Sweden and Canada for first place, losing the jump-off to the Canadian team. Next came the "Handy course" won by Lt. Marshall Cleland's wonderful mare *Margot*. This mare is one of the lightest, most elastic jumpers I have ever seen and is justly comparable to Capt. Koester's *Show Girl*, probably the most brilliant jumper we have ever had on the U. S. team.

Up to this time the Czechs had been in very bad luck. One of their horses had died of pneumonia in

Chicago. One of their best jumpers had been killed while schooling two days after the Toronto Show opened. They were nevertheless fine sportsmen, never spoke of their luck and kept trying. On next to the last night they got their reward with a brilliant victory by Capt. Coeck's *Chostra* over Capt. Ahearn's *Blooney Castle* and Capt. Argo's *Clismic*.

The course for the team or cup class was announced twenty-four hours in advance, and it was decided to use *Whirligig* as our third cup horse, as the fences were big and *Avocat* was getting sulky and stiff from too much jumping on hard going. In the afternoon we felt greatly relieved when all three horses took three or four big fences in beautiful shape. They seemed really ready to go. At night it was a different story. Ireland had three mediocre rounds to win with 12 faults; Sweden and the U. S. with 18 each. The Czech horses were more off, and Canada was hopeless.

(Continued on Page 64)

### The Fort Sheridan Polo Team

THE Fort Sheridan Twelve Goal Polo Team played through the Local and National Tournaments held in Chicago this summer without losing a game. This team was composed of the following members: Lieut. G. S. Smith, number one; Capt. C. A. Wilkinson, number two; Capt. C. E. Davis, number three; Lieut. L. G. Smith, number four; and Capt. C. B. Cole, substitute.



THE FORT SHERIDAN POLO TEAM.

Left to Right: First Lieutenant George S. Smith, F.A. (ADC to General Parker); Captain Candler A. Wilkinson, 14th Cavalry; Major General Frank Parker, C.A., Commander; Captain Chester E. Davis, 14th Cavalry; First Lieutenant Lawrence G. Smith, 14th Cavalry; Captain Clifford B. Cole, 3rd F.A.

The principal Tournaments played in were: The Central Circuit, the National Inter-Circuit, the National Twelve Goal Tournament, and the General Parker Trophy.

The final game of the Central Circuit Championship was played at The Oak Brook Polo Club, August 18th, between The Miami Valley Hunt and Polo Club of Dayton, Ohio and Fort Sheridan, the score was 6 to 5 in favor of Fort Sheridan. This was a very hard close game in which the Dayton team was ahead during the first half of the game.

The final game of The National Twelve Goal Championship was played at Oak Brook, August 25th, between The Dayton Team and Fort Sheridan, the game ended with the score Fort Sheridan 8, Dayton 6.

The final game in The National Inter-Circuit Championship was played at Oak Brook, August 27th, between The El Ranchito Team from Arlington, Texas, and Fort Sheridan. The score was 8 to 5 in favor of Fort Sheridan.

The season was finished by playing a series of the best two out of three games for The General Parker Trophy. In this series The Chicago All Stars opposed The Fort Sheridan Twelve Goal Team. The All Stars played with Mr. Prentice Porter, number one; Mr. M. Corpening, number two; Capt. P. P. Rhodes, number three; and Mr. Herib Lorber, number four. The first two games played were won by Fort Sheridan, with scores 6 to 4 and 5 to 4 respectively.

The success of this team is thought to be due to the



Second: *Madam X*, Sgt. Goodreau, 8th Cavalry; *Charley*, Corp. O'Neal; *Shooter*, Sgt. Zientek.  
 Third: *Yagel Jim*, Pvt. Blunk, Div. Hq. Tra.; *Chas*, Sgt. Weis; *Sonny Boy*, Pfc. Chapman.  
 Fourth: *Nick*, Pvt. Ennis, 7th Cavalry; *Post Office*, Corp. Norris; *Speedy*, Corp. Kelly.  
**CLASS 12.** Fault or disobedience and out, (Officers and Civilian):  
 First: *Sonny Boy*, Lt. Crowwell, 8th Cav.  
 Second: *Sonny Boy*, Capt. MacDonald, Div. Hq. Tra.  
 Third: *Tahoka*, Lt. Wing, 7th Cav.  
 Fourth: *Jerry*, Lt. Herman, 82nd F.A.  
**CLASS 13.** Fault or disobedience and out, Enlisted Men:  
 First: *Spikes*, Sgt. Zientek, 8th Cav.  
 Second: *Show Baby*, Corp. Long, 7th Cav.  
 Third: *Lone Star*, 1st Sgt. Witaski, 7th Cav.  
 Fourth: *Betsy Bell*, Pvt. Kennedy, 8th Cav.  
**CLASS 14.** Pair Jumping, Enlisted Men:  
 First: *Apology*, 1st Sgt. Witaski, 7th Cav.; *Garry Owen*, Corp. Long, 7th Cav.  
 Second: *Sue*, Sgt. Goodreau, 8th Cav.; *Ugly*, Corp. O'Neal, 8th Cav.  
 Third: *Speedy*, Corp. Kelly, 7th Cav.; *Sam*, Corp. Ports, 7th Cav.  
 Fourth: *Texas*, Sgt. Shroat, 7th Cav.; *Chestnut*, Pfc. Cook, 7th Cav.  
**CLASS 15.** Children's Jumpers:  
 First: *Sonny Boy*, Jean Dornblaser.  
 Second: *Wess*, Barbara Milton.  
 Third: *Lee*, Kate Gandy.  
 Fourth: *Red Wing*, Albert Ellis.  
**CLASS 17.** Parent and Child Class:  
 First: *Red Wing*, Albert Ellis & Pinny Sands, Captain Ellis.  
 Second: *Sonny Jim*, Vincent Ellis; *Lisa*, Captain Ellis.  
**CLASS 20.** Handy Jumpers, Enlisted Men:  
 First: *Lone Star*, 1st Sgt. Witaski, 7th Cav.  
 Second: *Betsy Bell*, Pvt. Kennedy, 8th Cav.  
 Third: *Dixie*, Sgt. Goodreau, 8th Cav.  
 Fourth: *Satan*, Sgt. Shroat, 7th Cav.  
**CLASS 21.** Jumper Championship (Officers):  
*Sonny Boy*, Div. Hq. Tra.; *Jerry*, Lt. Herman.  
**CLASS 22.** Jumper Championship (Enlisted Men):  
*Lone Star*, 7th Cavalry; *Dixie*, 8th Cavalry.  
**CLASS 23.** Ladies' Three Gaited Riding Horses:  
 First: *Great Flyer*, Mrs. Donaldson.  
 Second: *Mr. Weaver*, Mrs. Whalen.  
 Third: *Nancy Astor*, Miss Cooley.  
 Fourth: *Majestic*, Mrs. McReynolds.  
**CLASS 24.** Children's Three Gaited Saddle Horses:  
 First: *Angel*, Tommy Shroat.  
 Second: *Betsy*, Betty Bassett.  
 Third: *Nancy Carroll*, Belle Pendleton.  
 Fourth: *Aleck*, Johnny Donaldson.  
**CLASS 25.** Children's Three Gaited Horses:  
 First: *Shag*, Miss Ruth Burr.  
 Second: *Grandpa*, Vincent Ellis.  
 Third: *King James*, Jean Dornblaser.  
 Fourth: *Cricket*, Billy Shroat.  
**CLASS 26.** Parent and Child, Three Gaited Horses:  
 First: *Mr. Bassett*, Betty and Barbara.  
 Second: *Major & Belle*, Pendleton.  
 Third: *Captain Donaldson* and Family.  
 Fourth: *Sgt. Shroat*, Billy and Tommy.  
**CLASS 27.** Road Hacks (Enlisted Men):  
 First: *Cricket*, Sgt. Shroat, 7th Cav.  
 Second: *Moan*, Corp. Hutson, 4th Cav.  
 Third: *Amoson*, Pfc. Horn, 82nd F.A.  
 Fourth: *Adelant*, Corp. McGregor, 7th Cav.  
**CLASS 28.** Ladies' Road Hacks:  
 First: *Great Flyer*, Mrs. Donaldson.  
 Second: *Mr. Weaver*, Mrs. Whalen.  
 Third: *Miss Springtime*, Mrs. Vance.  
 Fourth: *Majestic*, Mrs. McReynolds.  
**CLASS 31.** Children's Road Hacks:  
 First: *Texas*, Billy Shroat.  
 Second: *Angel*, Tommy Shroat.  
 Third: *Nancy Carroll*, Belle Pendleton.  
 Fourth: *Cham*, Marion Zork.  
**CLASS 32.** Hunters, Lightweight:  
 First: *Nick Carter*, Maj. Glibreath, Div. Hq. Tra.  
 Second: *Tahoka*, Lt. Wing, 7th Cav.  
 Third: *Jimmy*, Lt. Pugh, 8th Cav.  
 Fourth: *Crescent*, Lt. Wing, 7th Cav.  
**CLASS 33.** Hunter, Medium & Heavyweight:  
 First: *Zephyr King*, Maj. Glibreath, Div. Hq. Tra.  
 Second: *Frosty Morning*, Lt. Biddle, Div. Hq. Tra.  
 Third: *Blue*, Colonel Muller, 8th Cav.  
 Fourth: *Calf Eye*, Lt. Wright, 7th Cav.  
**CLASS 34.** Ladies' Hunters:  
 First: *Nick Carter*, Jane Bancroft.  
 Second: *Zephyr King*, Mrs. Peyton.  
 Third: *Snatches*, Mrs. Maloney.  
 Fourth: *Blue*, Mrs. Donaldson.  
**CLASS 36.** Hunt Teams:  
 First: *Nick Carter*, Maj. Glibreath; *Low Flyer*, Lt. McReynolds, Div. Hq. Tra. Team, *Frosty Morning*, Lt. Biddle.  
 Second: *Tahoka*, Lt. Wright; *Crescent*, Lt. Wing, 7th Cavalry Team; *Mr. Weaver*, Lt. Johnson.  
 Third: *Deacon*, Lt. Rogers; *Gov. Capt. Burnett*, 8th Cavalry Team; *Tip*, Lt. L. R. Dewey.  
 Fourth: *Blue*, Capt. Boykin; *Chesterfield*, Maj. Gerhardt, 8th Cavalry Team; *Great Flyer*, Lt. Crowwell.  
**CLASS 37.** Corinthian:  
 First: *Frosty Morning*, Lt. Biddle, Div. Hq. Tra.  
 Second: *Nick Carter*, Maj. Glibreath, Div. Hq. Tra.  
 Third: *Crescent*, Lt. Wing, 7th Cav.  
 Fourth: *Zephyr King*, Maj. Glibreath, Div. Hq. Tra.  
**CLASS 38.** Handy Hunters:  
 First: *Huachuca*, Maj. Dornblaser, Div. Hq. Tra.  
 Second: *Tahoka*, Lt. Wing, 7th Cav.

Third: *Blue*, Capt. Boykin, 8th Cav.  
 Fourth: *Garry Owen*, Lt. Howze, 7th Cav.  
**CLASS 39.** Hunter Championship:  
 Champion: *Nick Carter*, Maj. Glibreath, Div. Hq. Tra.  
 Reserve: *Frosty Morning*, Lt. Biddle, Div. Hq. Tra.  
**CLASS 40.** Polo Mounts, Lightweight, Playing Ponies:  
 First: *Pan American*, Maj. Gerhardt, 8th Cav.  
 Second: *Norma*, Lt. Rogers, 8th Cav.  
 Third: *Betsy*, Maj. Allen, 7th Cav.  
 Fourth: *Blue*, Capt. Donaldson, 8th Cav.  
**CLASS 41.** Polo Mounts, Medium & Heavyweights, Playing Ponies:  
 First: *Mickey*, Lt. Bailey, 8th Cav.  
 Second: *Mr. Weaver*, Lt. Johnson, 7th Cav.  
 Third: *Bela Clara*, Lt. Fisher, 82nd F.A.  
 Fourth: *Dolly W.*, Lt. Elsworth, 82nd F.A.  
**CLASS 42.** Novice Polo Mounts:  
 First: *Mr. Weaver*, Lt. Johnson, 7th Cav.  
 Second: *Babe*, Maj. Gerhardt, 8th Cav.  
 Third: *Rosita*, Capt. Griffin, 8th Cav.  
 Fourth: *Roy*, Dr. Goodwin.  
**CLASS 43.** Best Playing Polo Mounts:  
 Champion: *Ruth*, Maj. Gerhardt, 8th Cav.  
 Reserve: *Betsy*, Capt. Cheves, Div. Hq. Tra.  
**CLASS 44.** Team of Four Polo Mounts:  
 First: *Blue Bonnet*, Lt. Reardon, 8th Cav.; *Grey Dawn*, Capt. Donaldson, 8th Cav.; *Cloudy Day*, Capt. Burnett, 8th Cav.; *Mickey*, Lt. Bailey, 8th Cav.  
 Second: *Jeann*, Lt. Hogan, 82nd F.A.; *Bela Clara*, Lt. Fisher, 82nd F.A.; *Almazon*, Lt. Taylor, 82nd F.A.; *Dolly W.*, Lt. Elsworth, 82nd F.A.  
 Third: *Mable*, Lt. Dewey, 8th Cav.; *Norma*, Lt. Rogers, 8th Cav.; *Nancy Carroll*, Capt. Burnett, 8th Cav.; *Pan American*, Maj. Gerhardt, 8th Cav.  
 Fourth: *Nellie*, Lt. Biddle, Div. Hq. Tra.; *Sampson*, Capt. MacDonald, Div. Hq. Tra.; *Eddie*, Lt. Ryan, Div. Hq. Tra.; *Betsy*, Capt. Cheves, Div. Hq. Tra.  
**CLASS 45.** Polo Pony Bending Race:  
 First: *Pan American*, Maj. Gerhardt, 8th Cav.  
 Second: *Mickey*, Lt. Bailey, 8th Cav.  
 Third: *Bela Clara*, Lt. Fisher, 82nd F.A.  
 Fourth: *Dolly W.*, Lt. Elsworth, 82nd F.A.  
**CLASS 46.** Polo Pony Stake Race:  
 First: *Norma*, Lt. Rogers, 8th Cav.  
 Second: *Mickey*, Lt. Bailey, 8th Cav.  
 Third: *Pan American*, Maj. Gerhardt, 8th Cav.  
**CLASS 47.** Cow Ponies:  
 First: *Sam Watkins*.  
 Second: *Tom McKnight*.  
 Third: *Capt. Woolverton*.  
 Fourth: *Dr. Goodwin*.  
**CLASS 49.** Officers' Chargers, (Public Mounts):  
 First: *Blue*, Col. Muller, 8th Cav.  
 Second: *Calf Eye*, Lt. Wright, 7th Cav.  
 Third: *Deacon*, Lt. Fraser, 8th Cav.  
 Fourth: *Chesterfield*, Lt. Britten, 8th Cav.  
**CLASS 50.** Officers' Chargers, (Private Mounts):  
 First: *Frosty Morning*, Lt. Biddle, Div. Hq. Tra.  
 Second: *Zephyr King*, Maj. Glibreath, Div. Hq. Tra.  
 Third: *Mr. Weaver*, Lt. Johnson, 7th Cav.  
 Fourth: *Mr. Dude*, Capt. Burnett, 8th Cav.  
**CLASS 51.** Best Troopers' Mount:  
 First: *Lone Star*, 1st Sgt. Witaski, 7th Cav.  
 Second: *Moan*, Corp. Hutson, 7th Cav.  
 Third: *Booger Red*, Corp. Long, 7th Cav.  
 Fourth: *Angel*, Sgt. Shroat, 7th Cav.  
**CLASS 52.** Military Mounts, Officers:  
 First: *Billy Dean*, Lt. F. O. Dewey, 7th Cav.  
 Second: *Mr. Dude*, Capt. Burnett, 8th Cav.  
 Third: *Trooper*, Lt. Wright, 7th Cav.  
 Fourth: *Lisa*, Capt. Ellis, Div. Hq. Tra.  
**CLASS 53.** Military Mounts, Enlisted Men:  
 First: *Blue*, Corp. O'Neal, 8th Cav.  
 Second: *Lone Star*, 1st Sgt. Witaski, 7th Cav.  
 Third: *Angel*, Sgt. Shroat, 7th Cav.  
 Fourth: *Bold*, Corp. Dugdale, 8th Cav.  
**CLASS 54.** Best Horse in Show:  
*Lone Star*, 7th Cavalry.

### Fort Bliss Polo Tournament, 1933

THE Senior Polo Tournament at Fort Bliss was played during the horseshow with the following results:

October 8: 7th Cavalry 5 Special Troops 2  
 October 11: 5th Cavalry 8 8th Cavalry 6  
 October 15: 7th Cavalry 7 5th Cavalry 6

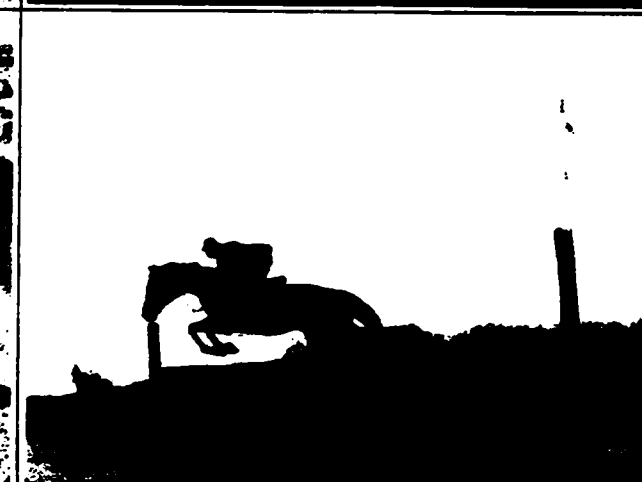
The winning team, which scored the fourth consecutive Post Championship for the Garry Owens, was composed of:

Lt. H. H. Howze No. 1  
 Maj. T. de la M. Allen No. 2  
 Lt. F. O. Dewey No. 3  
 Lt. E. J. Doyle No. 4

Junior Tournament schedule and results follow:  
 Oct. 18: 8th Cav. (C) 10 Special Troops 2

Oct. 22: 7th Cavalry 11 8th Cavalry (B) 9  
 Oct. 24: Freebooters 7 8th Cavalry (C) 3  
 Oct. 29: (Finals)  
 7th Cavalry 7 Freebooters 5  
 The winning 7th Cavalry team lined up as follows:

Lt. H. M. Zeller No. 1  
 Lt. F. F. Wing No. 2  
 Lt. M. C. Johnson No. 3  
 Lt. R. T. Coiner No. 4  
 Substitute: Lt. W. H. Culp



1. A Great Heart. "Sonny Boy," Captain Macdonald Up. Prix des Nations. Two Post and Rail Fences 4 Feet, 3 Inches High. Six Feet Apart. 2. "Huachuca." Major Dornblaser. Hunter Course. 3. "Blue." Owned by U. S. Government and Ridden by Captain Boykin. Winner of the Officers' Chargers (Public Mounts), Military Mounts (Enlisted Men). Jump No. 1 on Panoramic Sketch, Fort Bliss Hippodrome. 4. "Nick Carter," owned by Major F. Glibreath and Ridden by Jane Bancroft. Winner of the Hunters (Lightweight), Ladies' Hunters and Hunter Championship. Jump No. 7 on Panoramic Sketch, Fort Bliss Hippodrome. 5. Comedy. Lieut. Biddle Right Out of China. 6. More Comedy. Captain Shotwell Up.



# The Foreign Military Press

Reviewed by Major Alexander L. P. Johnson, Infantry

MEXICO—*Revista del Ejercito y de la Marina*—June, 1933.

"Establishment of Schools of Application," Official Decree.

On June 8, 1933, the Mexican War Department issued an order announcing the establishment of a school of application, which in a general way apparently is to be modeled along the line of the special service schools of the United States Army. With the creation of such an institution, the Mexican Army will be provided with a well rounded system of military education and training. The plan also provides for special courses of instruction for non-commissioned officers. The course of instruction will be for one year. This new institution, like all military schools in Mexico, is under the direct control and supervision of the "Direccion General de Educacion Militar" (Directorate General of Military Education).

AUSTRIA—*Oesterreichische Wehrzeitung*—August 4, 1933.

"Fire Protection During Aerial Attacks," by Major Hugo Schörgi.

Modern bombers employing thermite incendiary bombs of about 50 kg. each may cause simultaneous conflagrations of a serious character in several parts of a city and thus overtax the capacity and resources of the best fire-fighting organization. The amount of damage an aerial bombardment may cause under favorable conditions is beyond the possibility of estimating. The author believes that this situation opens a fertile field for the "civilian antiaircraft defense." Aside from providing an adequate fire-fighting organization and apparatus, he considers certain structural reforms as indispensable. In order to prevent the rapid spread of conflagrations, the author believes the modern city should consist of detached structures set back from the street. This will also favor the rapid dissipation of toxic gases. He also advocates zoning of residential, business and industrial districts. The modern city should have an ample water supply.

The author points out that lumber used for structural purposes will ignite at a temperature of 400 degrees centigrade. Since the modern thermite bomb produces a heat of 2000-3000 degrees, he advocates the use of building material capable of resisting such temperatures. In his opinion, steel armor-plate protection for roofs would further decrease the vulnerability of the modern city against incendiary bombs.

FRANCE—*Revue des Forces Aeriennes*—July, 1933. "Military Aviation in Russia." General Information.

According to Swedish sources Soviet Russia actually had in commission at the beginning of 1932 a total of 2000 airplanes, including 800 reconnaissance planes, 400 bombers, 400 pursuit planes and 400 seaplanes.

—*Militär Wochenblatt*—July 18, 1933.

"Organization and Tactical Employment of the French Machine Gun Company," by 318.

The French machine gun company consists of company headquarters of two sections: 1. communications and intelligence, 2. supply; and four platoons of two sections with two guns each. The gun commander is a lance corporal. Four men comprise the gun crew. The company has eight ammunition carts.

Machine guns are always used in pairs, never singly. The maximum range of the French machine gun is 4300 meters. It has a rate of fire of 400-500 rounds per minute. The practical rate of fire is only 250 rounds per minute. The gun weighs 24 kg., the tripod 25 kg. It can effectively be used against aircraft at 1000 meters.

The machine gun company of a front line battalion habitually uses direct fire, while the machine guns of rear battalions employ indirect fire. The French consider the ranges between 1000 and 1500 meters most effective for direct fire, although good results may be obtained up to 2400 meters. The platoon is normally employed as a unit, and the guns are, as a rule, so placed that the platoon commander can effectively control their fire by word of command. The two guns of a section are never emplaced closer than 15 meters.

Machine guns are not permitted by the French, the author states, to fire upon any target within 500 meters, nor are they allowed to lay down a band of fire closer to their own than 200 meters. The French regard observed fire at ranges in excess of 2400 meters impracticable. Machine guns employing direct fire are generally emplaced 500-1000 meters behind the front line. As a consequence the combined fire of these guns covers the zone situated from 500 meters to 1200 meters in advance of the front line.

The author believes that the French plan of employing machine guns permits the attacker to approach the defensive line to a distance of 1200 meters without encountering serious opposition. At 1200 meters, however, the attacker would come under the overwhelming fire power of the defense. Only by taking full advantage of the terrain can the attacker hope to keep down his casualties. In this connection the author points out, that normally the French employ single guns to sweep intermittently the terrain to their front. Since the lateral dispersion of the machine gun equals about 1/10 to 2/10 of the range, or 200 to 500 meters, the author concludes that the probability of hits is actually small during this type of fire. But, he adds, as soon as the French discover a paying target, they put in action as many guns as may be necessary for its destruction. Hence the attacker must endeavor to

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make his advance skillfully, taking full advantage of the terrain to mask his movements, and above all, he must avoid presenting to the enemy conspicuous targets.

—*Militär Wochenblatt*—September 11, 1933.

"Japanese Imperialism," by "B. B. Z." 387/33

General Araki, Japan's Minister of War, and regarded by many as the spokesman of the Japanese Army if not of Japanese Militarism, recently published a pamphlet under the title: "Japan's Way," in which he endeavors to justify Japan's military policy on the mainland of Asia. General Araki defends the view that it is Japan's mission to restore order wherever necessary on the Continent of Asia. He states that Mongolia is neither Russian nor Japanese, nor is it an independent state. It is, however of great strategic importance to Japan, and according to General Araki, his country does not intend to allow Russia to use it as a jumping board for future military operations. He summarizes Japan's mission in Asia in the single word "Kwodo" which, according to the reviewer means "the imperial way," that is to say, the way which the people of Asia must follow under the leadership of Japan.

General Araki writes, that the masses of Asia are the victims of oppression and exploitation by the white race, and that awakened Japan can no longer tolerate the arbitrary attitude of the countries which have been exploiting the people of Asia. It is Japan's moral duty, General Araki states, to oppose any power, no matter how great, which violates the political and moral precepts of "Kwodo."

HUNGARY—*Magyar Katonai Szemle*—August, 1933.

"Influence of Battlefield Conditions upon Marksmanship," by Major Laszlo Keler.

Target range experience shows, the author states, that the fire of a squad of riflemen is more effective against small and scattered targets at short and mid-ranges than either the automatic rifle or machine gun. Against inconspicuous moving targets exposed for only a few moments the automatic rifle is more effective, while against other targets, and at long and extreme ranges the machine gun produces the best results. While the slight dispersion of the rifle enables the trained marksman to obtain excellent results under the favorable conditions of the target range, the author notes that these conditions do not prevail upon the battlefield, hence we cannot expect the same results. Moreover, on the battlefield, the author adds, we are not likely to have the same well-trained personnel. As a rule, the training of the soldier in time of war is limited to a few weeks at the best. Fatigue, battlefield impressions, the effect of hostile fire and a variety of other causes affect the rifleman to a variable extent until at some stage of the battle the actual dispersion extends from the muzzle of the rifle to its extreme range. The author observes that nervousness produced by the most trivial cause will seriously influence the effectiveness of the fire of the best rifleman even on the target range. It can hardly be expected of the average man that he will remember the lessons

of marksmanship taught him hurriedly during the short period of training which preceded his entry into action. This fact emphasizes the importance and necessity of marksmanship training for boys.

In the author's opinion, the fire of automatic rifles is not affected to the same extent as that of rifles. This is largely so because automatic weapons are as a rule entrusted to the well trained older soldiers. Moreover, the construction, the manner of holding the automatic weapon as well as the use of bipods and stock-supports have a tendency of steadying their fire and prevent excessively high shooting. Nervousness, of course, will affect the effectiveness of the auto-rifleman just as adversely as the rifleman. The great advantage of the machine gun, the author states, rests upon the fact that its mechanical fire is not sensitive to the moral and physical condition of the gunner. It is capable of sustaining a fairly accurate and effective fire even though hostile fire has rendered ineffective or even silenced the rifleman or auto-rifleman. It is for this reason that the machine gun has become during the World War the infantryman's most powerful and most feared weapon.

SWITZERLAND—*Allgemeine Schweizerische Militärzeitung*—June, 1933.

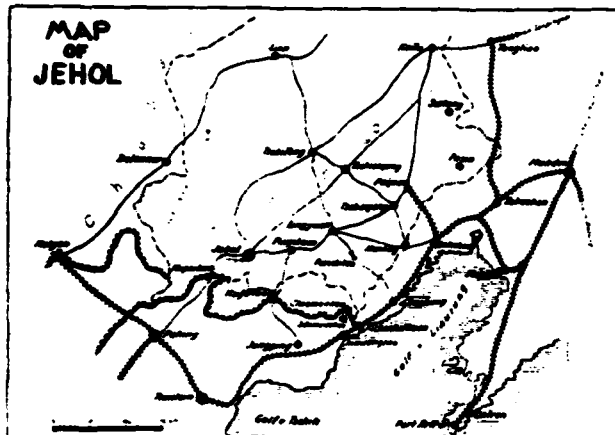
"The Jehol Campaign," by Major Otto Mossdorf.

In January, 1933, the Japanese forces in Manchuria consisted of 4½ divisions (9 brigades), 2 cavalry divisions and 6 railway guard battalions. Of these, 2 divisions, 1 cavalry brigade, air, tank, motor and special units participated in the Jehol campaign under the command of General Muto, commander-in-chief of Japanese forces in Manchuria. Lieut. Gen. Kuniho Koiso was chief-of-staff.

The character of the terrain and available road net practically determined the plan of campaign. Although a winter campaign in that region entailed additional hardships, the Japanese High Command, nevertheless, decided in its favor because of the impassable condition of highways across the mountain passes for modern transportation during the warm season. Moreover, as a result of previous experience, Japanese troops were inured to the hardships of winter warfare.

The Japanese estimated the enemy strength at 200,000 composed largely of volunteers of little military value. The regular troops under General Tang Yu-lin, governor of the province, amounted to about 30,000 men. There existed of course the possibility of strong reinforcements coming into the province from the south and west. It was obviously with that possibility in mind, the author notes, that the Japanese Note of February 21, 1933, to the League of Nations, referred to the menace of 487,000 Chinese troops to the state of Manchukuo which compelled the Japanese to resort to arms. The same consideration prompted the Japanese to seize Shanhaikwan and the Chienmenkou Pass. The Japanese refer to these operations merely as "incidents," yet the capture of these two points secured the Japanese left flank during the subsequent operations in Jehol.

At the beginning of the offensive the Chinese situation was briefly as follows: detachments of volunteers, designated by the Japanese as "bandits," held the eastern frontier. They were reinforced by some cavalry at Kailu. The triangle Peipiao-Tschaujang-Nanling, barring the principal approach to the provincial capital, was held in force. (note: the author's spelling is retained without change to the accepted English form in order to facilitate reference to sketch). The three main lines of defense were: 1. Tschifong-Lingyuan; 2. Pingchuan-Hsifenkou;



and 3. Just east of the City of Jehol. The Chinese forces were under the supreme command of General Tang Yu-lin.

The Japanese 6th Division sent the 11th Brigade to advance with the 4th Cavalry Brigade via Kailu on Tschifong and Tschienping, while the 36th and 4th Brigades made the main effort by advancing on Peipiao. The 14th Brigade, advancing from Suichung in the direction of Paitschitzu Pass, had a flanking mission.

On January 19 Japanese aviators bombed Tschanjang. Small detachments crossed the frontier on the following day. The Chinese garrison of volunteers at Kailu was decisively defeated on January 28. About the beginning of February the Nanking government began to take active interest in Jehol affairs and sent 3000 reinforcements into the province. On February 6, the Japanese bombed Peipiao.

On February 21 General Muto issued his formal attack orders for the following day. In face of the determined advance of the Japanese the Chinese defense collapsed completely. The author states that the volunteers in the advanced positions did relatively better than the regular troops assigned to the main lines of defense. The Japanese captured both Peipiao and Nanling on February 22. Intelligence reports in course of the advance located the Chinese Fifth Army of 45,000 men in the vicinity of Lingyuan.

On February 24, the Japanese delegation withdrew from the League of Nations after 42 out of 44 states

represented had voted against Japan. As the campaign progressed, the Chinese defending force was materially weakened by mass desertions to the enemy. On the other hand, the Japanese found their Manchukuo allies equally undependable. After the desertion of General Yang Yin-po to the Chinese, the Japanese High Command withdrew all Manchu troops to the second line.

On March 1, first anniversary of the establishment of Manchukuo, the Japanese occupied Tschifong and Lingyuan. Again, the author states, Japanese success was in large measure due to the defection of Chinese troops. The desertion of a battalion on the Chinese right flank enabled the Japanese to advance rapidly and to cut off two Chinese brigades, whereupon the remainder of the Chinese Army quit the field in abject flight. The Japanese overran the Chinese positions at Pingchuan and opened the way to the provincial capital, Jehol City, which was actually taken on March 5.

On March 6 General Muto returned to headquarters at Changchun and announced the virtual conclusion of the campaign. On March 8 the Japanese installed General Chang Hai-peng as provincial governor and Japanese civil officials, who had followed in the wake of the conquering army, took over the civil administration of the province. March 10 marks the actual conclusion of the military operations in Jehol with the occupation by the Japanese of Kupeiku, which they had purposely left open for a few days, to give all Chinese north of the Great Wall a chance to clear out of the province.

The author quotes General Araki, Japanese minister of war, to the effect, that the advance to the Great Wall marked the completion of the first phase of the Japanese campaign. This, it is believed, indicates further and even more important operations in the offing. The author notes, that the Japanese already talk about the reestablishment of "Ta-Yuan-Ko," the world-wide empire of Genghis Khan.

In the author's opinion, the Japanese plan of operations was well adapted to existing conditions. The Japanese High Command obviously had complete faith in success as indicated by the employment of only one half of their actually available forces for the execution of the plan. The tactics employed in this campaign were tried out during the preceding campaigns. It generally consisted of a rapid and aggressive advance of the infantry immediately after a severe aerial bombardment which seriously shook the enemy's morale. The native population was generally hostile to the Chinese, a circumstance which added to the difficulties of the Chinese forces. As soon as the Chinese withdrew the Japanese took up the pursuit, employing for this purpose comparatively small detachments. The author regards the employment of the cavalry on the extreme north flank as basically sound even though an envelopment actually failed to materialize because of the early collapse of the Chinese defenses.

## Organization Activities

### 1st Cavalry Division

Fort Bliss, Texas  
Brigadier General Walter C. Short, Commanding.  
COLONELS  
Alexander B. Coxe, G.S.C. William Spence, G.S.C. (F.A.).  
(Cav.), Chief of Staff. G-1 and G-4.  
Joseph C. Kay, Q.M.C. Quarter- Arthur T. Lacey, G.S.C. (Cav.).  
master, G-2.  
Robert J. Foster, V.C. Veteri- Isaac E. Titus, C.W.S., Chem-  
narian, ical Officer.  
Edgar King, M.C., Division Sur- John H. Woodberry, O.D., Ord-  
geon, nance Officer.  
Richard L. Cave, F.D., Finance  
Officer.  
HERBERT C. HOLDRIDGE, A.G.D.,  
Adjutant General.  
LIEUTENANT COLONELS  
Alexander M. Milton, G.S.C. Herbert C. Holdridge, A.G.D.  
(Cav.), G-3.  
William R. Arnold, Chaplain.

### FORT BLISS CIVILIAN CONSERVATION CORPS

#### ACTIVITIES

The C.C.C. reconditioning camp at Fort Bliss opened with the arrival of thirteen enrollees on April 27, 1933. From that date there was never a dull moment until the camp closed July 15, 1933. Originally located on Hayes Avenue, as the camp became more populous it was moved to the C.M.T.C. Area where semi-permanent buildings were available for headquarters establishments, an infirmary, messes, and latrines.

The quota for Fort Bliss was originally set at 800 to be recruited from West Texas, New Mexico and Arizona, but the allotment was increased from time to time until eventually 1695 men had passed through the camp and into the work camps within the Arizona-New Mexico District, for which Fort Bliss is the headquarters.

An average period of two weeks was allotted to the conditioning of each enrollee. His first day in camp was spent in physical examination, enrollment, processing, and general orientation. He was then assigned to a company where full use was made of any special ability which he might possess. Cooks and storekeepers, foremen and overseers found an immediate demand for their services and were welcomed with open arms by company commanders who were faced with the necessity of building an organization capable of func-

tioning in the field within two weeks. These specialists were immediately put into their respective niches and trained principally by actually performing their required duties under the supervision of capable officers and N.C.O.'s. Work details were sent out daily on various post projects, and much was accomplished in landscaping and improving the appearance of the post. Setting up exercises were a part of the daily routine, and sports were not neglected.

At first indoor baseball equipment and quoits were about all that could be provided, but later on each company was furnished with everything necessary for regular baseball games, volley ball and boxing. Many fine athletes were discovered and a considerable amount of keen competition developed.

In the evenings, trucks were run to the El Paso Army Y.M.C.A., which offered its facilities to the C.C.C. enrollees. The chief difficulty was found to be in providing a sufficient amount of transportation for all of the men who desired to take advantage of this opportunity. A combination boxing ring and outdoor stage was erected, and several night shows were given by all C.C.C. talent. Each company also had its own "day-room" located in a semi-permanent building where magazines and writing materials were available.

In short it was a busy two weeks spent in preparation for the field work to come.

The first company to leave departed from Fort Bliss in trucks the morning of May 9th for Camp Redstone north of Silver City, N. M. From that date until July 12th, forest camps were established almost daily from Fort Bliss, San Antonio and Fort Sill, until there were 42 Work Camps in the Arizona-New Mexico District ranging from Fort Davis, Texas, in the southeast, to the north rim of the Grand Canyon, in the northwest, and covering an area of approximately 187,500 square miles.

The district was divided for purposes of administration and supply into 6 areas with a field officer in com-



Mimbres, New Mexico



Little Walnut, 5 miles North of Silver City, N. M.

mand of each area. Each camp initially had two regular army officers and four enlisted men assigned as company personnel. Medical officers were originally allotted at the rate of three for the service of five camps.

The problem of supply has been very difficult. Many of the camps were located in almost inaccessible valleys and the first labor to be undertaken was the construction of roads from camps to highways. One camp is at the bottom of the Grand Canyon, 3,800 feet below the rim. It can be supplied over a 5-mile trail by pack train only. Others are over one hundred miles from rail heads and must be supplied by truck transportation. Each camp has its individual problem, and seldom will the same solution work for more than two or three.

Communications were maintained by all known means. In some cases, telephone systems were available, or were made available by stringing wires from installed commercial lines to camp sites. In the more isolated camps radio was found to be the only practicable service, and 18 sets are now being operated by regular army personnel working in 5 nets. Fort Bliss is kept in daily contact with all area headquarters by this agency. Due to the efficiency of the 1st Signal Troop and the well-trained operators from other post units on duty, this has proven to be the most reliable and useful means of communication within the District. Nearly 5000 messages were transmitted and received in the month of October. Commercial telegraph service was utilized to some extent but this was held to a minimum because of the expense involved.

Nor has the Finance Officer had an easy task. The payment of 11,000 men on camp pay-rolls and 11,000 separate allotments to dependents each month, in addition to normal duties, has placed a load upon this office which can be readily appreciated.

As winter approaches many changes are being made in the location of work camps. Those in the higher altitudes can not be maintained during the cold weather, and several camps are being moved from districts farther north into the Arizona-New Mexico District. Semi-permanent shelter is being erected in new camps and in the ones which will not be moved to replace the tents in which enrollees have lived through the summer months.

Many regular army officers are being replaced by reserve officers and returned to their units. The new quota of C.C.C. enrollees has been recruited, and the camps are preparing for another six months of labor in road building, erosion control, and kindred projects.

No complete picture of the labor connected with the C.C.C. project can be given in a brief article such as this. Suffice it to add that 92 Regular Army officers and 275 enlisted men stationed at this Post have been directly engaged in C.C.C. work at various times since last May, and each unit and supply branch has been directly or indirectly involved in some ramification of its support.

## 2nd Cavalry Brigade

Fort Bliss, Texas

Brigadier General George Vidmer, Commanding.  
Major Pearl L. Thomas, Executive.

Headquarters Troop, 2nd Cavalry Brigade.

CAPTAIN Murray H. Ellis. 1ST LIEUTENANTS Donald H. Nelson, Grant A. Williams.

Special Troops, 1st Cavalry Division.  
Major Frederick Gilbreath, Commanding.

CAPTAINS Herbert A. Myers, John L. Ballantyne, George B. Hudson, Henry M. Zeller, Jr.

2ND LIEUTENANT Angelo R. Del Campo, Jr.

## Fort Bliss Sports Notes

### Basketball

On March 4, 1933, Brigadier General Walter C. Short, Commander of the 1st Cavalry Division, presented the 8th Cavalry with the Fort Bliss Basketball Championship Cup for the year 1932. The 8th Cavalry basketball team has made the remarkable record of having played through the seasons of 1931 and 1932 without losing a game in post competition.

### Baseball

Four teams were entered in the race for the baseball pennant at Fort Bliss in 1933. They represented the 7th Cavalry, 8th Cavalry, 1st Battalion, 82nd Field Artillery, and Troop A, 1st Armored Car Squadron. The season was divided into two parts, the 7th Cavalry winning the first half and the 8th Cavalry the second. The championship was decided by a five game series between the two regimental teams. After a hard struggle which aroused considerable interest not only in Fort Bliss but in El Paso as well, the 7th Cavalry won the deciding game, the series, and the championship.

On October 21st a parade was held in the 7th Cavalry Regimental Area and Brigadier General George Vidmer, commanding the 2nd Cavalry Brigade, presented the much coveted baseball trophy to the team, and an individual trophy in the form of an engraved baseball watch charm to each of the players.

## 1st Battalion, 82nd Field Artillery

Fort Bliss, Texas

Lieutenant Colonel L. C. Sparks, Commanding.

MAJOR Ray C. Rutherford. Edward J. McGaw, William W. Ford, Robert A. Ellsworth.

CAPTAINS Lester J. Whitlock, 2ND LIEUTENANTS John J. MacFarland, Arthur H. Hogan, Merle L. Fisher, Dean A. Herman, William Taylor, Jr., Paul E. LaDue, Daniel Parker, Jr., John R. Brindley, William O. Darby, George T. Powers, 3rd.

Stockbridge C. Hilton.

William B. Weston.

Earl A. Hyde.

Arthur F. Doran.

Hugh B. Hester.

Fred B. Lyle.

1ST LIEUTENANTS George F. McReynolds, Lloyd R. Garrison, Raymond G. Miller.

The 1st Battalion, 82nd Field Artillery, is the only battalion of Horse Artillery in the United States Army. Horse artillery is distinguished from horse drawn artillery by the fact that all men, even the cannoners, are mounted on horses.

### Training

a. *Radio Communication.* Each battery is now equipped with two SCR 163 pack radio sets and one SCR 109A set. The former are for all communication

except with the Air Corps; the latter must of necessity be used for that, due to the wave length of sets now issued to Air Service. Much time has been devoted to this training. The battalion net is established at every opportunity and unusual proficiency has been attained. This form of communication has been used in the conduct of fire at service practice. A liaison officer equipped with a SCR 163 set frequently accompanied the Advance Cavalry Commander. When the advance was checked this liaison officer would "open station," call the Artillery Commander who would then designate a battery to bring desired fire to bear to clear the way.

Extensive exercises and maneuvers with the Air Service were held throughout the year. At service practice, fire from the air was conducted by an artillery officer.

*Gunners' Instruction.* The present Chief of Field Artillery has established a new system of Gunners' Examination. This system requires an enlisted man to be proficient in certain subjects designated by the battery commander and also demonstrate his knowledge of other subjects chosen by himself. The subjects from which he can choose range from driving a pair of artillery horses to the preparation of firing data and from the operation of a pair of semaphore flags to the firing of a machine gun. At our last examination in April, 1933, 276 were qualified as expert gunners, 32 were qualified as first class gunners, 86 were qualified as second class gunners and 67 failed to qualify or were excused from taking the examination.

*Machine Gun and Automatic Rifle Firing.* Due to the importance of defense against hostile aircraft considerable time has been spent in firing automatic rifles and machine guns. A very reasonable ammunition allowance was provided prior to the Economy Act and much progress was attained. However, the present towed targets do not give sufficient practice in actual marksmanship into the air.

About fifty enlisted men of the battalion are proficient in this phase of an artilleryman's education.

*Target Practice.* Owing to the fact that Castner Range, about six miles from Fort Bliss, is comparatively shallow in depth, it is necessary for this unit to go to the Dona Ana Target Range, a distance of twenty-eight miles, for its service practice. Three such trips were made during the past year for this purpose; one in November, 1932, one in March, 1933, and again in April, 1933. Here it is possible to fire many different types of problems over varied terrain. A bombproof was built last spring which made it possible to fire from positions corresponding to front lines. A map also was developed whereby gun positions, observation posts, and targets could be accurately located and fire prepared therefrom.

Subcaliber practice has been held at Castner Range. Some time has been devoted to firing at fast moving targets but to date our results have been none too satisfactory. The 75 mm. Gun (French, Model 1897, with its collimator sight and no handspike does not readily lend itself to fire on this type of target.

*Portée Battery.* Battery C has been designated

as a portée battery and about once a month it loads all its matériel and the necessary horses in trucks and trailers. A platoon demonstration was given during the 1933 1st Cavalry Division Horseshow.

*Knox Trophy.* The Knox Trophy test was taken by Battery B, 82d Field Artillery, in November, 1932. This test is held annually throughout the Field Artillery. It covers mobility, conduct of fire, communications tests, and interior economy. Battery B failed to win the competition; however, they made a very creditable showing.

*Armored Railway Cars.* This unit provides the personnel to man the two Armored Railway Cars at Fort Bliss. This detail which functions in addition to its other duties is assembled about once each month for such training. These cars are each armed with a 75 mm. British gun and certain small arms.

*Citizens Military Training Camp.* The artillery section of the C.M.T.C. in 1933 consisted of twenty boys. They were trained by Battery B.

*Organized Reserves.* During the year fifteen Reserve Officers were trained by this unit. Ten during the period October 15-25, 1933, and five individually at odd times throughout the year.

*Civilian Conservation Corps.* The C.C.C. dealt this unit a heavy blow. When at its height it took all the officers of the battalion except the Battalion Commander, an adjutant, and one officer for each of our four batteries. Three of the latter were Second Lieutenants of short service. Our contribution of enlisted men to this worthy activity was approximately eighty including radio personnel and matériel for three headquarters in the field. All men with the C.C.C. have done excellent work but the superior performance of duty of the radio operators has in a large measure contributed to the success of the entire C.C.C. project. At present the number of enlisted men with the C.C.C. has been cut to fifty, and the absent officers reduced to eight, one of whom is an area commander, three are assistant area commanders, and four are company commanders.

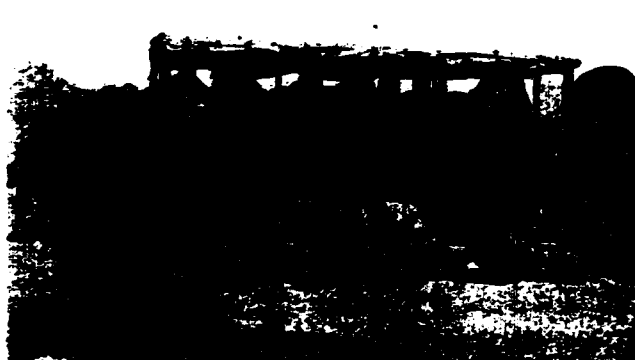
## FIRST CAVALRY DIVISION QUARTERMASTER TRAIN

Major Horace T. Aplington, Commanding.

CAPTAIN Kirk Broadbush, Q.M.C. (Cav.) 1ST LIEUTENANTS John B. Luscombe, Q.M.C. Roy M. Foster, Q.M.C. (Inf.).

The most interesting event of the past season, and the one most likely to have far-reaching results, was a portée-cavalry excursion into the heart of the Big Bend country arranged as a field test for experimental equipment. The organization selected for the test was the 1st Squadron, 7th Cavalry, with Troop A, 1st Armored Car Squadron, attached. The carrying convoy was a detachment of the 49th Motor Transport Company, commanded by 1st Lt. Duval C. Watkins, QMC, 1st Cavalry Division Quartermaster Trains, and including the following vehicles: twenty-four Modified Class B Trucks, twenty-three eight-horse trailers, three FWD trucks M1930, three kitchen trailers, four light trucks, two T1 Wagons, three passenger cars, three tankers, and a motorcycle.

Of these vehicles the horse trailers, the kitchen trailers, and the T1 wagons were of an experimental nature.



Horse Trailer loading at Fort Bliss.

The horse trailers were designed to carry eight horses, the horses facing across the direction of movement; the trailers to be drawn by the same truck that transports the forage, personnel and equipment pertaining to the horses carried. The kitchen trailers are equipped with gasoline-burning ranges and were designed to prepare meals while moving. Their purpose is to minimize the time required for cooking and serving meals while en route and not to entirely supplant the field cooking equipment carried by the convoyed troops. The horse and kitchen trailers were designed by Lt. Watkins and constructed under his direction from salvaged material in the shops of the 81st Motor Repair Section. Brigadier General Walter C. Short, commanding the post and 1st Cavalry Division, recognized the worth of the experiment from the start, and his approval, advice and encouragement insured the success of the project. The T1 wagons were designed by Major Cuyler Clark as combination motor-trailers and animal-drawn vehicles. They are of all-steel construction, light, and are mounted with doughnut pneumatic tires. Tests have disclosed a pay load capacity equal to that of the escort wagon and an energy consumption of only about one-third that of the escort wagon. The task of constructing these vehicles was performed in a highly commendable manner by Mr. Timothy A. Williams, our Post Wheelwright.

Following are excerpts from a report of the Quartermaster General's representative made to the Quartermaster General:

"... The first twenty-seven hours out of Fort Bliss, was continued driving—... Trucks after leaving Alpine, Texas, en route to Terlingua were traveling over narrow mountain trails, grades running from three to fifteen per cent. Part of this mountain road is improved gravel and part is unimproved wagon road. Many of the towing trucks stalled on thirteen per cent grades and had to be doubled over the incline... The greatest weakness developed was insufficient power of the (four cylinder) converted Class "B" trucks to tow the loaded horse trailers. ... In general the horse trailers proved to be a success for the movement of cavalry."



In Camp at Terlingua, Texas.

The utility of gasoline-burning kitchen trailers and the T1 wagons was thoroughly proven. Halts for noon meals on the march were reduced to less than an hour, and hot meals were invariably served. The T1 wagons were equally efficient whether towed by trucks or drawn by horses.

During the summer just past the Train was considerably involved in the Civilian Conservation Corps program of the Arizona-New Mexico District. Insofar as was practicable the Train furnished transportation to the camps as they were established. It controlled the hire of commercial trucks to supplement those furnished. During June the Train received, serviced and delivered about one hundred motor units to forty-seven camps and area headquarters which were spread over an area of about 187,500 square miles. Thereafter the Train problems diminished greatly and consisted mainly of maintenance and parts supply for all C.C.C. vehicles. This was and is being handled thru the use of the 81st Motor Repair Section shops at this station and by a Mobile Repair Unit which was organized for the purpose, and visits all camps periodically.

### Troop A, 1st Armored Car Squadron

Fort Bliss, Texas  
Captain John C. Macdonald, Commanding.  
1st LIEUTENANTS  
Hubert W. Ketchum, Jr. John L. Ryan, Jr.

During the past spring and summer, Troop A, 1st Armored Car Squadron, has made numerous reconnaissances. On these trips about 30 per cent of the travel was on paved or improved highways; 40 per cent was unimproved country roads; and the remaining 30 per cent was straight cross-country travel.

An interesting account of the activities of this unit will be published in the next issue of the CAVALRY JOURNAL.

### 1st Cavalry Brigade

Fort Clark, Texas  
Brigadier General Hamilton S. Hawkins, Commanding  
MAJOR  
James G. Monihan, Executive. Wesley W. Yale, A.D.C. to General Hawkins.  
CAPTAIN  
Truman E. Boudinot, S-2 and S-3.  
Headquarters Troop, 1st Cavalry Brigade.  
1st LIEUTENANTS  
Thomas T. Thornburgh. Dana G. McBride.

## The Cavalry School

### Fort Riley, Kansas

Brigadier General Abraham G. Lott, Commandant.  
COLONEL  
Bruce Palmer, Assistant Com-mandant.  
John Millikin, Director of Instruction.  
Rexford E. Willoughby, Secretary.

Cavalry Board  
LIEUT. COLONEL  
Edgar M. Whiting  
MAJORS  
Lawrence C. Frizzell  
Harry E. Saylor, Ord. Dept.

Department of Tactics  
MAJORS  
Geoffrey Keyes (Chief)  
Bernard R. Peyton, P.A.  
John F. Stevens.  
Thomas L. Martin, Inf.  
James W. Barnett.  
Richard L. Creed.  
CAPTAINS  
Vernon L. Padgett.  
Lowell A. Elliott, C.W.S.

Department of Weapons  
MAJORS  
Adolphus W. Hoffe  
Joseph L. Phillips.  
Richard B. Trimble.  
Frank L. Whittaker.  
Clinton A. Pierce.  
Rosenham Beam, Air Corps.  
1st LIEUTENANTS  
Richard Lee, 9th Engrs  
Wm. L. McEnery, S.C.

Department of General Instruction and Publications  
MAJORS  
Kenna G. Eastham (Chief).  
Donald S. Perry.  
Department of Horsemanship  
MAJORS  
John DeWitt, Jr. (Chief).  
Arthur P. Thayer.  
CAPTAINS  
Vernon L. Padgett.  
Kent C. Lambert.  
Paul H. Morris.  
James C. Short.  
1st LIEUTENANTS  
Earl F. Thomson.  
Peter C. Hains, III.  
Supply Officer, Academic Division  
CAPTAIN  
Alexander B. MacNabb.  
Post of Fort Riley

LIEUT. COLONELS  
William C. Christy, Executive.  
Max A. Elser, Q.M.C. Quartermaster.

MAJOR  
Thomas McF. Cockrill, Assistant.

COLONELS  
Edgar W. Miller, M.C., Surgeon.  
John A. McKinnon, V.C., Veterinarian.

MAJORS  
Charles A. Wickliffe, J.A.G.D., Judge Advocate.  
Perry O. Wilcox, Chaplain.  
Henry E. Saylor, O.D., Ordnance Officer.  
Wilson T. Bals, Provost Marshal.

1st LIEUTENANTS  
Harry A. Patterson, Post Exchange, Recreation and Post School Officer.  
Charles E. Dissinger, Adjutant.  
Alexander B. MacNabb, Supply Officer, Misc. Troops.  
Alston B. Ames, Assistant Commandant, School for B&C.

1st LIEUTENANTS  
Elmer V. Stansbury, Range Officer.  
Charles G. Meehan, ADG to General Lott.  
Paul A. Disney, ADC to General Lott.  
James R. Manees, FD, Finance Officer.  
William L. McEnery, S.C., Signal Officer.  
William J. Walsh, Assistant Chaplain.  
Richard Lee, 9th Engrs., Post Engineer Officer.

Students, Advanced Course  
MAJOR  
James R. Finley.  
CAPTAINS  
Herbert V. Scanlan.  
Harry W. Maas.  
Donald R. Dunkle.  
Alexander G. Olsen.  
Students, Advanced Recitation Course  
1st LIEUTENANTS  
George G. Elms.  
John B. Reybold.  
Halley G. Maddox.  
2nd LIEUTENANTS  
Theodore S. Riggs.  
Students, Troops Officers' Course  
CAPTAIN  
Jorge Castellanos, Mexican Army.  
1st LIEUTENANTS  
Ond C. Wilson, Inf.  
Henry R. Westphalinger.  
2nd LIEUTENANTS  
Walter E. Finnegan.  
John G. Minniece, Jr.  
Paul W. Shumate.  
Charles B. McClelland.  
Edwin H. J. Carns.  
John J. LaPage.  
George W. Coolidge.  
Milton A. Acklen.

MAJORS  
Mark A. Devine, Jr.  
Harry Knight.  
Hugh G. Culton.  
William S. Conrow.  
Ralph T. Garver.  
Raymond W. Curtis.

MAJORS  
Paul D. Harkins.  
Thomas F. Taylor.  
Edward J. McNally.  
Eric H. J. Svensson.  
Louis M. de la Riemer.  
Hugh W. Stevenson.  
James B. Quill.  
Tsi-Hsi Yuan, Chinese Army.

## First Cavalry (Mechanized)

### Fort Knox, Kentucky

Colonel Daniel Van Voorhis, Commanding  
LIEUT. COLONEL  
Adna R. Chaffee  
MAJORS  
Robert W. Grow  
Isaac G. Walker.  
CAPTAINS  
Harold B. Gibson  
Floyd M. Hyndman.  
Leslie F. Lawrence.  
Cornelius F. O'Keefe.  
Carl J. Rohsenberger.  
Hal M. Rose.  
Wallace C. Steiger.  
Richard E. Tallant.  
Charles H. Unger.  
Andrew J. Wynne.  
1st LIEUTENANTS  
Charles V. Barnum.  
Donald H. Bratton.  
John C. Hamilton.  
Aladin J. Hart.  
Harrison H. D. Hebert.  
Clifford I. Hunn.  
Milo H. Matteson.

## 2nd Cavalry

### Fort Riley, Kansas

Colonel Selwyn D. Smith, Commanding  
LIEUT. COLONEL  
Hugh H. Broadhurst.  
MAJORS  
Joseph Plassmeyer.  
Clarence C. Benson.  
Lester A. Sprinkle.  
1st LIEUTENANTS  
William E. Barott.  
Frank Nelson.  
John E. Selby.  
Alfred L. Baylies.  
Lathan H. Collins.  
Lloyd W. Bixas.  
James B. Taylor.  
Edwin M. Sumner.  
Harry E. Dodge.  
Manly F. Meador.  
Carl J. Dockler.  
Lawrence Patterson.  
Henry M. Alexander.  
2nd LIEUTENANTS  
George A. Brickman.  
Joseph F. Haskell.

The regiment has been employed during the past year in experimental work in connection with developing and perfecting a new table of organization to meet the needs of the present day Horse Cavalry. This work has been carried on in conjunction with Cavalry School activities and has consisted of developing a means of transportation for troop supplies by means of a pack train, using the Phillips Pack Saddle, and a Motorized Field Train. A Scout Car Platoon of seven cars has been organized and trained. Many experiments were also made with the Cal. .50 Machine Gun.

On June 25th, 20 Chevrolet 1½ ton cargo trucks were received for test. These trucks have been driven approximately 2,200 miles since date of receipt and have proven satisfactory.

During the year a total of 43 remounts have been received; of these 31 are still undergoing training. In addition 36 horses were received from the Academic Division. The Cavalry School.

Ninety-six recruits have been assigned during the year. All have been turned to duty with the exception of 30 now undergoing instruction.

Due to the absence of many officers and enlisted men on C.C.C. duty, the athletic activities have been greatly hampered. Squadron football teams have been organized and are now playing regular games in the Fort Riley League.

Supplementary rifle practice is now being conducted for recruits.



### Third Cavalry (Less 1st Squadron)

Fort Myer, Va.

Colonel Kenyon A. Joyce, Commanding.

MAJORS	1ST LIEUTENANTS
George S. Patton, Jr.	Christian Knudsen.
Alexander D. Barles.	Donald W. Sawtelle.
	Willard G. Wyman.
	Kenneth G. Hoge.
	Leslie M. Grener.
	Eugene L. Harrison.
	Wilbur K. Noel.
	Clarence W. Bennett.
	William A. Fuller.
CAPTAINS	2ND LIEUTENANTS
George I. Smith.	Loren F. Cole.
James T. Menzie.	John K. Waters.
Thomas W. Ligon.	George R. Mather.
Lecian K. Truscott, Jr.	Frank S. Henry.
Callie H. Palmer.	Marshall W. Frame.
Leo L. Goecker.	
Frank A. Allen, Jr.	
Marion Carson.	
Claude O. Burch.	

#### HEADQUARTERS THIRD U. S. CAVALRY

Fort Myer, Virginia.  
July 18, 1933.

#### GENERAL ORDERS NO. 6

1. The death of Captain John W. Weeks, 3d Cavalry, which occurred at Walter Reed General Hospital at 6:15 P. M., July 17, 1933, is announced with deep regret.

Captain Weeks was born at Aiken, South Carolina, on January 9, 1892. He graduated from The Citadel, Charleston, South Carolina, in the class of 1913 with the degree of Bachelor of Science.

His military service was as follows:

He entered the 1st Infantry, North Carolina National Guard, as Battalion Sergeant Major on July 5, 1916. He was promoted to Regimental Sergeant Major and finally terminated his service with the National Guard on February 16, 1917.

He was appointed 2d Lieutenant of Field Artillery on June 3d, 1917; promoted to 1st Lieutenant on June 3d, 1917; and Captain, August 5th, 1917. Transferred to the 3d Cavalry, August 17th, 1917. Promoted to Captain, Regular Army, June 30th, 1920.

Captain Weeks graduated from the following Special Service Schools: Ordnance School of Technology, 1921; The Cavalry School, Troop Officers' Course, 1922; Chemical Warfare School, 1922; The Cavalry School, Advanced Course, 1930.

His service in the 3d Cavalry was as follows: Troop Commander, Overseas, August 17, 1917 to May 20, 1919. Regimental Adjutant May 20, 1919 to August 14, 1921, on which date he was transferred to The Cavalry School. Reassigned to the 3d Cavalry May 30, 1932. Appointed Regimental Supply Officer July 1, 1932, in which capacity he served until the time of his death.

2. In the death of Captain Weeks the garrison of Fort Myer, Virginia, and the Army as a whole loses an outstanding soldier and a devoted friend.

The example of fortitude and cheerfulness displayed by Captain Weeks in the face of the sure knowledge that he was suffering from an incurable malady was an inspiration to all. His courageous devotion to duty to the last accords with the best traditions of our Army.

KENYON A. JOYCE,  
Colonel, 3d Cavalry,  
Commanding.

On September 20th the 3rd Cavalry (less 1st Squadron), under command of Major A. D. Surles, left this station for a ten days' practice march and service in the field near Marshall, Virginia. During the stay of several days near Marshall, an exhibition ride was given at the Fair grounds and a series of polo matches played with the Marshall Polo Club.

Colonel Joyce joined the Regiment at Marshall and took command for the return march to Fort Myer, camping at Aldie and Fairfax, Virginia enroute.

Among the new arrivals at this station are L. C. W. Thayer, M. W. Frame and F. S. Henry of the 1933 Class at the Military Academy. Lt. Thayer resigned his commission on September 15th, a day or two after joining. Captain Frank A. Allen, Jr. joined from Governor's Island, N. Y. on September 15th and Captain Leo Goecker from the 4th Cavalry at Fort Meade, South Dakota, on October 5th.

The 2nd Squadron, 3rd Cavalry under Major A. D. Surles participated in a special exhibition ride and drill for the delegates to and guests of The Triennial Meeting of the Royal Arch Masons at the Riding Hall on October 9, 1933.

Troop F, 3rd Cavalry, under command of Captain George I. Smith attended the Fair at Bennings, D. C., staging daily exhibitions of wild west and rodeo riding. Later this same troop participated in the Washington Hunt Club Horse Show at Rockville, Maryland, staging two exhibitions on October 14, 1933.

### First Squadron, Third Cavalry

Fort Ethan Allen, Vermont

Lieutenant Colonel Arthur E. Wilbourn, Commanding

MAJOR	1ST LIEUTENANTS
Gordon J. F. Heron.	Joseph M. Glasgow.
	Richard B. Evans.
	John H. Claybrook.
CAPTAINS	2ND LIEUTENANTS
Theodore B. Apper.	Charles G. Dodge.
Lawrence B. Wyant.	Edwin M. Cahill.
Robert E. Gallier.	James L. Dalton.
Randolph Russell.	

The following officers of this squadron are now on duty with the Civilian Conservation Corps:

Major Gordon J. F. Heron, commanding the 392nd Company, CCC, (Veterans), Rutland, Vermont, since September 15, 1933.

Captain Randolph Russell, on special duty with the Civilian Conservation Corps as Transportation Officer for CCC; in charge of work projects of CCC in the Reconditioning Camp, Fort Ethan Allen, Vermont.

First Lieutenant Richard B. Evans, commanding the 167th Company, CCC, at Danby, Vermont, since May 19, 1933.

First Lieutenant John H. Claybrook, commanding the 121st Company, CCC, West Burke, Vermont, since June 9, 1933.

Second Lieutenant Edwin M. Cahill, on special duty with the Civilian Conservation Corps at the Reconditioning Camp, Fort Ethan Allen, Vermont, as Camp Adjutant.

In addition to the officers, there are still several noncommissioned officers and cooks out on CCC duty.

Weather conditions indicate an early winter, and in addition to the usual garrison duties considerable effort will be made to maintain a separate stable of green horses to be trained as officers' mounts and for equitation and polo. Special classes for officers, non-commissioned officers and selected privates have been planned for these activities.

A special study of early military operations in the Lake Champlain region during the period 1700-1782 is being arranged. This course of study is one that will create considerable interest among the officer personnel of the squadron.

Because of the pressure of CCC duties and training of the civilian components of the Army, sports and athletics were not given much attention this past summer and fall. Troop A was runner-up in the Baseball Championship of the Post. Troop B is leading in the Post Soccer league with 5 wins and 3 more games to play.

The squadron has a large share of representatives in the Post Football and Soccer teams.

### Fourth Cavalry

Fort Meade, South Dakota

Colonel W. R. Pope, Commanding.

MAJORS	1ST LIEUTENANTS
K. Bradford.	C. E. Morrison.
W. M. Modisette.	V. F. Shaw.
C. Hazeltine.	J. H. Stodter.
	F. H. Bunnell.
	H. E. Walker.
	G. W. Busbey.
	R. L. Land.
	T. J. H. Trapnell.
	C. P. Bixel.
	L. L. Doan.
CAPTAINS	2ND LIEUTENANTS
C. McLennan.	T. F. Van Natta, III.
A. Besse.	C. H. Prunty.
H. Hutchinson.	
H. Minuth.	
R. Rogers.	
P. Upton.	
S. Cramer.	
S. Robertson.	
S. Bertholet.	
J. Healy.	
D. Massey.	
W. Barriger.	

Colonel W. R. Pope assumed command of the Regiment on June 28, 1933.

The field meet last fall resulted in a tie for first place for the organization trophy between Headquarters Troop and Troop F. Each was presented with an identical trophy. The trophy in the very successful Fort Meade Basket Ball League was won by Troop A, whose team consisted of Corporals Strain and Duvall and Privates Bachleitner, Miklouich and Fahrenwald. This team entered the American Legion Tournament, but was eliminated in the second round, after having eliminated the favorites in the first round. The team bowling tournament was won by Troop F, the individual events by 1st Sergeant Gibson and Corporal Fancher, Troop F. (doubles) and Corporal Beck. Machine Gun Troop (singles). Several boxing shows were put on during the winter, the best boxer on the post turning up in Private Ramundo, who outpointed Corporal Hutcherson, both of Troop A, in the season's most important bout. The Headquarters Troop hockey team, consisting of 1st Sergeant Geoffrey, Sergeants Brossard and McGlone, Corporals Mowrey and Belobraidick and Privates Moorman, Fuller and Simmons, represented the post in outside games and won seven games and lost none. The Officers' Dramatic Club during the winter successfully presented two plays, "Nothing but the Truth" and "Kick-in" in the War Department Theater, which has been fitted up for dramatics.

The Post baseball league ended in a victory for the Headquarters Troop team, and the Post team, captained by Sergeant Billings, had a successful season with civilian teams, resulting in fifteen victories and five defeats. The Fort Meade-Sturgis golf team came out sixth in the twelve-club Black Hills League. The regimental polo team, consisting of Captains Healy and Rogers and Lieutenants Van Natta and Porter, ended an abbreviated season by receiving cups for

the runner-up position in the Frontier Days Tournament at Fort Fancis E. Warren, at Cheyenne, Wyoming. Other officers playing polo were Captains Upton, Cramer, and Bertholet and Lieutenants Morrison and Stodter. A Gymkhana for enlisted men only, held this fall, furnished keen competition and resulted in a victory for Corporal McGinty, Troop A, in the principal event. The Fort Meade Stakes. Good trout fishing was had during the summer and prairie chicken, pheasant and duck hunting this fall.

In the spring, Fort Meade was designated as headquarters of the South Dakota District, Civilian Conservation Corps, and erected a reconditioning camp of 1000-man capacity on the flat, just south of Bear Butte Creek, from which personnel was sent out for a total of eighteen work camps in the Black Hills. Work in the reconditioning camp was rendered difficult by heavy rains during the construction period, and the worst flood in years during its occupancy. The work camps were originally furnished officers from the regiment and from Forts Riley and Leavenworth, and some officers of the 4th Cavalry were sent to the Minnesota District. Enlisted cadres were furnished from the regiment. Reserve officers are now taking over from regular camp commanders.

Training was considerably curtailed during the organization period of the CCC, but the regimental training program, which is arranged in identical quarterly cycles of thirteen weeks each, has insured as much training as practicable in the circumstances. About 150 recruits have been received since the beginning of the year, and all have had the prescribed curtailed target practice, and all old men have run the saber course.

The riding hall has been completed, but is being used as a CCC warehouse, while the gymnasium will not be available this winter because it is housing the CCC commissary.

Fifty workers of the Federal Emergency Relief Administration are engaged in work on the post, at present in the improvement of the skating rink and the construction of a bridle path along the Bear Butte Creek, the trees along which will afford a wind-break in winter and shade in the summer.

The following officers have recently left the regiment to take up the duties indicated: Colonel O. W. Rethorst, former regimental Commander, to recruiting duty at Minneapolis, Minnesota. Captain L. L. Goecker, Fort Myer, Virginia, 2nd Lieutenant C. H. Born, student at the Air Corps School, 2nd Lieutenant H. W. Stevenson, student at the Cavalry School, 2nd Lieutenant J. R. Ranck, Fort Ringgold, Texas, and 2nd Lieutenant R. W. Porter, student at the Signal School, Regimental Sergeant Major O. W. Messenger, after thirty years service, every day of which was in the 4th Cavalry, retired from active service on July 31, 1933, and is now living in Denver, Colorado.

The post was saddened by the unexpected death of Mrs. Cobler, wife of Staff Sergeant George W. Cobler, who has acted as hostess of the Officers' Club for a number of years past.

## Fifth Cavalry

Fort Clark, Texas

Colonel Wallace B. Scales, Commanding.  
 LIEUT. COLONEL  
 Joseph C. King.  
 MAJORS  
 Victor W. B. Wales.  
 Spencer A. Townsend.  
 James B. Wise, Jr.  
 CAPTAINS  
 Burton C. Andrus.  
 James C. Ward.  
 Walter W. Boon.  
 Curtis L. Stafford.  
 Malcolm Byrne.  
 John N. Gross.  
 Carlton Burgess.  
 Howard A. Boone.  
 Ralph E. Ireland.  
 Oscar W. Koch.  
 Wilford R. Mobley.  
 1ST LIEUTENANTS  
 David A. Taylor.  
 Clarence C. Clendenen.  
 Arthur K. Hammond.  
 John K. Sells.  
 Dana G. McBride.  
 John O'D. Murtaugh.  
 Clark L. Ruffner.  
 Roger A. Gardner.  
 George V. Ehrhardt.  
 Alexander M. Miller, III.  
 2ND LIEUTENANTS  
 Charles C. W. Allen.  
 Cornelius A. Lichtrie.  
 James E. Corbett.  
 James C. Blanning.  
 Randall E. Cashman.  
 Thomas J. Brennan, Jr.

Thru the thickening dust of caliche the Fighting Fifth emerged. The arduous days of fatigue are at last at an end with coming of the training season. Once again the regiment will assume the aspect of being wholly soldierly.

The recent arrival on the Post of Colonel Scales, the new Commanding Officer, and Mrs. Scales was the cause of many receptions and much hand shaking. Colonel Scales commanded the Fifth Cavalry several years ago. His popularity among the men is unbounded, mainly because of his interest in athletics.

With the coming of bearable weather footballs are seen floating thru the air every night on both parade grounds, the golf course and the Polo Field. There is no regimental team but virtually every troop has its own team. An unofficial intraregimental schedule is being played. And the fur flies. It's all in fun, but these cavalrymen are bloody bounders.

Due to the absence of a great many officers on the C.C.C., Polo was in its death throes but was quickly revived by the tournament at Fort Bliss, in which the team was runner-up. With the early return of some of the detached officers in the offing a good winter season is expected.

The first race meet of the season is being sponsored by the Parent Teachers Assn. of Brackettville on Armistice Day. With the legalizing of betting in Texas a boon to the horse racing is confidently expected. The horse flesh in the Post is constantly improving. The races may prove very interesting as it will enable the local jockeys to compare their skill and mounts with the best of the local breeders.

## Sixth Cavalry

Fort Oglethorpe, Georgia

Colonel Gordon Johnston, Commanding.  
 LIEUT. COLONEL  
 Walton Goodwin, Jr.  
 MAJORS  
 Roy O. Henry.  
 Frederic W. Boye.  
 James E. Cockrell.  
 CAPTAINS  
 Charles F. Houghton.  
 William V. Ochs.  
 Willie C. Burt.  
 John O. Lawrence.  
 Raymond C. Gibbs.  
 Thomas W. Haven.  
 Charles H. Daywalt.  
 George F. Cummings.  
 Edward H. Anderson.  
 George R. McElroy.  
 1ST LIEUTENANTS  
 John T. Ward.  
 Paul M. Martin.  
 Walter F. Jennings.  
 Walter F. Burnside.  
 Ralph M. Neal.  
 Don E. Carleton.  
 H. Jordan Thela.  
 Cary B. Hutchinson.  
 Zachary W. Moores.  
 Logan C. Berry.  
 William J. Bradley.  
 William H. Wood.  
 Harry W. Johnson.  
 2ND LIEUTENANTS  
 William F. Gisham.  
 Scott M. Sanford.  
 William E. Chandler.  
 Harry W. Candler.  
 Bogardus S. Cairns.  
 F. Clay Bridgewater.  
 Donald C. Cubbison, Jr.

## Seventh Cavalry

Fort Bliss, Texas

Colonel Joseph A. Baer, Commanding.  
 LIEUT. COLONEL  
 William W. Gordon.  
 MAJORS  
 Horace T. Applington.  
 Terry de la M. Allen.  
 Thomas G. Peyton.  
 CAPTAINS  
 Donald A. Young.  
 Roscoe S. Parker.  
 Eugene A. Regnier.  
 Edward M. Fickett.  
 Mordaunt V. Turner.  
 John P. Scott.  
 Samuel R. Goodwin.  
 Vance W. Batchelor.  
 William H. W. Reinburg.  
 Leo B. Conner.  
 1ST LIEUTENANTS  
 Frank O. Dewey.  
 Albert S. J. Stovall, Jr.  
 William S. Biddle.  
 Lee C. Vance.  
 Ronald M. Shaw.  
 Edward J. Doyle.  
 2ND LIEUTENANTS  
 Donald M. Schorr.  
 Hamilton H. Howze.  
 Franklin F. Wing, Jr.  
 Marvin C. Johnson.  
 Richard T. Colner, Jr.  
 Karl L. Scherer.  
 William W. Culp.  
 William G. Bartlett.  
 Sherburne Whipple, Jr.  
 Anthony F. Kleitz, Jr.  
 Joseph E. Bastion, Jr.

Under the supervision of Lieut. A. J. S. Stovall, recruit instruction commenced December 1, 1932, and ended February 15, 1933, covering a period of ten weeks. Lieut. Stovall assisted by Sergeant Thomas B. Slade, Troop F, turned out a very capable number of men, after following a systematic course of Cavalry drill from the School of the Trooper, to Field Service.

Preliminary training with the Rifle, Pistol, and Saber commenced early in the spring, but because of the economy program of the War Department, the regular Target practice at Donna Anna, N. M., was cancelled. However, the regiment obtained good results from the Pistol and Saber as the following figures show:

## Regimental Percentage

Pistol, Mounted	99.45
Pistol, Dismounted	92.09
Saber	98.28

The Regiment suffered a loss in March when Colonel Ola Bell was relieved from Command of the regiment and ordered to report to the 9th Corps Area for duty with the Organized Reserves. Under the command of Lieut. Col. W. W. Gordon, the "Garry Owens" escorted Colonel Bell to the South Gate of the post, formed line, and presented sabers.

On August 3rd, the 1st Squadron under the command of Major John A. Roberson left Fort Bliss for Terlingua, Texas, as portée Cavalry. The object of the experiment was to test this method of transporting Cavalry swiftly to different points of the border.

The motorized unit was self-sustaining, carrying enough rations for 200 men, and forage for 180 horses for ten days. Each man was fully equipped for field service, and the Squadron (reinforced) carried 12 Machine Guns, .30 Cal., 2 Machine Guns, .50 Cal., four Thompson .45 Cal. sub-machine guns, and a .75 millimeter field gun mounted on a truck and capable of being fired from its mount. The column was composed of 23 trucks and trailers for the transport of personnel, equipment and animals, and 14 other motor vehicles, including troop kitchen trailers which prepared meals en route, gasoline and water supply trucks, and a motorized Engineer Detachment. Attached to the command was Troop A, 1st Armored Car Squadron, commanded by Captain John C. Macdonald, which operated from twenty to thirty miles ahead of the column, and radioed information to the main body.

The control of the column was made possible by three radio nets, one covering a ten mile radius, and embracing the head and tail of the column and the command car in which Major Roberson traveled. The second net, with a sixty mile radius, linked the Armored Car Troop with the convoy commander. The third net connected an Armored Car Command Car with airplanes overhead, and Fort Bliss. Messages were sent and received while the column was in motion.

Terlingua was chosen as the objective because it was known that the road between Alpine and that town would furnish a grueling test for the trailers. It is an unimproved road with many steep grades and sharp turns. The surface varies from good gravel in the mountainous sections to clay and sand across the broad valleys. However, the three hundred and ten mile march was made in three days and horses and men arrived at Terlingua fresh and ready to proceed if necessary. The convoy remained in camp for four days during which period the squadron marched to Castolon on the Rio Grande for an overnight camp. The return trip to Fort Bliss was also accomplished in three days, but at a better road rate probably due to the experience gained by the drivers. Ten miles per hour is about the best rate to be expected using Liberty trucks as traction. With better motor equipment a higher rate could be maintained over good roads.

Organization Day was observed June 25th. During the Regimental Parade, the following order was read:  
 HEADQUARTERS SEVENTH CAVALRY,  
 FORT BLISS, TEXAS

SRG las.  
 June 24, 1933.

GENERAL ORDERS  
 NO. 19

It is with great pleasure and pride that the Regimental Commander congratulates the officers and men of the "GARRY OWENS" on this day—the eve of the 67th anniversary of their regiment—the illustrious Seventh Cavalry.

The history of this regiment exemplifies all the dash and daring that is the pride of the Cavalry service. The records of battles won, and of engagements fought against overwhelming odds, show heroism and bravery of the highest order. Time and again the Regimental Commander during the Indian fighting days, when called upon by higher headquarters for recommendations for reward, for individual acts of bravery beyond the call of duty, invariably replied: "WHERE ALL DO SO WELL, NO SPECIAL MENTION CAN BE MADE IN INDIVIDUAL CASES."

This enviable record of gallant actions has bound the Seventh Cavalry together with an esprit that is unequalled by any other regiment in our service, and it is for this reason that when the Cavalry is spoken of to a non-military person, it brings to his mind the Seventh Cavalry. Such an esprit is ours to foster and maintain in garrison and in the field, in peace or in war. At no time has the regiment been better equipped with personnel to perpetuate its cherished and well earned reputation.

The Regimental Commander again congratulates the regiment as a whole and its members individually on this anniversary.

By Order of Lieutenant Colonel GORDON:

S. R. GOODWIN,  
 Captain, 7th Cavalry,  
 Adjutant.

OFFICIAL:

S. R. GOODWIN,  
 Captain, 7th Cavalry,  
 Adjutant.

Distribution "A".



About half way between Alpine, Texas, and Terlingua, Texas.

The Regiment welcomed their new Commanding Officer, Colonel Joseph A. Baer, and Mrs. Baer. Colonel Baer has just returned from a four-year tour of duty as Military Attaché in Vienna, Austria. He assumed command October 25th. A regimental parade was held October 29th in his honor.

## Eighth Cavalry

Fort Bliss, Texas

Colonel Carl H. Muller, Commanding.  
 LIEUT. COLONEL  
 Arthur H. Wilson.  
 MAJORS  
 Edward L. N. Glass.  
 Henry McE. Pendleton.  
 Charles H. Gerhardt.  
 CAPTAINS  
 Harold E. Eastwood.  
 Charles J. Booth.  
 Harvey N. Christman.  
 John E. Meyer.  
 William R. Stockman.  
 Holmes G. Paulie.  
 Ceylon O. Griffin.  
 Daniel B. Cullum.  
 Jess G. Boykin.  
 Edwin M. Burnett.  
 Philip B. Shotwell.  
 Thomas Q. Donaldson, Jr.  
 1ST LIEUTENANTS  
 Robert Edwards.  
 George W. Bailey, Jr.  
 Carl D. Silverthorne.  
 Lawrence R. Dewey.  
 August W. Farwick.  
 Charles A. Sheldon.  
 2ND LIEUTENANTS  
 George R. Sutherland.  
 Henry B. Crosswell.  
 Glenn F. Rogers.  
 Philip H. Bethune.  
 Frank H. Britton.  
 John R. Pugh.  
 William B. Fraser.  
 Howard E. Webster.  
 David V. Adamson.  
 James H. Polk.  
 Jack W. Turner.

It is believed that the following training features as carried out in this regiment during the past year are somewhat unusual, if not unique.

1. *Combat problems with the .22 calibre gallery rifle.* (a) A simple patrol problem, or a combat patrol on the flank of an assumed force, was laid out on the ground. This was developed until the situation required the squad to dismount to fight on foot (led horses immobile). At this time the rifles were issued to the men and various details explained. From then on the problem was conducted as though armed with .30 calibre rifles except that no firing was done until the point three hundred yards from the targets was reached. From then on the problem was conducted as a normal combat problem except that the last firing point was about a hundred and fifty yards from the targets. The results, as far as fire distribution and total hits, were at least as good as those with service ammunition. It was further apparent that the cover used and concealment obtained was better, due to the shortened distances of fire which permitted better

control. This was done in the following manner: a man was placed on the flank of the line of targets with a pistol and blank ammunition and when any firer showed himself the pistol was fired. Careful control by officers both at the firing line and at the line of targets was maintained in order to clear line of targets each time before firing was started.

(b) The following questions came up from time to time and their answers are believed to be of interest.

Q. Since the rifles must be used by different men how are the correct sight settings made known to the firer?

A. Each rifle is tagged after targeting with all necessary data on the tag.

Q. Are the targets used reduced in size to give the same effect as regular targets at normal distances?

A. This is not necessary and not desirable as seen from the description of the problem given above.

Q. There is a great variation in the velocities of different lots of .22 calibre ammunition. Are rifles targeted for this?

A. This difficulty was not encountered; however rifles could easily be targeted the afternoon before with the same lot of ammunition as that to be used in the problem the next morning.

Q. Only five rifles are issued per troop. How do you get additional rifles for squad problems?

A. These problems were run by squadron, the troops lending rifles to one another. There are twenty-seven rifles in each regiment which would be ample for a platoon problem. In one test last winter five squads of a troop ran the same problem in a morning with complete success. The problem started some four miles from the stables. As each squad completed its problem the light wagon, which was following along, picked up the rifles and returned to the starting point of the next squad. The critique was given at the targets, immediately, and was completed while the rifles were going back. Control Officer was stationed so as to prevent the next squad from reaching the initial firing point before the targets were cleared. Each squad, at the completion of the critique, cleared well to the flank where they were usually met by the led horses which had been brought up by men not participating.

Q. These rifles are very expensive. Has damage been caused by their use in combat firing?

A. There has been no apparent damage to the twenty rifles used extensively last year by the four rifle troops of the 8th Cavalry, as shown by the preliminary gallery practice of this spring. Care is necessary to see that bolts are not lost during the problem as these are likely to slip out due to the mechanism of the rifle. One or two men preferably additional corpor-

als or platoon sergeants were used with success.

Q. Are the problems always with concealed targets?

A. It was found desirable to have the first problem, run by each squad, so set up that the targets were clearly visible to all firers. All later problems were so set up that only one or two targets could be seen by any one man on the firing line. Excellent results were obtained in fire distribution, due perhaps to the size of the unit and the consequent ease of control and observation.

2. *Antiaircraft firing with the .22 at moving targets.* Antiaircraft firing was conducted for the troop groups of selected men under an officer, in the mechanical methods of leading firing at motion picture targets, and at moving targets. This latter feature was emphasized and the target so constructed that fire could not only be directed from all angles but with a wide variation of speeds. The target frame was so constructed that space around the target was sufficiently large to observe the misses and permit the firer to see exactly how much or how little his lead varied from the perfect. By a combination of range, angle of fire and speed of the target, conditions approaching the actual were obtained. This target was a sliding one with pulley and cable between two old telegraph poles, one end of the cable much higher than the other. By a combination of weights and brakes the speed is varied.

3. *Methods of improving the horsemanship in officer personnel.* (a) Every tactical ride had as a horsemanship feature a series of cross country rides led by the Colonel of the regiment, with stiff gallops over varied ground. The various situations of the tactical ride became checks for the cross country phase.

(b) Every young officer, no matter how recently he had joined was required to enter some class in the annual horse show on carefully selected horses. (Note: One recent graduate placed second in the novice jumping class in the recent annual horse show.)

(c) In addition to the regular equitation class, every young officer is required to turn out for polo. This increases the boldness of their riding as well as giving them an interesting sport to follow.

## Ninth Cavalry

Fort Riley, Kansas

Lieutenant Colonel William C. Christy, Commanding

MAJORS  
James C. R. Schwenck.  
Geoffrey Keyes.  
Calvin DeWitt, Jr.  
Arthur P. Thayer.  
Rexford E. Willoughby.  
James W. Barnett.  
Wilson T. Bak.  
Clinton A. Pierce.  
Thomas McF. Cockrill.  
John T. Cole.

CAPTAINS  
Kent C. Lambert.  
Carlisle B. Cox.  
Paul H. Morris.  
James C. Short.  
Ray T. Maddocks.  
James V. V. Shufelt.  
Alexander B. MacNabb.  
Thomas J. Heavey.  
Harold P. Stewart.  
Charles P. Chase.  
Francis P. Compkins.  
Cornelius C. Jadwin.

1ST LIEUTENANTS  
Earl F. Thomson. Carl W. A. Raguse. Peter C. Hair. III.  
The regiment, under the command of Lieutenant Colonel William C. Christy, 9th Cavalry, in general,

performed regular routine duties pertaining to the Cavalry School.

The following named officers of the regiment have been placed on detached service with the Army Horse Show Team, which will, in turn visit Chicago and New York City, for the purpose of participating in exhibits at those places:

Major John T. Cole.

First Lieutenant Earl F. Thomson.

First Lieutenant Carl W. A. Raguse.

The team left Fort Riley on October 16th and is expected to return about November 20th.

During the past few months Major Thomas McF. Coverill, 9th Cavalry, has made numerous trips throughout the Kansas District, Civilian Conservation Camps, inspecting and selecting suitable camp sites for C. C. companies.

The football team coached by Captain J. V. V. Shufelt, promises to close a very successful season, having won four out of five games played. The first game played was lost to the "Topeka Shops" of Topeka, Kansas, by a score of 2 to 0. However, Western Baptist College, Kansas City, Missouri, 10th U. S. Cavalry, Fort Leavenworth, Kansas, All Stars, Manhattan, Kansas, and Western University, Quindara, Kansas, went down in defeat. A return game will be played with the 10th Cavalry at Fort Leavenworth, Thanksgiving Day, November 30, 1933.

## Headquarters and 1st Squadron, Tenth Cavalry

Fort Leavenworth, Kansas

Major Pearson Menoher, Commanding

MAJOR

Lewis A. Pulling.

CAPTAINS  
John H. Irving.  
Paul C. Feibiger.  
Marcus E. Jones.  
Charles H. Martin.

ATTACHED  
Major Arthur Vollmer.

The regiment celebrated its 67th Anniversary on July 28th with a picnic and barbecue in the beautiful stretch of woodland a mile south of the post proper. Many visitors were present from the neighboring cities including many retired members of the regiment.

During the summer months the regiment was called on for the majority of its officer personnel and a large number of enlisted men for duty in connection with the conditioning and administration of the C. C. units allotted to this station. Twenty-one companies, or a total of about 5,500 men, were conditioned and shipped out to the various camps established throughout the states of Kansas and Missouri.

The 10th Cavalry "Buffalos" football squad is progressing through the 1933 season in good shape, having won three of the five games played so far. The two defeats were at the hands of the Lincoln University of Missouri and the 9th U. S. Cavalry at Fort Riley, Kansas. Among those beaten by the Buffalos was the Western University of Kansas City, Kansas.

## Machine Gun Troop, Tenth Cavalry

Fort Myer, Virginia

CAPTAIN  
Clyde D. Garrison.

1ST LIEUTENANTS  
Gordon Rogers.  
Paul R. Greenhalgh.

The troop participated in the Loudoun County Emancipation Celebration at Purcellville, Virginia, on September 22, 1933.

A platoon of 24 men under Sergeant Frank Holder conducted a musical ride, equipped with the black and yellow parade equipment and mounted on twelve bay and twelve chestnut horses. Music was furnished by the Colored Odd Fellows Band of Washington, D. C.

The president of the association, in commenting on this celebration stated, "We appreciate your hearty cooperation with our association. The public is still talking about how nice the platoon performed and the wonderful deportment and appearance of the men. Please accept our thanks for all past favors

(Sgd.) L. Mc WASHINGTON,  
President."

## Second Squadron, Tenth Cavalry

West Point, New York

Major John B. Thompson, Commanding

1ST LIEUTENANTS

Samuel P. Walker. Andrew A. Frieron.

John W. Wofford. William J. Reardon.

After a very successful summer training period with Cadets the Squadron has settled down to its usual winter routine. Summer training was a progressive departure from that of any other year. Instead of the usual permanent camp as heretofore, 5-day practice marches with tactical exercises on alternate weeks were made with camps at Round Pond, Popolopen, Harri-man Estate, and Glen Cove on successive days.

The baseball championship was won by the Squadron in the Post League series of 5 teams when they defeated the U. S. M. A. Service Detachment 10 to 6, late in August. The football team augmented by promising material from last year's second team has already defeated Lincoln University and College Point, A. C. College Point, L. I. There are several hard games remaining on the schedule including Troy, Danbury and Brooklyn. However, the team is very optimistic, and there is talk of an undefeated season.

## Headquarters, Eleventh Cavalry

Presidio of Monterey, California

Colonel Ralph M. Parker, Commanding

LIEUT. COLONEL

Donald A. Robinson.

MAJORS

Raymond E. McQuillin.

Edward C. McGuire.

Harrison Herman.

CAPTAINS

Louis G. Gibney.

F. F. Duggan.

Ross E. Larson.

Sexton Berg.

Henry H. Cameron.

Alberto E. Merrill.

James S. Rodwell.

Otto R. Stillinger.

John R. Thornton.

Claude W. Feagin.

Harry C. Mewshaw.

1ST LIEUTENANTS

Thomas F. Sheehan.

Edwin P. Crandell.

Newton F. McCurdy.

Clinton J. Harrold.

Paul G. Kendall.

Augustine D. Dugan.

Clarence K. Darling.

Bernard W. Justice.

Harrison W. Davison.

Paul A. Ridge.

Robert G. Lowe.

2ND LIEUTENANTS

Joseph A. Michela.

John H. Dudley.

Albert E. Harris.

William H. Thompson.

Robert H. Bayne.

Charles E. Leydecker.

The following officer has reported for duty with the 11th Cavalry:

Lieutenant Colonel Donald A. Robinson, 11th Cavalry.

The following officers have recently been assigned but have not yet reported:—

Captain F. F. Duggan, 11th Cavalry,  
 Captain Otto B. Stillenger, 11th Cavalry,  
 2nd Lieutenant William H. Thompson, 11th Cavalry,  
 2nd Lieutenant Robert H. Bayne, 11th Cavalry.  
 2nd Lieutenant Charles E. Leydecker, 11th Cavalry.

Captain Harry C. Mewshaw, 11th Cavalry, is receiving congratulations on his promotion.

Captain Harrison S. Beecher, 11th Cavalry was placed on the retired list September 30, 1933, after more than thirty years' service. He leaves the regiment with the well wishes of all.

During September the 2nd Squadron with Headquarters Troop attached spent ten days at Camp Ord (formerly called Gigling Reservation) and engaged in target practice for recruits, also saber practice and tactical field training. The 1st Squadron with Machine Gun Troop attached spent the first part of October at Camp Ord engaged in field training and target practice.

The semi-monthly Boxing Bouts held at the outdoor boxing arena have been well attended by enthusiastic crowds.

Colonel Parker has assumed active charge of Polo Training, and almost daily practice has been held since September 1, 1933. Players and ponies are showing marked improvement and are expected to make a creditable showing in the forthcoming tournament. Four teams have been organized, and keen rivalry exists between the 11th Cavalry and 76th F. A., as both organizations have developed fast teams. Polo practice has been the incentive for several polo teams during the last two months.

The football team of the Presidio of Monterey, in charge of Lieutenant Harris, has been working out daily and is now ready for fast company.

## 12th Cavalry (less 2nd Squadron)

**Fort Brown, Texas**  
 Colonel Guy Kent, Commanding.  
 LIEUT. COLONEL  
 Stephen W. Winfree.  
 MAJORS  
 Thoburn K. Brown.  
 George S. Andrew.  
 Clyde Pickett.  
 CAPTAINS  
 Clifford A. Eastwood.  
 Heywood S. Dodd.  
 George A. Goodyear.  
 Vernon M. Shell.  
 Gene R. Manger.  
 Darrow Mosher.  
 Redding F. Perry.  
 Benmar B. Vail.  
 1ST LIEUTENANTS  
 Robert L. Freeman.  
 Hugh F. T. Hoffman.  
 Douglas Cameron.  
 Charles H. Reed.  
 Raymond D. Palmer.  
 Prentice E. Yeomans.  
 2ND LIEUTENANTS  
 Nelson J. DeLany.  
 Wayne J. Dunn.  
 Brainard S. Cook.  
 Gerard C. Cowan.  
 Charles M. Isely.

## 2nd Squadron, 12th Cavalry

**Fort Ringgold, Texas**  
 Lt. Col. Robert C. Rodgers, Commanding.  
 MAJOR  
 Sherman R. Ingraham, V.C.  
 CAPTAINS  
 Charles W. Burkett.  
 Henry M. Shoemaker.  
 Herbert L. Jackson.  
 Benjamin A. Thomas.  
 George B. Moore, M.C.  
 1ST LIEUTENANTS  
 Daniel P. Buckland.  
 Rudolph G. Schmidt, Q.M.C.  
 Clyde Massey.  
 John F. M. Kohler.  
 2ND LIEUTENANTS  
 Samuel L. Myers.  
 O'Neill K. Kane.  
 Joseph R. Ranck.

## Thirteenth Cavalry

**Fort Riley, Kansas**  
 Colonel Charles F. Martin, Commanding.  
 MAJORS  
 Arthur H. Truxes.  
 Charles R. Johnson, Jr.  
 CAPTAINS  
 William T. Bauskett, Jr.  
 John A. Hettlinger.  
 Harry A. Patterson.  
 Stephen Boon, Jr.  
 Harold deB. Bruck.  
 Ralph C. Thomas.  
 Ernest A. Williams.  
 Roy E. Craig.  
 Herbert W. Worcester.  
 Gilbert Riegan.  
 Vaughan M. Cannon.  
 William L. Hamilton.  
 1ST LIEUTENANTS  
 Elmer V. Stansbury.  
 Morton McD. Jones.  
 Charles H. Noble.  
 Frederick R. Pitts.  
 Alan L. Fulton.  
 John P. Willey.  
 David E. Bradford.  
 Wallace H. Barnes.  
 Norman M. Winn.  
 William H. Hunter.  
 Henri A. Luebbermann.  
 2ND LIEUTENANTS  
 Chandler P. Robbins, Jr.  
 Frank D. Merrill.

The 13th Cavalry under the command of Colonel Charles F. Martin, marched to Salina, Kansas to participate in the Kansas State Anniversary Legion Convention and Labor Day celebration.

On Sunday evening, September 3, 1933, the Regiment gave a retreat Parade and Review in honor of the Assistant Secretary of War, Mr. Harry H. Woodring. In addition the 2d Squadron gave an exhibition drill, and the Machine Gun Troop gave a demonstration of the mobility of machine guns and going into dismounted action.

A quotation from the *Salina Press*: "A crowd of more than 8000 people packed the grounds to see the 13th Cavalry pass in review with dash and splendor. It was a gala day, a fitting inauguration for the legion convention of Kansas, and a brilliant spectacle."

The following day the regiment participated in the Legion street parade.

From October 18th-21st inclusive, the regiment participated with the Cavalry School Brigade in a four-day field exercise. Due to the shortage of officers students were given assignments in the regiment.

Many important lessons of technique and troop leading, including some involving new problems to the Cavalry due to aviation and mechanization, were learned and are now being studied by the officers of the regiment. The trains consisted of the spring wagons and trucks, the trucks replacing the scout wagons.

## 14th Cavalry (less 1st Squadron)

**Fort Des Moines, Iowa**  
 Colonel Charles E. Stodter, Commanding.  
 MAJORS  
 Francis C. V. Crowley.  
 Willard S. Wadleton.  
 CAPTAINS  
 Royden Williamson.  
 Erskine A. Franklin.  
 Glenn S. Finley.  
 Henry H. Cheshire.  
 Daniel Becker.  
 Robert M. Graham.  
 Benjamin H. Graban.  
 Frank T. Turner.  
 1ST LIEUTENANTS  
 Murray B. Crandall.  
 Harry D. Eckert.  
 William H. Nutter.  
 Theodore Kalakuka.  
 2ND LIEUTENANTS  
 Jergen B. Olson.  
 Harry J. Fleeger.  
 Joseph H. O'Malley.  
 Charles E. Voorhees.

Major General Guy V. Henry, Chief of Cavalry, visited the post on October 15th. A review was given in the morning and was followed by an inspection of quarters and stables and the post in general.

An afternoon tea was given in his honor at the quarters of the Regimental Commander, Colonel C. E. Stodter, where all officers, ladies and their guests and

many ladies and gentlemen from Des Moines were received.

Music was furnished during the reception by the 14th Cavalry Band, and General Henry expressed himself as being well pleased and complimented the Regiment on its particular attention to all details.

Over 50% of the officers of the regiment are engaged in Civilian Conservation Corps activities at the present time.

## 1st Squadron, 14th Cavalry

**Fort Sheridan, Illinois**  
 MAJOR Harry D. Chamberlin, Commanding.  
 MAJOR  
 Charles C. Smith.  
 CAPTAINS  
 Catesby C. Jones.  
 Thomas G. Hanson, Jr.  
 Chandler A. Wilkinson.  
 Chester E. Davis.  
 Charles W. Fake.  
 1ST LIEUTENANTS  
 Lawrence G. Smith.  
 Edwin C. Greiner.  
 Clyde A. Burcham.  
 2ND LIEUTENANTS  
 Harold L. Richey.  
 Jules V. Richardson.

During the spring and summer months the 1st Squadron 14th Cavalry was busy conditioning, messing and shipping to the West Coast and points in Illinois and Wisconsin 17,000 members of the Civilian Conservation Corps.

We maintained at the World's Fair a show troop which escorted all the dignitaries visiting the Century of Progress.

The Squadron's low goal polo team (assisted by a one goal player from the F. A.) won the intercircuit and 12 goal championship.

The high goal team (assisted by a 5 goal player from the F. A.) mounted on squadron horses, held the championship West team headed by Cecil Smith to a score of 11 to 7. This game was played on the flat.

The Fall months have been spent in conditioning 12,000 replacements for the Civilian Conservation Corps.

## 26th Cavalry

**Fort Stotsenburg, Pampanga, P. I.**  
 Colonel A. F. Commiskey, Commanding.  
 LIEUT. COLONEL  
 W. H. Cowles.  
 MAJORS  
 W. C. Chase.  
 J. W. Cunningham.  
 A. Q. Ver. (PS).  
 CAPTAINS  
 E. F. Dukes.  
 L. G. Forsythe.  
 W. R. Hamby.  
 C. A. Horger.  
 G. A. Moore.  
 H. H. Neilson.  
 W. C. Scott.  
 A. H. Seabury.  
 E. Shirley.  
 D. R. Stillinger.  
 R. O. Wright.  
 M. S. Williamson.  
 J. M. Bethel.  
 1ST LIEUTENANTS  
 W. Blanchard.  
 K. O'Shea.  
 G. J. Rawlins.  
 R. A. Browne.  
 B. L. Riggs.  
 C. H. Valentine.  
 G. W. West.  
 R. T. Willson.  
 G. E. Berilla, Jr.  
 H. I. Hodes.  
 I. E. Wells.  
 L. R. Rapp.  
 C. V. Bromley, Jr.  
 W. M. Burgess.  
 E. S. Baclig. (PS).  
 I. S. Moran. (PS).

## 103rd Cavalry

**Philadelphia, Penna.**  
 The 1st Squadron's Annual Inter-Troop Dismounted Pistol Match was fired at Second Troop P. C. C. Farm, Sunday, October 29, 1933. Course of fire was the National Pistol Match Course (modified by using the L target).

## 110th Cavalry

**Boston, Mass.**  
*Cavalry Troop Travels 40 Miles in 2 Hours 15 Minutes*

Motorized cavalry in the New England States got its first test when Troop B, 110th Cavalry, Massachusetts National Guard, saddled its mounts at the Commonwealth Armory, Boston, loaded them into seven horse busses and travelled 41.9 miles to Worcester in two hours and 17 minutes from the time embussing started.

The occasion was an evening military parade, September 27, arranged in connection with the dedication exercises of Worcester's new auditorium and war memorial building. It was also the first appearance of cavalry troops of the Massachusetts National Guard in that city.

Inasmuch as the cavalry regiment of the Bay State and the 122nd Connecticut Cavalry are the only horse troops in New England and considering the recent motorization of local guard units, the "motorization" of a cavalry troop was watched with general interest in military circles.

Several years ago at Fort Devens, the 110th Cavalry in Field Training maneuvers working with the 26th Division Aviation and two armored cars, employed one horse van in which a squad of "Portée" cavalry was transported to the scene of combat. The training afforded through the coordination of the aviation and the armored cars and the use of "Portée" cavalry were invaluable to the personnel of the regiment at that time.

The invitation to Worcester provided an opportunity to test the mobility and adaptability of cavalry. Ordinarily cavalry, participating in any duty over 40 miles from their home station, would plan for a three or four day "turnout." Solely by horse transportation the march from Boston to Worcester and the parade would take at least two days, and the return trip would be a full day's ride.

Colonel Dana T. Gallup, the Regimental Commander, instructed Captain Richard E. Anthony, commanding Troop B, to make the necessary arrangements for participation in the parade. Seven privately owned horse vans were secured and spotted in the Commonwealth Armory riding ring at 4 o'clock Wednesday afternoon.

The members of Troop B arrived at the armory at 3:30, messed, saddled horses. Embussing started at 4:15 and was completed at 4:50 in an elapsed time of 35 minutes. With two motorcycle officers of the state constabulary leading the way, the convey of





Loading Horses in the Armory.

Inspection of Loaded Bus.

horse vans and two passenger busses, for the troops. left the armory at 4:58, and, although heavy showers were encountered during the trip that tended to make rapid travel dangerous and difficult, the 41.9 miles to the debussing point was traversed in 2 hours and 17 minutes.

The convoy arrived at the Worcester city line at 6:30, but it took almost one hour to go a short distance through crowded streets and traffic to the debussing point. At 7:17 debussing started and was completed at 7:24—seven minutes—and the troop moved out in column of fours, mounted, at 7:31, or a total elapsed time of three hours and 16 minutes from the time embussing started at the armory.

At the conclusion of the parade embussing started at 8:25 and was completed at 8:45—20 minutes. The convoy left the center of Worcester at 9:10, arrived at the city line at 9:45 and after a 30 minutes halt for mess left the city line at 9:55 and travelled 39.7 miles to the armory, arriving at 11:30 P. M., in the elapsed time of one hour and 50 minutes.

Debussing at the armory started at 11:32 and was completed at 11:40, or in eight minutes. The total elapsed time of the return trip from the time embussing started in Worcester until debussing at the armory was completed was two hours and 15 minutes including the 30 minute halt for mess.

Included in the movement were 3 officers, 49 enlisted men, 52 horses, 7 horse vans, and 2 passenger busses.

This actual experience is interesting from a military point of view, not only for war-time training but even more especially for State use of its troops for riot duty. This experiment has demonstrated that a troop can be actually operating on the streets of a city over 40 miles from its armory within 3 hours and 16 minutes from the time when they started to load for transportation at its home stables. The elapsed time in this test included an hour in passing through the last couple of miles of crowded streets and disordered traffic, so that it is fair to say that the actual elapsed time from

the stables to the destination was two and one-quarter hours.

### 305th Cavalry

Philadelphia, Pennsylvania

Working on a schedule approved by Hq. 62nd Cavalry Division, this Regiment has gotten well under way with the inactive training season activities. Some exceptionally interesting speakers have been obtained for the Wednesday Noon conferences, and the attendances have been very good. In addition to the regular equitation classes, Wednesday evenings have been devoted to dismounted instruction in basic work, such as bridling and saddling, grooming, dismounted drill, and manual of arms: each member of the class being given opportunity to handle the instruction.

On Sunday November 5th, 1933, starting from the stables at Valley Forge Military Academy, about forty members of the Regiment under the command of Colonel Matthew F. James, formed the various elements of a regiment in an advance guard action. The march across country involved several small actions. Entering historic Valley Forge the advance guard came under enemy fire from a ridge in the Park. The regiment, moving under cover in an enveloping movement and coming upon the enemy from the rear, in a spirited pistol attack drove the opposing force out of its position and occupied the ridge.

Through the cooperation of the Naval Air Service at the Philadelphia Navy Yard, a flight of observation planes acted as an aerial observation squadron for the problem. The rear pits in three of the ships were occupied by officers of this Regiment, affording them a unique opportunity to gain some idea of the work of aircraft cooperating with advancing ground troops.

It is felt that considerable experience was gained by all who attended and took part in the problem.

The use of the horses and authority to ride across the beautiful Valley Forge Park were made possible through the courtesy of Colonel Milton G. Baker, Commandant of the Valley Forge Military Academy.

### 306th Cavalry

Baltimore, Maryland

The inactive training season of the 306th Cavalry started off successfully during the month of October with equitation classes, unit conferences and extension courses.

The first unit conference was well attended and in charge of Major E. W. Taulbee, the regular unit instructor, who is now on Civilian Conservation Corps duty. The equitation classes were again enthusiastically received and are being carried on at Fort Hoyle, as usual, under the supervision of Colonel C. R. Mayo and Lt. Col. Sloan Doak, Headquarters, 62nd Cavalry Division. Material assistance was given in the formation of the classes by Colonel M. F. James, 305th Cavalry, and Major William R. Skinner, 306th Cavalry, who are also acting as instructors.

### Second Squadron and Machine Gun Troop, 306th Cavalry

Washington, D. C.

The inactive training period for Cavalry opened on Thursday evening, October 5, 1933, with an open discussion of plans for the season.

Several familiar faces were missing, due to their absence on active duty training with the Civilian Conservation Corps. The usual losses on account of changes of address have occurred.

Due to a combination of reasons, our equitation classes will not get started until after the first of December.

In spite of it all, we expect a very successful year of conferences and Extension School work.

### 307th Cavalry

Richmond, Virginia

The following officers of the regiment are on duty with the Civilian Conservation Corps: Captain William M. Stokes, Jr., Captain Joseph J. Matthews; 1st Lieutenants, Louis B. Powell, Walter L. Renn, Jr., and Sam H. Franklin, Jr.; 2nd Lieutenants, Woods G. Talman, John L. Peyton, and Robert G. Southall, II. Capt. E. C. Harrison, Jr., served 10 days on CCC.

Troop schools were organized last month, and monthly conferences are planned throughout the winter. Many officers have attended the Group School conferences held throughout the State this month, and are showing keen interest.

The following officers have recently been assigned to the regiment: Second Lieutenants Wm. A. Trolan, Wm. L. Kelly, III, H. L. Archer, and Wythe Whiting Holt.

### 3d Squadron and Machine Gun Troop, 307th Cavalry

Norfolk, Virginia

The Unit Instructor, Major David H. Blakelock, Cavalry, has been detailed as Supervisor for Sub-District No. 16, CCC, Virginia, in addition to his other

duties. Eleven companies comprise the sub-district, six of which arrived from the Ninth Corps Area on October 17. All camps are busily engaged in constructing winter quarters, and work is progressing in a very satisfactory manner.

Inactive duty training is progressing in a very satisfactory manner. Attendance at group schools has far exceeded the attendance in past years. These group schools are conducted monthly in Newport News, Norfolk and Suffolk, Va. These schools give the majority of the officers of the squadron an opportunity to receive inactive duty training and receive instruction in the tactics of cavalry and of the separate arms. In addition subjects which are of general interest to all officers are discussed.

Major James R. Mullen, Commanding the Squadron, has been designated as assistant instructor for extension courses in the squadron and is handling all Cavalry subjects in the 10 and 20 series.

### 308th Cavalry

Pittsburgh, Penna.

In accordance with instructions from the Commanding General, Third Corps Area, and from the Chief of Staff, 62nd Cavalry Division, the Regimental Commander has announced as a definite policy that for the current Inactive Training Year, the planning and execution of the training of the 308th Cavalry is to be the definite responsibility of the Regimental Staff, and of the Squadron and Troop Commanders.

The Schedule prepared by the Plans and Training Officer has been approved by the Chief of Staff, 62nd Cavalry Division, and is now being carried out.

Conferences are being conducted by officers of the regiment who have volunteered for this duty.

War Department Training Films have been requisitioned for all conferences and will be shown in connection with scheduled subjects.

Among those to be shown are films on Care of Animals, The Cavalry Rifle Squad, Platoon and Troop, The Development and Deployment of the Division for a Flank Attack, The Service of Supply of a Division.

A number of 308th Cavalry officers have been detailed for duty with the Civilian Conservation Corps. All of our officers on this detail find it interesting and instructive. They are Capts. E. R. Ayres, J. B. Brettell, G. M. Benney, A. J. Bintrim, and C. G. Beese; 1st Lieuts. Truman G. McMullan, E. P. Geesey, Alexander M. Stewart, and Herman A. Huhn.

### 862nd Field Artillery, Horse

Baltimore, Md.

The inactive training of this regiment is progressing very satisfactorily since the opening of the Extension School and the beginning of the unit conferences and the equitation classes. The first unit conference was conducted by Major S. LeRoy Irwin, F.A., Unit Instructor, 313th F.A., Washington, D. C., who is acting as unit instructor in the absence of Major John M. McDowell, F.A., now on Civilian Conservation Corps

duty. The equitation classes under the supervision of Colonel C. R. Mayo and Lt. Colonel Sloan Doak, Headquarters 62nd Cavalry Division, have gotten away to a fine start. About 50 percent of the officers of the regiment are now enrolled in the Extension School.

### 66th Cavalry Division

Kansas City, Missouri

**T**HE fall activities of the Kansas City Chapter of the Reserve Officers Association opened this year on October 3 at the headquarters of the Association, 3614 Main Street, and in these activities the Cavalry Reserve Officers play an important part through their activities and membership in the organization.

The rumor mentioned in the last JOURNAL notes concerning the change in Unit Instructor for the Cavalry Branch proved to be partly true: Major Richard left us, but Major Schwenek did not come to replace him. Major D. G. Richard was ordered to Fort Bliss, Texas. His place has been succeeded to by Major Harold "Skipper" Thompson who comes to us from the 13th Cavalry, Fort Riley, Kansas.

Classroom work has started, and the sand table will shortly be in prominence with the problems thereon. Major Richard started the year's course of instruction with lectures on Troop Administration. During the time we were awaiting Major Thompson's arrival, Colonel Gaujot carried on with instruction in the "Technique of Formal Field Orders." Major Thompson has carried on with the subject of Troop Administration and will soon take up the subject of problems in tactics. Major Thompson has also started the Sunday morning equitation classes at Fort Leavenworth and is having a fine attendance. Pistol work will shortly start for the Cavalry Reserve Officers so the selection of members for their team to participate in the fall and winter inter-chapter matches can be made. The chapter's indoor range is used in this connection.

Since the last issue of the JOURNAL, First Lieutenant Reed O. Phipps, Cavalry Reserve, has been ordered to duty on C. C. C. work at Scammon, Kansas, and Second Lieutenant Earl Stout, Cavalry Reserve, has received a similar detail at Big Springs Park, Van Buren, Missouri. Also, the following Cavalry Reserve Officers of Kansas City have had two weeks' active duty training at Fort Riley, Kansas: Major George Danhour, Second Lieutenants G. H. Clevidence, Edward McNamara and P. C. Shoemaker.

At the meeting November 7th, the members of the Reserve Officers' Association elected Major Thomas C. Swanson, Commanding Officer of the 466th Armored Car Squadron, President of the Kansas City Chapter, which puts the senior officer of the Cavalry Reserve group in full and active charge of running the R. O. A. of Kansas City for the coming year. Major Swanson appointed Second Lieutenant Russell T. Boyle, 15th Cavalry, to be the Secretary for his administration. With the Cavalry in the saddle we are looking forward to one of the greatest years in the history of the chapter.

## Is This the Man Who Won the War?

(Continued from Page 15)

These men must be the advance of the counter-attack. The whole of the Allied armies must be in back of them!

Listen to them cheer! These are fresh men. Run! Sound the retreat! Fall back until we see the strength of the counterattack and can prepare to meet it!

They fell back. Their golden moment was gone, never to return. The hoofs of a horse had trampled an irresistible army into the earth! A man had won a war!

The Germans fell back and gave the Allies time to close the gap. It was never opened again until after the Armistice. It was sealed with Flowerdew's blood.

For fifteen years young Flowerdew slept in peace, unhonored, almost unknown. When Lord Seely spoke his name, an empire stirred. Authorities investigated. The facts were authenticated. And for the first time the story has been told in full in these pages. There is but one thing to add: a letter written by Flash to Seely.

"I shall never forget the heroism of the valiant Canadian Cavalry Division," it reads in part. "On the 30th of March at Moreuil, on April 1 at Santerre, the brigade succeeded, by its magnificent example and its offensive dash, in holding the enemy in check and breaking his spirit at last. The situation, extremely harassing in the beginning, was saved, largely thanks to its efforts."

## International Horse Shows

(Continued from Page 41)

lessly out when Spot's came out. With only two riders left, Capt. Bate, who could scarcely walk with water on the knee from his New York fall, went in because there was no one else to send. He made the round through sheer determination, and did well to finish with 15 faults.

It was too bad to have an otherwise brilliant week's jumping marred by a bad "cup night." Many were prone to blame the hard footing or too much jumping. No one knows what truly causes such reversals of form, but I am inclined to believe that it was one of those nights when everything is wrong for everyone, and excuses and alibis are perfectly worthless.

Throughout the shows, particularly in New York and Toronto, the competition was harder than we have ever had. Horses jumped better over bigger fences than in past years, and certainly performances which won corresponding classes last year would often leave one out of the ribbons or at least several places removed from the coveted first.

The U. S. suffered from the loss of Joe Ables and Wampton and from the accidents of Whirlip. The other nations had corresponding grief. All admitted themselves with credit and I believe parted with a mutual feeling of friendship and respect which after all is the finest result obtained from International Competition.