This article was downloaded by: [Johns Hopkins University]
On: 06 January 2015, At: 11:18
Publisher: Routledge
Informa Ltd Registered in England and Wales Registered Number: 1072954
Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH,
UK

Royal United Services Institution. Journal

Publication details, including instructions for
authors and subscription information:

<http://www.tandfonline.com/loi/rusi19>

Some Cavalry Topics

Lieut-Colonel F. Chenevix Trench

Published online: 11 Sep 2009.

To cite this article: Lieut-Colonel F. Chenevix Trench (1881) Some Cavalry
Topics, Royal United Services Institution. Journal, 25:111, 524-552, DOI:
[10.1080/03071848109418271](https://doi.org/10.1080/03071848109418271)

To link to this article: <http://dx.doi.org/10.1080/03071848109418271>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan,

sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

consists of military discussions, or of a game of Kriegspiel, preceded by a lecture on some event, or on some interesting military question. Regimental commanding Officers are the first to set the example, which is followed by the other field Officers, and even young Lieutenants frequently lift up their voices. As a general rule the lecturer chooses his own subject, but it is not unusual for an Officer to take up some question of general interest at the desire of his comrades or of his chief. At all events there can be no doubt that a paper, intended to be thus read in the presence of equals and superiors, demands of its author sustained effort and fixed attention.

I here close my quotations from the "Report on the German Army." A great deal more might be said upon the subject of the "Training of Infantry for Battle," as carried out in Germany, and especially on the training of Officers, but the latter branch of this subject will ere long (indeed before the publication of this paper) be treated of, together with the cognate subject of the rules regulating promotion, in the theatre of this Institution by one who has the advantage of personal experience in the matter. I doubt not that he will add many important details to those given by me.

Imperfect as my sketch has been, it suffices, I think, to prove that I was justified in claiming for the German Army, as I did at the commencement of the article, the first place amongst Continental armies for thoroughness in the work of training infantry.

I doubt not that the army of every civilized nation has some good points in its system which other armies might do well to imitate, but I believe, as far as regards my subject, at any rate, there is no military system from which more may be borrowed with advantage than from that of Germany.—L. G.

SOME CAVALRY TOPICS.

	Page
1. Observations on the efforts made to perfect the organization of cavalry in Continental armies	524
2. The mission or rôle of an independent cavalry division or brigade ..	527
3. Instructions issued from Army Head-quarters to the commander of an advanced cavalry force	529
4. Principles which should guide the disposition, &c., of a cavalry force which is to cover the advance of an army	533
5. The organization of a pursuit by cavalry	540
6. Continental cavalry manœuvres in 1879	545

BY LIEUT.-COLONEL F. CHENEVIX TRENCH, 20th HUSSARS.

(1.)

Observations on the efforts made to perfect the Organization of Cavalry in Continental Armies.

"THE next great war will begin with a fierce and long sustained cavalry battle. Such is the opinion expressed by German Officers of all ranks and of every branch of the service."

The reasons which have caused this opinion to be so generally entertained are not far to seek. The services which, owing to exceptionally favourable circumstances, the German cavalry was able to render to its own side in the Franco-German War have so long been matter of history that it would be

waste of time to dwell upon them here. But it was from the first plain enough, that the real cause which enabled these services to be so easily rendered was that in that campaign the efficiency of the cavalry was all on one side, and that the German horse, except in the actual battle-fields in the earlier part of the campaign, met with but little or no opposition in fulfilling the rôle which they were directed to carry out, and which step by step they realized that it was, under existing circumstances, possible for them to play. None, however, are better aware than the Germans themselves that they can scarcely expect that in their next campaign with one of their neighbours, the task of the cavalry covering the advance of their armies will be so unopposed, and therefore so easy, as it was eleven years ago in Eastern France.¹ When, as will probably be the case in the next great European campaign, the cavalry of both sides are matched and handled with fairly equal skill, and when whole divisions of that arm are pushed forward with the same objects far in advance of the armed hosts which respectively follow in their wake, it is obvious that sooner or later collisions must take place between these opposing bodies of horse, and that several cavalry actions must in all probability open the campaign. The prestige which naturally attaches itself to the victors in the first contest of a campaign, and the moral effect produced by such first successes, are advantages for which too high a price can scarcely be paid. Hence it is, that to ensure the winning of any such first contests, and to gain the advantages at the outset of a campaign, which only a highly trained cavalry can secure, has during the last ten years been one of the chief pre-occupations of the leaders of the German army. They hope to do by means of improvements in the organization and tactics of their cavalry which, in addition to constant and laborious training, are well calculated to give their numerous regiments of that arm the pre-eminence over any opponents whom they may be called upon to meet. From the morrow of their last war not a day was lost in studying the question in all its phases, and in taking means to correct the shortcomings and to supply the deficiencies both in equipment, organization, and tactics which the then recent campaigns of 1866 and of 1870 had caused to be felt.

This recognition by the German military chiefs of the necessity for improving their cavalry afforded opportunities to two German Officers of unquestioned merit and ability to come to the front as reformers in the art of handling the cavalry arm. I refer, of course, to Generals Von Schmidt and Verdy du Vernois. Both of these men may fairly claim to have exercised a predomi-

¹ How easy this task was may best be realized by the almost entire absence of casualties suffered by the most active and enterprising of the German cavalry divisions. For instance, in the 4th cavalry division, which rendered such signal services to the 3rd German army, the losses in men up to the time the division reached the Marne were as follows :—

From the beginning of the war—

Killed ..	..	..	..	6
Wounded ..	..	..	..	4

From the Vosges to the Marne—

Killed ..	..	..	..	1
Wounded ..	..	..	..	3

These figures are official.

It can be no matter for surprise that in a country where no resistance was offered, the cavalry could play a very active part.

It may also be observed that the regulations which were in force for the French cavalry at the outbreak of the campaign were those which had been issued at the camp at Chalons on August 9th, 1867. In these regulations it was strictly prescribed that the main body of a cavalry division was always to march in rear of all other troops. See "*Lewal's Etudes de Guerre*," p. 248.

nant influence over the tactics and instruction of the German cavalry. In point of fact, as Germany, in all military matters, leads the way, while her neighbours forthwith proceed to copy and imitate her, the influence of the teaching of these two men may be said to have extended over a far wider area than that of the cavalry of the German army only. It needs but a cursory acquaintance with the cavalry regulations of the principal Continental armies to perceive how much they owe to German inspiration, and to the principles adopted in the German cavalry service.

What has made the teaching of these two German Officers the more valuable, is the fact that the writings of the one may be said to complement and supply to a great extent the deficiencies of the other. The famous section V of the Prussian Cavalry Regulations, of which General Schmidt was the author, was published on the 4th June, 1874, and the German cavalry manœuvres of that and the two next succeeding years (1875 and 1876), were carried out (even after his untimely death) in strict accordance with the views and principles of action which he had advocated and prescribed. The avowed aim and purport of section V of the Prussian Cavalry Regulations was to show how to handle and manœuvre masses of cavalry on the open field, acting against similar masses, and always with a definite object in view. In short, it was framed by the author in order to supply what was felt in the earlier part of the Franco-German campaign to be a great want, viz., a defined and recognized system of offensive and defensive tactics for large bodies of cavalry when operating against the enemy in the open field. But neither in the instructions therein contained nor in the actual practice of the German cavalry manœuvres inspired by and carried out in accordance with General Von Schmidt's ideas could the student or enquirer learn much of how to manage large or small bodies of cavalry in the duties of reconnaissance and scouting, or how to act on many of the various emergencies with which cavalry soldiers engaged in such duties have on active service to deal. For instruction in these and other necessary details, we have to look to General Verdy du Vernois, whose work entitled "*Die Kavallerie in 'Armee Verbande,'*" has long been regarded, both in Germany and elsewhere, as a sort of official text-book on the whole subject.

It is almost needless to say that, in the present day, every improvement in organization, in tactics, or mechanical appliance which may be introduced and adopted in any of the great Continental armies, is at once noted, watched, and scrutinized by the jealous eyes of neighbours and rivals. This being so, the example of the German cavalry, and the efforts it has been constantly making ever since the termination of the Franco-German war to develop and improve the capabilities of the cavalry arm, were sure to attract notice and remark. To any one who has cared to keep himself *au courant* with what has been doing during recent years in the cavalry of Continental armies, the efforts which have been made to emulate, and in some degree keep pace with the German cavalry in its readiness for action, in tactical skill, in its study of minute details, and in its endeavours to develop the general capabilities of the arm, so that it may be able to endure the strain of a prolonged campaign, are patent enough. Improvements in organization, in arrangements for rapid mobilization, so as to enable the cavalry to take the field almost simultaneously with the outbreak of war, the publication of revised and enlarged cavalry regulations, the institution of annual cavalry manœuvres on a considerable scale, extending over wide zones of operations, and in which every effort is made to render the conditions such as will give the greatest possible *vraisemblance* to the work that would have to be done on a campaign;¹ elaborate experiments with different kinds of condensed forage; the formation

¹ As an instance of this may be mentioned the "raid" made by the Russian cavalry in Russian Poland in the autumn of 1876.

in time of peace of independent cavalry divisions, which are to be launched forward at once to cover the advance of the main armies on the outbreak of war ; the permanent quartering of large bodies of cavalry in the immediate neighbourhood of frontiers ; the issue of improved firearms for the cavalry arm, the organization and systematic training of cavalry pioneers ; all these are signs which he who runs may read. At any rate they are amply sufficient to show that the armies of the great military Powers are fully alive to the great importance of the rôle which will devolve upon their cavalry in the future, and of the necessity of its being able to act efficiently on the very first outbreak of war.

After having thus taken a general and cursory view of the efforts which are nowadays continually being made in some of the great European armies to bring the efficiency of the cavalry arm to the highest possible pitch, it will be worth while to enumerate somewhat in detail some of the more important principles and methods of action which have been advocated and prescribed during recent years by General Verdy du Vernois, and other well known writers, as applicable to the management and leading of an advanced cavalry division in modern warfare, and to show how some of them have been put into practice, and rehearsed at recent Continental cavalry manœuvres.

(2.)

The Mission or Rôle of an advanced or independent Cavalry Division or Brigade.

Before proceeding further, it may be well here to pause and ask, what is the generally accepted view of the mission or rôle which in future campaigns will devolve upon the cavalry arm ?

It may be observed at the outset that the rôle which an advanced cavalry force has to play must vary so greatly in each particular case and be dependent upon so many conditions, both of a strategical and topographical nature, that it would be difficult adequately to describe it in concise and definite terms. In other words, it would scarcely be possible within the scope of a few lines to embrace and include the manifold duties which in a European campaign, especially in a highly civilized country, the cavalry of each side will be called upon to fulfil. But in general terms and at somewhat greater length than a mere definition will admit of, the various tasks of the cavalry both at the beginning of and during a campaign may be summed up as follows :—

I. The general performance of outpost duties, thereby ensuring the safety and security of one's own army in rear.

II. The repulse of the enemy's cavalry at any point where it may endeavour to advance, so as to prevent it from gaining information as to the movements and intentions of one's own army in rear.

III. Exploration and reconnaissance of large tracts of country in front or on the flank of one's own army, in order to find and keep touch of the enemy, and to obtain intelligence as to his strength, position, and probable intentions.

IV. Covering the mobilization of one's own army in rear, and protecting railways and telegraph lines from raids of hostile cavalry.

V. Hindering and checking, where possible, the mobilization of isolated portions of the enemy's army.

VI. Anticipating the enemy in gaining possession of special positions, such as roads, passes, bridges, defiles, postal and telegraph offices, the possession or destruction of which is likely to prove advantageous to one's own side, or available for the purpose of harassing the enemy or checking his advance.

A little reflection will show how varied and extensive are the duties which are included under the above general heads, and enable one to realize that a numerous and well appointed cavalry is more than ever essential nowadays to the success and safety of an army in the field.

Supposing that the foregoing *résumé* of the duties and mission of an advanced cavalry force be accepted as correct, it may be observed that these duties may be defined under two heads, viz, the general duties which have just been detailed ; and secondly, special tasks which a cavalry division or brigade may be directed to carry out. A few examples taken from the Franco-German campaign will serve to show what kind of instructions were issued to the German cavalry, and the manner in which these instructions were carried out.

In August, 1870, the 2nd German Army, when advancing from the Sarre to the Moselle, was preceded by its cavalry divisions. On the 9th August this line forming a cordon extended from Sarre Union to Gross Tenquin, Falquemont, Fouligny, and les Etangs, and patrols were pushed on as far as the environs of Metz. Owing to this screen, which concealed their movements, the corps d'armée écheloned 8 or 10 miles in rear were enabled to carry out their marches in security without being subject to the inconvenience of having suddenly to halt and deploy to no purpose in consequence of the sudden and unexpected appearance of the enemy. In addition to this, the Commander-in-Chief, receiving numerous reports from all these cavalry patrols, was able to form an idea of the movements of the enemy, and consequently to direct his own corps d'armée, so that all useless marching and counter-marching was avoided.¹

Field-Marshal Prince Frederic Charles, commanding the 2nd German Army, to General Von Manstein, Commanding the IXth Corps d'Armée :—

“NEMOURS, November 18th, 1870.

“Above all it is important to have more detailed information concerning the position of the enemy to the north of Orleans, especially as to the strength and composition of his army, the extent of his front, and where his right begins and his left ends.

“The Generals commanding the 1st and 2nd divisions of cavalry will receive orders to push forward their explorations, especially round the two flanks of the enemy, in order to obtain information upon the points mentioned above, and with this object they will endeavour to make as many prisoners as possible.² Your Excellency will be good enough till further orders to send each day at noon to my Head-quarters an Officer as bearer of the latest news concerning the enemy, and all that may have taken place on your right flank.”

Extract of an order given to the IIInd German Army :—

“ORLEANS, December 6th, 1870.

“The VIth cavalry division is instructed to proceed by forced marches to Vierzon, and there entirely to destroy the three following lines of rail, viz. :—

“1. From Vierzon to Bourges.

“2. From Vierzon to Chateauroux.

“3. From Vierzon to Tours.

“The Xth Corps will furnish the cavalry division with a strong detachment of Engineers provided with blasting powder, so that the destruction of these lines may be simultaneous.

¹ Borstadt.

² With regard to this point Verdy du Vernois, in his work on the cavalry division, dwells upon the great importance of making prisoners, and of questioning them carefully, especially at the beginning of hostilities. After illustrating his remarks upon this head by the narration of an incident which happened during the operations against Bourbaki's army in the Franco-German war, he concludes his remarks by declaring that “the cavalry ought to give special attention to this point, for it is often one of the greatest services which it can render to a Commander-in-Chief.”

"I leave to the Commander of the VIth Cavalry Division the task of making the necessary dispositions for carrying out this order, but I shall count upon these railways being put *hors de service* by the 8th of the month. In addition to this, it will be the business of the VIth Division to inform me of the line of retreat followed by the enemy's troops who have retired by Ferté-Saint-Aubin. Communication will be kept up with my Head-quarters by means of relays of orderlies.

"The IXth Corps d'Armée will go into cantonments to the south of Orleans without going beyond the line of St. Hilaire-Olivet-Saint Denis, but to-day it will send a body of infantry to la Ferté-Saint-Aubin to support the cavalry.

"My Head-quarters will remain to-morrow at Orleans.

"The Field-Marshal Commanding the 2nd Army,

"Prince Frederic Charles."

The first of the orders here quoted gives instructions as to the general task of the cavalry referred to. In the last extract it will be seen that a special mission is entrusted to the cavalry division.

(3.)

Instructions issued from Army Head-quarters to the Commander of an advanced Cavalry Force.

The following general principles and instructions are laid down by Lieutenant-Colonel Pierron, in his comprehensive and well known work, entitled "*Les Méthodes de Guerre actuelles et vers la fin du XIX^{me} siècle.*"

They are so comprehensive that they will be found to include nearly all possible contingencies in almost any campaign, and I can hardly, therefore, do better than append a translation of the more important of them here.

The Commander-in-Chief of the army, after having determined upon his plan of operations, sends for each of the commanders of the cavalry divisions or brigades which are to be sent forward in advance of the army, and imparts to him the following information, viz. :—

That portion of the plan of operations which it will be useful to them to know.

The duties to be performed by the division, *i.e.*, to cover a portion of the front or a flank; to gain touch of the enemy, to screen the movements of one's own army, to unmask those of the enemy, and to give information concerning them, to occupy the passages over an important river or stream before the enemy can do so, to hinder the mobilization of the enemy's troops, to seize the magazines, to make requisitions, to outflank the enemy's wings, to destroy his lines of communication and of supply, such as railways, roads, telegraph lines, canals, &c.

The proclamations which are to be published in the enemy's country, orders to the communes or districts to give up their arms, and to furnish provisions, abolition of recruiting, &c.

All that is known of the enemy up to date, of the composition of his army, of the positions held by him and of his intentions; the doubtful points which it is desirable to clear up, the prints of the uniforms of the hostile army, &c.

A cipher for correspondence.

The portion of the front or flank which the brigade or division should reconnoitre, the delimitation which should be made of the zone of country to be assigned to each brigade or division, which should vary in breadth from five to ten leagues; the necessity of reconnoitring both banks of any rivers or streams which may run parallel with the direction of the march. In the event of the enemy changing the direction of his march, the necessity of applying for fresh instructions.

Funds with which to pay guides and spies.

The Commander-in-Chief, moreover, notifies in what direction and to what place the intelligence concerning the enemy should be sent to him, and impresses upon his hearers the necessity of only sending him information which is of practical value, *i.e.*, to avoid all vague generalities, but to be precise as to the names of regiments, the nature of the enemy's troops (cavalry, artillery, or infantry), their uniforms and approximate strength, and the direction of their march.

He points out the bodies of infantry which the cavalry division can count on for the moment for support ; and insists upon the expediency of making use of them as supports for the flanks, in order to draw the enemy's cavalry into an angle of cross fires ; in case there is no infantry, some squadrons on foot, and an ambuscade on the borders of defiles, will furnish a better support than the cavalry disposed entirely in line.

As far as is possible the Commander-in-Chief causes a small body of infantry to follow up the cavalry division, such, for example, as a battalion of foot chasseurs to protect his rear, to support him in need, should he be driven back by superior forces, and to guard his cantonments, especially during the night.

Finally, he completes the organization of the division by attaching to it an Officer of engineers, a detachment of military telegraphists, or at least some employés of the telegraph department, and a railway engineer to inspect the condition of the railways, and to report in good time the repairs which it is necessary to make to them.

The Commander-in-Chief points out, moreover, what is to be done to the railway lines, *i.e.*, whether they are merely to be rendered *hors de service*, or to be destroyed entirely. The cavalry division should be provided with special tools for this purpose, and with dynamite cartridges carried on the saddles in order that the men should always have them to hand, as carts or vehicles of any kind are never to hand when wanted.

Officers who speak the language of the enemy are distributed among the squadrons at the front. In addition, one or several post office officials able to translate manuscript are attached to the division, to seize the letters in the post offices, the official documents in the town halls and printing presses, to extract information from them, and to transmit them to Army Headquarters.

Finally, the General commanding the division is informed in what direction and to what place he will send his sick men and disabled horses, and where the *dépôts* are from which he will draw any necessary supplies.

The General commanding the cavalry division provides himself with a general map and also with detailed maps, identical with those of the Commander-in-Chief. The latter desires him, whenever he may have occasion in his reports to name any small place, to mention in brackets the name of the most important place which is nearest to it, in order to avoid the necessity of having to refer from one map to another.

The Commander-in-Chief, moreover, warns the leader of the cavalry division, that if the cavalry should receive the order to pursue the enemy, the plea that the horses were too fatigued to pursue will not be held as a valid reason for this order not being carried out. The horses which are not in a condition to carry out the pursuit should be left behind, and the squadrons will go forward with those which are most fit.

In cases where the cavalry receives an order to anticipate the enemy by occupying the passages, bridges, dikes, viaducts over a stream or river, or over a ravine, not only should these passages be watched by squadrons on foot, but the cavalry should strengthen itself by occupying the borders of villages and clumps of trees, where advantageous positions can be taken up, and should push forward patrols continually, so as to be forewarned of the

approach of the enemy. A report of such approach should be made direct to the Commander-in-Chief.

If, on the contrary, the enemy should have been beforehand and occupied the banks of the stream, the cavalry leader should ascertain the exact extent of the position which he occupies, and should point out in his report upon which flank he has discovered a passage or point from which a view can be got of the rear of the enemy's position, the breadth of the stream should be mentioned, as well as the comparative command of the two banks, in order that the army may be able to push forward, and make its preparations for bridging with pontoons, &c., as circumstances demand. Finally, the cavalry should point out the route to be followed in order to approach under shelter as near as possible to the enemy's position.

The commander of every detached party, whether it be brigade, regiment, or squadron, or any smaller party, must invariably point out and name to those under him who is to take his place, and to assume his functions and responsibility whenever he temporarily has to be absent from his post.

An officer of the General Staff detailed by the Commander-in-Chief of the army will accompany the cavalry division in order to gather and collate information on the special points upon which the Commander-in-Chief desires information, and to keep him constantly *au courant* with the general aspect of affairs. This Officer being unencumbered with any duties, and being conversant with the plans of his chief, should betake himself wherever he will be able to see and judge best.

The supplementary means of information by no means releases the commander of the cavalry force from the obligation of reporting direct to the Commander-in-Chief everything he learns concerning the enemy. In order the better to do this he will leave relays of orderlies between necessary points, in order to facilitate the transmission of news.

With these instructions issued from Army Head-quarters may be included the following important points which have to be considered, and arrangements which have to be settled, before the commencement of operations, in order to ensure the efficient working of a large cavalry force.

I will take, for the sake of example, the case of a cavalry division about to operate in front or on the flank of an army. The following list will be found, under ordinary circumstances, to embrace all points which are essential:—

1. All information that has been received concerning the enemy up to date.
2. The object to be attained.
3. The extent of front to be covered, *i.e.*, from such a point to such a point.
4. Connection with the brigades or divisions on either flank.
5. Co-operation of the troops which are nearest.
6. The strength of the infantry force upon which the cavalry can fall back, should it be unable to hold its own in front.
7. Reconnoitring squadrons who should both obtain and keep touch of the enemy, and who can seize a bridge or defile, &c.
8. Officers' patrols to be pushed out on the front or on the flanks.
9. Roads to be told off to brigades and regiments of the first line.
10. Communication of the several brigades of a division with each other.
11. The route by which the reserve brigade or regiment is to march.
12. Manner in which the division is to be concentrated, and its central point in case it should be driven back by superior forces.
13. Body of troops with which the commander of the division will march. Place where he will establish his head-quarters on arrival at the day's halting place.

14. News or intelligence to be sent direct—
 - (a.) To the Commander-in-Chief.
 - (b.) To the divisions or brigades.
 - (c.) To the troops in rear.
 Prisoners and documents to be sent to army head-quarters.
 Doubtful points concerning the composition of the enemy's forces to be cleared up.
15. Railways to destroy or to protect or to place temporarily *hors de service*.
16. Telegraphic lines to be cut off or to be watched and taken care of.
17. Bridges to be surprised or guarded.
 Rivers and streams to be patrolled and watched.
18. Place in the column of march of the reserve of cartridges, of the reserve of tools, and of the light equipage for the construction of bridges.
19. Distance at which the heavy baggage of the division is to follow.
 Designation of the brigade which is to furnish the escort to the baggage.
20. Relays of orderlies to be left in rear for the purpose of forwarding correspondence.
21. General alignment of position to be occupied after the march.
22. Designation of bivouacs or cantonments.
 Communication between bivouacs or cantonments by means of orderlies or by postal service, alarm signals, and posts.
 The situation of the head-quarters of the brigade.
23. Precautions for security : outposts, patrols, reconnaissances to be pushed far ahead. Methods on which signallers are to be made use of.
24. Telegraphic station where dispatches brought in by orderlies are to be sent to.
25. Measures to be taken concerning rations and forage.
 - (a.) Distribution of rations and forage.
 - (b.) Organization and march of the wagons, &c., necessary for its transport.
 - (c.) Reserve of oats to be carried.
 Subsequent measures to be taken :—
26. Watches to be regulated by that of the Chief of the Staff.
27. Requisitions to be made for—

Rations,
 Forage,
 Horses and wagons for transport,
 Linen,
 Leather,
 Tools, &c.
28. Delimitation of zones of requisition between brigades or regiments.
29. Disarmament of the enemy's country. Proclamations to be posted up.
30. Orders to be given concerning sanitary regulations.
31. Measures to be taken to get rid of men and horses who may become sick, wounded, and ineffective.
32. Establishment of horse infirmaries.
33. Orders concerning the artillery and its supply of ammunition.
34. Guides, maps, and statistical documents to be procured.
35. Indication of the map which the commander of the division makes use of in giving his orders.
36. The relief of squadrons, regiments, or brigades in first line.
37. The dispatch or recall of detachments. Arrangements for rationing and providing them with means of transport, if necessary.
38. Reports which these detachments should furnish while detached.
39. Measures concerning discipline ; provost-marshal and assistants ; prisoners' safe-conducts, &c.
40. Indents to be addressed to the nearest dépôts for fresh supplies of stores.

41. Requisitions to be made in good time for compressed hay, forage, cakes, &c.
42. Returns to be sent in.
 - Accounts.
 - Present states.
 - Diaries of march.
43. Secret-service funds for paying guides, spies, &c.
44. Arrangements for the issue of pay to the troops.
45. Organization of the postal service.
46. Proclamations to be given to the civil authorities.
47. Time and place to which reports are to be sent in on the morrow.
48. Officers to be detached, to march with bodies of troops which may be marching on either flank, in order to be constantly *au courant* with their movements.

It is not, of course, to be supposed that it would be necessary in every case to take all the measures which have here been named.

This list has been drawn up with the object of including all the more important contingencies which would in any case have to be provided for.

(4.)

Principles which should guide the Disposition, &c., of a Cavalry Force which is to cover the Advance of an Army.

It is obvious that when a cavalry force has to explore, as well as to ensure the security of a zone of territory which may be from 15 to 20 miles in breadth of front, the Commander of it, if he is successfully to fulfil the duties entrusted to him, must in each case conduct his operations upon some well-considered and definite plan. For what is the work which the brigade or division has to do? Briefly expressed, and omitting minor details, its *rôle* is this: Firstly, it has to find out what the enemy is doing or intending to do; and, secondly, it has to prevent the enemy from finding out what one's own side is doing or intending to do. In order to accomplish the first object, it is necessary that the cavalry force should be extended on as wide a front as possible; in order to accomplish the second, it must be so disposed as to be able rapidly to concentrate and fight. Thus it will be seen that the *rôle* of the force is not only a double one, but that the conditions of the two main objects it has in view are directly opposed to each other, inasmuch as the means which would naturally be taken to ensure the feasibility of the first of these objects render the second one doubly difficult to carry out.

As this whole subject, owing to its great importance, has been during recent years amply dealt with by well known military writers, it is only natural that as a result of the fresh discussion which it has undergone, and of the experience which has been gained, both in peace manœuvres and in actual service, certain general principles should have been prescribed and laid down in each of the great Continental armies, as being those which it has been considered best to carry out and adopt. In order the better to do this, it will be as well to glance at the principles of action which have recently been advocated and prescribed in some of the leading Continental armies. I propose, therefore, to take for this purpose the methods of action in the French and German cavalry, inasmuch as the *modus operandi* adopted in each of these armies may be said to present a contrast from which some instruction may be derived.

Since the war of 1870-71, four "*règlements d'instruction*" have been officially issued for the use of the French cavalry, viz. :—

1. The practical instructions of 17th February, 1875, on the duties of cavalry in the field.

2. The instructions of 27th June, 1876, on the duties of cavalry acting in advance of an army.

3. The regulation of 17th July, 1876, on parade movements.

4. The provisional instruction of 1st July, 1877, on cavalry marches.

It is with the second of these regulations with which we have here to deal. The instructions laid down in them for the disposition of a French cavalry division, consisting of three brigades of two regiments each, may briefly be described as follows :—

(For the sake of clearer explanation, I will call these brigades the 1st, 2nd, and 3rd brigades, and will distinguish the two regiments composing each brigade by calling them the right and left regiments of their respective brigades.)

The 1st line is composed of two regiments, viz., of one belonging to each of the two brigades, say the right regiment of 1st brigade, and the right regiment of 2nd brigade.

The 2nd line, which is to follow the 1st, in support, at about 6 miles or so in rear, is composed also of two regiments, say the left regiment of 1st, and the left regiment of 2nd brigade. Each of these latter corps is in rear and support of the right regiment of its own brigade. The 3rd brigade forms a general reserve on a main central route, if possible about 3 or 4 miles or so in rear of the 2nd line.

The two regiments forming the 1st line each send forward two squadrons, the interval between them being regulated according to circumstances, *i.e.*, by the nature of the country, the extent of the front to be covered, &c.

The remaining two squadrons of each of the regiments forming the 1st or advanced line, follow and are supposed to remain equidistant between the advanced squadrons of the 1st line and the 2nd line. If a flank is exposed to attack, these squadrons are to march so as to protect it, otherwise they march in rear of the centre of the squadrons which have preceded them.

2nd Line.—The regiments in 2nd line march on one of the routes which may be available, and should either be in rear of the centre of the regiment of their own brigade, the squadrons of which are extended in front, or in rear of either flank of it which may be exposed to attack. The 2nd line has to assist the 1st line in reconnoitring, by throwing out flanking patrols which are to go out to considerable distances, and also to send out Officers' patrols to the front, which are to avoid going over the ground which has been traversed by similar parties sent out by 1st line.

The military student will not fail to detect at once some cardinal errors in the regulations which I have just described.—The more striking of these are the stiffness and formality of the whole formation, the too great distribution of force, and consequent weakness of the whole line at every point. When these regulations were first issued, these and other grave defects did not escape keen-eyed German military critics, and the comments of one of them, which are supposed to be addressed to the French cavalry, will serve to show their opinion of the principles officially prescribed by the French military authorities.

“In carrying out the exploration of a section of country by cavalry, the only sound system is that of concentration.

“The French regulations of 27th June, 1876, are based on a false principle. In seeking to be everywhere, you will virtually be nowhere, and in this vast dispersion, where your groups are subdivided *ad infinitum*, squadrons are no longer squadrons, regiments are no longer regiments, nor are brigades any longer brigades. You believe that you will be able to reform in time to be of use to the division which you have broken up into small fractions over a section of country of from 30 to 35 kilometres (18 to 20 miles) in breadth, and with a depth of from 15 to 20 kilometres. But is not this an illusion? and are the risks which you run compensated by any real

"advantages? Your isolated parties are too strong, if they are only intended for transmission of intelligence, they are too weak if they are meant for resistance, or to take an offensive part. Again, you attempt to regulate in too dogmatic a fashion a service which should be elasticity itself.

"If your regulations do not prescribe, at least they seem to advise a normal disposition, and the sort of mathematical form which this disposition assumes entirely destroys any spirit of initiative, because you will always feel yourself more or less bound to this figure, even when circumstances may render it advisable to adopt quite different dispositions."

The German critic whom I have here quoted might have added that, in addition to these grave defects, two-thirds of the whole division practically passes at once beyond the Divisional Commander's control, and that more than two-thirds of it are continually engaged in the harassing work of reconnaissance and patrolling duties. It is only fair to the French cavalry to state that the system officially prescribed for them meets with their almost universal condemnation. Thus, in an interesting article which appeared in the "*Journal des Sciences Militaires*" for February, 1879, these regulations are severely criticized, and at the French cavalry manœuvres which took place in the neighbourhood of Paris in September of the same year, I found that they had by common consent fallen utterly into disrepute, as being too formal and quite inapplicable to the varied exigencies of actual warfare.

The principles accepted in the German army may be described as nearly the opposite of those prescribed in the French army.

In the first place, they adopt a far smaller zone of operation for a division, viz., 15 kilometres, or 20 at the most (*i.e.*, 8 or 10 miles). In order to be able to tell off a division to such a small space they draw freely from their great force of 93 cavalry corps. At the outbreak of hostilities, all the cavalry at the disposal of an army should be thrown forward in advance of the front, and the Germans do not hesitate to borrow from their divisional cavalry the number of regiments necessary to make up the independent cavalry divisions to the requisite strength of six regiments, *i.e.*, three brigades of two regiments each. The divisional cavalry corps, in taking their share in the work of general exploration, will render far better service to their infantry as units of the independent cavalry division, than they could render if acting as isolated bodies. Moreover, they need only be thus detached from their divisions for a time, and rejoin them later when their work of exploration and reconnaissance has come to an end.

Provided that the front to be covered does not exceed 15 kilometres, the system which finds favour in the German army is to hold one, or at most two, of the grand arteries of communication which run at right angles to this front. Thus, the whole division is concentrated upon one or two routes, having as its advanced guard a brigade preceding the main body of the division, at a distance of from 1 or 2 miles, during the march, and at a distance of from 5 to 6 miles during the time that the division is in cantonments or in camp.

A couple of squadrons are generally detached from the leading regiment of the advanced guard, in order to furnish a sufficient number of scouts, and their immediate supports. These are pushed forward in front of the regularly formed advance guard to as great a distance as the nature of the country, the proximity or otherwise of the enemy, or similar reasons, may seem to demand. If circumstances should require it, in addition to these scouts, small well-mounted patrols, consisting of an Officer and from four to six men, are pushed very far ahead, either on special missions or to gather what information they can, and are granted a complete independence for reconnoitring purposes. Flankers are generally detached from the main body of the advanced guard. Between the advanced guard and the division should be stationed posts of sufficient strength to ensure the proper and efficient transmission of news.

The observations laid down by Verdy du Vernois on this head are as follows :—

“The movements of armies and of corps d’armée must follow the principal roads, consequently it is these which should first engage the attention of the cavalry. It is, however, no less necessary to overrun and reconnoître upon a sufficiently large scale the country where the enemy may chance to be, or that in which his detachments may be moving.

“The extent of country to be reconnoitred determines the amount of cavalry to be placed in the first line, and decides the question as to whether a division can do the work assigned to it with a single brigade, or whether another brigade must be placed in front, or even a third. It is plain that the less one expects resistance, the less need there is of making the line compact, and the more the sphere of exploration can be extended.

“The main body of the division will always have to make its action felt in the direction where it has most chance of encountering the enemy, or where one supposes the main body of the forces to be found. It follows, therefore, that the main body ought to be placed at this point in rear of one of the wings, and if the extent of the first line is too great to enable it to give support opportunely to the wing which is attacked or opposed by the enemy, it will be necessary to give the latter great independence and a separate mission, or even to assign to it in case of need, a separate line of retreat.

“Generally speaking, a cavalry General will always keep in view the necessity of concentrating his forces, and will endeavour to avoid their dispersion. But while recognizing this principle, it must be borne in mind that the carrying out by a division of cavalry of the service of exploration necessitates the detachment of large bodies in cases where the extent of country both in depth as in breadth, or the exigencies of the strategical situation, do not admit of having a reserve in the centre.”

Captain Von Widdern¹ discusses this question of the actual disposition of the different component units of a cavalry division as follows :—

“The front and depth of a cavalry division depend, in the first instance, upon the width and extent of the zone of country which is assigned to it for exploration, and on the proximity of the enemy. The front should be defined exactly. It may be such that the cavalry division is obliged to keep the main body of its forces on a single route. On the other hand, the front assigned to the division may be such as to necessitate or to offer it the opportunity of marching on two or more parallel routes.

“In the first case, one of the light brigades with a battery should form the advanced guard, followed by the main body formed by the other two brigades. In the second case, viz., that of there being two or more parallel routes available, two brigades would take the main route, viz., the light brigade as an advanced guard, the heavy brigade as its main body. The least important route should be taken by the other light brigade. In the third case, viz., when there are three parallel routes, the brigades would march parallel to and as far as possible abreast of each other, each brigade having its own advanced guard. This latter disposition is the more favourable, inasmuch as the troops march more quickly, are more easily quartered in cantonments and fed, and occupy a greater extent of territory, a point which is of material importance as regards gaining information. As long as no contest is anticipated during the next twenty-four hours, this order of march ought to have the preference, even though the columns are a short day’s march distant from each other. In such circumstances, a concentration of the whole division is always possible within a day.

“As soon as the first contact with the enemy is felt, the division ought to

¹ “Handbuch für Truppenführung und Befehlsabfassung.” By Von Widdern.

"contract its front, so that a concentration might easily be effected in a few hours.

"It is necessary also to arrange for a reserve. For instance, it may be managed in the following manner. The two first light brigades are placed in the first line; to each of them are assigned a route, a zone of territory, and a special portion of work, whilst the heavy brigade follows at a little distance, and takes the main route. In a country which is at all practicable for cavalry, a cavalry division is sufficiently concentrated when the main bodies of the columns following the extreme flanks are 10 kilometres (6 miles or so) from each other, while the reserve brigade is 5 kilometres in rear of them.

"When the detachments charged with the duty of exploration and scouting, which are sent on many miles ahead, signal the approach of large forces of the enemy, and when it becomes necessary to reinforce one of the flank brigades with the reserve brigade, this can be done in half-an-hour, if the brigade to be reinforced is on the same route; and in an hour-and-a-half if it is on another route, counting from the moment that the brigade requiring support sends to ask for it. All this is on the supposition that there is a prospect of the cavalry being able to maintain itself in front.

"The complete concentration of the division can always be effected, i.e., if the lines of communication are in good order, in a few hours, either on one of the brigades of the first line, or on the reserve brigade.

"In all cases the division should take up a formation, such as has here been prescribed, when the hostile cavalry is not numerous or enterprising, or when the country is open and well provided with transversal roads, as a concentration can under these circumstances be completely effected in a few hours. Moreover, the scouts can widen the front to be explored by at least 6 or 7 kilometres (3 or 4 miles) by extending out on the flanks of both wings, so that the total front to be explored by the division could be made to stretch over 25 kilometres.

"The more distant the brigades marching on parallel lines are from each other, the more independent, it is needless to say, they ought to be of each other. It is desirable that each of them should have a battery at its disposal, and it is only in a country where there is a fear that the artillery might hamper the march of the brigade, that a battery should not be given to the advanced guard brigade.

"The Staff of the division should march with the main column, i.e., with the reserve brigade. It is this latter which, equally with the other columns, must hold itself responsible for the security of the baggage train. When a detachment of infantry (on carriages) is attached for the day to a cavalry division, its place on the march is usually with the main body of the principal column either in front or in rear of the artillery. When not on the march this detachment is given the duty of protecting the cantonment of Head-quarters, or employed to occupy defiles," &c.

All the foregoing remarks apply solely to the large units or bodies which compose the cavalry division. So long as the enemy has not been found, or while only small detachments of his force have to be dealt with, or while he gives way and continues to retreat, the work which devolves upon the first line of the division ought to be entrusted to small scouting detachments.

The strength of these scouting parties will vary from an Officer's patrol to a squadron, and they should keep in front of the regularly formed advanced guard, or should patrol to the right and left of the zone of country occupied by the division on the march. These scouting parties, whose duty it is to gain contact with the enemy, should be relieved from any direct obligation of providing for the scarcity of the division, and, in case of failure, should remain absolutely independent of the movements of the main body.

While the division itself marches to the front by either a single route or by several parallel or converging routes, and alternately arrives at certain points

which have been determined upon, these scouting parties, especially when they have once gained touch of the enemy, should be left as much as possible to their own devices, and should move forward with the sole object of adding to and completing the information already acquired, and of pushing their investigations further and further. The greater the distance which separates the division from the enemy, the more necessary is it for the scouting parties to push far ahead.

In order to secure the post office, letters, and telegrams, and the local papers, &c., and, in short, to obtain every information which, from a military or political point of view, may be of importance, it is necessary to act by surprise, and there is no better means of ensuring this great element of success than by sending forward Officers with small parties far ahead of the advanced guard, who will suddenly appear at points where cavalry is not expected.

In order to devote themselves more entirely to their task, these parties should be free from any obligation to act on the defensive, nor should they be instructed, in case they have to retreat, to follow any particular route. To endeavour to rally them every day on the advanced guard, or on any other support thrown forward in advance, is a task which will often be impossible, unless one wishes to run the risk of seeing them lose all trace of the enemy, or let go the touch which they may already have established with him.

While on the subject of these scouting patrols, it is worth while to notice a point which has been a good deal mooted on the Continent of late, viz., the necessity of entirely separating the service of outposts for watching over the safety of the army or main body from that of scouting and gaining intelligence of the enemy. It has not unfrequently happened, both on active service and at manœuvres, that the difference between these duties has not been sufficiently defined, and they have consequently been found to clash with each other. The gist of the views prevalent upon this point may be summarized as follows :—

In order to be informed of the movements of the enemy, it is necessary to be constantly in contact with him. To protect oneself against surprise, it is necessary to have outposts and detachments in advance of the main body, but these latter are not able to go far from the former, inasmuch as they may have to fall back upon it for protection. The result is, therefore, that if the enemy is at a certain distance, the detachments charged with the duty of protecting the main body cannot remain in contact with him. As it often happens, moreover, that the opposing armies are several days' march distant from each other, it is necessary that the duties of scouting and gaining intelligence, and those of ensuring the safety of the army (*service de sécurité*), should be separated and entrusted to different troops.

Thus, while on the one hand those whose duty it is not to lose sight of the enemy are alone able to furnish continuous information about him, the detachments, on the other hand, who have to perform the outpost duties, cannot furnish any intelligence about the enemy, unless they are in close proximity to him. The two tasks, moreover, are quite distinct from another point of view, viz., that the results of the work performed by those who are respectively charged with these duties concern different chiefs. It is necessary that the Commander-in-Chief of an army should have continuous reports concerning the movements of the enemy. The object of the patrols sent out by the outposts or columns on the march is merely to ascertain if the enemy is within range, or at any rate quite near. The exact whereabouts of the enemy matters but little to the subordinate commanders of these columns, as long as he is not within range. Thus, whenever the enemy is not to be found within the zone of country which is reconnoitred by the patrols of the outposts and picquets, it is necessary that the Commander-in-Chief should maintain contact with him by means of detachments of scouting

patrols who should look only to him, and who should receive instructions directly from him. This plan will be specially favourable to the efficient execution of the work.

With regard to the dispositions necessary for the outposts, and also for the fight, it is worth while to note the following points, viz., that the detachments engaged with the enemy ought to find their first support, and even their special reserve, from their own corps. This same principle should also be observed when the troops composing a division are distributed over several routes. Thus, when several parallel routes are available, a brigade should march on each of them. If a section of country of a certain extent is told off to a brigade, and if circumstances demand that this brigade should be subdivided into several small columns, it is a mistake to put an entire regiment in front line, and to provide it with the supports which may be necessary to it by means of detachments borrowed from other corps. Such an arrangement as this would greatly hinder the transmission of orders, especially for the commander of the regiment, and would also render proper surveillance difficult. It would, moreover, create confusion and inconvenience in rationing the troops.

With regard to the artillery, Captain Von Widdern remarks as follows:—
 “If the division has as many batteries as brigades, each brigade retains as a matter of course its battery when marching by brigade. If, as often happens, the division has only two batteries for three brigades, that brigade which is eventually to be detached should take with it a battery, leaving the other to march with the main body. If the division marches upon a single route, the advanced guard brigade should take with it one battery, and if there is any question of a pursuit, it should take them both. There are, however, many cases in which (although it is an infraction of the ordinary rule observed) there should be no hesitation in giving a division of a battery to a detachment which has to be separated from the main column. It is especially advisable to do this in a country where the population show an active resistance, or when hostile irregular bands will probably have to be dealt with, who will endeavour to bar the entrance into woods, defiles, and villages. The mere presence, and much more the coming into action of artillery, at once gives a cavalry force a most imposing effect. A few shells thrown into a village where the population contemplate resistance has a marvellous effect.”

With regard to Captain Von Widdern's opinion, which is here expressed, on the subject of breaking up the artillery into small detachments, it may be as well to make a few remarks.

It may sometimes be advisable to detach a portion of a battery in the manner just described, but I think there is no doubt that it should be regarded as quite an exceptional measure. It is, indeed, generally accepted that there is nothing to be so much guarded against as the dissemination of artillery, and it is highly important to know how to resist the demands of commanders of detachments for a few guns. Upon this point, Verdy du Vernois remarks: “It is not necessary for artillery to penetrate into the zone of exploration. One often sees at manœuvres a detachment of two or three squadrons precede a column with a battery of horse artillery attached, an arrangement which, even at manœuvres, has numerous disadvantages, because the squadrons should spread over the country, and should only keep together a small portion of their effective strength; even this party may find it advisable to quit the road as soon as the enemy shows himself. In such a case the artillery will be forced to follow across country over all sorts of ground, and the horses will have a great deal taken out of them before they have been able to render the least service. Artillery has need of some little time to get the proper range, and the small parties of cavalry who are at these times to be seen in the far distance offer but a very small

"target to fire at, and they are always on the move. They can, moreover, "always find an undulation of ground behind which to take shelter, as soon "as a shell bursts near them. In addition to this, a small body of cavalry "under these circumstances has always to be thinking of how to take care of "the guns, and this paralyses all its movements. For these reasons it is only "under exceptional circumstances that a battery should be detailed to accom- "pany a single regiment."

What, then, are the main principles of action to be deduced from the epitome of opinion which has been quoted? It seems to me that they may be summed up somewhat as follows, viz:—

(1.) That the brigade or division must be of a certain considerable strength in order to be able to meet the onerous and varied duties which it may be called upon to perform.

(2.) That it is necessary, in arranging for the disposition of an independent cavalry brigade or division to which a zone of country has been assigned for reconnaissance, to bear in mind the necessity of being able rapidly to concentrate the whole available force.

(3.) That in order to effect this object, it is absolutely necessary to avoid a too great dispersion of the force at disposal, and that the extent of country assigned for reconnaissance to a body of cavalry should be as far as practicable proportioned, both in depth and breadth, to its numerical strength.

(4.) That when it is deemed advisable to send out Officers' patrols or scouting parties far ahead of the advanced guard, these patrols should not be fettered with the obligation of taking measures to provide for the security of the troops in rear. If on the march, that duty must devolve upon the regularly formed advanced guard. If the force is stationary, as, for instance, when halted for the night, the duty of securing the safety of the force will naturally be undertaken by the regular outposts.

(5.) That as soon as the enemy is found, and the main line of his advance has been ascertained, the division or brigade should contract its front so that a concentration may be effected in good time.

(5.)

The Organization of a Pursuit.

One of the most difficult tasks which can fall to the lot of a cavalry division is to regain the lost touch of the enemy, either when he may have changed his plan of operations, or when, either after a defeat, or before a decisive battle, he makes a secret and sudden retreat. The difficulties of the task in this case are naturally greater or less in proportion to the ignorance which exists as to the routes which may have been taken by the enemy. For instance, the German cavalry had the greatest difficulty in 1870 in refinding the army of Marshal McMahon, when the "touch" of that General's forces was lost immediately after the battle of Wörth, and when the shattered *débris* of his army escaped towards Champagne by the defiles of the Vosges, the Moselle, the Meuse, and the Marne. Two divisions of cavalry, and afterwards four, were ordered to regain the touch of this army.

For a long time utter uncertainty prevailed as to the route which General de Failly's corps had taken; and yet the traces which this corps had left in its track were numerous, the population of the country had shown no disposition to resist, and from the Vosges to the Marne, as also subsequently in the Argonne and in Champagne, the German reconnoitring parties met with a most insignificant resistance. In other words, everything was in favour of the German cavalry.

When, as has often happened, the combat has been prolonged till nightfall, and when at the moment when the last echoes of the artillery fire die away,

there has been no opportunity of forming any clear idea of the exact situation of the enemy, it is often absolutely necessary to wait till morning in order to find out how matters stand, so that any further decisive measures may be based on the actual state of affairs. If on the morrow the weather happens to be foggy or misty, there arises a new difficulty in addition to those already existing, and very often the favourable opportunity for a pursuit will have passed away, ere it is possible to see that the enemy has completely evacuated his position, and before any idea can be formed by an actual examination of the battle-field of the extent of the defeat inflicted upon the enemy.

Favoured, then, by the darkness of the night, the enemy has avoided a direct pursuit by a forced march. But in what direction has he gone? That is the question to be solved first of all. It is upon the cavalry that the solution of it devolves, and they must first of all regain contact with the vanquished foe.

It was thus that matters generally stood at the end of the greater number of the battles fought upon Austrian and French soil in 1866 and 1870-71, and especially in the case of those contests which were interrupted by the darkness of the night. After the battles of Königratz, Wörth, Spicheren, Orleans, Amiens, St. Quentin, and other minor engagements more or less serious, the conqueror completely lost contact with the enemy. After the battle of Königratz, this contact was not completely established till the sixth day; after the battle of Wörth, contact was, it is true, regained the next day, owing to the pursuit of the 4th Cavalry Division and some detachments of Bavarian cavalry; but in the evening of that day all traces of the French were again lost, so that, as already mentioned, the Germans remained a very long time in utter ignorance of the direction followed by the shattered remnants of McMahon's army (which had avoided pursuit by making forced marches during two successive nights), as also of the direction of the retreat of De Failly's corps. After the battle of Spicheren, the Germans also lost all contact with the enemy, who had withdrawn during the night. This contact had then to be regained, which was not done till two days later.

In winter campaigns, when the beaten army can make use of the long nights to carry out its retreat in secret, and the victor can only carry on the pursuit during the comparatively few hours of daylight, there will most frequently be seen that which has just been described, viz., complete loss of contact, and great difficulty in regaining it.

The army, then, which has been favoured by the fortune of war, and which sees night coming on before there is any decisive issue to the conflict, ought not to let its cavalry remain inactive, even during the night. On the contrary, all the cavalry, reunited on the field of battle, should be pushed forward on the main roads, so that, in the event of a pursuit being determined upon, it should hold itself ready in close proximity to the most advanced position occupied by its own army, to launch forward its forces at daybreak in pursuit. During the night Officers' patrols should endeavour to gain news of the enemy's movements, especially by pushing forward on those roads which it is probable he would make use of in case of a retreat.

This assembly of the cavalry towards the close of the day, or during the obscurity of the night, is on battle-fields of any great extent by no means an easy task. Nevertheless, every effort must be made to effect this difficult work, so as to get the cavalry together in good time; and it is also necessary that the cavalry itself should be equal to the occasion, if it receives orders to betake itself, in spite of the darkness of the night, to a different point from where it has been engaged during the day, or despite the fatigue and exhaustion of men and horses, either to keep on the enemy's track, or to refind it if it has been lost.

The Officers entrusted with the command of the different bodies of cavalry ought to remember that upon their arm devolves the task, without any formal

order, of preserving contact with the enemy, and of unhesitatingly undertaking his pursuit. They should therefore give directions upon their own responsibility for all that is necessary to obtain this double object, and should without any delay, at the close of a battle, send their staff and orderly Officers to the Commander-in-Chief, in order to inform him of the position in which the cavalry may happen to be, and of the measures which they have taken in anticipation of an active pursuit, as well as to ask for fresh instructions.

The commanders of the cavalry posted on the wings of the line of battle should specially endeavour to carry out the directions just detailed, inasmuch as the Commander-in-Chief has a right to expect that these Officers will take all possible measures to obtain verbal instructions.

The cavalry posted on the wings of the line of battle should seek during the night to anticipate, and to reconnoitre the routes on which the enemy will probably retreat. As long as these routes are more or less encumbered with the enemy's troops, it will be sufficient to employ Officers' patrols to watch them, and to keep up the contact; on the other hand, should the enemy have made good the retreat so that the roads are clear, and afford no definite clue, they should be employed by complete squadrons, which should push on their investigations as far as necessary, and should leave posts of communications behind them as they go on.

When these squadrons are able to ascertain definitely that the enemy is in retreat, and have found out the route or routes he has taken, they should not cease to follow him up as long as circumstances will permit them to do so. Meanwhile the main body of the cavalry keeps up communication with these detached squadrons, and sends them reinforcements in case they are in want of them. As a rule, however, it should not follow on till daybreak. Less fatigued than the troops which have been employed in discovering the line of the enemy's retreat, the main body of the cavalry will be able to render better and more effective service during the day, and to take the lead as soon as the real pursuit begins. Thus pursuit will be all the more energetic and tenacious, if the strength of the men and horses have been husbanded during the night.

In any case, it will generally be upon the small scouting patrols that the most fatiguing work will devolve during the night, as it is their duty to maintain the actual contact with the enemy. In spite of the many difficulties with which they have to contend, such as that of ascertaining what is taking place in the darkness of the night, the danger of being completely lost in a strange country, &c., it is more than probable that at least some of the numerous patrols sent out will accomplish the end in view.

There are cases, however, when, in spite of the activity and skill with which the scouting patrols may carry out their work, they are liable to be completely baffled, and unable to effect anything beyond a certain point. This is especially the case when they find themselves stopped by a natural obstacle, which it is impossible for them to cross, such as a river, the passages of which are either held, or have been completely destroyed by the enemy.

It was thus, for instance, that on the 28th November, 1870, at the close of the battle of Amiens, the German cavalry was unable to discover the direction followed by the French in their retreat beyond the Somme. It is true that the nature of this river permitted the scouting parties to reach the different points of passage, but it prevented them from going any further, as it was impassable, and the bridges had been completely destroyed by the French.

When a retreating foe, in spite of all the vigilance of the conqueror, or in consequence of his negligence, has made good his retreat, and the cavalry force sent in pursuit has not yet been able, from various causes, to come up with or regain contact with it, *i.e.*, when all traces of it have for the time been lost, the scouting parties ought especially to make it their business to gather together all materials necessary for gaining a due appreciation of the

position of the enemy, by getting possession of the most recent journals and papers at the postal and telegraph offices, by questioning the inhabitants, &c. Wherever a strong patrol, a troop, or a squadron, arrives at any place, the first visit should be to the telegraph office, in order to carry off the register of messages sent and received; to the post office in order to get possession of the letters; to the railway station to get possession of all documents connected with the traffic, and with the recent dispatch and arrival of trains; to the prefecture or sub-prefecture to examine any papers which might have reference to the movements of troops. When the exploring detachments were strong enough, and as soon as they had ascertained that no enemy was present in the place, this work was, in the campaign of 1870, divided by the German scouting parties, and a descent was made simultaneously on the railway station and the post office.

In organizing a pursuit, the first instructions issued relative to this operation ought, in general, to embrace the following points, viz., a brief *résumé* of the successful results of the fight and the general direction of the enemy's retreat; a few words vividly depicting the advantages to be reaped from a vigorous pursuit, and which should tend to reanimate the exhausted energies of the troops. Finally, a brief explanation of the main objects which it is desired to attain by this supreme effort. After this should follow:—

1. Instructions for the cavalry divisions launched forth in pursuit of the enemy on the different roads. These instructions should clearly specify what destruction should be made of telegraph lines and railways which run to the rear or flanks of the enemy; they should direct the cavalry division to sever the connection of the main line upon which the enemy may be found to be retreating, with any branch lines, in order to render easier the capture of the rolling stock, &c. In certain circumstances the cavalry will, moreover, be charged to prevent the enemy from carrying out any works of railway destruction.

2. The designation of a sufficiently numerous body of pioneers, who sometimes have to accompany cavalry columns in order to carry out special tasks; also the designation of infantry detachments who ought to follow the cavalry without delay in order to support it. These latter and their equipment should, whenever practicable, be mounted on carriages.

3. Designation of any special tasks which it is expected that the cavalry commander will carry out.

4. The indication of the place where the army head-quarters will provisionally be established, and also the points to which the cavalry detachments advancing along the different roads will send their reports *direct*, and from whence they will take their orders up to a fixed hour. This is generally noon on the first day of a pursuit.

5. Arrangements for fresh supplies of ammunition and stores.

6. The place to which the pioneers should be sent.

Captain Von Widdern discusses at some length the measures to be taken for efficiently carrying out a pursuit. With regard to the part which the cavalry should play in it, he remarks as follows:—

"Masses of cavalry should be concentrated on the route on which to all appearance the main body of the enemy is likely to be met with. As many batteries of horse artillery as possible should accompany the cavalry, and if circumstances admit of it, some companies of infantry carried on carriages and abundantly provided with cartridges, as was done repeatedly with success during the campaign of 1870-71. It is, moreover, desirable that the cavalry should be accompanied by an Officer of the Head-quarter Staff, who should fulfil the functions of official reporter. With regard to the other roads, they should be scoured by small detachments, such as regiments, squadrons, strong patrols commanded by Officers, &c.

"The strength of these bodies must vary in proportion to that of the

"whole cavalry force employed. In all cases the addition of some guns to the pursuing force is most useful; the mere appearance of artillery always produces the greatest effect upon an enemy overtaken in full retreat, and perhaps also in a state of utter disorder; it tends also to give the pursuing cavalry force greater completeness and prestige, and to encourage its audacity. It may be added, also, that if any fresh engagement should take place with a considerable body of the enemy's troops, the firing of the guns acts as a guide to any bodies of the pursuing force who may be advancing by parallel roads.

"It is very important to send frequent reports to head-quarters, which ought to be at some fixed point, and to follow at a certain distance in rear. 'Negative reports,' i.e., those indicating the points where the enemy has *not* been met with, or the routes on which no traces of his retreat have been discovered, are no less important than other reports. It must not be omitted to attach to each report a return of the number of prisoners made up to the very hour of sending off the report, showing the branch of the service, and the corps to which such prisoners belong.

"The commanders of the cavalry march with their main columns, and after notifying in a cursory fashion to Army Head-quarters the most important facts that have been ascertained, and results that have been achieved by the pursuit, they will at their first halting place furnish a daily detailed report of all that has taken place. The circumstances of the moment must decide if the Officer of the Head-quarter Staff, who has been detailed as official reporter, is to return the same evening to Head-quarters in order to report verbally his views, and to recount the facts which he may have observed."

The same author also discusses the case already supposed, i.e., when, after a defeat or before a battle which is imminent, an enemy is forced, or thinks it prudent, to make a rapid and secret retreat. He gives the following as a specimen of the orders and instructions which might be issued to a pursuing cavalry force of two divisions under such circumstances:—

"The first cavalry division will endeavour to-morrow morning to re-establish the touch of the enemy.

"With this object the main body of the division will proceed in the direction of A, smaller detachments will proceed towards B and C, and will act so as to press the enemy very closely.

"The cavalry will also ascertain whether scattered fragments of the enemy's forces have escaped by way of Z.

"The second cavalry division will immediately advance with all its forces in the direction of E, passing by D. The Commander-in-Chief wishes to lay especial stress upon the importance of reaching the bridge of E before to-morrow evening, in order that its destruction may be prevented by the enemy. On the other hand, it is necessary that the enemy's communications with the fortress of F should be interrupted. In order to be able to maintain possession of the said bridge the division will be supported without delay by a battalion of chasseurs, for whom carriages will be provided.

"With regard to the further movements of the second division, after having ensured the possession of the bridge at E, it will endeavour to gain the left flank of the enemy's column of march, and will do its utmost to destroy the railway near H, which the enemy will doubtless endeavour to reach in order to use it for the transport of his troops. It is of the greatest importance to capture the rolling stock of this railway.

"Prisoners will be conducted to P.

"The head-quarters of the army will proceed to-morrow provisionally as far as M, to which place the commanders of the different pursuing columns will send their reports direct up to noon, and eventually by

"relays of orderlies. By the same agency they will receive the orders sent out to them.

"Officers of the Head-quarters Staff will be attached to the cavalry divisions, in order to send in reports to army head-quarters on the general situation of affairs.

"It is extremely important that the pursuing force should not delay to make known the roads upon which *no* traces of the enemy have been met with."

When the enemy has at his disposal, immediately in his rear, a line of railway which he can reach in a march, or at any rate in a few marches, the victor engaged in the pursuit should strain every nerve to prevent his making use of it to facilitate his retreat. It is therefore of the utmost importance that the victor's pursuing columns should without the smallest delay reach the probable point where the retreating foe will first reach the railway. These columns should be of considerable strength, and be composed of the three arms; cavalry detachments should also simultaneously be sent forward, accompanied by pioneers, to destroy or temporarily render *hors de service* any lines by means of which the enemy, if he once succeed in carrying off his forces by embarking them on the railway, can escape in a lateral direction.

It may be observed that a pursuit carried out exclusively by cavalry, with the object of immediately gaining contact with an enemy who has secretly withdrawn his forces,¹ or even any pursuit carried out, only by cavalry, unsupported by infantry columns,² will seldom lead to a success of any real importance.

In a pursuit, the direction which will ensure the most decisive results will always be that which tends to push the enemy off the line of communication which connects him with his base of operations, and from his sources of supply. The Franco-German campaign offers two memorable examples of the consequences to an army of being thus driven from its lines of communication. In January 1871, after several defeats, the army of Bourbaki was driven into Switzerland. Previous to this, the army of Bazaine, beaten at Spicheren and Colombey-Neuilly, was pushed off its line of communication with Chalons.

The troops which in an engagement have taken an active part, directly conducing to the retreat of the enemy, will rarely have an opportunity of following him up during his retreat otherwise than in a frontal direction. On the other hand, other fractions of the army, such as the cavalry, from their position with regard to the enemy's line of communications, will often be in a position to co-operate with other troops, so as to drive the adversary from his base of operations.

An indispensable condition towards effecting this result consists of quickly notifying all important intelligence to the other bodies of troops which may be co-operating in the pursuit, and prompt use should be made by the cavalry of orderlies, or, if necessary, of small parties for this purpose.³

(6.)

Continental Cavalry Manœuvres in 1879.

In order to give a general idea of the cavalry manœuvres which are annually practised in Continental armies, I propose to give a brief *résumé* of those

¹ *E.g.*, The pursuit after the battle of Wörth.

² *E.g.*, The pursuit after the battle of Orleans.

³ The dispositions of General Goeben for carrying out an energetic pursuit of the French after the battle of St. Quentin, in January, 1871, may be quoted as an example of what can under adverse circumstances be done.

which took place in the French, German, Austrian, and Russian armies in the autumn of 1879.

Of the great cavalry manœuvres of the above year, I will first deal with those which took place in the environs of Paris in September, 1879, and which attracted a large number of visitors.

The French Cavalry Manœuvres of 1879.

The programme of these manœuvres was as follows :—

As a preparatory measure there were assembled in the department of the Seine and Marne, the first cavalry division (one brigade of chasseurs, one of dragoons, and one of cuirassiers), under the orders of General Thornton, at Rebaix; and the 4th cavalry division (one brigade of hussars, one of dragoons, and one of cuirassiers), under the orders of General Espouilles, at Nemours. From the 4th to the 13th September these troops practised a progressive course of exercises with the several tactical units, from the squadron to the division. Then began the manœuvres of two divisions operating one against the other. The direction of these manœuvres was entrusted to the General commanding the 9th Corps, the Marquis de Gallifet. The general idea adopted by this Officer was as follows :—General Thornton was instructed to cover the advance of an invading army which, having arrived in the valley of the Marne by the various issues leading out of Champagne, had formed the resolution of marching upon Paris by the valley of the Oise. In order to carry out this scheme he had to direct his march upon Ferté-sous-Jouarre. General d'Espouilles was opposed to him, and was sent by a hostile army established at Orleans to watch the operations of the army, whose presence in the valley of the Marne had become known. Hence it will be seen that the chief task of the 1st Division was to form a screen, and that of the 4th Division to break through it.

At the beginning of the manœuvres the distance between the two divisions was 90 kilometres (about 50 miles). It was necessary, therefore, before doing anything else to bring them into contact with each other. In order to do this, and to prevent the troops from marching at random, General de Gallifet prescribed the movements to be made so that they should come into contact on the 15th September. During the next four days manœuvres à *double action* were practised. Here, again, in order to bring about the greatest possible number of encounters, and those, moreover, on the most favourable ground, movements were prescribed in the most minute detail, down to fixing the very hour of encounter. This was carried to such an extent that no initiative whatever was left to the commanders of the two opposing sides, inasmuch as the issue of all orders of any moment was reserved to the supreme authority. As these orders, moreover, were given much too soon, and as the subordinate commanders issued their instructions as soon as they received them, the result was (as was remarked in the "*Spectateur Militaire*")¹ that it was known long before that such or such a regiment would on a certain day defend a certain ford, &c. Another result was that these minute and detailed instructions often entailed counter-orders, and thus produced disorder. Much useless labour, moreover, was expended in drawing them up, transcribing and issuing them, and finally the troops were unnecessarily harassed and fatigued.

General de Gallifet profited by this occasion to issue detailed instructions on the subject of scouting, reconnaissance, and outpost duty, the employment of artillery, and several other subjects. Finally, he availed himself of these manœuvres in order to test a "*projet d'instruction sur le service d'exploration de la cavalerie en campagne*." This plan, which he had drawn up by order of the Minister of War, and introduced on trial into the IXth

¹ See *Livraison* of October 15, 1879.

Corps, seems destined to replace the regulations of 27th June, 1876, which are actually in force, and to which reference has already been made.

That great interest was taken in these manœuvres, and that the lessons to be learnt from them were closely studied, was abundantly shown by the space devoted to them in the French military periodicals and papers of the time, in whose pages they were closely scrutinized and discussed.¹

The encomiums bestowed upon the cavalry were generally confined to reasonable limits. "L'Avenir Militaire," in its praises, began with the private soldier, but did not go further than the Captains. The "Spectateur Militaire" was willing to admit that the Colonels were worth something, but it attacked the Generals of Brigade with the utmost violence, and, moreover, repeated *verbatim* the severe censure which General Espouilles expressed to the division on several matters. But on the whole the general verdict was that the French cavalry had learnt much, and that it was animated by a sincere desire to learn and improve itself more. It was admitted on all hands that manœuvres, continual manœuvres, were the chief desideratum, and that it was necessary that every division should have an opportunity annually of carrying out manœuvres extending over a certain time. It was thought, also, that this was equally necessary for the brigades of divisional cavalry. The service of scouting and reconnaissance was carried out, as has been already mentioned, in accordance with a new system which was introduced on trial.

The regulations officially prescribed in "L'Instruction sur le service de la cavalerie éclairant une armée" had fallen into complete disrepute. They were condemned as being too formal, as being inapplicable in many cases, and as causing a too great dispersion of force. What a cavalry division is required to do when covering the advance of an enemy is above all to see well. Consequently it has to put forth its "antennæ" far ahead and yet retain the power of rapidly concentrating in order to fight the enemy. As these are the conditions to be fulfilled, the proposition has been mooted of separating completely the service of scouting and reconnaissance from that of outposts, ("le service de sécurité"). For reasons already explained it will nearly always be found necessary on active service to separate these two services.

During these manœuvres the normal plan adopted for carrying out the service of scouting was as follows:—The two regiments of a brigade marched side by side, and each of them detached a squadron ahead, which distributed its four pelotons over the front of the brigade. Each peloton sent a party (or "point" as it is called in the French cavalry service) about 800—1,200 yards ahead. This party or "point" consisted of four or six men, according as non-commissioned officer or Officer commanded it. This plan pre-supposes numerous roads or a country which is especially practicable for cavalry. Moreover, in wishing to avoid a too great dispersion of forces, it makes the "antennæ" of the force so weak that they would never be able to reconnoitre a country which was at all hilly or broken.

During these manœuvres, so prodigal a use was made of "Officers' patrols," that the efficiency of the regiments was thereby impaired.

With regard to fighting on foot, though a true estimate has been taken of the value of this practice by the French military authorities, and although it has been officially limited to certain conditions, yet it was nevertheless during these manœuvres too frequently resorted to. On several occasions, however, the opportunity was rightly taken of using it with success. This was notably the case on September 18th, when the chasseurs, pursued by some dragoons, who were paying no attention to reconnoitring the ground ahead of them, were opportunely checked by the fire of dismounted men. Theoretically, however, it seemed to be thoroughly understood that it would be a mistake to

¹ See "Moniteur de l'Armée," 1st October; "L'Avenir Militaire," 6th October "Spectateur Militaire," September—November, 1879, &c.

suppose that this mode of fighting could have an excessive influence on the action of cavalry. Fighting on foot is chiefly to be recommended in the case of a retreat, and yet it ought not to be so stubbornly maintained as to prolong resistance too much, if one does not wish to run the risk of having one's retreat cut off. Cavalry fire ought always, if possible, to surprise the enemy ; it should never degenerate into a sustained fusillade, and in no case ought the mounted attack to be delayed by it ; nor ought it to prevent the cavalry having recourse to the sabre.

For offensive purposes it should never be resorted to, when there is any possibility of attaining the object in view in any other way.

Such is a summary of the rules prescribed for, and the views generally entertained by the French cavalry on this subject ; which will, I think, be acknowledged as being generally sound.

The part played by the horse artillery attached to the cavalry in these manœuvres was severely criticized, and the two arms were recommended to acquire a closer acquaintance with each other. On some occasions it was said that movements were skilfully carried out with the object of gaining shelter from the enemy's fire ; but, on the other hand, the contrary was often the case, and many times the cavalry, under the impression that it was right to give the artillery ample opportunity of first producing an effect with its fire, carried this idea too far and let slip the chances of success which a prompt attack would have given.

With regard to the escort of the artillery, in addition to the special duties entrusted to it, General de Gallifet laid great stress upon the importance of its carefully reconnoitring the ground with a view to the special requirements of horse artillery.

Austrian Cavalry Manœuvres of 1879.

The Austrian cavalry manœuvres of this year, which took place at Bruck, on the Leitha, were carried out by the 2nd Cavalry Division (four regiments of six squadrons, one of four squadrons, and one of two squadrons), in all, 4,526 horsemen, and two horse artillery batteries of six guns, under the supreme command of the Inspector-General of Cavalry, Field-Marshal Count Pejacsevitch, and they lasted from August 23rd to September 6th. The majority of the troops were quartered in the permanent camp, and the rest in cantonments. This method of sheltering the troops, entailing as it does the necessity of manœuvring over a perfectly well known country, presented all the petty advantages and the great drawbacks which are inseparable from permanent camps. It is owing to these drawbacks having been so greatly felt that the wish has been expressed in Austria, that the plan adopted in Germany for the carrying out of manœuvres might be generally followed.

All these Austrian cavalry manœuvres were carried out *à double action* except those of the first day, when the enemy was indicated by a squadron. The Commanders of both sides on the evening before received printed programmes which made them acquainted with the object of the manœuvres, the general idea, the special idea, and the situation of affairs at the beginning of the day's work. The umpires received instructions containing suppositions as to the probable course of the movements which would be carried out. But these instructions were always kept secret until the termination of the day's work, and were only made use of by the umpires to guide them to the points where their own presence would probably be necessary. They were only made known when the day's manœuvres were over, and they then served to render the latter more instructive by comparing the movements actually carried out with the calculations of the superior authorities. With this programme for a basis, the Commander of each side had on the evening

before to draw up the necessary orders, and to communicate them to the troops under his command. In these orders he had to indicate the composition of the different columns, the routes they were to take, the object they were to hold in view, and to point out by what means the columns were to maintain communication with each other, as well as with himself and his staff, &c.

In order to render these manœuvres as instructive as they ought to be, *i.e.*, really manœuvres, and not merely parade exercises, orders were given each day that the troops of each side should start at a great distance from each other. This often necessitated marches of 15, 20, and even 30 kilometres (9, 12, and 18 miles) being made to get to the starting place, and then, of course, the troops had in addition to the fatigues of the manœuvres to return home, so that the endurance of men and horses was put to a considerable test. Thus, for example, on the 29th August, the 8th Regiment of dragoons, in addition to the ground gone over during the course of the day's manœuvres, had to march 60 kilometres under a broiling sun.

The object of the first day's manœuvres, which were directed against a marked enemy, was to concentrate the division which was marching in three separate columns on the head of the centre column. In other words, the division being occupied in making a simple march ahead against an enemy believed to be weak, it was suddenly found necessary, owing to an unexpected change in the aspect of affairs, to effect a concentration of the division. Various calculations of time and distance had then to be made to enable this movement to be carried out without harassing men and horses unnecessarily and as rapidly as possible. The execution of this manœuvre showed that it is advisable in actual practice to allow for the hitches and delays, which, in theory only, have no existence, and that it is far better in an unknown country to keep to the roads than to go galloping across country.

The tactical object of the manœuvres, which took place on subsequent days, when two sides were opposed to each other, was to exercise the cavalry in every phase of duty which on active service would be likely to fall to its lot; the composition of the two sides was varied, as the neighbourhood of the camp at Bruck enabled either infantry or an additional force of artillery to be added to either side. This tended to diversify each day's work without in any way taking away from the manœuvres their characteristics as exercises for cavalry.

The first day's work for each of the two sides was to march out of camp and dispose in order of march a great mass of cavalry. The second day the stronger side had to carry out the service of reconnaissance and scouting, and the weaker side, reinforced by a battalion of chasseurs, had the task of forming a screen so as to hide the movements of an army in rear. A reconnoitre between the opposite sides was the main feature of the manœuvres of the third day. On the fourth day, the stronger side acted as the support of a wing which the weaker side had to attack while it was marching. The fifth day there was a representation of an episode in a pitched battle. Finally, the sixth and seventh days were devoted to combined manœuvres of the three arms, in which infantry and artillery on a large scale took part.

Major Dembschen, an Austrian Officer, wrote an article on these manœuvres, which was published in the December number of the "Austrian Military Review of 1879." To it I am indebted for most of the details that have here been given. The author states that a considerable improvement was to be noticed in the performance of scouting, reconnaissance, and outpost duties, especially in the matter of gaining information; on the other hand, he censures the squandering and too great depression of forces in the performance of some of these duties, and lifts up his voice against the too lavish use that, in the Austrian as well as in the French cavalry, is made of Officers' patrols; a practice which in both armies seems to be abused. He recommends that a vigorous distinction should be drawn between the services of

ordinary scouting and outpost duty, and those of Officers' patrols, inasmuch as at present these duties often encroach one upon the other; and he is of opinion that a special *service d'informations* should only be set on foot when the distance from the enemy is found to be so great that it is not possible for the scouting to be carried out by the troops who in the ordinary course of things would be charged to carry out that duty.

The German Cavalry Manœuvres of 1879.

The cavalry manœuvres which were executed at Namslau, in Silesia, under the command of Major-General von Alvensleben, by a mixed division of Prussian cavalry (two regiments of cuirassiers, two of hussars, and three of uhlans), strengthened by two batteries of horse artillery, served to illustrate a combination of two systems. The one which has become habitual almost exclusively in the German army consists in operating against a marked enemy. The other consists in having two opposing sides manœuvring against each other. This latter method was, as already shown, practised in 1879 in France and Austria. In Germany, however, in that year, it was the former system, viz., manœuvres against a marked enemy, which was most practised.

When the regiments had had the usual preliminary practice in brigade drill, two days were devoted to manœuvres which were intended to illustrate the employment of the brigades as the three lines of a division. There were then two days upon which the division was considered as an independent cavalry division, and also one day when it had to take its part in line of battle.

On these last two days, each regiment was formed in rank entire, an arrangement which afforded a great number of Officers an opportunity of practising the discharge of the duties of a higher grade than their own. Great efforts, moreover, were made to make the manœuvres as instructive as possible in every respect. The marches to and from the scene of the manœuvres were all carried out in every respect as in time of war. The regiments marching from different quarters had orders to oppose one another on their entry in the zone of cantonments. On only one occasion, however, did one regiment succeed in surprising another on the march. Finally, during several days, the programmes were so arranged as to oblige isolated detachments on each side to look for and attack each other.

A special feature of these German cavalry manœuvres consisted in having attacks carried out by the whole division against long lines of infantry marked out by flags and by dismounted men, against masses of artillery indicated by some guns. In accordance with instructions issued by the Commander of the division at the beginning of the manœuvres, these attacks were executed always by *échelon* of squadrons. For instance, two brigades drawn up in this formation would charge together, while the third brigade of a division was employed as the circumstances of the case seemed to require. In these instructions great stress is laid upon this method of attacking artillery either in front, flank, or rear, according as opportunity may offer.

The Russian Cavalry Manœuvres of 1879.

It may be remembered that in the autumn of 1876 a great progressive step was made by the Russian cavalry towards developing and improving at annual manœuvres the practice of the duties which would in real warfare fall to its lot to perform. In the above year the Russian military authorities decided to give to two large opposing bodies of cavalry a zone of operations amply sufficient, both in depth and width of front, to afford full scope for reconnoitring skill, for secrecy, for rapidity, and for marching powers. Upon the leaders of each side, moreover, was imposed a task precisely similar to

that which the cavalry of any great Power might, in the event of an outbreak of war with any of its neighbours, have to perform.

These doings of the Russian cavalry, which took place in the neighbourhood of Warsaw, attracted a great deal of attention in the neighbouring Continental armies, and that for several reasons. Firstly, it was the first instance in Europe in which a large cavalry force engaged in manœuvres attempted to undertake a "raid" after the American fashion, against a far distant point of the enemy's communications. Secondly, the area or zone over which the operations extended was both in depth and width of front an unusually large one, and therefore amply sufficient to afford full scope for the display of strategic skill and ability on both sides. Thirdly, an entirely new feature was introduced on this occasion, in order to aid the troops, and to give the whole affair as much *vraisemblance* as possible to real warfare, viz., the co-operation of the whole of the civil and local officials on both sides.

By way of following up the idea which had thus been carried out in 1876, arrangements were again made in the autumn of 1879 for strategical cavalry manœuvres on a large scale. On this occasion, during the earlier part of the manœuvres, the task which devolved upon one side was to protect the mobilization of a large force, while the object of the opposing side was to disturb and prevent it. The general idea was that a division of cavalry stationed at Goldap and Gambennen (on the east Prussian frontier) was to try to prevent and disturb a mobilization of (Russian) troops which had already begun in the district of Sawalki, while a force of equal strength which was in that district was, with the aid of the local garrisons, to oppose and frustrate this attempt. After a contest of eight days the district of Sawalki was occupied by the enemy. A fresh idea was then put forth, viz., that the invading party was to push ahead, and the other side was to defend the line of the Boba, a small river which flows through the eastern side of the district of Sawalki. To dwell, however, in detail upon the execution of these manœuvres would carry me further than the limits of this paper allow.

While on the subject of the Russian cavalry manœuvres it may be interesting to note the instructions which Lieutenant-General Gourko issued with reference to the cavalry at manœuvres at the camp of Krasnoe Selo in this same year, where the command was entrusted to him. He directed that the march of the cavalry each day to the place of assembly was to be from 10 to 15 versts ($6\frac{1}{2}$ to $9\frac{1}{2}$ miles) in order to give them ample opportunity of practising all precautions necessary on the march, the rate of march, moreover, was to be as a rule not less than 10 versts an hour, and that no ground was to be thought impracticable for cavalry except steep slopes and marshes. Finally, he strictly enjoined the use of the three-line formation in tactics.

The following order of the late Emperor, communicated by the General to the troops of the Guard and of the military district of St. Petersburg, at the end of the manœuvres at the camp of Krasnoe Selo, would seem to show that the *élite* of the Russian cavalry have, like some of their neighbours, much to learn: "Generally speaking the cavalry has shown but little proficiency "in scouting and reconnoitring; communication between the different columns "was badly maintained, and the contact or touch of the enemy was often "altogether lost. It has also happened sometimes that, up to the end of the day's "manœuvres, the chiefs had received no positive information regarding the "position of the enemy, and that the commanders of the different columns were "ignorant both as to the whereabouts of the columns nearest to them and of "what was going on in their immediate neighbourhood. It is necessary to "bestow far more care on the subject of scouting and reconnaissance, a matter "to which attention was specially drawn in the order of 1st May. Until the "efficient performance of this duty has become habitual in the cavalry, that "arm will not be able to fulfil one of its most important functions, viz., that "of being the eyes and ears of the army."

It will be seen by the cursory sketch which has here been given of the various cavalry manœuvres which took place in the four chief Continental armies in 1879, that it is usual to employ large bodies of cavalry on these occasions chiefly in two ways. One of these methods is to oppose one body against another of about equal strength, and the other is to manœuvre them against a "marked enemy." When the former method is adopted, great pains are taken to exercise the cavalry over a wide extent of country, because it is justly held that the most essential condition for affording useful instruction to the cavalry arm is a zone of operations of sufficient front and depth for the practice of the various duties which in actual warfare they would have to learn. When the two brigades or divisions which are to oppose each other are separated (as often happens in Continental manœuvres) at the outset from 50 to 80 miles¹ of country which is strange to either side, and they have to work up to each other, during two or three days' work the work to be done, if carried out with ordinary zeal and ability, can hardly fail to be instructive to all concerned. I fear that in England we can never, for well known reasons, hope to have the benefit of such excellent practice as this. Even at Aldershot, the area of operations is always so restricted as greatly to mar the practical usefulness of any manœuvres of this kind, and cause them to fall far short of what might under more favourable circumstances be made of them.

The second method adopted, viz., that of manœuvring against a supposed enemy, marked out by flags and skeleton bodies of troops, has always been much practised in the German, and in a lesser degree in other Continental armies. The chief merit of this system is considered to be that it enables useful instruction to be given, not only to the leaders and higher Officers, but also to all the subordinate ranks, by enabling every man clearly to realize the position of the enemy, and to understand the meaning of each manœuvre which is made to oppose him. How far this expectation is fulfilled is, I think, in many cases a matter of some doubt. It may be observed, moreover, that when a marked enemy is made use of, the cavalry is generally employed in tactical exercises and evolutions having for their object the practice of fighting and manœuvring in large masses. These manœuvres are in all Continental armies carried out on the principles which were first prescribed some eight or nine years ago by General Von Schmidt for the Prussian cavalry.

Apart from these exclusively cavalry manœuvres, there are naturally many occasions in which a considerable force of cavalry forms part of a large force, such as an Army Corps, which is pitted against a similar body of troops. This was the case last year (1880), at the Imperial manœuvres at Berlin, when the IIIrd Army Corps was opposed by the Guard Corps. To each of these forces a cavalry division belonged. Here the propinquity of the two armies to each other excluded all idea of reconnoitring and scouting on the part of the cavalry, but the two divisions practised through their whole extent the duties which would devolve upon them upon the actual battle-field. To enter, however, here upon a detailed account of the part played by the cavalry in these manœuvres would carry me beyond the limits of this paper.² It must here suffice, in conclusion, to remark that those who care to note the efforts made year by year by the cavalry of Continental armies to develop the capabilities of the arm, can hardly fail to be struck with the progress which has recently been made.

¹ For instance, at the Austrian cavalry manœuvres which took place in Galicia, last year, the contending forces started from points 80 miles apart.

² For an interesting account of these manœuvres, and of the part played by the cavalry in them, the reader is referred to the "*Revue Militaire de l'Étranger*," No. 524, of April 1st, 1881.