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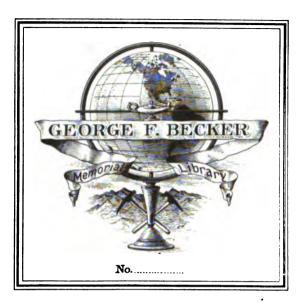
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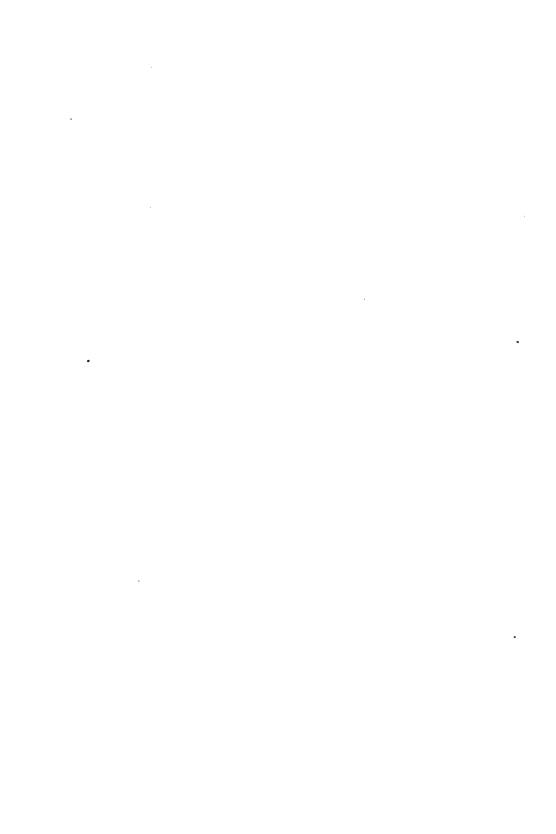
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LETTERS

ON

APPLIED TACTICS

TWENTY-FOUR TACT!CAL EXERCISES

DEALING WITH

THE OPERATIONS OF SMALL DETACHED FORCES
OF THE THREE ARMS

WITH NUMEROUS EXAMPLES OF ACTUAL ORDERS

WORKED OUT BY

MAJOR GRIEPENKERL

TRANSLATED BY

A RETIRED OFFICER

THIRD EDITION

LONDON
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1904

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July 1922

PREFACE

I T is necessary to inform readers of this translation that, in order to render these Letters useful to British officers unacquainted with the organisation of the German army, the imaginary forces, whose operations are dealt with in the following pages, are to be considered as organised on British lines. The expression "battalion," therefore, throughout this translation may be taken to imply 8 companies, each 100 strong; "squadron," 100 sabres; and "battery," 6 guns. The various space and time calculations have consequently been modified, and are in accordance with I.D. 163, and the Tables and Data for the use of Staff College Officers, compiled by Col. Rothwell. With the exception of alterations thus involved, and of details in connection with ammunition supply, &c., the translation is literal.

In places, however, the German organisation betrays itself, e.g., in the constantly-recurring expression "two companies"—the nearest equivalent for the German company (nominally 250 strong on war footing, which, however, for tactical purposes may be reckoned as 200 rifles). The four-company organisation of the German battalion also leaves its impress on the distribution of the outposts in the last few letters, though these are perhaps the most valuable in the book.

It may be as well to add that the sketches of outpost formations, &c., were not in the original work.

The translator desires to express his thanks to Col. Gawne and Mr. Spenser Wilkinson for permission to make extracts from their translation (published for the Manchester Tactical Society by Stanford) of the *Felddienst Ordnung*, to which the author makes frequent reference.

Throughout this translation F.O. stands for Felddienst Ordnung, the translation of which above referred to, under the title of the Order of Field Service of the German Army, should be consulted, if only for the sake of the invaluable instructions on the subject of Orders and Outposts.

I.D., in foot-notes by translator, stands for Infantry Drill, 1896.

With regard to the four maps on a scale $\frac{1}{25.000}$, the contours are at 5 metres = 16.4 feet Vertical Interval, every fourth contour being drawn darker. The maps are therefore not contoured according to the "normal" scale of horizontal equivalents, by which the vertical interval should be 47.35 feet for a map on a scale of $\frac{1}{25.000}$.

In order, therefore, to rapidly determine, with sufficient accuracy for all practical purposes, the slope or gradient at any given spot on the four maps at $\frac{1}{25.000}$, the student should bear in mind that the slopes appear, if read by the normal scale of slopes on the protractor, about three times steeper than they really are.

Attention is drawn to the supplementary exercises, based on those worked out in these letters, which are given at the end of the book.

THE TRANSLATOR.

PREFACE TO THE FOURTH EDITION

THE fact that a fourth edition is called for of a collection of tactical problems of such dimensions as the present, which demands of students both assiduous labour and no small amount of time, affords a proof that my method of assisting my brother officers of all ranks of the German army in their tactical studies has met with wide approval. There is, therefore, no occasion for me to introduce any important changes in the arrangement or matter of the work. In the present edition such alterations only have been made as have been necessitated by the appearance of several tactical works bearing on my subject, and of new regulations. I have also subdivided into several short exercises one of the problems, which, in the opinion of many of my readers, was too voluminous.

Readers of the book will be interested to know that it has met with notice in several foreign countries. A French translation, by Captain Richert, of the Ecole supérieure de Guerre, under the title of *Thèmes tactiques gradués*, has been published by L. Baudoin (Librairie Militaire, Paris). A translation into Japanese (published by authority of the Japanese War Office), by Professor K. Shiba, of the Staff College in Tokio, is to appear next month at Tokio.

THE AUTHOR.

HILDESHEIM,

December, 1896.

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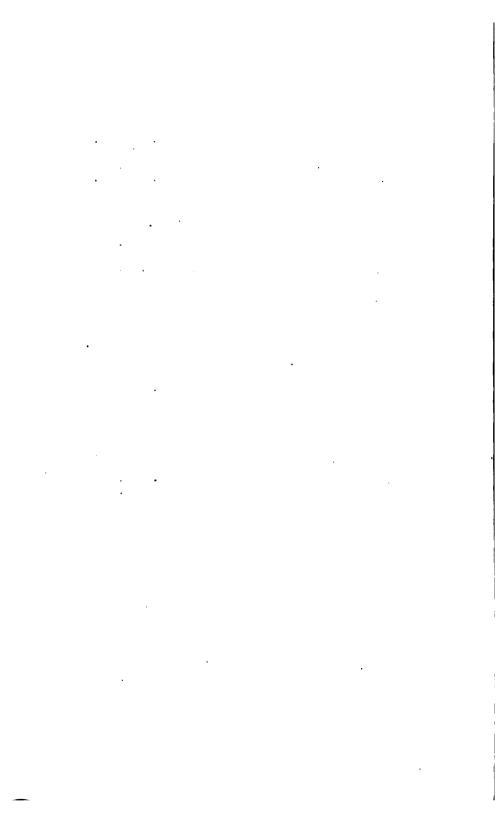
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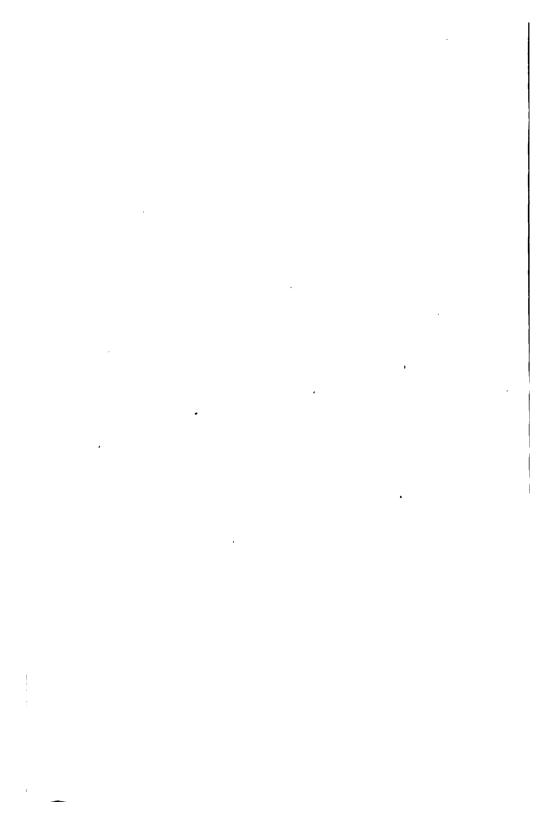
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LETTERS ON APPLIED TACTICS

FIRST LETTER

INTRODUCTORY

HAVE often been asked by young officers preparing for the Staff College entrance examination, to set them tactical exercises and to look over their solutions. In doing so, my observations on the various solutions sent me had for the most part to be put in writing. Hence was evolved, in course of time, the following series of letters; my main object in compiling which was to assist young officers in preparing for examination who have no opportunity of obtaining advice from qualified senior officers in the garrisons where they happen to be quartered. Such an opinion is not always to be had, and, even if it were, it is no small labour to set a number of exercises, and discuss them thoroughly, when one's own time is fully taken up by military duty. Even more labour devolves on the instructor if he happens not to be in the same garrison as his pupil, as it will entail his putting all his corrections and explanations in writing; and the instruction is, as a rule, lacking in that detail which is essential for most beginners.

Thus it frequently happens that the young officer has to work by himself and, however talented and industrious he may be, will encounter almost insuperable difficulties in tactics. The study of the drill-books and tactical text-books forms only a part of the preparation necessary for an examination, for an examiner does not ask you for essays on applied tactics, but expects you to apply theoretical principles in the solution of problems, which generally involve the framing of orders. A knowledge of the art of framing orders is not however, a natural gift, neither can it be gained from any text-book, for the framing of orders involves the solution of tactical problems. to do which in a correct manner, without having passed through the Staff College course, is only granted to very few exceptional geniuses. All the existing works dealing with tactical problems, such as the unsurpassed "Studies" of General Verdy du Vernois, or the partly-strategical, partlytactical exercises, with solutions, of Gyzicki, assume considerable knowledge in the student, and, as a rule, deal with the operations of very large forces, so that they are unsuited for a beginner. I trust that, when you have acquired more knowledge, you will study such invaluable works as those mentioned. My experience, however, shows me that the study necessary to prepare for an examination must be of a very restricted nature, and will in great measure consist in your going over the same ground that was traversed by you in preparing for your examinations for promotion, and refreshing your knowledge of subjects which you have forgotten. My object is to conduct you, by the following letters, to a point from which you may continue your studies unaided. The problems solved in the following pages are extremely simple, for most problems that have been set in recent examinations are not difficult, and experience shows that simple problems are the most instructive, provided they are thoroughly worked out. They are undoubtedly more instructive than complicated situations, which too often lead to unnatural solutions.* An exercise in applied tactics set at an examination should deal with as simple a situation as possible, and the candidate should be required to come to a decision and give his reasons for it. In discussing the following exercises I have designedly gone into considerable detail, and I am prepared to admit that I might in many places have dealt more briefly with my subject; I have not even been able to avoid repetition; but my experience shows me that undue conciseness of style is apt to puzzle a beginner, or, at any rate, give him more trouble in comprehending what is said. I have made a point of discussing at some length subjects which led to misunderstandings and mistakes on the part of officers who have already worked through these exercises.

These letters, therefore, may be somewhat elementary to passed Staff College officers. They have, however, been of service to officers desirous of preparing themselves for General Staff instructional journeys, tactical instructional rides, and similar tactical exercises, or who have merely wished to refresh their theoretical knowledge. They are intended merely to act as a guide, and to incite you to make your own way towards higher military culture;—they make no higher pretensions.

The scene of operations in these exercises is the neighbourhood of Metz. This locality was the most convenient for me; and, besides this, the four maps on a scale of $\frac{1}{82,000}$ are easy to read and admit of many changes in the scene of operations, which is desirable in the case of beginners. A study of this district will also assist you in following, at some future date, the history of the war of 1870,

[&]quot;Situations of war which depend on many and complicated hypotheses are much less useful for manœuvres than those which are very simple and can be grasped easily and unhesitatingly. Even the most simple situation of war may admit of a great variety of solutions."—F.O. II, 26.

comprising, as it does, those blood-stained fields which, from August to October of that year, were the scene of so many glorious deeds of the German army.

Instead of making all the exercises dependent on one General Idea, I have purposely devised a different situation in the case of each exercise, with a view to affording you frequent opportunities of rapidly becoming familiar with a tactical situation. I have in most cases considered Metz as an unfortified town, for the obvious reason that, as the fortifications are not shown on the map, I have had to leave them wholly out of the calculations.

I take for granted that after passing your examinations for promotion you have kept up your knowledge by carefully doing the winter exercises, &c., and by reading military works and magazines; but you are aware that the claims made on you by ordinary garrison duty leave you little leisure for thorough study. You must not be surprised, therefore, if in the following letters I do not over-estimate the extent of your knowledge, and mention many things with which you are already fully acquainted. In the course of your work you will soon find out for yourselves where your knowledge of tactics is defective.

Before commencing to work out the following exercises, I advise you to prepare yourselves as follows: First, study the general principles governing the employment of the three arms in the field as given in the latest edition of the Tactical Guide* in use at the Royal Staff College, and it will be sufficient if you master the contents of that work. In the case of an arm to which you do not belong, you must get a clear idea of the formations employed for assembly, march, and attack. After this, I advise you to devote special attention to Part II. of the Infantry Drill,

^{• &}quot;Leitsaden für den Unterricht in der Taktik auf den Königlichen Kriegsschulen."

which contains principles regulating the action of the other arms as well; and those of you who do not belong to the infantry should most carefully study the tactics of infantry, which is the paramount arm. Part IV. of the Field Artillery Drill also requires special attention. In it many of the rules given in the Infantry Drill are repeated word for word. This preparation, supplemented by a perusal of the musketry instructions and of the Field Service Regulations, will enable vou to do exercises in formal tactics.* The Field Service Regulations must, in particular, be thoroughly mastered, and you should finally work through the principles of Attack and Defence, the attack and defence of Localities, and savage warfare in the Tactical Guide. I consider this preparation quite sufficient, fully sharing Von Wedell's opinions ("How to prepare for the Staff College entrance examination"), who warns the student against the study of advanced tactical and strategical works, which will only tend to confuse him. Besides, our (German) official drill-books are the best and most up-to-date authorities on tactics. often take occasion in the following letters to refer you to passages in the drill books and the Field Service Regulations, and you will soon perceive for yourselves that it is easier to understand the principles detailed in the above works than to apply them to the case in hand. To show you how to do the latter is my object in the following pages.

I assume that when solving the following problems you have at hand the *Tactical Guide*, the Drill books, and the *Field Service Regulations*—nothing more. Accustom yourselves also to work by the clock, noticing the time taken from the moment when you first set eyes on the data and the map to the last stroke of the pen, and *make a rule of finishing each exercise at a sitting*.

With practice you will be able to work quicker and

^{• &}quot;Formal tactics" are those of each arm independently of the others.—Trans.

quicker. At the examination the time allowed you is short, but if you feel sure of being able to finish in the time you will do your work with greater confidence and better. In such case also you will be able to bestow more attention on composition, style, and handwriting. An intrinsically good tactical exercise loses by a faulty style of expression or illegible handwriting, and is apt to be judged unfavourably. An experienced examiner can tell by the style of your work whether you have had sufficient practice in solving tactical problems or not.

It is not essential that your solutions should exactly tally with those which I give. Nothing is further from my intention than to give what are called "patent solutions." Many tactical measures are a matter of opinion. In practice the same object may be attained by very different means, and it frequently happens that there is no objection to a measure in itself, but that possibly some other measure may offer more advantages. In examinations, tactical instructional rides, &c., the examiner will thank you more for a judicious decision, cleverly carried out and clearly reasoned, than for a solution whose sole merit is that it exactly coincides with his own, for even a solution correct in itself may be spoilt in the working out. By comparing, however, your solutions and your views with mine, and by frequently going deeply into different sorts of tactical situations and inwardly digesting them, you will create and sharpen the faculty of forming a tactical judgment.

You must not look askance on the models for framing orders, which I shall give you. You have, doubtless, often been warned against cast-iron rules in tactics—and rightly so! And yet it is necessary that you should study a number of models of orders in order to prevent your forgetting important details, especially as beginners. These models of orders are therefore to be considered as aids to memory, nothing more.

I shall show you that it is frequently justifiable and necessary to deviate from these models, and shall so frame the exercises as to counteract any tendency on your part to fall into a set form of framing orders.

The form in which orders are cast is, generally speaking, of secondary importance, when once you have mastered the essence of the matter; though our customary forms are not founded on caprice, but on most practical considerations. The art of framing orders consists in giving orders suitable for the attainment of the object in view, whatever it may be, and this must frequently involve deviations from the ordinary form. In the issuing of orders in practice I am opposed to the use of set forms, which I look upon as merely the tools of the trade. It is one thing, however, for a senior general officer, of long experience, both in war and peace, to issue orders; and quite another when a beginner has for the first time to be taught the use of all the implements usually employed in the art of framing orders.

The models are drawn up in the form almost universally employed in the army, and are in accordance with the rules laid down in the *Field Service Regulations*.

I recommend that all tactical exercises should be worked in the following manner—the processes being gone through in the order below stated:—

- 1. Read the exercise through carefully several times with the map in your hand. The longer the exercise the more care is necessary.
- 2. Study carefully on the map the ground under consideration, especially the network of roads. A general comprehension of the map is not sufficient for tactical ends, least of all for the working out of exercises. You must be able to project on your mind an accurate and vivid picture of the country in question—imagine, for instance, that you stand upon some particular height, and ask: How will the

surrounding country appear according to the map? What buildings are in sight? What roads, and how many of them? And, in particular, how far distant is the visible horizon? Where do woods, rows of trees, heights, and buildings conceal the country behind them? &c. This naturally requires care and much practice. The more defective the map, the more care is necessary. You will be somewhat spoiled by the very excellent maps on which we shall work together, but at first that does not matter.

- 3. Realise accurately your own position and that of the Enemy. Imagine, for instance, that you are in command, halting at the place mentioned in the data, surrounded by your staff. You must now see the troops in formation on the country before you, your own as well as the enemy's. The more vivid your imagination, the better will be your tactical work.
- 4. Read the proper sections in the "Tactical Guide," or in the *Field Service Regulations* and the Drill books. By these means you will, of course, work somewhat more slowly, but the time which you spend on this will repay you Verify (by reference to the above works) every matter on which you are in doubt.
- 5. When dealing with movements of troops, calculate the time required to march to the important points mentioned in the data, not only for your own troops, but for those of the enemy, by measuring the distances. In the case of positions, measure their frontage and depth.
- 6. Consider the counter measures likely to be adopted by the enemy, while, for instance, you are marching yourself, or taking up a given position. In this matter the beginner is apt to commit the fault of considering the enemy as too inactive; thinking, for instance, that he remains at rest, while he must in reality have started on his march towards the scene of action.

- 7. Arrive at a definite decision. As above indicated, great weight will be attached to this at the examination. No half-measures. For instance, when you have decided on an assault, attack energetically with all your troops; if you wish to retreat, do not again come to a standstill after the first few miles without the weightiest reasons. Be perfectly clear in your own mind what you intend to do, and carry it out to the letter.
- 8. Consider the distribution of your troops. Write the details provisionally in your rough note-book and see whether you have disposed of all the troops allotted to you. The beginner may easily forget some portion or other; as the result of my own experiences, I especially advise caution in the distribution of the cavalry.
- 9. Now, and not before, compose the actual orders. In doing this use my models until you are quite certain to forget nothing. Write the orders also in the note-book, and then test them carefully point by point to see if they answer the following requirements:—
- (a) Each set of orders must be logically arranged. My models ensure this at first, later on you will yourself have acquired the necessary practice. Never hesitate to deviate from my models when you have a reasonable ground for doing so. Be careful to break up the orders into numbered paragraphs, and to bring together under one paragraph all corresponding matter.
- (b) Each order must be as short as possible. Short sentences are easy to understand; a discursive mode of expression, a long-winded elaborate style is unmilitary. Test your orders then, to see whether you cannot strike out a superfluous word, or whether a simpler or more serviceable phrase does not occur to you,—grudge every word. You will thus at first have much to alter in your note-book, but this is as it should be. There is an old saying that an

order which has not suffered many corrections in the notebook is worth nothing. Experience shows that a wordy order is always abbreviated by those to whom it is dictated; this is of course quite inadmissible, for those with whom you deal are often not in a position to judge whether in altering the phrasing they do not also alter the sense. If then evil consequences are to be avoided, the orders must be so issued as to be written down word for word. Reasons for a given disposition have no place in the orders, for if the orders are well put together they justify themselves. Besides, as a rule a justification of the dispositions you have made is specially asked for, and then you have the desired opportunity of stating in conclusion the reasons for your measures. Instructions for the care of the sick and wounded, police-regulations, &c., are also quite out of place in tactical orders; and only exceptionally should arrangements for the supply of ammunition be included. Such things appertain to the special "Daily Orders,"* which follow the "Operation Orders."

(c) Each order must be perfectly clear and intelligible. If misunderstandings arise, the chief fault lies with the issuer of the order, which should leave no opening for mistakes. It is, in fact, true that the quality of the order is mirrored in its execution. In practice the orders must be suited to the individuality and visual range of the recipient, though in working out exercises on paper all subordinate officers are assumed to be perfect. Still it is as well to consider the question:—what knowledge can the recipient have of the general circumstances? Will he understand my point of view from the wording of the orders, and thus comprehend the orders in my sense? You should therefore put yourself in the

^{*} All orders not directly concerned with the operations, such as those referring to interior economy, returns, &c., should be issued separately. They are best headed *Daily Orders*, *i.e.*, "Divisional Daily Orders," "Army-corps Daily Orders," &c.

recipient's place, and consider what you yourself would do if you received an order in such and such terms, and had to execute it yourself. Clearness must not be sacrificed to brevity: brevity must never lead to superficiality. Expressions which easily give rise to misunderstandings, since their signification depends on the actual point of view of the observer. as for instance, right, left, in front of, behind, on this side, on the other side, are to be avoided. Replace them by points of the compass, thus-not "to the left of Verny" but "west of Verny." You should not refer to "the southern outlet" of a village unless there is only one such. In dealing with larger places, doubts easily arise; it would be very indefinite to choose intermediate points of the compass and speak, for instance, of the S.S.W. outlet; it is better to say "at the outlet towards X," or "at the outlet of the pathway to X," if there are several such outlets. Unusual expressions, foreign words especially, are to be avoided; our latest regulations form an excellent pattern of style and expression.

- (d) No order must be couched in uncertain terms: for an ambiguous order is loosely carried out. All modifying expressions such as "as far as possible," "as well as you can," "according to circumstances" must be rejected; for the commander must accept the whole responsibility and shift none of it on to the shoulders of his subordinates. Precise orders give a subordinate confidence in undertaking a dangerous task with determination, for they appeal to a subordinate's most necessary quality, namely, his military obedience. The more difficult the position the clearer and more definite the order must be. It would be most reprehensible in the drawing up of an order, intentionally to choose an obscure, ill-defined, or ambiguous expression under which to hide one's own indecision.
- (e) The orders must not in their arrangement trespass on the province of the subordinate. This is an error

only too often committed both in the field and in the solution of exercises. Beware of it! Your orders must only contain what your subordinate cannot of himself arrange for the carrying out of your intention. The details of the execution must be left to him, especially if your orders are somewhat long in transmission, and if the circumstances which you have presupposed have quite changed on arrival of the orders. By means of your orders, place before your subordinate his task—the execution of it is The higher the commander, the shorter and more general may his orders be. In practice you could always interfere later, were it absolutely necessary—as, for instance, if your subordinate were making a mistake, which would absolutely jeopardise the attainment of the object vou have in view.

(f) The orders must not arrange anything too far in advance; in fact, not further than can be seen with certainty at the moment of framing the orders. Arrangements of this kind seldom get executed, for the commander cannot foresee the next counter-measures of the enemy, or various unexpected contingencies, and he would be only too often forced to recall his first orders, and then follow "Order. Counter-order, and Disorder." Moreover, frequent changes in orders already issued weary the men, shake their confidence in their commander, and tend to make subordinates uncertain in their demeanour. Elaborate directions for various hypothetical cases are to be avoided in orders, and appear only occasionally even in "Instructions." possible that one of these cases may occur, but it is equally likely that something unforeseen may happen also, and then the subordinates cannot tell what is to be done. So one should not be too fond of saying that one "expects this" or "presumes that." If, later on, the presumption is not verified, the subordinates see the error of their leader, and that shakes their confidence. On the other hand, it is always of importance for the subordinates to clearly recognise the general object aimed at by the orders, *i.e.*, the intention of the commander, so that they may themselves strive to attain it, should the general situation demand a procedure different from that originally directed. In my next letter I shall come to the exceptions to this general rule.

(g) In each order, particulars of time and place must be so exactly given that error is impossible. I refer you to the appropriate Instructions on this subject contained in the Field Service Regulations, which I need not repeat here. In giving particulars of time, I recommend you to write the minutes very distinctly; in the case of hard names of places—as, for example, French or Polish names—you must compare them letter by letter with the map. Further, simple as they are, it is only too easy, unwittingly, to transgress the rules as to Form laid down in the Field Service Regulations. Take pains from the beginning in this, for an error committed out of mere carelessness is always very Besides, these precise rules in our Field Service Regulations are the result of exhaustive experience in war, and not mere superfluous trivialities. If they are not accurately followed, mischievous misunderstandings may easily result. When you have carefully worked out the distribution of the troops, and the orders in your note-book, copy them both very clearly, the more clearly the better, and here I recommend you to underline the opening words of each paragraph to emphasize them. The distinctness of the writing requires continuous practice if it is not to be lost in haste or excitement. The examiner ought to be able, in a measure, to comprehend at a glance a well-expressed order. This distinctness has, in addition, no small value in actual service; all ranks see at once what they have to do, and the orders are more easily and quickly understood.

I will now give you a very easy exercise. "Orders for a March, or Advance."

FIRST EXERCISE.

(See maps Metz and Verny.)

A detachment in an enemy's country, under Colonel A., composed as follows:—

I/Battalion.
II/Battalion.
III/Battalion.
1st and 11nd Squadrons, 1st Dragoons.
1st Field Battery, R.A.
1st Field Company, R.E.
Bearer Company,

bivouacs on the night 2/3 July, 1889, south of Liéhon (map Verny);—the safety of the bivouac being secured by other troops;—and receives at 9.30 p.m., 2nd July, an order to proceed next morning to interrupt for some days the railway traffic at the station of Peltre. Reinforcements for the detachment are marching on Delme. Hostile cavalry patrols have been seen, on the afternoon of the 2nd, south of the unfortified town of Metz; and, according to trustworthy reports, hostile infantry and artillery are bivouacked near Antilly (map Metz), six miles N.N.E. of Metz.

- (1) State the orders issued by Colonel A. on the evening of the 2nd July.
- (2) Give reasons for the measures adopted.
- (3) Show on the map the order of march of the force an hour and a half after leaving the bivouac.

N.B.—To save marking the map, a piece of tracing paper may be laid over it; the troops being drawn on the tracing paper, instead of on the map.

I now give you a general Model and an example of orders for an Advance, which you will naturally be able to apply only in part in the present case. I intentionally give you no further aids or instructions. You should now work out the exercise with the aid of the books above mentioned, and this will test your present knowledge.

My next letter will deal with any doubts that may have arisen. In the later exercises also I advise you to pursue the same course, for if you are to benefit fully by your work, you must work independently, even if you work more slowly. I could make matters easier for you by referring to various difficulties beforehand, but I purposely avoid doing so; you will thus learn to work faster and more effectively. You may make some mistakes, but these have their uses, since in tactics one learns most from one's own errors. Do not take too much time in drawing the troops on the map, but be careful in calculating and drawing to scale the road spaces occupied by the various units, for I shall insist particularly on your calculating accurately the position of each individual unit at the given time. Do not read the next letter until you have finished your own solution, including the showing the order of march on the map.

MODEL FOR

"ORDERS FOR A MARCH."

Place.

Date.

Hour of Issue.

DETACHMENT ORDERS.

DISTRIBUTION OF TROOPS.

1. Advanced Guard: officer com-

manding.

Infantry.

Cavalry.

Artillery.

Engineers.

Bearer Company (rarely).

2. Main Body (in order of march).

N.B. No commanding officer to be detailed.

Cavalry (orderlies or troops).

Infantry

Artillery.

Infantry.

Engineers.

Bearer Company.

Right (Left) Flank Guard:
 officer commanding.
 Same as Advanced Guard.

- 1. Information as to the enemy and our other forces.
- 2. Intention of O.C. Detachment. (in the most general terms).
- 3. Order for the Advanced Guard.

 (Time of starting; place whence it will start; road by which it will march; reconnoitring to be performed; communication to be maintained with parallel columns, &c.; any special duties.
- 4. Order for the Main Body.

 (either the distance to be preserved * between it and the advanced guard, or place and hour of starting.)
- Order for the Flank Guard.

 (as No. 3, but with special mention, as a rule, of reconnoitring duties. Sometimes the point at which the flank guard is to be detached is mentioned).
- Order for the Outposts.
 (Instructions as to how they are to join the column of route).

[•] i.e., distance between the tail of the A.G. and head of the M.B.—Trans.

- Order for the Baggage.
 (Party to be detailed to conduct it; distance to be preserved between it and the main body, or special arrangements.
- Position of the officer commanding; — at the commencement of the march.

Manner of communicating the orders to the troops.

Signature.

Note.—If the cavalry is not attached to the Advanced Guard, but is constituted "Independent Cavalry," it will form No. 1 in the Distribution of Troops (with an officer detailed to command it). The 3rd order (in the right-hand column) would then be *Order for the Independent Cavalry* (time of starting; place whence it will start; road by which it will march; reconnoitring to be performed; communication to be maintained with parallel columns, &c.). Even so, however, there must *always* be sufficient cavalry attached to the advanced guard to provide for its own immediate security on the march.

If no outposts are mentioned in the data, No. 6 will be omitted.

EXAMPLE OF "ORDERS FOR A MARCH."

Bivouse north of Z, 2, v. 91.

DETACHMENT ORDERS.

DISTRIBUTION OF TROOPS.

- Advanced Guard: Lt.-Col. B. I/Battalion.
 - 1st Dragoons (less the IVth Squadron).
 - 1st Field Company R.E.
- 2. Main Body (in order of march).
 - 1 Section, 1st Squadron, 1st Dragoons.

II/Battalion.

1st Field Battery R.A.2nd Field Battery R.A.III/Battalion.

Bearer Company.

Right Flank Guard: Major F.
 Nos. 1 and 2 Companies
 IV/ Battalion.
 Ivth Squadron, 1st Dragoons.

 The enemy's infantry has been seen near X and Y, and his cavalry patrols north of W.

11.15 p.m.

- Our 3rd Division will march to-morrow from M to N.
- 2. The Detachment will march to-morrow to O.
- 3. The Advanced Guard will start at 6.15 a.m., and move by the main road through P on O, reconnoitring towards D, E, and F, and keeping up communication with the 3rd Division.
- The Main Body will follow the advanced guard at 800 yards distance.
- The Right Flank Guard will start at 5.45 a.m., and move, viâ S, to T, reconnoitring through V and W in the direction of U.
- The Outposts will stand fast until the Vanguard has passed through the support line.
- 7. The baggage, conducted by a section, under an officer, furnished by the 1st squadron, will follow the main

body at 11 mile distance as far as C, where it will remain till further orders.

8. Reports will reach me (or, my position will be) at the head of the main body.

Dictated to officers representing the various units (or, "verbally to the assembled commandingofficers of units"). A., Colonel.

N.B.—All words printed in italics in the above orders should be underlined by you in writing such orders.

SECOND LETTER

ORDERS FOR A MARCH

A CCORDING to my experience you will have required some three or four hours to work out this exercise if you did as I advised; this is, however, not too long. Quicker work will come with practice.

If a detachment has to execute works within striking distance of the enemy, and at the same time protect the working party, as in the present case of interrupting the traffic on a railway, it should take up a position at such a distance between the scene of operations and the enemy as to protect the working party from the enemy's fire. The operations may thus be carried on for some time or even possibly completed while fighting is going on in front. Protection must be secured not only from infantry fire but especially from artillery. This principle will regulate the distance of the covering detachment from the scene of operations. It is very advantageous if the latter is covered from view and fire by a line of heights sufficiently to the front, as in the present case. In such a case the greater part of the detachment occupies these heights, a smaller part—in the present example a fieldcompany of Engineers, supported, if necessary, by some infantry-undertakes the duty of interrupting the traffic. The covering heights stretch from Mercy-by-Metz to Bévoyela-Basse; these heights, then, are the goal of the detachment.

The best route thither is the high road by Grève-la-Haute. The more westerly road by Chérisey, Orny, Chesny is longer because of its frequent windings, and is also worse, especially in the Hospital Wald. While in bivouac at Liéhon, one cannot in the least tell the nature of the section between Orny and Chesny: for example, whether artillery can traverse it without delay. Such forest-roads, especially after much rain, have awkward swampy places which the map does In practice one can sometimes resolve such doubts by reconnoitring, but in working out orders with the map it is better to remain prudently on a main road, even if it be somewhat longer. Slight détours matter little, for the troops march with more comfort, and therefore with more speed, and are less tired. Even the advantage of approaching Peltre by the less exposed route through the Hospital-Wald should not tempt you to enter on this doubtful road. Again, you could advance by the main road past Grève-la-Haute and then branch off to Peltre via Chesny. If you only had in view a march to the station of Peltre, this way is about as long as the high road and almost equally good. Since, however, the heights to the north of Peltre are the objective of the greater part of the detachment, there is no reason to choose this last-named way rather than the preferable main road; but there is no reason why you should not order the working-party to branch off via Chesny.

For the purpose of the march you must consider not only the road itself but the surrounding country. First you have on your left flank* the Hospital Wald, then later, on your right flank the wooded patches east of Mécleuves, the great wood of Champel, as well as the woods west of Ars-Laquenexy. The rest of the country on both sides of the route is fairly open to view. As soon as your patrols have penetrated to the north of Grève-la-Haute, and in especial

^{*} i.e., the left as you face the enemy.—Trans.

somewhat later to the elevation marked 270'8 south-east of Pierrejeux, they can survey the country before them to some distance. The distant line of heights to the north between Mercy-by-Metz and Bévoye-la-Basse bounds their view. On reaching these heights, however, a wide prospect is opened as far as Metz and the heights of Belle-Croix. Now, what can the enemy see? You can scarcely prevent his patrols reaching the heights of Mercy-by-Metz. Thence they can observe your advance as soon as you descend the elevation marked 270'8 S.E. of Pierrejeux, and also later on when you reappear on the higher parts of the main road.

Moreover the enemy will try to push his patrols as near as possible to your column on both flanks, under cover of the woods; you must keep these circumstances before your mind in framing orders for reconnoitring.

Your own position is much simplified by the fact that the troops are collected in one bivouac.* So that you have only to march them off. The exercise says nothing about the rest of your troops (and nothing about outposts), so you need not trouble yourself about these; still less need you inquire why you have to interrupt the railway at *Peltre*, whereas it might be equally easy or easier to do so elsewhere. Take the exercise as it is; do not import difficulties—beginners often do so. If the exercise says distinctly, as in this case, that the railway must be interrupted at the Peltre Station, you must take your measures accordingly.

In the exercise I have intentionally used the word interrupt; with regard to the railway, adding "for a few days." I could, however, have used the single word obstruct.‡ I desired, however, to draw a distinction between complete obstruction or destruction of the line, and temporary interruption of the

Trans.

^{*} Instead of being quartered in various villages on or near the main road.

^{† &}quot;Unterbrechen" in the original.—Trans.

^{1 &}quot;Sperren" in the original. - Trans.

traffic. "Obstruction," or "Destruction," should be such as to stop the traffic for weeks and months, and it is a very decisive step, which should only be ordered by supreme authority, or by a general with an independent command. Under such circumstances you destroy important viaducts. tunnels, embankments, &c.—operations which generally require many hours, and always need engineers or trained railway-troops. A simple "interruption" should be a matter only of a few hours or days, there being presupposed a later use of the line by your own side, without the employment of extensive resources for repairing the line; such interruption may be ordered by any commanding officer, especially in the district occupied by the enemy's forces. Partial removal of the permanent way, destruction of the engines, or barricades, are the proper means; hence, if engineers are at hand, you will naturally detail them for the work; but otherwise, as you know, cavalry are equipped for such interruptions, and, in case of necessity, the pioneers of infantry battalions may be used.

In the case of a "destruction" which generally requires many hours to accomplish, the covering body must keep the enemy at a much greater distance from the working party than in the case of a simple "interruption." If a "destruction" is interfered with by the approach of the enemy, an attempt should be made to carry out one or more "interruptions." An interruption "for some days" demands somewhat extensive works, and this explains why, in the present instance, a detachment of this strength is employed for this purpose.

We know that the enemy on the afternoon of the 2nd July has bivouacked with infantry and artillery near Antilly; it is probable, therefore, that he will remain there for the night. The cavalry which he has sent in advance, viâ Metz, will either return to the main bivouac at Antilly or encamp nearer to Metz. In any case the information about the

enemy is rather indefinite. You know nothing of his strength, and so must be prepared for superior numbers. The statement "with artillery" indicates that at least two or three battalions are bivouacking at Antilly, for artillery seldom accompanies smaller bodies of infantry than this. The enemy's immediate destination is, apparently, the unfortified town of Metz, for he is not likely to pass by so great a town with its many resources. This is shown further by the fact of his having sent cavalry in advance to Metz. One can then assume with some certainty that on the morning of the 3rd July the enemy will be en route from Antilly to Metz. When he receives news of the advance of our detachment, we cannot tell whether this will cause him to leave his former route and march direct against us, leaving Metz to the west, but you must reckon with the possibility. The enemy's cavalry, being in its own country, may have been informed by the country-folk that there are troops south of the town, or it may itself have noticed some portion of your cavalry. In either case it will push its reconnoitring next morning further towards the south, and then the opposing cavalries will soon come into contact. our cavalry proves superior, we may hope to conceal from the enemy the advance of our detachments: this is uncertain, however, and such uncertainty is the rule in war. That is just the difficulty of commandership, that we but seldom know, with any certainty, the movements, strength, and intentions of the enemy, and must fall back on coniectures founded on the often scanty information received. Learn the art of always dexterously sketching out for yourself, from the various and more or less trustworthy sources of information available, a mental picture of the whole situation; and so much the better will your arrangements be. The reports received from your cavalry will, in practice, first establish whether your conjectures were

accurate—therefore the great importance of well pushing forward cavalry reconnaissance. Bear in mind, moreover, that troops "in a friendly country" are, as a rule, better provided with information than are troops "in an enemy's country." We can now, once for all, calculate by what hour the detachment can reach the heights of Mercy-by-Metz, and when the hostile infantry can do the same. It is customary to calculate, in the case of detachments composed of the three arms, on a rate of three miles an hour, on good high roads presenting no special difficulties. You may hold fast to this figure as an average rate of march. (I.D. 163.) Long halts have to be calculated for separately, in addition, i.e., presuming that the tactical situation renders them permissible at all.

A small column, consisting of infantry only, marches, under favourable conditions, at the rate of 31 miles per hour: and, for short distances, 32 miles per hour. Cavalry employed on reconnoitring duty, in which it for the most part alternately walks and trots, moves on an average 61 miles per hour.† At the same time it will, as a rule, be able to advance more rapidly the first few miles, enjoying as it does greater security, until it has established touch with the enemy. Thereafter it has to take into consideration the necessity of advancing under cover, and must make longer halts for the important duty of obtaining a good view. This causes the cessation of continuous forward movement. I specially direct your attention to this, because beginners are prone to over-estimate the pace at which reconnoiting cavalry moves. On the other hand, however, do not fall into the opposite error, and bear in mind that such a thorough searching of any tract of country as is often carried out

[•] Cf. our "parade pace" of 3 miles 720 yards an hour. (I.D. s. 9.)

⁺ Our Cavalry walk and trot is officially reckoned five miles an hour. (I.D. s. 163.)

both by cavalry and infantry in peace manœuvres is impossible in war; because, firstly, it would take too much time; and, secondly, in only rare and exceptional cases is really necessary; for small bodies of the enemy, being themselves in danger, fall back; while larger bodies cannot easily remain concealed.

We must expect a slower rate of march than three miles an hour when the attendant circumstances are unfavourable, such as long continuous stretches of up-hill road, bad state of the roads, unfavourable weather (heat, wind, slippery ice), exhaustion of the troops after a forced march, or when performing a night march, &c. There is much more than can be calculated, in consequence of which no hard and fast rules can hold good, and we must be guided by the circumstances in each individual case.

According to Bronsart von Schellendorff (Headquarter Staff Office), when the thermometer stands at from 67° Fahr. to 77°, we must allow about 4½ minutes extra time in marching each mile; in greater heat correspondingly more. Night marches last about half as long again as day marches of equal length. Sandy or slippery ground causes an extra delay of 3 to 5 minutes on each mile marched, heavy rain or snow 2 to 3 minutes, a strong head wind 6 to 9 minutes. In hilly country, when it is a case of a road ascending a valley at a moderate gradient, add 4 to 9 minutes, according to the gradient, on each mile traversed.

I now measure the distance on the map from the bivouac south of Liéhon to the heights of Mercy-by-Metz as being 7½ miles. In measuring take into due consideration the curves in the road. Should you over-estimate the distance by half a mile, this corresponds to ten minutes in time. To be ten minutes late may be awkward, but, on the other hand, to arrive ten minutes before the time makes no great odds.

I recommend you to use a small wheel for measuring curves with great accuracy. In practice, especially on horseback, the last joint of the thumb must suffice as a measuring instrument. Thus the head of the infantry column could reach the end of its march in $7\frac{1}{2}$ miles \div 3 = 2 hours 30 minutes.

The enemy has from Antilly to the heights of Mercy-by-Metz 10 miles \div 3 = 3 hours 20 minutes.

Under the supposition that both parties march off at the same time, Colonel A. could thus reach the goal of the march 50 minutes earlier than the enemy.

To make arrangements at this stage as to how the detachment is to occupy the heights of Mercy-by-Metz, or for a portion of it to diverge just above Chesny, in the direction of Peltre, would be to fall into the mistake of "making arrangements too long beforehand." Let the troops commence the march first; the rest comes at a later stage, and is thus the subject of later and fresh orders. We do not yet know whether we shall reach the heights without a fight, or whether we shall get as far as the mouth of the branch road to Chesny.

It is unnecessary to detach a flank guard, as at the outset we have only cavalry opposing us. Not till a later stage in the proceedings can the enemy's infantry become dangerous, so that cavalry alone is sufficient for information and protection on both flanks. In the next letter I shall revert to the subject of flank guards. The detachment therefore marches on *one* road, in accordance with the principle that one should concentrate one's strength as far as possible in one column, in the case of detachments like this, and only break them up when absolutely necessary.

As the outcome of the above considerations we arrive at the following decision: The detachment to march as early as possible, so as to attain the objective before the enemy: and in one column, by the high road to the heights of Mercyby-Metz. The cavalry to trot on ahead.

With regard to the latter, note that on account of the conformation of the country, it is desirable to dislodge the enemy's cavalry as soon as possible from the heights of Mercy-by-Metz. Perhaps also our cavalry, by fighting dismounted, can hold the heights until their own infantry come up. As to whether the above tasks can be successfully carried out or not is an open question; but in any case the cavalry must hurry on far ahead, and the more close the touch it then obtains of the enemy's cavalry, so much the more will its rate of progress slacken. For the proper performance of its duty cavalry requires great freedom, but nevertheless it must not wholly lose touch with the infantry in rear, for it must be sufficiently at hand at any possible development of the fight. This being premised, you now have the choice either of placing the bulk of your cavalry directly under the commanding officer of the detachment, as "independent cavalry," and then pushing it forward far beyond the advanced guard, or of assigning it to the advanced guard as "advanced guard cavalry." In the present problem excellent reasons may be advanced for either course. For "independent cavalry" the following is to be said: The cavalry must, for the reasons I have above detailed, gain a footing on the heights of Mercy-by-Metz as soon as possible. We must, therefore, from the very outset employ it in sufficient strength to reconnoitre by force, provided the enemy's cavalry is not very superior to ours numerically, and to drive them back. But officers' patrols or smaller bodies are adequate for reconnoitring only when the opposing cavalry does not do its duty, as, for example, in the case of the French in the last war; though it is true that they can sneak through more easily than larger bodies. When, however, as here, the enemy has pushed his cavalry well

forward, we must employ stronger bodies; especially when, as here, and as generally is the case, our cavalry has not only to reconnoitre, but to screen the movements of its own troops at the same time. To do all this the cavalry needs a certain freedom in its movements, which it cannot possess if it is attached to the advanced guard. Besides, every advanced guard commander is naturally prone to use cavalry solely in providing for the security of the march; whereas the commander of the whole force, owing to the broader view taken by him, will accord it far greater freedom. The latter also is in a better position to judge when the occasion requires his intervention to prevent the cavalry getting out of hand. I also prefer to use cavalry independently, when its mission lies outside the sphere of the advanced guard, or temporarily, at all events, lies far in advance of it—as, for example, in the present instance. It has further to be borne in mind in this connection, that independent cavalry transmits its reports direct to the officer commanding the detachment, who is in a better position to rightly appraise their import than is the advanced guard commander, for the latter in most cases is acquainted with the general situation only so far as is necessary for the proper performance of the march. It follows that, when cavalry is employed with the advanced guard, it may come to pass that the import of intelligence fraught with the greatest importance to the entire force may not be appreciated by the advanced guard commander to whom it is delivered.

For "Advanced Guard Cavalry" there speaks the consideration that, in the present case, our cavalry will in all probability very soon encounter that of the enemy; and, if it then finds itself unable to make headway without assistance, the advanced guard will have to reinforce it, in which case it were better that both bodies should, from the outset, be under the command of one and the same

person. In other words, the assumed proximity of a strong hostile cavalry might constitute an argument for employing the cavalry in the advanced guard. Moreover, its numerical weakness might be adduced as a reason for not employing it independently—on the ground that, after deducting a troop for the advanced guard, and men for orderlies, and to conduct the baggage, there would remain only about a squadron and a half for independent cavalry. Further, that so weak a force as this would hardly deserve the name of "independent cavalry"; for, owing to its weakness, it would be in the highest degree un-independent, being deficient in the necessary fighting-strength.

In spite of these latter arguments, however, I give the preference, in the present case, to independent cavalry, on the grounds that this course is essential for the carrying out in an offensive spirit an independent duty outside the sphere of the advanced guard.

I digress at this point to give you the spirit of our regulations on the subject generally. A detachment should employ its cavalry as advanced guard cavalry, unless it is exceptionally strong in that arm.

By "exceptionally strong" I mean three or more squadrons, when one squadron or less would be sufficient to provide for the safety of the march. It is a downright mistake to send forward an independent cavalry unless there is sufficient of that arm, in addition, to ensure the safety of the march. If the independent cavalry of a detachment is less than two squadrons, it is a rare and exceptional case, requiring special justification.

The raison d'être of independent cavalry is the existence of some independent task outside the sphere of the advanced guard, be it with reference to place or time. There is always a danger, however, that the cavalry may misuse its independence, get beyond control, and not be at hand when required.

In connection with the distribution of the cavalry in this instance, bear in mind that, considering the paucity of that arm, and the difficulty of the task before them, as few men as possible should be withdrawn from the squadrons. officer commanding the detachment must be satisfied with a N.C.O. and six to eight men in attendance on him—an officer with a like number of troopers can undertake the guidance of the heavy baggage—and the officer commanding the advanced guard takes the few orderlies he may require from the cavalry allotted to the advanced guard, for there must always be some cavalry with the advanced guard. Should you be exceptionally strong in cavalry, allot a whole troop to the main body, which must march at the head of it. This arrangement is especially desirable, firstly, when the officer commanding the detachment has from time to time occasion to send out patrols direct from the main body, as in flank marches, or when traversing an enclosed country in which, in spite of reconnaissance to the front, hostile bodies might suddenly appear and endanger the main body; or, secondly, when it is probable that the main body will have to undertake some fresh rôle, such as becoming the advanced guard of a larger force—a case which sometimes happens—in which event a paucity of cavalry would be distinctly prejudicial.

The advanced guard takes from \$\frac{1}{6}\$th to \$\frac{1}{8}\$rd of the infantry, though tactical units must never be broken up to attain this exact proportion. In this case a battalion is suitable. The rest of the infantry is with the main body. Of artillery there is only a battery present, which will naturally accompany the main body; and, in consideration of its safety, cannot be at the head of it, but should have a battalion in front of it. The field company of engineers is best with the advanced guard. If all goes on well, it can, by being so placed, turn off towards Peltre, and commence

its work there earlier than it could if it were in the main body. Otherwise, and as a general rule, the engineers are best with the main body of a small mixed force. Whenever, though, there is any likelihood that the services of engineers may be soon wanted, that arm should be allotted either wholly or in part to the advanced guard. For instance, when a river has to be crossed in the course of a march. and it is possible that the enemy may have destroyed the bridges—or when some other physical obstacle to the march may be anticipated—or, as in this case, when it is desirable that the engineers commence some piece of work with the least possible delay, the engineers should be with the advanced guard. Every bridge on the road you intend to march by affords an argument for so detailing them-They should be well to the front in the advanced guard, preferably with the vanguard. The bearer company as a rule remains with the main body, marching at the tail of it. There is seldom more than one bearer company with a small mixed force; and it is not required until the fighting has become severe at some particular spot, thereby entailing many casualties. Until this happens the wounded are sufficiently attended to by the surgeons and stretcher-bearers accompanying the troops.*

The officer commanding the advanced guard decides the order of march of his own command. In framing orders all you have to do is to assign him his troops, mentioning them by arms in the conventional order.

The officer commanding the whole force himself decides, as a rule, the order of march of the main body, drawing attention to the paragraph in the orders referring to the main body under the heading of "Distribution of Troops" by the

[•] In the British army a medical officer is attached to each battalion, regiment of cavalry, &c. This officer has at his disposal two trained men, of good physique, from each company and squadron as stretcher-bearers.—Trans.

words main body in "order of march." The main body should have no separate commanding officer detailed to it in orders. Sketch out now the order of march in accordance with the Field Service Regulations. By so doing you will prepare the way for framing the actual orders. Moreover, every subordinate officer in the main body likes to ascertain by means of the order his place in the column. In operations on a larger scale there are many influences at work besides those affecting the present problem, and the order of march of the main body often cannot be decided upon till just before it starts. I give you a twofold Distribution of Troops, according as you have decided on "independent cavalry" or not.

DISTRIBUTION OF TROOPS.

- I/Battalion. 1st and 11nd Squadrons 1st Dragoons. 1st Field Co. R.E.
- 2. Main Body (in order of march). 1 Section 1st Squadron 1st Dragoons. II/Battalion. 1st Field Battery R.A. III/Battalion. Bearer Co.
- 1. Advanced Guard: Lt.-Col. B. or 1. Independent Cavalry: Capt. C. 1st Squadron (less a troop) 11nd Squadron 1st Dragoons.
 - 2. Advanced Guard: Lt.-Col. B. I/Battalion. 1 Troop 1st Squadron 1st Dragoons. 1st Field Co. R.E.
 - 3. Main Body (in order of march). 1 Section 1st Squadron, 1st Dragoons. II/Battalion. 1st Field Battery R.A. III/Battalion. Bearer Co.

In conclusion, you should test whether every unit belonging With regard to the abbreviato the force has been disposed of.

tions of the designations of troops, battalions and squadrons of cavalry should be numbered in Roman figures.

"Place, Date, Hour of Issue" can now be given, "Bivouac south of Liéhon, 2. vii., 89, 10 p.m." The hour of issue is that when the order is completed and issued, not that when you commence writing it. Since it was 9.30 p.m. when the officer commanding received the order on which this problem is based, he could scarcely issue his own orders before 10 p.m. He must first attentively read the order received, then study the map, and perhaps confer with his second in command, before drawing up the orders for his detachment. Meanwhile the officers to receive the orders for the several units are being assembled, and not till all are present can the order be dictated. All this requires timewhich you must take into account. I recommend you to make a similar estimate of time before drawing up any orders, so as not to fall into the error of estimating the hour of its completion too early.

It is also permissible, instead of issuing the complete orders overnight, to merely publish brief orders on the eve of the march, stating when and where the troops must stand ready the next morning, postponing the issue of the orders for the march proper till next morning—a little before marching off. I will not at present dwell further on this subject, but would caution you not to overlook it; and I shall revert to it later on.

No. I reads "Hostile infantry and artillery are bivouacked near Antilly. Hostile cavalry patrols are reported south of Metz. Reinforcements for us are marching on Delme." Thus the information concerning the enemy is repeated almost word for word as in the original orders received from headquarters. You must not, however, always do this. The point is to give your subordinate officers what is essential for them to know in order to be able to execute their individual

tasks in accordance with your intentions. Anything more is superfluous, unimportant details must be omitted. Very unfavourable news, the gravity of which might be magnified by subordinates, should, whenever practicable, be either wholly omitted, or, at any rate, referred to in very circumspect terms. Good news, on the contrary, should be given special prominence; as here the fact that reinforcements are marching on Delme. Never lose sight of the fact that your orders pass through many hands, and that despondent men, who can unfavourably influence the "moral" of the troops, are everywhere to be found.

Of the movements of friendly troops, no more than as above need be said in the orders.

No. 2. "The Detachment will march to-morrow morning to Mercy-by-Metz."

You observe how little concerning the enterprise you have in hand need be mentioned to subordinates; enough, however, to ensure that each in his place (even if something unforeseen occurs) shall, without further prompting, adopt the line of action which will be correct, and suitable to the general situation; you not premising too much as to your intentions. If it thereafter proves impossible to carry out the enterprise in hand, (supposing, for example, Peltre is found to be already occupied by an enemy in superior force), your subordinates will not notice the failure of the undertaking, and you prevent manifold rumours getting about. It is only too easy to shake the confidence of your troops in you as leader by issuing indiscreet orders, and the harm. once done, is with difficulty made good; besides which it nearly always perceptibly impairs their fighting efficiency. Besides your plans should be kept as secret as possible. First reach the heights of Mercy-by-Metz, if you can; and then let your subordinates know what you further intend to do.

The commanding officer is, however, justified in giving

more detailed information concerning his intentions, &c., to some of his subordinates, e.g., the senior officer on his staff, and especially to the officer commanding the cavalry. latter will thereby know to what points to call special attention in his reports. Again, suppose that, in the case before us, the officer commanding the cavalry sees that it is doubtful whether it will be possible to carry out the interruption of the railway as planned. If he had been taken into the confidence of the commanding officer, he would at all events try to effect a minor interruption of the line with the means at his disposal - possibly in the neighbourhood of Peltre—possibly somewhere else. (If you have the opportunity, look over the Instructions for the employment of Cavalry in the Field, 1893." You will find there much worth knowing in this connection; especially on the subject of demolitions, and the passage of rivers in folding boats.)

It is further advisable that the officer commanding the detachment should send for the officer in command of the engineers overnight, and discuss with him the task before him. The latter will thus have the opportunity of making some preparations, even possibly during the night.

As to a possible retreat, no orders are issued, although the commanding officer will consider what he intends to do if he meets unexpectedly an enemy in greatly superior force.

The troops must think only of "Forwards"; and, certainly not at the beginning of the affair, of "Retreat." Moreover, it is wholly unnecessary at this stage to mention any arrangements for a retreat, because one generally retreats (if at all) to that place from which one set out. If the baggage remains halted, it is generally an indication that a retreat may possibly have to be made.

No. 3. To add, as was formerly the custom, the words "I order," or, "To this end it is ordered," is redundant. You

might now have to settle the hour when the detachment is to start from the bivouac, which, as you know, will be determined by the consideration that you have to reach the heights north of Peltre as soon as possible. The desirability of reaching some place or another as quickly as possible is an element in almost every tactical problem; but I must warn you against fixing too early an hour for marching off in this as in other problems. Avoid, especially in consideration for the mounted arms, starting the troops until an hour after daybreak. The march should, as a rule, commence even later, in order to give the troops as much as possible of the absolutely necessary night's rest, unless possibly, by way of exception, it is desirable to avoid marching in the middle of the day in very hot weather. In general one starts from a bivouac rather earlier than from quarters. At the beginning of July the sun rises about 4 a.m. You should therefore fix 5 a.m., at the earliest, as the hour of starting. Even so, the mounted arms will have to begin their day's work a long time before 4 a.m. I take this opportunity of giving you average figures in round numbers for sunrise and sunset, which you must remember, so as not to make arrangements inconvenient to the troops. For tactical purposes scientific accuracy is not of importance.

					Sunrise.				Sunset.	
January						8	a.m.	•••	4	p.m
February			,			7	"	• • •	5	,,
March		•				6	"	•••	6	,,
April		•	,			5	,,	•••	7	,,
May						4	"	•••	8	"
June			,			4	,,		8	"
July			,			4	,,	•••	8	,,
August						5	"	•••	7	"
Septembe	er		,			5	"	• • •	6	"
October			,			6	"		5	1)
Novembe	r					7	"		4	"
Decembe	r	,	,			8	"		4	"

From this point onwards the orders will differ, according as you have constituted an "independent cavalry" or not. In the first case No. 3 should run—" The independent cavalry will trot on ahead, at 5 a.m., to Mercy-by-Metz—reconnoitring towards Colombey, Borny, Queuleu, and Sablon. The Hospital Wald and the large wood of Champel are to be observed."

The reasons for the cavalry moving forward at a trot have been already given. Although you specify Mercy-by-Metz as the goal of their efforts, yet doubtless the officer commanding the detachment recognizes in his own mind the improbability of their being able to trot continuously that distance ($7\frac{1}{2}$ miles). As soon as they begin to get the touch of the enemy, however, their rate of progress will gradually get slower. The further afield you fix the goal of their efforts, the more energetically are cavalry likely to act. They will at any rate try to reach it quickly. Possibly they succeed in doing so—so much the better then.

There is an established axiom in military matters that a General should require of his troops what is next door to impossible. By this means the possible is performed. But there must be no over-driving.

Borny is given as a point to be reconnoitred, because of the main road leading thither via Vallieres;—Colombey, to secure the right flank in good time;—Queuleu and Sablon as a matter of course.

More extensive reconnoitring than this is not necessary to begin with. Should it, however, become necessary to push the cavalry even further towards Antilly, I should manage it by means of a new order—probably given on the heights of Mercy-by-Metz.—The reconnoitring thus goes on, more or less, by instalments. The advantage of this course is that it will counteract any tendency of the cavalry to get out of hand, besides giving the commander of the detachment a

guarantee that the reconnaissance of the first few miles of country will not be slurred over. Thus our motto is "give the cavalry a large order," yet, for all that, with certain qualifications.—By specially mentioning the Hospital Wald, and the large wood of Champel in the order, we ensure greater attention being given to examining these localities. As to how this is to be done—whether by patrols or by larger bodies—is the business of the officer commanding the cavalry. In fact, at the time the order is made out, the officer commanding the detachment is not in a position to pronounce on this point. The more cavalry the enemy displays in these localities next morning, the more we must send thither.

There is no doubt that in giving these directions about searching the woods you are somewhat interfering with the independence of the cavalry commander. He, probably, recognizes the necessity, without your telling him, of examining large woods lying close to the route to be traversed. Nevertheless, it is desirable to insert this clause, so as to be perfectly certain that both flanks of the line of march will be carefully reconnoitred. In practice the amount of independence allowed a subordinate depends on his personal character, a factor which is wanting in the theoretical solution of a problem.

Yet, even in practice, the supreme commander is sometimes justified in encroaching on the initiative of his subordinates, even when their efficiency and zeal is undoubted; (as, for instance, in the present case, where certain instructions are given about the way the reconnaissance is to be carried out); for the general continuity of the arrangements as a whole, the unity of leadership, and the supreme commander's own views and intentions outweigh all other considerations.

The freedom which is necessary to a subordinate in arranging the details of how he intends to execute your

orders, on which I laid stress in my first letter, must not be abused. Still it is not so bad to err on this side as to hamper him with useless details. You must have very good grounds for interfering in your orders, with a subordinate's freedom of action in executing them.

It will not infrequently occur that the supreme commander, if he has it very much at heart to reconnoitre in any particular directions, will order officers' patrols out, but he must not make a practice of doing this. As a rule all such arrangements are equally well made by the cavalry commander, or by the commander of the advanced guard; and the whole conduct of the reconnoitring thereby remains more in one hand; nor does the subordinate officer get in a habit of relying on the commander to do his work for him. I do not consider it essential in this case to start the cavalry much before the infantry, as the former will soon get ahead by moving at a trot. Nor need the place of departure be specified—seeing that the cavalry are in the bivouac. Their line of route also is left open, so as to give them a free hand in the matter.

No. 4. "The Advanced Guard will start at the same hour for Mercy-by-Metz, via the main road through Grève-la-Haute."

Note that the commander of the advanced guard has a definite route prescribed to him. For all other particulars, however, such as the measures to be taken for the protection of the march, and for keeping up the connection with the cavalry in front—also the order of march of his command—it rests with him to make his own arrangements.

If you have put your cavalry in the advanced guard, you must express No. 3 thus:—"The Advanced Guard will start at 5 a.m. for Mercy-by-Metz, viâ the main road through Grève-la-Haute. The Cavalry will proceed in advance, at the trot, to Mercy-by-Metz, and, while observing the Hospital

Wald and the large wood of Champel, will reconnoitre towards Colombey, Borny, Queuleu, and Sablon."

By such an order you would interfere with the independence of the commander of the advanced guard; but your justification for so doing is that you are doubtful whether his views on the subject of employing cavalry are the same as your own.

No. 5 (or if you have attached the cavalry to the advanced guard, No. 4). "The Main Body will follow at 750 vards distance." You can either fix a certain hour for the main body to start, or, as above, mention the distance (in yards) at which it is to follow the advanced guard. The latter is best in practice, because, should any accident delay the start of the advanced guard, the main body still preserves the required distance. Besides, it is easier for you, as you have no time-calculation to make. The only case in which you should arrange the start of the main body by reference to time, is when the advanced guard and the main body have to start from different rendezvous, which lie far apart, and are separated by country where the view is so limited that the head of the main body cannot see the advanced guard start. A distance of from 650 to 750 yards is, in the case of small forces consisting of a few battalions only, about sufficient when the enemy is distant and the general situation is as yet little ascertained. Experience shows that two factors enter into the determination of the distance—on the one hand the advanced guard must be far enough in advance to prevent any checks to its advance delaying the main body also; on the other hand the main body must be near enough to intervene in good time if the advanced guard encounters the enemy. Exceptional arrangements must be made, as you should bear in mind for future reference, in the case of an advance against an enemy who is already established in your vicinity. Here the distance between advanced guard

and main body can be reduced, with a view to expediting both the start of the latter, and the general march of events.

No. 6 (or, if you have attached the cavalry to the advanced guard, No. 5). "The baggage conducted by a section, under an officer, furnished by the Ist Squadron, will remain stationary in column of route on the by-road leading from Lièhon into the main road—the head of the column being at the junction of the two roads, 1400 yards east of Lièhon."

The rule is to allot to the baggage, for purposes of guidance and maintaining order among the wagons, a cavalry officer, with as many troopers as are necessary. Nor must this party be too weak; though this is a matter better left, if possible, to the discretion of the commander of the squadron concerned. It may be he has some horses weaker than others, or which for other reasons have to be spared fatigue, which he will be glad to give easier work for a day. It will not, as a rule, do to put a non-commissioned officer in command of the party, for he would lack the tactical view requisite to keep the baggage out of difficulties, and would not wield sufficient authority, especially in relation to the non-combatants present with the train. Still less is a noncombatant officer fit to command the escort. The party should not be scattered throughout the length of the baggage column. The baggage might, in the present instance, almost equally as well be left behind in the bivouac. This is often done when one is sure of returning thither again. In the present case, however, this is by no means certain, so it is better not to leave the baggage behind.

As to the distance between the baggage and main body in general;—the former must, on the one hand, be kept well in rear, if there is any chance of a fight; while, on the other hand, it must be capable of being readily brought into cantonments or bivouac by nightfall, and therefore must not be too far

behind. But it is often impossible to foretell where the force will pass the next night. In the present instance the baggage should not be taken far afield. In fact it would be a downright mistake to drag it about at our heels; for, on commencing the day's march, it is impossible to foresee whether the force may not experience a reverse, and have to make a hurried retreat; in which case the clumsy wagons would be very much in the way on the main road. The best course here is to let it go a little way at any rate, so that the wagons may fall into their places, on one road, and in one column. We post it on a by-way, with its head at the junction of the by-way with the main road, so that it can either readily move to the front or retreat southwards. It would not be wrong to advance the baggage a little further to the front in the present instance—say to Grève-la-Basse; as you can be pretty certain that it will not be in the way there. I should not advance it any further than that though; and in any case it must on no account go down the steep descent near Pierreieux too soon.

With small forces the baggage usually follows about a mile and a quarter in rear of the tail of the combatant column on the march. Bear in mind now, for future reference, the following cases which may occur with regard to the baggage:

- (1) It follows the main body at a distance of about 11 miles.
- (2) It follows the main body at the same distance as in (1), but only to some appointed spot, where it awaits further orders.
- (3) It marches only a short distance, in order to fall into its order of march properly.
- (4) It remains behind in bivouac or cantonments.
- (5) It follows close on the main body without any interval, or else very close in rear of it (in Flank marches).

- (6) It does not follow the main body, but marches on a road of its own (in Flank marches).
- (7) Instead of following in rear it is sent on in front (in Retreats); or, the troops being temporarily stationary, it is sent back to the rear (in Defence—sometimes, but not so often, in Attack).

No. 7 (or, if you have attached the cavalry to the advanced guard, No. 6). "I shall be found (*reports* will reach me) at the head of the main body.

A., Colonel."

The best position for the officer commanding a detachment, at the beginning of the march, is between the advanced guard and the main body; whence he can observe whether everything is carried out in accordance with his intentions, and where he can await the first reports. So stationed, he is less subject to distractions, and can better exercise supervision. than by being with the advanced guard, in which case his attention would be liable to be taken up by comparatively unimportant details. But as soon as he receives news that touch has been established in earnest with the enemy, he must gallop to the front. There he interrogates the advanced guard commander as to what the latter has observed, and it now becomes his duty to see for himself; because, as our infantry regulations say, "The commander's own observation of the situation as regards the enemy and of the country is worth more than reports or information at second hand, or the mere inspection of the map."

The section of cavalry appointed, in the "Distribution of Troops," to the head of the main body, serve the commanding officer as orderlies—therefore will accompany him when he rides to the front. I must specially impress upon you the importance of economizing to the utmost the number of these mounted orderlies. Every man in excess of what is

absolutely necessary is an evil, since the squadron furnishing the section is thereby unnecessarily weakened for the important duty of reconnaissance. Our peace manœuvres spoil us in this respect, for there mixed forces have more than twice the cavalry they would have in the field, so that one naturally tends to revel in the luxury of unlimited mounted orderlies. In war all this would soon become impossible, for the divisional squadrons must be husbanded in every way, if they are to properly carry out their arduous duties day after day, for weeks and months continuously.

At the foot of the order note briefly how it reached the troops. In accordance with my model you write this on the left, level with the signature. As in the present instance the order is given in bivouac, it is only necessary to assemble the officers from the several units to receive it, and dictate it to them. So you write, "Dictated to the officers representing the several units."

With regard to the reasons for the measures adopted, I can be very brief. The person who sets the problem will see, by the reasons adduced by you, whether you have clearly realized the whole state of affairs, and thoroughly grasped the tactical principles involved. This is shown by the reasons on which you base the measures adopted. Bearing this in mind, write your proof concisely. Aim at expressing yourself very clearly, strictly logically, and with decision, as becomes a military order. In the present problem you might arrange your reasons as follows:—

- (1) Show that you comprehend the general situation as regards yourself and the enemy.
 - (2) Give reasons for the decision arrived at.
 - (3) Give reasons for the distribution of troops.
- (4) Give reasons for each of the orders, so far as is necessary.

While you are writing the reasons, it will sometimes occur

to you—especially if you are a beginner—to alter, for the better, some points or expressions in the orders. This is one of the chief advantages in writing your reasons for the measures adopted. The act of giving your reasons in writing compels you to so thoroughly think the various measures out, that, very likely in the course of doing so, you arrive at more correct decisions. Thus the subsequently written reasons act as a crucial test whether your work was sufficiently thorough when you drew up the orders. It is on this account I advise you to give reasons, based on sound tactical principles, for all orders framed by you.

A few words, in conclusion, as to the estimate of the length of the column which is involved. The order of march. drawn to scale on the map, will show at a glance the position of the several portions of the force at the given time, and, above all, the road space occupied by the whole This latter the commander should thoroughly column. realize in two cases: firstly, when, during a march, a fresh order may have to be issued: for instance, when some alteration has to be made in the distribution of the troops in view of a change of direction (see 4th exercise), or when, while on the march, orders for attack, or for occupying a position, may have to be made out; secondly, when fresh orders will be required to distribute the troops to different places of bivouac or cantonments at the termination of a march.

The road space occupied by the several tactical units are given in round numbers in the Field Service Regulations. (See I.D. s. 163.) An hour and a half's marching will bring the head of the vanguard about 4½ miles, i.e., near La Horgne-au-Cheval-Rouge. Let us take this as our reference-point. As an advanced party, at a varying distance, say 1000 to 1500 yards in front, is a half-troop of cavalry maintaining connection with the independent cavalry still further in front. The order of march of the detachment is then—

				yards. yards.
ſ	1 Troop Cavalry in s	ections .	•	12
	Distance .	•		25
Vanguard {	2 Cos I/Battalion in fe	ours .		75
	Distance .		,	25
Į	Field Co. R.E	•		185
				322
	20 °/ _o opening out	•	•	64
				 386
	Distance, say .	•	•	600
1	6 Cos I/Battalion wit		rts,	
Main Guard{	2 S.A.A. mules, 20 °/. opening out.	and tool cart	•	309
ŧ	20 % opening out.	•	•	62
				 371
	Distance, say .	•		1600
ſ	II/Battalion (with A	mmunition, &	zс.,	
i	as above) .	•		384*
	Distance .	•		25
	Field Battery .	•		224
Main Body	Distance .	•		25
	III/Battalion (with a	mmunition, 8	ζС.,	
	as above) .		•	384
	Distance .	•		25
(Bearer Co.	•		170
`	,	•	•	
				1237
	20 % opening out	•		247
				1484
	~			 .
Say 2½ miles	. Total r	road-space	•	4441†
• 0	:- form	in line		yards.
	in fours, same as frontage oneers, and mounted office		:	. 300 . 50
Two S.A	.A. carts (2-horse)		•	. 20
One Too	l-cart (do.) .A. mules .	•	•	. 10
1 #0 3.1		Total wood secon	•	• 4
		Total road-space	•	. 354 <i>Trans</i> .

[†] The road-spaces and distances are as given in the *Tables and Data* for the use of Staff College officers, compiled by Colonel Rothwell; published by Eyre and Spottiswoode; and are, of course, different to those given in the original, which are based on German organization.—*Trans*.

Therefore, to deploy on the head of the vanguard, the whole force would require $2\frac{1}{2} \div 3 = \frac{4}{5}$ hour = 50 minutes

If the baggage followed, it would be about 1½ miles in rear, and its length, allowing for opening out, about 500 yards. [As regards baggage, in round numbers, that of a battalion takes about 100 yards road space: that of a battery, 100 yards; and that of a cavalry regiment about 200 yards.]

The tail of the advanced guard will thus be at a point on the main road due east of Pierrejeux, the head of the main body 700 yards north of Grève-la-Haute, the tail of the main body 800 yards south of Grève-la-Haute, while the baggage is leaving Liéhon. I have not allowed for possible halts. A space and time calculation can never be more than approximately correct, which, however, is sufficient for practical purposes. A hundred yards over or under estimated is of no importance as a rule.

On this account your estimate need not precisely agree with that above given; for instance, your "distances" might be different to mine, thereby giving a different "total road-space." I have left it for you to decide how far the cavalry (both that forming the advanced party of the vanguard and the independent), is in front of the head of the vanguard.

I will now put together for you the orders (already detailed) in the form in which they should be written by you.

N.B.—Baggage is not mentioned in the "distribution of troops," but it must be dealt with in the orders, being always kept separate from the combatant column whenever an action is possible, i.e., nearly always in tactical exercises. It is seldom that a pontoon troop will accompany a "detachment." If so, its place on the march would usually be at the tail of the advanced guard or of the main body, or even with the baggage.

The baggage is practically the "train" of a detachment. In the case of a large force the baggage forms part of the train, being in the second, or rear section of it; a mile or two behind the first section, which is sometimes termed the "fighting train," as it may be wanted in action (reserve ammunition column, field hospital, &c.), whereas the second section of the train and the baggage is required only in bivouac or cantonments.—Trans.

DETACHMENT ORDERS.

Bivouac south of Liéhon.

2. VII. 89.

10 p.m.

DISTRIBUTION OF TROOPS.

- 1. Independent Cavalry: Capt. C.
 - I^{at} Squadron (less a troop) and II^{ad} Squadron 1^{at} Dragoons.
- 2. Advanced Guard: Lt.-Col. B. I/Battalion.
 - troop 1st Squadron 1st Dragoons.
 - 1st Field Co. R.E.
- 3. Main body (in order of march):

 1 section 1st Squadron 1st
 Dragoons.
 II/Battalion.
 1st Field Battery, R.A.
 III/Battalion.
 Bearer Co.

- Hostile Infantry and Artillery
 are bivouacked near Antilly.
 Hostile cavalry patrols are
 reported south of Metz.
 Reinforcements for us are
 marching on Delme.
- The Detachment will march tomorrow morning to Mercyby-Metz.
- 3. The Independent Cavalry will leave bivouac at 5 a.m., and proceed at the trot to Mercy-by-Metz—reconnoitring towards Colombey, Borny, Queuleu, and Sablon. The Hospital Wald and the great wood of Champel are to be observed.
- 4. The Advanced Guard will start at the same hour, and march to Mercy-by-Metz, along the main road through Grève la-Haute.
- The Main Body will follow the advanced guard at 1600 yards distance.
- The Baggage, conducted by a section, under an officer, furnished by the 1st Squadron, will remain stationary in column of route on the

by-road leading from Liéhon into the main road. The leading wagon to be on the junction of the two abovementioned roads, 1400 yards east of Liéhon.

7. Reports will reach me at the head of the main body.

Dictated to officers representing the various units.

.., Colonel.

If the cavalry be allotted to the advanced guard, the orders must be altered as previously mentioned.

I again remind you that all words printed in italics in the above orders should be underlined by you in writing such orders, and names of places should be written in block capitals.* In writing a tactical exercise begin a new page with the orders for the sake of distinctness.

This letter now forms the basis for the following exercise. There are several more or less debatable points in connection with an advance which I have so far purposely refrained from dealing with, but intend to discuss in subsequent letters.

SECOND EXERCISE.

(See maps Metz, Verney, and Ars a. Mosel.)

The 5th and 6th Divisions, with the addition of a few extra batteries of artillery, are operating in friendly country, with the object of throwing reinforcements into the fortress of Metz, which is held by a weak garrison. On the night 5/6 July, '89, the force bivouacs east of Vivier (map Metz, six miles due east of Metz), and throws out a left flanking detachment, under Colonel A., consisting of—

^{*} In reconnaissance reports, likewise, "the names of places and people must invariably be writ en in printed characters."—Cavalry Drill, 1896. Vol. ii., part ii., sec. 5.—Trans.

I/Battalion.

II/Battalion.

III/Battalion.

IV/Battalion (Rifles).

1st Dragoons (less IVth Squadron).

1st Field Battery, R.A.

A Battery, Royal Horse Artillery.

1st Field Co., R.E.

which goes into close cantonments in Colligny (south-east corner of Metz map) late in the evening of the 5th July.

At 11 p.m. Colonel A. receives the following despatch from the officer commanding the main body (5th and 6th Divisions):—

Eastern Army. Vivier, 5th July, '89. 5th and 6th Divisions. 10.30 p.m.

The enemy has invested Metz west of the Moselle. He has crossed the Moselle at noon to-day near Novéant with a column of all arms, and occupied Fey, Cuvry, Pouilly, and Fleury, with a few infantry. Isolated cavalry patrols of the enemy have appeared north and east of the Hospital Wald. Weak detachments from the garrison of the fortress are holding Bévoye-la-Haute, Grigy, and Borny. The 5th and 6th Divisions will start for Metz, vià Laplanchette, at 5.15 a.m. to-morrow. You will cover the march again to-morrow as a left flanking detachment, marching by Colombey; and you will make arrangements for your detachment to have passed the ravine of the Vallières brook, east of Colombey, by 7 a m. The baggage of the detachment will accompany it.

By order. (Signed) B. Colonel, A.A.G.

Describe the arrangements made by Colonel A. for the 6th July, and give reasons for the same.

N.B.—The woods in the neighbourhood of Metz have very dense underwood, and infantry could only work through them slowly, and in extended order.

As regards the fortifications of Metz, see the remarks in the first letter, according to which you must leave them wholly out of the calculation.

THIRD LETTER

FLANK MARCH

THE data given at the end of the last letter involve a simple advance of a flanking detachment, protecting the left flank of a force about to march from Vivier to Metz via Laplanchette. The term "flanking detachment" means simply a flank guard on a large scale, comprising all three arms. Perhaps you wonder how it is there is a battery of horse artillery in Colonel A.'s detachment. It is accounted for by the words "the 5th and 6th Divisions, with the addition of a few extra batteries of artillery"—whence I infer that the force has received a portion of the corps artillery to supplement the divisional artillery.*

It is not within our province to inquire why the force does not assume the offensive against the adversary who is investing Metz. The despatch received from the Lieut.-General in command states that the force will march on Metz. There are doubtless excellent reasons for this course. Remember the maxim always to strictly confine yourself to the data in the exercise, and never be led astray into the

^{*} The British army corps on war strength, for service abroad, has three field batteries per infantry division, total nine field batteries, and in the corps artillery five field batteries and three horse artillery batteries, making a total of fourteen field batteries and three horse artillery batteries, or 102 guns, or about four guns per 1000 infantry. The proportion in the German Army is about 5.3 guns per 1000 infantry; there being carried, by the way, in the battery 135 rounds per gun (an unknown number of shells being filled with a high explosive), as against 110 per gun in the British Army.—Trans.

consideration of circumstances outside the scope of those data.

The road by which the detachment will have to march runs from Colligny via Colombey to Metz, so the detachment has to cross the precipitous and deep ravine of the "Vallières brook" near Colombey. The 5th and 6th Divisions will have to cross the same ravine nearly a mile lower down, at Laplanchette; † and at both places precautions must be taken, even if both roads are in the best condition. The Lieut.-General will be glad when his main body has crossed the ravine; for to be attacked during its passage would place him in an awkward position. In view of this the detachment must so place itself as to cover the passage of the ravine by the main body; not merely marching parallel with it on Metz, but halting in a suitable place until the whole of the main body has crossed the ravine. Where and in what manner this halt is to be made it is impossible to say—at the present stage of the proceedings-at least with any accuracy; but information will come to hand after the march is begun which will enable us to decide this matter.

Pending this all that can be done is to commence the march so as to get the detachment over the ravine in good time, and to make careful provision for reconnaissance. This much, however, can be definitely stated, that for the purpose of feeling the way the detachment must not go beyond the "Französischen Denkmal" (1420 yards west of the ravine). As regards the orders we have to frame, this point, therefore, may be considered as being, for the present, the termination

^{*} The ravine is about 1300 yards in breadth at this point, and there is a descent of about 115 feet to the bridge over the brook, with a gradient of 16, or 4° slope on each side.—Trans.

[†] The depth and width of the ravine are much the same at this point as near Colombey.—Trans.

^{\$} See I.D. 137.

and goal of the march. It is evident that the officer commanding the 5th and 6th Divisions has not contemplated the detachment halting east of the Vallières brook, because he postulated in his despatch that Colonel A.'s force should be over the brook by a given hour.—The question may have occurred to you, why did not the Lieut.-General state how far the detachment should go before halting? There is doubtless some ground for asking such a question. Inasmuch, however, as he has left his subordinate perfect freedom of action in deciding the details, and has not hampered him with any special requirements, so it is the duty of the latter to arrive at a right decision for himself. The detachment must, as it advances, keep up close touch with the main body, so as always to know exactly how far the latter has got. There will not be much difficulty in doing this, as the country between the two roads for the most part lies open to view, except in the immediate vicinity of the Vallières brook; and there are plenty of good cross roads. But besides the high road on which the detachment will march we must also consider what roads may be of importance in facilitating reconnaissance, that is to say, those south of and parallel to the first mentioned. These are:

- (1) The road viâ Marsilly and Aubigny to Colombey.—Patrols moving by this route would have to strike across country for part of the way, but this would have to be done in any case, as the road throughout is too near the main road on which the detachment will march to be of much use for reconnoitring and security.
- (2) The road viâ Marsilly and Ars-Laquenexy to Grigy.—Near Ars-Laquenexy this by-road strikes another important paved main road (chaussée) which, about 1½ miles south of the route of the detachment, runs also to Metz. But between Colombey and Borny on the one hand, and Ars-Laquenexy and Grigy on the other, there are so many woods and copses

between the two main roads that it would be difficult to keep up visual communication.

(3) The road viâ Marsilly and Ars-Laquenexy to Mercy-by-Metz—thence on viâ Grigy or Bévoye-la-Haute to Queuleu.—Using this road one gets, near Mercy-by-Metz, a view over the country east of the Hospital Wald. From this point, too, one can, with any luck, prevent hostile cavalry detachments penetrating by the gap between the large wood of Champel and the wood west of Ars-Laquenexy to observe the advance of our detachment.—From Bévoye-la-Haute also there is a view over the country west of the Hospital Wald, and, what is important, the main road Verny-Pouilly-Metz lies in sight from this point.

It follows from the above that this main road through Mercyby-Metz promises best for reconnaissance.

The detachment has gone into close cantonments late in the evening; that is to say, as many men and horses as possible are packed into the buildings of Colligny, while those for whom there is no room in the houses and sheds rest close to and under the lee of them. Under these conditions the various units are not so united or so well in hand as they are in a bivouac; therefore, before a start can be made the whole force must parade at a place of assembly; for to start straight out of close cantonments is almost impossible. may have to be done in cases of necessity; but to assemble the troops clear of the buildings where they have passed the night before commencing the march is more conducive to good order. The point of assembly must be so chosen as to be quickly and easily accessible to all. In this instance the best place for it is the bend of the road just at the north-west exit from Colligny—on no account in the village itself, as there is no room. Whether the troops are to assemble in order of march on the road, or by the side of it, cannot be foreseen at the time of issuing the orders for the march.

is best decided at the time of assembly, and on the spot; when the orders on this point are given, either by the officer commanding the detachment or by his representatives, who will of course be there in good time to point out its place to each unit as it arrives.

The enemy has crossed the Moselle with columns of all arms about noon on the 5th July. In what strength we do not know, but the fact of his having occupied Fey, Cuvry, Pouilly, and Fleury the same afternoon indicates a desire on his part to complete with as little delay as possible the investment of the weakly-garrisoned fortress, towards the accomplishment of which he has crossed the Seille without any opposition. It may be expected that more of his troops will have crossed the Moselle on the afternoon of the 5th, and perhaps also after sunset. He will thus be in superior strength on the 6th, though at the outset we shall have only his advanced parties to deal with. This superiority is only what might be expected, as it requires a large force to invest a fortress like Metz-at least 100,000 men.-Apparently, however, the enemy is not strong in cavalry on the right bank of the Moselle. If he were, more would have been seen of this arm than the "isolated patrols" spoken of in the Lieut.-General's despatch. It may therefore be presumed that the bulk of the hostile cavalry divisions is at present kept back on the west bank of the Moselle.-On the 6th July the enemy is certain to try to extend the investment further to the east. In this quarter the Hospital Wald lies directly in his way. He is not likely to pass south of this large wood, as it would involve too great a détour; but will either pass north of it, via Peltre or Mercy-by-Metz (probably not, though, on account of the proximity of the fortress); or through the wood via Chesny. He will certainly become aware, in the course of the forenoon, of the presence of the detachments from the fortress holding Bévoye-la-Haute. Grigy, and Borny. His patrols will probably also reconnoitre in the direction of the important main roads leading from the eastwards towards Metz, and thereby soon encounter our patrols, If the enemy's patrols succeed in getting near Ars-Laquenexy or Grange-aux-Bois before ours the advance of our detachment cannot long remain concealed from their observation, even if not previously made known to them by the inhabitants of the country or otherwise. But as soon as the enemy comes to know of the approach of reinforcements for the fortress he is bound to attack them to prevent their reaching Metz. These considerations lead to the conclusion that the detachment must actively seek contact with the enemy. No support worth mentioning can be expected from the weak detachments in Bévoye-la-Haute, Grigy, and Borny, which have quite enough to do to defend themselves.—The enemy may thus be expected to advance on Grange-aux-Bois or on Ars-Laquenexy, either-

- (1) viå Peltre and Mercy-by-Metz, or
- (2) viâ Chesny.

On reaching, say, Ars-Laquenexy, it is more to his advantage to take up a position west of the ravine, and try to prevent or delay our main body crossing it, than to pass to the east of the ravine. It is doubtful, too, whether he *could* do the latter before our arrival. Between Colombey and Borny therefore we shall probably have to fight a general action. But mark that it is a case of *perhaps*, or *probably*; but whether *really* is an open question.

By what time, approximately, can the enemy reach the line Colombey-Borny? The distance, as the crow flies, from the nearest of the villages occupied by him, Fleury and Pouilly, is about five miles; by road considerably more. The flanking detachment, on the other hand, from the cross-roads just north of Colligny to the Vallières brook has only about two and a half miles to go, so can easily get

the start necessary to cross the ravine unmolested and select a position west of it.

The more difficulty the hostile cavalry has in reconnoitring the slower will the troops in the rear of it march. The cavalry of the flanking detachment must therefore be sent far out to the south-west, especially in the direction of Mercy-by-Metz, from which point they must endeavour to push back hostile patrols, as well as larger bodies of cavalry on the Hospital Wald. If it does no more than this, our cavalry will have amply done its duty; for you must realize that the cavalry cannot, as a rule, guarantee absolute protection, in the full sense of the word, to infantry marching in rear of or beside it. Cavalry lacks the power of resistance requisite to ensure protection. In this instance all it can do is to give the infantry the earliest tidings of the enemy's whereabouts, which it does by riding close to him and keeping his cavalry so occupied as to deprive it of the initiative. Here again I have to impress upon you to give the cavalry a "large order" (see last exercise); get all you can out of it, but leave it the necessary freedom. not in this instance recommend throwing out, with the idea of thereby gaining additional security, a flank guard composed of infantry, to march, say, on Grigy, via Marsilly and Ars-Laquenexy. Such a flank guard would get too far separated from the detachment on crossing the Vallières brook, and while traversing the woods west of Ars-Laquenexy, and the detachment would be courting the danger of being destroyed piecemeal.

Let us assume, for the sake of argument, that you have detached say half a battalion, with some cavalry, as a flank guard to the detachment, marching via Marsilly and Ars-Laquenexy on Grange-aux-Bois. The enemy approaches by way of Mercy-by-Metz, and the four companies make an attempt to delay him somewhere near Grange-aux-Bois,

while the rest of the detachment is taking up a position for defence at the "Französischen Denkmal." No doubt the four companies will delay the enemy some time. If they employ smokeless powder, it will be difficult for the hostile cavalry to see what force they have to deal with. This uncertainty, which lasts some time, imposes caution, and with it delay, on the enemy. Thus the employment of smokeless powder doubtless is all in favour of small bodies whose mission is to gain time for their own side by wasting that of the enemy.

But now for the other side of the picture. In the long run the enemy perceives the weakness of the flank guard, and then the four companies have to retreat, exposed to the annihilating fire of modern weapons. In what state will they rejoin their main body? Does the advantage to the detachment justify this sacrifice? Would not one be just as well forewarned of the enemy's approach by the reports of the cavalry? As soon as it came to an engagement, i.e., to the enemy's attacking the detachment in position, the rôle of any hitherto existing flank guard (if there had been one) would become identical with that of "advanced posts" in front of a defensive position. disadvantages of such advanced posts are explained in the Tactical Guide, s. 72.* Every improvement in modern firearms lends extra weight to the already cogent objections to advanced posts there detailed.

Note here, for future reference, that when the enemy's presence is reported on the flank of your line of march, and you are in doubt whether you ought to throw out a special flank guard composed of infantry or not, you must weigh:—

(I) Whether, all things considered, an *infantry* flank guard is necessary for causing delay to the enemy.

^{*} Cf. I.D., s. 117. 9.

- (2) Whether there is a suitable road for such a flank guard.
- (3) If this be the case, how far apart are the two roads under consideration. It is most exceptional for a "detachment" to send out an infantry flank guard more than one and a quarter miles.
- (4) Whether the two roads are separated by ravines, woods, &c., exposing the flank guard to the danger of being destroyed before support could reach it from the main body of the detachment.

After weighing these points, you will more often than not decide to dispense with an infantry flank guard; unless, as a special case, and not likely to occur often, you deem it important to divert the enemy's attention from the main column by throwing out such a flank guard. Where cavalry will answer the purpose, infantry should not be employed, the latter, owing to its slow movement, having difficulty in rejoining the column from which it is detached.

In the present exercise protection both can and must be provided by cavalry. To fetter this arm to the advanced guard would be a positive blunder. It must operate in considerable strength, outside the sphere of the advanced guard, with an independent mission; and push far out in search of the yet far distant enemy.

The above considerations lead us to the following decision: the detachment to assemble at the bend of the road just at the north-west exit from Colligny, and march in one column to the Französischen Denkmal, as a preliminary measure; pushing forward independent cavalry to Mercyby-Metz viâ Ars-Laquenexy.

The next point to be considered is the distribution of troops. Considering the general situation, it is highly improbable that the advanced guard will soon become engaged, but we cannot be certain of it, since in war,

even with the best of information at one's disposal, all is uncertain. We must therefore be prepared for everything, and arrange the composition of the advanced guard accordingly. It is as well to assign the rifle battalion to the advanced guard.

If it is a case of our having to attack, the undoubtedly superior fire effect of the Rifles will prepare and support the attack of the other troops, for their good marksmanship is bound to make itself felt in the long-drawn-out fire action. If it is a case of our standing on the defensive, an opportunity often occurs of putting the Rifles in a place where they can find a field of action suitable to their special qualities. I would not have less than a battalion in the advanced guard, for we must get a considerable body of infantry on the west side of the Vallières ravine as early as possible. If, however, this consideration were not so important in this case, you could make the advanced guard weaker in infantry; because, as a rule, the rôle of an advanced guard is not so important in a flank march as in an advance—consequently it need not be so strong. The advanced guard must, besides, have the necessary cavalry: i.e., a quantity of patrols to reconnoitre the Colombey road, and the country close to and on each side of it, and to maintain connection with the main body of the 5th and 6th Divisions, as well as with the independent cavalry.

I would assign a troop to the advanced guard, perhaps two, but not more than two, for we must be careful to economize in cavalry, at all costs, so as to have a superiority in that arm where it is more needed. The next point for consideration is whether one of the two batteries should be detailed for the advanced guard.

We have, in the present instance, only one battalion in the advanced guard, and should, as a rule, be most reluctant to attach artillery to such a small body of infantry; because small detachments which have, like an advanced guard, to operate independently for some time, are often compelled to spread themselves over a front out of all proportion to their strength, and consequently are unable to afford sufficient protection to artillery. There is the less justification for attaching guns to the advanced guard in this case, in that the main body of the flanking detachment will be near enough at hand to be able to quickly despatch one or both of the batteries to the front at a trot. A mixed force comprising two batteries which has only one battalion in the advanced guard, keeps, as a rule, both batteries with the main body—the more so, as the artillery is thereby kept united. It is only advisable to give the advanced guard a battery in the very exceptional case of the advanced guard having to gain a footing somewhere with as little delay as possible. Say, for example, the object is to secure a position on a height, or the passage of a ravine, with as little delay as possible; keeping the enemy at a distance, meanwhile, by long range artillery fire, or compelling him to deploy prematurely. Here the intervention of artillery a few minutes earlier is in some cases such an advantage, that one would not hesitate to put a battery in the advanced guard, and put up with the risk it incurs by being for some time insufficiently protected. At all events there would be excellent grounds for adopting such a course. This, however, is hardly the case in the present instance, for the enemy at present is so distant that we shall have no difficulty in gaining the heights west of the Vallières brook; therefore both batteries are best with the main body of the flanking detachment.

It is, on principle, never permissible to attach part of a battery, say two guns, to an advanced guard. The battery must never be broken up. An exception may occur in mountain warfare, when not more than two guns can be

brought into position in narrow valleys, and it is desired to force hostile bodies at long range to leave the road and deploy.

Should you have three or more batteries with a large detachment, then the advanced guard will be proportionately strong, and you can detail a battery to it. Should one of the batteries be a horse artillery battery, as I have purposely assumed to be the case in this exercise, it had better remain with the main body, for the advanced guard battery needs less mobility, as it moves for the most part on or close to the road of march. The greater mobility of the horse battery finds its application in that it is able to quickly bring the desired support from the main body to the front.

The field company of engineers goes with the advanced guard, as its services may be required during the passage of the Vallières ravine. Should it, later on, have to strengthen a position occupied for defence, this forward position will enable it to commence work earlier.

It will be well in this case to keep a troop of cavalry with the main body of the detachment, and not be satisfied with a few mounted orderlies. This is apparently inconsistent with the principle enforced in the preceding letter as to the necessity for economizing cavalry. In this instance, however, there must be more cavalry placed at the disposal of the officer commanding the detachment, and immediately under his orders. He will from time to time have occasion to send direct from himself a patrol to the main body of the two divisions, in order to be always well-informed as to its whereabouts—the left flank of the main body of the detachment must be adequately protected by patrols—and, again, the officer commanding will require patrols to keep up connection with his independent cavalry. The troop for the advanced guard and that required for the main body and to conduct the baggage are taken from one and the

same squadron, so that the other squadrons may remain intact.

The artillery will follow the leading battalion of the main body. A special escort for the baggage, somewhat of the nature of a small rear guard, is unnecessary. One is, as a rule, most unwilling to employ complete units for such a purpose, and one prefers to leave the protection of the baggage against, say, the enterprises of small bodies of the enemy's cavalry, to the infantrymen who are temporarily unable to march through being foot-sore, which is generally ample for its security. With flank marches, however, always consider, in each particular case, whether special measures should be taken for the protection of the baggage, or not.

The "Distribution of Troops" will therefore run as follows:—

DISTRIBUTION OF TROOPS.

1. Independent Cavalry: Lt.-Col. B.

1st Dragoons (less ½ the 1st Squadron, and the 1vth Squadron).

2. Advanced Guard: Lt.-Col. C.

IV/Battalion (Rifles).

1 troop 1st Squadron 1st Dragoons.

1st Field Company R.E.

3. Main Body: (in order of march).

1 troop 1st Squadron 1st Dragoons.

I/Battalion.

A Battery, R.H.A.

1st Field Battery, R.A.

II/Battalion.

III/Battalion.

On the subject of orders, I explained in the previous letter that frequently two sets of orders for a march instead of one can be issued. Always bear in mind that it is most desirable for the troops to know overnight, if possible, what time they

must be ready to commence the march next morning. The company* commanders, &c., can in that event make their arrangements better on matters of interior economy, such as the issue of rations, access to baggage, &c., than if the order reaches them almost like an alarm-order, just before the fall-in for the start. Moreover, each individual man will know when to begin cooking his rations, for that requires time, and nothing is more unpleasant than having all of a sudden to stop cooking because of an order to fall-in at once, the more so when the troops will have to make great exertions, and no one can say when there will be another opportunity for cooking.

Let two sets of orders be issued; the first, issued overnight, assembling the troops for the start only; the second, the order for the march proper, being promulgated verbally or dictated shortly before marching off.

This method of issuing orders is that which is most employed in the field, especially when in the vicinity of the enemy. The advantage of it is that the manner in which the troops are to be employed and the choice of roads is left open up to the moment of starting. This manner of issuing orders is peculiarly applicable when one is expecting some fresh information or orders from superior authority during the night, which would compel one to cancel any previously On the following morning the officers comissued orders. manding units are assembled some 10 or 15 minutes before the actual time for starting, to receive the orders for the march. In the field, orders as a rule are issued, both for divisions and detachments, late at night; as usually the reports on the events of the day and the orders of superior commanders have to be waited for. The officers detailed to receive the orders often have to wait for hours together before

This applies to the German company, equal our double-company.—Trans.

they are completed. All are worn out with the exertions of the day, and will be glad when at last they can ride away, but even then must betake themselves to their respective commanding officers, who generally will have to awakened. In short, picture to yourselves vividly all the circumstances of the case, and you will realize how desirable it is that orders which have to be issued in the middle of the night should be as simple as possible. How easy it would otherwise be for fatal mistakes to arise! Issuing orders by word of mouth has also the undeniable advantage that it is possible to explain and clear up any doubtful points. Doubtless there is this advantage in issuing the march orders proper in good time overnight, that the several subordinate commanders are thereby enabled to grasp the situation more thoroughly, and to better comprehend both the intentions of the supreme commander and what their own duty will be. In very difficult cases such might be done, but only by way of exception; and when, on the contrary, the situation is a simple one, as in the present instance, and such as every subordinate officer can easily understand, the march orders proper need not be issued till just before commencing the march. Even if the orders can be given verbally, as when the troops are assembled, it is more probable that orders somewhat longer than usual will be dictated.

You will thus do well, with regard to the question whether one or two sets of orders should be issued, to consider, in each case, what the exercise requires. If it asks you to give "the orders issued by the officer commanding the detachment on the evening of the——," give only one set of orders, but in framing it, bring to notice by some means or other that the troops, if previously in quarters or close cantonments, must be assembled somewhere before commencing the march. If the exercise says "Give the orders," or says nothing special, give two sets of orders, if it seems likely that reports containing

further information may shortly arrive. If the general situation is *simple*, the enemy *distant*, and there be no *special* information to wait for, you need give only *one* set of orders. In the case we are now considering, as the orders from Divisional Headquarters do not arrive till II p.m., and it would be impossible for the subordinate commanders to receive your orders till very much later, it is preferable to issue two sets of orders.

Before you can issue the orders to assemble the troops, however, you must decide at what hour the march must commence. In calculating this you must bear in mind that, in accordance with the orders from Divisional Headquarters, the detachment — though not its baggage — must be across the Vallières brook by 7 a.m. on the 6th July. The distance by road, from the cross-roads north of Colligny, to the Vallières brook is $2\frac{1}{2}$ miles = about 50 minutes' marching. The head of the vanguard will require that time to march the distance. But all the troops must be across the brook by 7 a.m. So we must calculate, in addition, the total road-space occupied by the detachment in order of march, which will be as follows:—

	as ionows.—					yards.	yards.
$Vanguard$ $\left\{ \right.$	1/2 Troop Cavalr	y	•		•	I 2	
	Distance .		•			25	
l	2 Companies.		•	•	•	75	
						112	
	20 % opening o	ut	•	•	•	22	
							134
	Distance, say .		•				600
(6 Companies (v	vith carts	and mu	les)		309	
Main Guard {	Distance . Field Co. R.E.		•	•		25	
l	Field Co. R.E.		•			185	
						519	
	20 % opening o	ut	•		•	104	
							623
•	Distance, say		•	•	•		2000

						yards.
	Brought forward	•	•			3357
(1 Troop Cavalry	•	•		24	
	Distance .	•	•		25	
	1 Battalion .	•			384	
	Distance .		•		25	
	H.A. battery (detachme	280				
Main Body {	Distance .				25	
_	Field Battery .				224	
	Distance .		•		25	
	1 Battalion .				384	
	Distance .				25	
(Battalion .				384	
					1805	
	20 °/, opening out	•	•	•	361	
						2166
	Total road-space	•	•	•		5523 yards.
						,

Say 3 miles, or 1 hour's marching.

Thus the detachment must march off I hour 50 minutes before 7, i.e., at 5.10 a.m. Commanding officers to assemble to receive orders at 5, and the detachment to be prepared to march off by 5.10 a.m. at the cross-roads north of Colligny. Note that the cavalry, with the exception of the troop with the main body and ½ a troop in the vanguard, does not come into the calculation of road-space, as they trot on in advance. I may remind you en passant that, if your detachment marches off at 5.10 a.m., the last man does not start till an hour later, so has to wait uselessly that time. It is not always possible to avoid this, but, whenever possible, precautions should be taken against it. Bear this in mind for a future occasion; I will not pursue the subject further at present. The hour of starting which we have arrived at by a simple calculation happens to be much the same as you would have fixed as the earliest possible, considering the time of year

and of sunrise. Should, however, it be necessary for the troops to march off earlier, tactical requirements would take the precedence.

A very much later time is purposely chosen for the baggage than for the troops, so that the latter have left the village some time when the baggage-wagons set out, in order that, during the assembly of the troops, the roads may be free from vehicles. On the other hand, the baggage must be unparked early enough to start in good time. It is, moreover, highly desirable to assemble the baggage on the road . as part of the column of march, to which end it must be stated in the orders where the head of the baggage column must stand, because this is the simplest way of setting the baggage en route, and saves the heavy* wagons the necessity of much turning or leaving the road. Instead of this, the baggage might be assembled earlier, and leave the village by a different way to the troops—for instance, by the eastern exit—a procedure which I shall recommend in similar cases later on. In the present instance I prefer the first method.

I take this opportunity of impressing on you that, as a rule, all the baggage of a division is massed, and marches in one body. The instructions contained in the orders from Divisional Headquarters, in the present instance, for the baggage of the detachment to accompany it, must be considered exceptional. I introduced them into the data on purpose to make you reflect about holding back the baggage awhile. If the data had required that the baggage also should be across the Vallières brook by 7 a.m., you would have had to bring into the calculation about 750 yards for the length of it (4 Battalions, each 100 yards=400 yards, cavalry and artillery together about 350 yards). A few yards more or less are of no consequence.

[•] The English G.S. wagon weighs 55 cwt. when loaded.—Trans.

The orders for assembling the troops would run:

Colligny. 5. VII. 89. 11.15 p.m.

DETACHMENT ORDERS.

 The detachment will be formed up by 5.10 a.m. to-morrow, at the cross-roads north of Colligny, ready to march off.

The baggage, conducted by a section, under an officer, furnished by the 1st Squadron, will be formed up in column of route at 6 a.m., on the road from Colligny to Colombey. The leading wagon to be at the bend of the road north of Colligny.

2. Officers commanding infantry buttalions and all officers of other arms will attend to receive orders at 5 a.m., at the place ordered for the parade of the detachment.

Dictated to officers representing the several units.

A., Colonel.

The actual orders for march run as follows:

Cross-roads north of Colligny. 6. VII. 89. 5 a.m.

DETACHMENT ORDERS.

DISTRIBUTION OF TROOPS.

- 1. Independent Cavalry: Lt.-Col. B.
 - 1st Dragoons (less \frac{1}{2} the 1st Squadron, and the 1vth Squadron).
- Advanced Guard: Lt.-Col. C. IV/Battalion (Rifles).
 1 troop 1st Squadron 1st Dragoons.
 1st Field Co. R.E.
- 3. Main Body (in order of march):

 1 troop 1st Squadron 1st Dragoons.

 I/Battalion.

 A Battery R.H.A.

 1st Field Battery R.A.

 II/Battalion.

 III/Battalion.
- The enemy has invested Metz on the bank west of the Moselle, and yesterday afternoon occupied Féy, Cuvry, Pouilly, and Fleury. His cavalry patrols have shown themselves near the Hospital Wald.

The 5th and 6th Divisions will march to-day via Laplanchette on Metz. Troops from the fortress have occupied Bévoye - la - Haute, Grigy, and Borny.

- The detachment will march to-day, as a left flank guard, provisionally to the "Französischen Denkmal," west of Colombey.
- 3. The independent cavalry will immediately advance at the trot to Mercy-by-Metz, via Ars-Laquenexy, reconnoitre in the direction of Chesny, Orny, and Pouilly, and try to prevent hostile cavalry gaining ground east of the Hospital Wald.

- 4. The advanced guard will start at once by the road through Colombey to the Französischen Denkmal, keeping up connection with the division, Grigy and Borny.
- The main body will follow at a distance of 2000 yards.
- The baggage will follow immediately in rear of the main body.
- 7. Reports will reach me at the head of the main body.

Verbally to the assembled commanding officers.

., Col nel.

With reference to above orders note the following:-

No. I.—Every subordinate commander must be informed concerning the march of the 5th and 6th Divisions, and as to the fact of Bévoye-la-Haute, Grigy, and Borny being held by friendly troops; otherwise mistakes might arise, and the unexpected appearance of columns or patrols of friendly troops might give rise to confusion and unnecessary measures.

No. 2.—I do not consider the expression "as a left flank guard" redundant, for these few words facilitate a rapid grasp of the situation, and constitute the central idea which must dominate the acts of all. The provisional object of the march is, in accordance with the reasons above adduced, the French monument west of Colombey. At the time of commencing the march it cannot be foreseen what will have to be done on arriving at the monument, e.g., whether we shall merely have to remain there prepared for eventualities, or have to occupy a defensive position, and, if so, where;

therefore nothing is said about it in the orders. Such would have to be the subject of *fresh* orders based on the reports which will have been received; *meanwhile* all that can be done is to set the detachment in motion forwards. Nor could one say, at this stage of the proceedings, how long the detachment will stop at the monument, although we know the hour at which the 5th and 6th Divisions march off from Vivier, and so can estimate by what time they will be out of danger. No such estimate can ever be absolutely trustworthy, however, since unforeseen events may delay their march.

No. 3.—Mercy-by-Metz is indicated as the principal locality to be aimed at by the independent cavalry, from which point onwards also its task is defined. How this task is to be accomplished is the business of its commander; it would be a mistake to impose any restrictions on his action. He will probably not be able to form an opinion on the state of affairs until he reaches the heights of Mercy (whence there is an extensive view), and until he has received some reports from the front. As to where the cavalry are to operate later on, in the event of the detachment taking up a position, that would form the subject of a later order.

No. 4.—The advanced guard is not ordered to do any reconnoitring, so its commander can make his own arrangements for the usual reconnoitring on both sides of the line of march and to Borny. On the other hand it is advisable—although, strictly speaking, it is perhaps superfluous—to specially mention in the orders the necessity of keeping up connection with the several friendly bodies, so as to be certain of this duty being properly carried out.

No. 5.—It is often advisable, when two sets of orders are issued, to settle about the party to conduct the heavy baggage in the first orders, those which assemble the troops. An officer to command the section can then be detailed some time before

the march orders are given out, he knows the duty required of him, and he will more readily understand, when the second orders are issued, all that concerns him. In that case, of course, no allusion is made in the march orders proper to the conducting of the baggage.—The baggage must follow the main body without any interval, so as to get across the Vallières ravine as quickly as possible, as it is in a dangerous position until that is done. Should it subsequently be advisable to send it on in advance to Metz this would be dealt with in a later order.

If you wish to issue the orders for march overnight in Colligny, thus giving only *one* set of orders, the following alterations would have to be made:

The first set of orders would be wholly omitted, and the second would be changed as follows:—

Colligny. 5. VII. 89. 11.15 p.m.

- Instead of "yesterday afternoon"—"this afternoon"
 Instead of "to-day"—"to-morrow."
- 2. "The detachment will march to-morrow, &c., and will parade at 5.10 a.m. at the cross-roads north of Colligny."
- 3. As above, but instead of "immediately"—5.10 a.m.
- 4. As above, but, instead of "immediately"—5.10 a.m.
- 5. As above.
- 6. "The baggage, conducted by a section under an officer, furnished by the rst Squadron, will be formed up in column of route at 6 a.m. on the road Colligny-Colombey, with the leading wagon at the bend of the road north of Colligny, and will follow immediately in the rear of the main body."
- 7. As above. On the left "Dictated to the officers representing the various units."

You should now be able to work out the reasons in the same succession as I gave you in the last letter. You would in particular have to explain why there is no flank guard

to the detachment, and why the cavalry is sent on in advance to act independently. Should you conceive the idea of assembling the various units composing the detachment at different times, so that no one has to wait unnecessarily, I should consider it very practical, though you would have to give your reasons for the measure all the same.

The next exercise will again give you an opportunity of calculating road spaces and times of starting, which are combined with a problem connected with the quartering of troops in several places. You will thus do well to thoroughly work through the sections in the *Field Service Regulations* dealing with the subject.

It may be as well to note that in this exercise two sets of orders were issued: one late at night, briefly stating the hour and place for the rendezvous of the troops next morning; the other (communicated verbally to C.O.'s at the rendezvous parade) containing the actual orders for the march.—Trans.

THIRD EXERCISE.

(See general map and the maps Metz and Verny.)

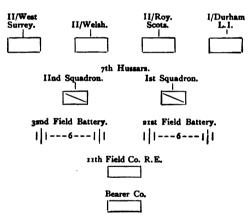
A detachment (see diagram below) under Colonel A. is in an enemy's country, and on the 1st August, '89, is on the march southwards by the road passing through Vigy (general map) and St. Barbe (map Metz), when an order is received for it to be formed up east of Laquenexy by 8 a.m. on the 2nd August, in order to join at that place the 6th Division, which is advancing on the unfortified town of Metz viâ Sorbey. On the afternoon of the 1st hostile cavalry patrols. have fallen back, viâ Nouilly, Lauvallières, and Laplanchette, towards Metz. The enemy is reported to have a large number of troops in bivouac west of Borny. At 5 p.m., when the head of his vanguard has reached Petit Marais (north of Retonfey), Colonel A. decides to quarter his troops in the villages of Gras, Cheuby, Erpigny, St. Barbe, and Avancy,

and to throw out outposts (4 companies I/Durham Light Infantry, 2 troops Int Squadron 7th Hussars) on the line Poixe-Retonfey.

Required-

- 1. Order of march of the detachment on the 1st August, in the form of an estimate of the road-space occupied.
- 2. The arrangements for quartering the detachment for the night (omitting the outposts).
- 3. The arrangements made by Colonel A. for the 2nd August.
 - 4. Your reasons for the measures adopted.

Colonel A.'s Detachment.



FOURTH LETTER

MARCH QUARTERS AND FLANK MARCH

TO work out the estimate of the road space occupied by the detachment, the "Distribution of Troops," that is to say, the order of march on the 1st August, must first of all be considered. The Distribution of Troops might be as follows:

I. Advanced Guard

I/Durham Light Infantry.

1st and 11nd Squadrons 7th Hussars.

2. Main Body: (in order of march)
A section from 1st Squadron 7th Hussars.
II/Royal Scots.
21st Field Battery R.A.
32nd ditto.
II/Welsh Regiment.
II/West Surrey.
11th Field Co. R.E.
Bearer Co.

If you have put another battalion in the advanced guard, or a troop instead of a section in the main body, or the engineers in the advanced guard, it is all the same as regards the steps to be taken for quartering the troops at night. A good deal might be said for such dispositions, and in such case the calculation I am about to give will require to be somewhat modified.

With regard to the distribution of the troops among the various villages, the important question is, where are the several portions of the column of march at 5 p.m., when the officer commanding the detachment decides to halt; our object being to make such arrangements for quartering the troops that, if possible, there may be no need for anyone to retrace his steps. It is on this account that I have asked you to make an estimate of the road-space occupied by the detachment on the march. I now assume that the officer commanding halts the detachment at exactly 5 p.m., and assembles the officers commanding units to receive orders. Part of the cavalry is pushed out to the south-west, nor has their exact position at this time any bearing on the question of quartering them for the night. As the head of the vanguard stands at Petit Marais, the head of the main guard stands halted 840 yards north of Petit Marais, for

					yards.	yards.
- 1	ı Squadron .	•	•		100	
Vanguard {	1 Squadron . Distance . 2 Companies Infantry	•	•	•	25	
· · · · · · · · · · · · · · · · · · ·	2 Companies Infantry	•	•	•	75	
					200	
	20 °/ ₀ opening out	•	•		40	
						240
	Distance, say .	•	•	•		600
						840
						040

The head of the main body is about the Soleil d'Or, for

1110 11000	i the main body is	about			.,
				yards.	yards.
Main Guard {	6 Companies with munition carts, a tool cart 20°/, opening out	309			
	Distance, say	•	•	. —	371 2600
					2971

The tail of the infantry of the main body is where the road from Vry to Sanry intersects the main road, for

						yards.	yards.
1 Battalion	•	•	•	•	•	384	
Distance		•	•	•	•	25	
Field Battery	•	•	•	•		224	
Distance			•	•		25	
Field Battery			•	•	•	224	
Distance		•	•			25	
1 Battalion	•			•		384	
Distance	•	•	•			25	
1 Battalion	•	•	•			384	
						1700	
20 % opening	out	•	•	•		340	
							2040

While the tail of the whole detachment (disregarding the baggage) is about 500 yards north of the above-mentioned cross-roads, for

						yards.	yards.
Distance in rea	ar of	Infantry	Battalion		•	25	
Field Co. R.E.		•		•	•	185	
Distance		•	•	•		25	
Bearer Co.	•	•	•	•	•	170	
						405	
20 °/. opening	out	•	•	•	•	81	
							486

It is immaterial in this exercise whether your calculation exactly agrees with mine; the object being merely that you may obtain an approximate idea of the road-space occupied, and where the several portions of the column will stand when halted at 5 p.m.

The first principle to be observed in quartering the troops, is that no unit shall have to go back if it can be possibly avoided. The second must now be laid stress on,

viz., that the troops should be distributed among the villages in such a manner as will best facilitate re-forming the column of march to resume the advance the next day, provided that, as in this case, the direction and purpose of the next day's march can be foreseen. Quartering the troops, therefore, is in a sense, the commencement of the next day's march. Therefore, the first thing to do is to consider how the detachment will advance on Laquenexy on the 2nd August, and the C.O. must settle this in his own mind before the troops can go to their quarters.

The main body will naturally march by the main road as far as the cross-roads north of Colligny; thence, either to the south edge of Ogy, and from there, by the by-road running due south, direct to Laquenexy; or viâ Colligny and Villers-Laquenexy to Laquenexy.

Other roads which likewise enter into the question are:

- (1) The road via St. Barbe, Gras, Retonfey, Flanville, and Ogy.
- (2) From Servigny-by-St. Barbe, viâ Noisseville, Montoy, and Coincy, and then either through Ars-Laquenexy or through Marsilly.
- (3) From St. Barbe, viâ Cheuby, Glattigny, Vaudreville, Maizery (general map), and Colligny.

These three roads may be considered, tactically speaking, roads parallel to the line of march. The first is at no point more than about 1600 yards from the main road; for the most part nearer. On account of the numerous bends it is about 2 miles longer. The second is nowhere more than 2 miles from the main road, but is inconvenient, as it crosses the deep ravines of Noisseville, Montoy, and Coincy. The third road is not only considerably longer than the main road, but much worse, so that we should hesitate to march troops or vehicles by it without previously reconnoitring it.

Much more important are the high roads running through

Lauvallières, Laplanchette, Colombey, and Ars-Laquenexy respectively towards Metz, and, consequently, towards the enemy. Study the country traversed by these roads, and you will see that, from the following points, extensive views are to be obtained:

- (1) From l'Amitié brewery, south of Noisseville, a view to Belle Croix.
- (2) From Le Haut-Montoy, a view to Todten Allee (2000 yards to the west).
- (3) From a point on the main road south of Coincy, or from the high ground near Aubigny, a view to the high ground west of Colombey, and the woods south-west of that.

It is much more difficult to find a point whence a good view can be had on the high road through Ars-Laquenexy to Grigy. On the three first-mentioned roads (those leading to Metz via Lauvallières, Laplanchette, and Colombey) a comparatively small force of cavalry will suffice for reconnaissance; but the high road through Ars-Laquenexy requires very careful watching.

The country west of the high road, by which the main body will march, is, on the whole, easy to see over as far as the Vallières brook, for the valleys of Noisseville, Montoy, and Coincy can be easily observed by a few patrols. It is not so easy to watch the Vallières ravine itself, and the view is very restricted by the woods south-west of Colombey. After all, though, the line of heights east of the Vallières brook affords such a commanding view that, so long as our cavalry is there, the detachment is secure from surprise. If the enemy attacks from the westward, the villages of Retonfey, Flanville, St. Aignan, Ogy, and Marsilly are so favourably situated in the vicinity of our line of route that, by defending them, the enemy's advance could be checked a considerable time.

The mission of the detachment is accurately defined by

the fact that it has to be at Laquenexy by a certain time; so the point is to decide how we shall utilize the roads at our disposal. All the hostile patrols have fallen back towards Metz, so that is the direction from which the enemy may be expected; moreover, reports state that there is a large bivouac of hostile troops near Borny. It is therefore a flank march that the detachment will have to make on the 2nd August. To provide for protection on the threatened flank devolves on the cavalry, which must go out in advance towards Metz on the most important roads, viz., those through Lauvallières, Laplanchette, Colombey, and Ars-Laquenexy. The cavalry must set out as soon as possible on the main roads, passing through the two last-named places, to find out the exact whereabouts of the hostile force reported to be near Borny. In the neighbourhood of Ars-Laquenexy, moreover, we may expect to establish contact with the reconnoitring cavalry of the 6th Division.

In doing as above indicated, the cavalry will be separated from the detachment by the Vallières ravine. This is inevitable in the present instance, as it is absolutely necessary to find out what is going on on the other side of the brook, and there is not much risk incurred, as there are plenty of passages across the ravine, and the separation is, to some extent, compensated for by the rapidity of movement of the cavalry.

[In general, however, one should guard against having impassable ground between cavalry and the troops they are covering; for otherwise the unity of command and the transmission of information comes to an end. It must always be feasible for the whole force to rapidly effect a junction with a view to combat. You will do well to bear this in mind for future occasions.]

As we have the enemy on our flank, you might well ask whether a special flank guard, composed of infantry, should be thrown out. In this case it is desirable, as, should the

enemy attack, we must not only have early information of his approach, but must hold him back as long as possible; until the main body either has formed up for action, or has gained a sufficient start, should the intention be to retreat. Our object would be to fight a delaying action, which cavalry, on account of their small power of resistance, cannot do unaided. Infantry is therefore needed, supported, if necessary, by artillery.

Since the main body of the detachment will march by the main road through Colligny, the road for the flank guard will be that via Gras, Retonfey, Flanville, &c. The flank guard will thus be near enough to the main road for it to be easily supported. There are no obstacles between the two roads. and the view from one to the other is unimpeded. The road Noisseville-Montoy, &c., is too far from the road by which the main body will march, and is, moreover, too near the enemy, seeing that we have no occasion to seek an engagement, or to provoke the enemy to attack, but shall be well content if we can effect a junction with the 6th Division without having to fight. On this account, also, it would not be advisable to make the main body march by way of Retonfey and Ogy, and the flank guard possibly by Noisseville and Montoy, with the mistaken idea that the flank guard would thus be favourably placed to prevent the enemy crossing the Vallières brook. Neither would I recommend that the cavalry should march parallel with the main body by the last-mentioned road (vià Noisseville and Montoy), because the cavalry ought to go straight to the place where the enemy is reported to be.

The exercise does not say whether the enemy is in occupation of Metz, but it may be surmised that his patrols have fallen back on that town. The troops near Borny may consequently be considered as pushed out from Metz. The enemy will either retire, or hold his ground, or advance. If

he retires, our purposed junction with the 6th Division will not interfere with his movement,—if he remains where he is, we shall perhaps attack him in close company with the 6th Division,—if he advances, the detachment must be withdrawn out of reach of the danger of being annihilated while isolated; but in any case we must try to effect a junction with the 6th Division without loss of time.

The following are the lines by which the enemy may advance:

- (1) By way of Lauvallières.—As we have seen above, reports will probably come in early enough to enable us to take counter-measures in good time. If, as is possible, we have got over part of the march by the time the enemy approaches the Vallières brook, we must make every effort to push on the march, leaving the flank guard to follow as a rear guard.
- (2) By way of Laplanchette on Flanville or St. Aignan. In this case, too, owing to the favourable nature of the country, the cavalry will be able to warn us in good time, so that the flank guard, possibly reinforced, may make a stand until the detachment has got sufficient start in the direction of Colligny. Here again it will be a kind of rear guard action, only in this case the flank guard will probably have to hold its ground much longer than in the first case.
- (3) By way of Colombey. It is more likely that the enemy will advance on this line than any other, because he is already present in some strength near Borny; that is to say, on this road. But it is hardly possible to imagine that he will move troops by this road without at the same time engaging the 6th Division with other troops—otherwise he would probably come between two fires. In this case the detachment would, in all probability, have to assume a vigorous offensive (having first effected a junction with the 6th Division), to drive the enemy back into the Vallières ravine.

Should the junction have not yet been effected, a delaying action must be fought. In both cases, however, the flank guard has to fend off the enemy until the main body is deployed and ready for action.

(4) By way of Ars-Laquenexy only. In this case the enemy will collide with the 6th Division, which we must support.

The above considerations bring into prominence how important may be the rôle, in this case, of a right flank guard, and hence the **decision** to march the bulk of the detachment by the main road to Colligny, and thence viâ Villers-Laquenexy to Laquenexy, while a flank guard marches viâ Gras, Retonfey, and Ogy on Laquenexy.

You must not now, however, because of the importance of the flank guard, be led astray into making it too strong; still less is it advisable to cut up your detachment into two columns of about equal strength. Where large forces are concerned, the latter arrangement has, doubtless, the advantage that one half of the force can more effectually and quickly support the other if on a parallel road than if marching in the same column with and in rear of itprovided that the lateral distance between the two roads is less than half the depth of the column which would be formed by the entire force,—that the two roads do not cross one another,—and that no impassable ground lies between In the case of a small detachment, however, a division into two columns tends to fritter away its strength. The less disseminated a force is, the stronger it is; for bodies once detached are for the time being out of hand, and one is never sure whether they are not being committed to an engagement contrary to the intentions of the supreme commander; whereas troops kept united in one column on the march can be applied in accordance with one fixed purpose. splitting up your force always ask yourself the question, What is the least amount of troops that can do the work? and detach only what is absolutely necessary. A flank guard of a few companies must suffice for such a detachment as we are here concerned with, the more so in view of the fact that the main body will not require long to form up for action.

In the preceding letter I explained how the use of smokeless powder can assist a few companies in fighting a delaying action. Here, too, smokeless powder will be all in our favour if, as seems probable, the flank guard has to defend localities. The hostile cavalry will soon find out that the villages are being defended by infantry, but it will be some time before the numbers of the defenders become apparent.

In flank marches such as this the advanced guard, as a rule, plays an unimportant part; in the present instance, especially, it is difficult to suppose that we can encounter the enemy right in front of us, as he would, in that case, be pushing in between the 6th Division and the detachment. This is most improbable, because, remaining stationary as the enemy is in the neighbourhood of Metz, and in a country friendly to him, he is sure to receive information from the inhabitants, magistrates, &c., and cannot remain in ignorance of the advance of a division viâ Sorbev. Two companies are sufficient for the advanced guard; the other six of the same battalion can be detailed for the flank guard, so that a battalion in all is employed to protect the march. It would be permissible to detail a half-battalion for each purpose, but I prefer the first-mentioned distribution, as the flank guard may be involved in an obstinate fight; moreover, as it is not impossible that the flank guard may have to be supported by a battery from the main body, it may be as well to allot it two extra companies for the greater security of the guns. is desirable to take both flank guard and advanced guard from one and the same battalion, so that the main body may consist of complete battalions. At first no artillery must be attached to either flank guard or advanced guard, as they are both too weak. If the support of artillery is required, the guns can always be moved up from the main body in time, care being taken to provide for their safety while so moving. There is no need for *engineers* with either flank or advanced guard, as no special obstructions are likely to be met with, and there would hardly be time to prepare any locality for defence.

Colonel A.'s detachment being comparatively a small one, it is not desirable to again impose the fatiguing duty of forming the advanced or flank guard on the outposts, which have had no rest all night. The outposts usually stand fast until the new vanguard has passed through their line, when they close on the road and take their place in the column. Thus the outposts cover the rendezvous of the other troops, and are not withdrawn till the cavalry of the vanguard has gained ground sufficiently to the front. By this means you effect the desired relief easily and naturally. A larger body (army-corps) keeps its advanced guard composed of the same troops for some time (thus avoiding the disadvantages attendant on an inevitable breaking up of the "order of battle"), and makes no change in its composition until a unit has become so weakened by casualties that it becomes necessary to relieve it by a fresh one. This is rendered possible, because the advanced guard is so big that it can detail its component units for the heavier duties in due rotation. Small detachments, on the other hand, cannot adopt this procedure, and have to detail a new advanced guard each day, as above shown. It is better to detach the flank and advanced guards for the 2nd August, just before beginning the fresh march (that is to say, next morning), than on the termination of the previous day's march. The reason for this is (1) that if they were detached overnight the insight into the situation as regards the enemy which has been gained

by the advanced troops in the course of the past day's march would probably be interrupted—certainly not improved; and (2) because the *commencement* of a march is often viewed from quite another standpoint to that from which the orders of the previous day were framed;—whereas, by not detaching the troops destined to cover the march until just before the commencement of that march, we appoint, in the advanced and flank guard commanders, fresh men to deal with the altered situation. If we have touch of the enemy's patrols, it would be a mistake to withdraw the outposts too soon, as their withdrawal will inform the enemy that we are about to march off.

In the present instance, as the I/ Durham Light Infantry has furnished the infantry for the advanced guard during the 1st August, and the outposts for the night, the II/Royal Scots may provide the advanced and flank guards on the 2nd August. Cavalry and flank guard have in this instance the same duty, and the closer the connection they keep up with each other the better will that duty be performed; the infantry of the flank guard constituting to a certain extent a support for the cavalry. Thus it will be as well to associate them together under one and the same heading in the orders (i.e. treating the cavalry as part of the flank guard.—Trans.), and it is desirable, when the relative ranks permit of it, to assign the command of the flank guard to the officer commanding the cavalry. If, however, you wish to make the cavalry independent, such a course might be justified by the need for sending out the bulk of the cavalry in advance in the direction of Metz. In that case, however, you must give the flank guard some cavalry, a troop at least. and this causes your cavalry to be rather disseminated, and unduly weakens the independent cavalry. I therefore prefer the first-mentioned distribution (i.e. treating the cavalry as part of the flank guard), the more so because it will tend to

counteract any abuse of liberty by the cavalry, while not restricting its necessary freedom of action.—The advanced guard can make shift with very little cavalry, as it only has to examine the country in the vicinity of the main road, and endeavour to open communication with the 6th Division; for this purpose an N.C.O. and 12 men are enough. The rest of the troop I would assign to the main body, in order that the officer commanding the detachment will have rather more than a few orderlies at his disposal. See the preceding letter on this subject.

The distribution of troops might consequently be settled as follows:

- 1. Advanced Guard: Captain B.
- 2 Companies II/Royal Scots.
- 1 N.C.O., 12 men I/7th Hussars.
- 2. Main Body: (in order of march).

 I troop (less I N.C.O., 12 men) I/7th Hussars.

 II/Welsh Regiment.

 21st Field Battery R.A.

 32nd ditto

 II/West Surrey.

 I/Durham Light Infantry.

 11th Field Co. R.E.

 Bearer Co.
- 3. Right Flank Guard: Major C. II/Royal Scots (less 2 companies). I/7th Hussars (less a troop) and II/7th Hussars.

With regard to the above, note that in this case you can either detail "A and B companies II/Royal Scots" for the advanced guard—in which case the senior officer of those two companies naturally becomes the commander of the advanced guard—or, as it is not usual to choose any particular com-

panies, this being the business of the battalion commander, you might simply say "2 companies II/Royal Scots." The latter course is preferable, partly in view of the personal element (i.e. the character, qualifications, &c., of the officers commanding the companies to be detailed), which in such a case always play an important part, especially when the superior commander has no acquaintance with the battalion concerned; and partly because there may frequently be circumstances rendering it desirable to employ on this duty some other companies than those which the superior commander may have specified.

The Ist Squadron, which was on outpost duty, is named to furnish the troop for the main body and advanced guard, since it may be assumed that the two troops of this squadron on outposts will push out their reconnaissance in the direction of Metz before the march is commenced, and that some time will therefore elapse before they are re-formed. The IInd Squadron thus remains intact for the purpose of reconnoitring towards the right flank.

The cavalry hitherto employed on outpost duty must have a fixed time and place of assembly appointed, that it may be placed at the disposal of the officer commanding the cavalry, and got in hand in good time for the purpose of covering the march. It should assemble, half an hour after the march begins, at the point where the road from Retonfey to Noisseville intersects the main road from Petit Marais to Lauvallières, this being about the centre of the line on which it has hitherto been operating as outpost cavalry. By this arrangement orders can reach it in proper course, and we do not have patrols and orderlies from the outpost companies wandering about, not knowing where they are to re-form after the detachment has marched off; for the result of the arrangement suggested is that the troop-leaders can give out early in the morning where the

place of assembly is to be. It would be a mistake to recall the outpost cavalry until half an hour after the main body has got under weigh, as its duty is to reconnoitre with the utmost vigour while the other troops are being assembled.

It will take some little time for the 4 companies of the I/Durham Light Infantry, on outpost duty, to close in on the main road, thus it is more convenient for the I/Durham Light Infantry to come at the tail of the infantry in the column of march.

Having thus far explained the advance for the morrow. I will now consider the arrangements for quartering the troops, which will take the form of wide cantonments (see 19th letter). To this end I must once more review the various considerations which will influence the manner in which we must quarter the troops; these are—firstly. the existing order of march when the detachment halts. on the evening of 1st August,—care being taken that no unit has to retrace its steps to reach its quarters for the night; nextly, due convenience for continuing the advance,—care being taken that no unit has to make a détour to take up its place in the column next day; finally, the order of battle. care being taken to arrange for the units composing main body, advanced, and flank guards respectively being quartered as near one another as possible. It must also be borne in mind that, the more distant the enemy, the more regard can be had for the convenience of our troops; but that in the vicinity of the enemy tactical requirements prevail. i.e. infantry occupies the villages nearest the front, which are the most exposed to attack; cavalry is quartered more towards the rear or flank, where they are safer and the horses get more rest; and artillery must never be quartered by itself, nor yet too much to the front. When the enemy is very near, troops are more closely packed into the villages.

to which end all available sheds and stables should be utilized. (Close cantonments: see p. 55 and 19th letter.)

As four companies of the I/Durham Light Infantry and two troops of the Ist Squadron are on outpost duty, we shall, in order to keep units as far as possible together, which is so desirable for purposes of interior economy, quarter the other half-battalion of the Durham Light Infantry and the other half of the Ist Squadron as near as possible to the outposts, that is to say, at Gras.

Infantry and artillery will be best on the main road, while cavalry can occupy the quarters furthest from the front, so the second squadron will be quartered in Cheuby, where it is in safety, and can rest, as there is plenty of stabling.

The best place for the six companies of the flank guard will be on the road by which they will march next day, viz., at Erpigny; the two companies for advanced guard, which belong to the same battalion, being close by, in the houses on the western outskirts of St. Barbe. The II/Welsh Regiment and the two batteries may be quartered in St. Barbe, where the artillery are ensured security, as well as ample stabling for their numerous horses (about 300).

The II/West Surrey, the engineers, and the bearer company can remain in Avancy. The officer commanding the detachment will select his quarters so as (1) to be able to communicate his own orders rapidly—therefore in as central a position as possible; and (2) so that reports from the front or orders from superior authority may readily reach him—therefore on the main road. St. Barbe meets both requirements.

In conclusion of the subject of quartering, you would now do well, as a matter of precaution, to test whether every unit has been dealt with. To this end draw up a statement as follows:—

MANNER OF QUARTERING THE TROOPS

FOR THE NIGHT OF THE 1ST-2ND AUGUST.*

Right	Half	Batta	lion	I/Du	rham	L.I.	On Outposts
Left	"	,,,		,,		,,	Gras
2 Com	panies	II/R	oyal	Scots	•		St. Barbe
6 Com	panies	II/R	oyal	Scots			Erpigny
II/Wel	sh Re	gimen	it	•	•		St. Barbe
II/Wes	st Surr	ey .		•	•		Avancy
Ist So	quadro	n.				•	On Outposts
Ist So	quadro	n.					Gras
IIBd Sq	uadror	١.				•	Cheuby
Artille	гу.			•			St. Barbe
Field (Čo. R.	E					Avancy
Bearer	Co.						Avancy

The baggage accompanies the respective units. That of the outpost troops will either remain in Gras, or,—as the enemy is at present sufficiently distant, and there is no reason to fear a sudden attack,—it can, at any rate for a few hours, be placed at the disposal of the outpost companies If you have adopted a different order of march to mine, the arrangements for quartering the troops will likewise be different; you can make the dispositions yourselves. Perhaps, in reasoning out the matter, you have not taken into account the question of continuing the march on the morrow, on the grounds that you do not consider it possible to foresee the exact manner in which it will be done, since circumstances may have altered before the time for starting comes. In practice, of course, we cannot always tell, at the time the troops go to their quarters for the night, what will

^{*} The commanding officer must have settled in his own mind the "Distribution of Troops" for the next day's march, and consequently have gone through all the above reasoning as to the morrow's march before he can give (verbal) orders for the troops to go into quarters as follows.—Trans.

be the exact arrangements for the march on the following day; but when, as in the present instance, we can, it would be a mistake not to take advantage of it. The fact of the enemy's patrols having fallen back on Metz clearly indicates that there is not much likelihood of anything happening before to-morrow's march begins; as, prior to an offensive movement, the enemy would show more activity in reconnaissance.

The hour of commencing the march, and, consequently, that of assembling the troops, is fixed by the requirements laid down in the data, viz., that the detachment must be formed up east of Laquenexy by 8 a.m. Before making any calculations as to time, however, we must decide where the detachment is to assemble. It would be wrong to have one point of assembly, such as St. Barbe, or Petit Marais, for all; for we must, so far as is possible, avoid causing any unit an unnecessary détour, which the flank guard would have to make if the whole detachment had to rendezvous at either of the two above-named points. The principle is to assemble main body, advanced, and flank guard each on its own road, and well forward on it, but at the same time under cover of the outposts; the place of assembly being, if possible, sheltered from the enemy's observation.*

• However inured troops may be to marching, care must be taken to spare them all exertions not absolutely necessary for the purpose of the march. For instance, particular attention must be paid to arranging the times for starting.

Large bodies of troops concentrated at a single point of assembly can only be placed in motion by degrees. Accordingly their arrival should be so arranged as to avoid the needless fatigue caused by coming up too soon, and then having to wait. The hour of starting must never be earlier than necessary. The junction of the fractions of a force should always be effected by moving forward in the direction of the march. (F.O. I. 199.)

In framing orders for a march, the road-space occupied by each unit, its rate of march (See I.D. 163), and the distance it must traverse before reaching the place of assembly, must be taken into consideration.

Unless the enemy be very near, there should be several places of assembly, one for the advanced guard, one for the main body, and so on. (F.O. I. 216.)

The flank guard, to be composed of the infantry from Erpigny, and cavalry,—some from Cheuby and some from Gras,—can assemble at the eastern exit of Gras; this point being sheltered from observation from the west by the houses and gardens of the village. A special order must be sent to the two troops of the Ist Squadron on outposts at their place of assembly (intersection of road Retonfey—Noisseville with road Petit Marais—Lauvallières).

The two companies from St. Barbe, and cavalry from Gras, for the advanced guard will assemble just east of Petit Marais.

The main body will be composed of cavalry and four companies from Gras, a battalion and the two batteries from St. Barbe, the troops in Avancy, and the outposts. These latter do not affect the question, as they will march by the shortest way to the main road, and probably join the main body column as it passes Retonfey. The rest of the main body can assemble on the main road about 600 yards south of St. Barbe, where a by-road branches off to Cheuby; this point being covered from view by the under feature southwest of and close to it, and by the buildings of Gras.

The baggage will be collected on the main road north of the road-fork where the main body assemble, and the wagons can consequently be drawn up in march formation. The baggage of the outpost troops need not go back (being in Gras), but can draw up to the main road by itself, as most convenient, and wait for the baggage column to come up.

In calculating the hour of starting, we commence, as before, with the head of the vanguard, which has to traverse, from Petit Marais vià Colligny to the east of Laquenexy, about 5½ miles=110 minutes (at 3 miles an hour). But as the detachment has to be *formed up* by 8 a.m., we must, in addition, reckon the length of the whole column on the march, not counting the flank guard, which will form up on

its own account. I thus calculate the length of the column on the march.

					yards.	yards.
Admonoad	Vanguard ½ company	•	•	•		20
Advanced Guard.	Distance .	•	•	•		300
	Main Guard .	•	•			60
	Distance .	•	•			2000
1	/ 1 Troop .	•			24	
	Distance .	•	•	•	25	
1	r Battalion .	•	•		384	
	Distance .	•	•	•	25	
	Battery .		•		224	
	Distance .		•		25	
,	Battery .		•		224	
	Distance .				25	
Main body	Battalion .		•		384	
	Distance .	•	•		25	
	1 Battalion .	•		•	384	
	Distance .	_			25	
	Field Co. R.E.	•	-		185	
	Distance .			•	25	
	Bearer Co	•	•	٠	_	
	bearer oo	•	•	•	170	
	\				2154	
	20 °/o opening out	•	•	•	431	
·						2585
Total road-space			•	•		4965

(or about 23 miles), equal in time to 1 hour.

Add for distance to be marched, 110 minutes, total 2 hours 50 minutes; so the vanguard must start from Petit Marais 2 hours 50 minutes before 8 a.m., i.e. at 5.10 a.m.

We must fix the time for the flank guard to start, so that it will march approximately level with the advanced guard, remembering to give it a little start, as the road it has to march on winds considerably. It should thus leave Gras at 5 a.m. punctually. It does not matter that its route is more

circuitous than that of the main body, as its rate of march will be quicker. (A detachment of the three arms marches at the rate of 3 miles an hour—a small column of infantry at the rate of $3\frac{1}{8}$ miles an hour.)

The main body must keep 2360 yards behind the vanguard; but the distance the main body has to traverse from its place of assembly to that of the advanced guard is fully 1200 yards, therefore the main body must start 2360 - 1200 = 1160 yards = say 13 minutes later than the advanced guard, that is to say at 5.23 a.m.

The baggage, in the present instance, had better follow immediately in rear of the main body, so as to reduce the length of the column and pass from in front of the enemy as soon as possible. It is not advisable to send it by the road through Cheuby, Glattigny, &c., although furthest from the enemy, for, as we have seen above, this road is too bad for ponderous wagons. No doubt this is a disadvantage, but bear in mind that there are so many by-roads running eastwards from our main road that we can always withdraw the baggage by one of them as soon as it appears, by the reports from the front, that we cannot avoid an obstinate engagement with the enemy. I do not consider it necessary to provide any special protection, in the sense of a small rear guard, for the baggage in this case, as it can be sufficiently protected—in case of being attacked, for instance, by hostile cavalry—by men who have fallen out, unable to march, or by the rearmost troops of the main body.

The length of the main body amounts to 2585 yards (see above) = say $1\frac{1}{2}$ mile = 30 minutes; so the baggage will start that much after the main body.

Thus we arrive at the following times of starting:

Advanced Guard	•	•		5.10 a.m.
Main Body	•	•		5.23 (say 5.25).
Flank Guard	•	•		5.
Baggage .	•	•	•	5.53 (say 5.55).

From this it follows that it would be unnecessary and useless to assemble the troops in one body at the same place and time. Besides arranging that no unit has to go by a roundabout way to the place of assembly, you must see that the men do not have, unnecessarily, to wait about on arrival there before marching off,—a time when they do not need resting. An objectless delay of this sort harasses the men, besides causing subordinates to unfavourably criticise their leader, for they consider it, and justly so, a nuisance which a little foresight would have spared them.

Whenever a detachment is quartered in several villages, separate places of assembly and different times for resuming the march should, as a rule, be appointed: these places and times being determined by calculating the road-space occupied by the column on the march; bearing in mind the rate of march of each unit.

You will remember that I explained in previous letters that, as a rule, in the field two sets of orders are issued for a march—the first being assembly orders issued overnight, the second (being the orders for march proper), issued shortly before marching off; though, when there is no special information to wait for, &c., only one set of orders need be given, dealing with both the assembly of the troops and the march—these orders, of course, being promulgated overnight.

In the present instance, the officer commanding the detachment is free to adopt either method; but in any case it would not be till about 10 p.m. on the 1st August, after taking up his quarters in St. Barbe, that he would be prepared to finally decide upon any of his arrangements for the next day, as he would probably wish to wait for the arrival of reports from his cavalry. If then he decides, at about 10 p.m., to issue two sets of orders, they would run as follows:—

[In this case, if the officer commanding does not deem it necessary to await further reports from his cavalry, he *might* promulgate the *assembly orders* before the troops disperse to their quarters—say at 5.30 p.m. on the 1st August—though it is hardly possible, as the calculations, &c., require some time to work out—thus saving the necessity of assembling officers to receive them late at night.—*Trans*.]

The assembly orders will be as follows:—

St. Barbe. 1. VIII. 89. 10 p.m.

DETACHMENT ORDERS.

DISTRIBUTION OF TROOPS.

- 1. Advanced Guard: Capt. B.
 - 2 Companies II/Roy. Scots.
 - I N.C.O., 12 men, I/7th Hussars.
- 2. Main Body (in order of march).
 - I Troop (less I N.C.O. and 12 men) I/7th Hussars. II/Welsh Regiment. 21st Field Battery R.A. 32nd do.

32nd do.
II/West Surrey Regiment.
I/Durham L.I.

11th Field Co. R.E. Bearer Co.

Right Flank Guard: Major C.
 II/Roy. Scots (less 2 C^{on}).
 I/7th Hussars (less 1 Troop).
 II/7th Hussars.

- The Advanced Guard will be formed up not later than 5.10 a.m. to-morrow just east of Petit Marais, in readiness to march off.
- The Main Body not later than 5.25 a.m., at the point where a road from Cheuby joins the main road to Colligny, 550 yards south of St. Barbe.
- 3. The Right Flank Guard not later than 5 a.m., at the eastern outlet of Gras.
- 4. The Baggage, conducted by a section, under an officer, furnished by the I/7th Hussars, not later than 5.55 a.m., in column of route, on the Colligny road. The leading wagon to be 380 yards south of the cross-roads in St. Barbe. The baggage of the outposts will join the column independently.
- 5. The Infantry of the Outposts will close in on the road St. Barbe-Colligny, as soon as the vanguard has passed their lines. The cavalry of the outposts will assemble at 5.30 a.m., at the inter-

MARCH QUARTERS AND FLANK MARCH 101

section of the Retonfey-Noisseville road with the main road from Petit Marais to Metz, but touch of the enemy must not be lost.

 Officers commanding battalions, artillery, squadrons, engineers, bearer company, advanced guard, and baggage will attend to receive orders at 4.45 a.m., on the knoll north-east of Gras.

By order,

Dictated to the officers representing the several units.

(Signed) T., Major.

Brigade-Major.

The actual Orders for the March will be as follows:—

Knoll north-east of Gras. 2. VI

2. VIII. 89. 4. 50 a.m.

DETACHMENT ORDERS.

- The Enemy is reported to be in bivouac near Borny; his patrols fell back on Metz yesterday afternoon.
- The Detachment has to join, at 8 a.m., near Laquenexy, the 6th Division, which is advancing viâ Sorbey.
- The Advanced Guard will
 march off at 5.10 a.m. on
 the road to Laquenexy
 via Colligny and VillersLaquenexy, and will endeavour to open communication with the 6th
 Division.
- 4. The Main Body will follow at 5.25 a.m., with 2000 yards distance.
- 5. The Right Flank Guard will march off at once, via Retonfey, Flanville, and Ogy, for Laquenexy, reconnoitring towards Metz by way of Lauvallières, Laplanchette, Colombey, and Ars-Laquenexy.
- 6 The Baggage will follow the main body without any distance.

MARCH QUARTERS AND FLANK MARCH 103

7. Reforts will reach me at the head of the main body.

Verbally to the assembled commanding officers.

L., Colonel.

Heading 2 differs from the model given at page 18, because this way of putting it is shorter and more intelligible than it would be strictly according to the model, which would be to say in I—"The 6th Division will arrive at Laquenexy, viâ Sorbey, at 8 a.m. to-day," and in 2. "The detachment has to join the 6th Division to-day at Laquenexy."

The assembly orders appointed 4.45 a.m. for the giving out of the march orders. Allow 5 minutes for giving them out, which is little enough, and this makes 4.50 a.m., the time of the orders being issued. (See p. 34.)

* If only one set of orders is to be issued, it will be as follows:—

St. Barbe.

T. VIII. 89.

10 p.m.

DETACHMENT ORDERS.

DISTRIBUTION OF TROOPS.

- 1. Advanced Guard: Capt. B.
 - 2 Companies II/Roy. Scots.
 - 1 N.C.O. and 12 men I/7th Hussars.
- 2. Main Body (in order of march).
 - I Troop (less I N.C.O. and I2 men) I/7th Hussars.

II/Welsh Regiment.

21st Field Battery R.A.

32nd do.

II/West Surrey Regiment.

I/Durham L.I.
11th Field Co. R.E.

Bearer Co.

3. Right Flank Guard: Major C.

Il/Roy. Scots (less 2 Companies).

I/7th Hussars (less 1 Troop). II/7th Hussars.

- The Enemy is reported to be in bivouac near Borny; his patrols fell back on Metz this asternoon.
- The Detachment has to join at 8 a.m. to-morrow, near Laquenexy, the 6th Division, which is advancing viâ Sorbey.
- 3. The Advanced Guard will be formed up at 5.10 a.m., just east of Petit Marais, ready to march off at once on the road to Laquenexy viâ Colligny and Villers-Laquenexy, and will endeavour to open communication with the 6th Division.
- 4. The Main Body will parade at 5.25 a.m., at the point where a road from Cheuby joins the main road to Colligny, 550 yards south of St. Barbe, and will follow the advanced guard with 2000 yards distance.
- The Right Flank Guard will parade at 5 a.m., at the eastern entrance of Gras, and at once proceed, viâ

[•] This could of course in no case be issued before the troops disperse to their quarters, as it would require some time to compile.— Trans.

Retonfey, Flanville, and Ogy, to Laquenexy; reconnoitring towards Metz by way of Lauvallières, Laplanchette, Colombey, and Ars-Laquenexy.

- 6. The Infantry of the Outposts will close in on the road St. Barbe-Colligny, as soon as the Vanguard has passed their lines. The cavalry of the outposts will assemble at 5.30 a.m., at the intersection of the Retonfey-Noisseville road with the main road from Petit Marais to Metz, but touch of the enemy must not be lost.
- 7. The Baggage, conducted by a section, under an officer, furnished by the I/7th Hussars, will be formed at 5.55 a.m., in column of route, on the Colligny road, with the head of the column 380 yards south of the crossroads in St. Barbe, and will follow the main body without any distance.
- Reports will reach the commanding officer at the head of the main body.

By order,
(Signed) T., Major.

Brigade-Major.

Dictated to the officers representing the several units.

In these orders note the following points:—In the assembly orders it is expressly said that the troops are to "be formed up not later than a certain hour"; the object being that the troops should have had a rest at the point of assembly before the time specified, and not merely arrive there just exactly at the time and not a minute sooner, as they might do if the order merely said that they were to "start from the point" at the given time. I always prefer to express the order thus when it is a case of forming up a body of troops concentrating at a point of assembly from several different quarters, all some distance from one another. leaves each subordinate commander free to arrange the hour of leaving his quarters so that his men can have a few minutes' rest at the point of assembly; giving them a longer period of rest in proportion to the distance they have had to march to reach the point of assembly: and the commanders of battalions, &c., should have absolute freedom in making their own arrangements in this respect.

Irrespective of the above measure, however, the units whose place is to the rear of the column of march cannot escape having some time to wait at the point of assembly. For instance, if the II/West Surrey does not arrive at the point of assembly till exactly 5.25 a.m., it will not start thence, as part of the main body, till 12 minutes later, as the following units have first to deploy into column of route on the road: a troop of cavalry, 24 yards road-space; a battalion, 384 yards; 2 batteries, 448 yards; also $4 \times 25 = 100$ yards for distances, and $20 \, ^{\circ}/_{\circ}$ for opening out = 191 yards; in all 1147 yards; at 100 yards per minute = about 12 minutes.

The distribution of troops must be given *overnight*, in the first orders, as it is necessary for the various units to know their places for the next day; the same with the arrangements for the conduct of the baggage, as the officer to be in

command of it must be present next morning to receive orders. Similarly with the measures affecting the outposts; as it gives the officer commanding the outposts ample time to make his preparations for closing the outposts in on to the main road. If the instructions for the outposts were not issued till the next morning, the infantry might not reach the main road in time to fall into their place in the main body.

The knoll north-east of Gras is fixed upon as the place for issuing the march order proper, because from that point a commanding view is to be had over the country under consideration, which is always an advantage in explaining matters, should any of the subordinate officers ask questions or require explanations—a thing which in reality not infrequently will occur, in spite of the clearest orders.

Considerations which often, on peace manœuvres, check a subordinate asking for an explanation of a doubtful point, vanish on active service. Such considerations would be the desire to avoid laying oneself open to the suspicion of being undecided, or to the reproach of lacking power of comprehension, or to the semblance of insinuating that the superior officer has not clearly expressed himself. The subordinate who on active service does not ask a question when in doubt, is as culpable as the superior who shows intolerance of being so questioned. The principal advantage of assembling all the officers before starting, is that the commanding officer has an opportunity of quickly and easily explaining himself.

You will have noticed that No. 3 of the assembly orders * is expressed in a different way to the corresponding number in the assembly orders in the last exercise.† In that case all mounted officers were ordered to be present, in this case mention is made only of those who are absolutely necessary for the purpose. In the case of detachments the

^{*} See p. 100.

one way is as good as the other, though the first is shorter, and therefore perhaps better. Where *larger* forces are concerned, however, it is, as a rule, impracticable to assemble at one point *all* the mounted officers.

Although, in consideration of the time when the flank guard has to start, a somewhat early hour is appointed for the issuing of the second set of orders, yet this does not affect the times at which the various units will leave their quarters, as the several commanding officers will ride off in advance to the place of assembly. A somewhat early start out of quarters is also unavoidable, especially as regards the troops from Avancy, who will have to leave there long before 5 a.m.; for the data require the force to be formed up at Laquenexy by 8 a.m.

I have not reckoned with the possibility of a long halt to rest the troops during the march, as these generally cannot be indulged in when an enemy is near at hand, for at such a time tactical considerations outweigh any consideration for the convenience of the troops.

Under heading 4 of the orders,* it is again expressly stated that a distance of 2000 yards must be preserved between the advanced guard and the main body. To merely say "The main body will follow at 5.25 a.m.," would not sufficiently define the distance, for times of starting can never be kept with mathematical precision. If the start were fixed by time, the leading unit of the main body would undoubtedly have to step out or step short to get the right distance. It may not be superfluous to point out in connection with heading 2 of the assembly orders,† that there are two by-roads running from Cheuby into the main road in the vicinity of St. Barbe; so, without the addition of the words "550 yards south of St. Barbe," a confusion might easily arise. Beware of this kind of thing.

[•] p. 102. † p. 100.

In conclusion, I will ask you to briefly review the exercises we have up to now worked out. In the first we dealt with a simple advance, with nothing but hostile cavalry to expect on our flank; so the attention of our own cavalry. especially towards the parts threatened, was sufficient, and a flank guard was not wanted. In the second exercise we had hostile infantry to expect on one flank, though so distant that we could depend on reconnaissance with cavalry alone warning us in good time to occupy a suitable position. A flank guard was unnecessary; the more so, as the country between the road on which the detachment had to march and that by which a flank guard would have marched was unfavourable (i.e. the flank guard would have been separated by woods and an awkward ravine from the detachment's main body). In the third exercise, the present one, we had again a case of a flank march, the enemy on this occasion, however, being so near that an engagement was quite possible. In this instance, owing to favourable roads (i.e. a by-road near and parallel to the main road of advance), and the favourable nature of the country lying between the roads under consideration, a flank guard was not only allowable but necessary, in order to gain for the main body the time necessary for taking counter measures. In the next exercise we shall again have the enemy on our flank, but under somewhat different circumstances to any we have vet had to deal with.

FOURTH EXERCISE.

(See general map, and maps Metz and Verny.)

A detached force in friendly country, under Colonel A., composed as follows:—

I/Battalion.

II/ Do.

III/ Do.

IV/ Do.

1** and 11** Squadrons 1** Dragoons.

1** and 2** Field Batteries R.A.

1** Field Co. R.E.

Bearer Co.

is on the march in one column, on the 3rd June, 1889, from Tennschen (general map) to the unfortified town of Metz, which is garrisoned by portions of the 3rd Division. Colonel A. has orders to reach Metz, if possible, without losses by fighting. The cavalry of the detachment is pushed out in a south-westerly direction, towards the railway from Metz to Saarbruck (same as Metz to Remilly, general map). Colonel A. has received information from Metz that a hostile division is advancing west of the Französischen Nied, and that the 3rd Division will provisionally maintain a defensive attitude, until the arrival of reinforcements, and has detached a small force to occupy the suburbs of Plantières and Oueuleu.

When, at 9 a.m., the advanced party of the vanguard has arrived about $\frac{1}{4}$ mile west of L'Amitié brewery (south of Noisseville), the following report from an officer's patrol reaches Colonel A., who has ridden forward to the brewery:

"High ground east of Aubigny, "3rd June, '89, 8.35 a.m.

"Hostile columns of all arms advancing from Courcelles-on-the-Nied on Ars-Laquenexy, hostile advanced guard infantry just reaching Chamberdine. Have noticed a squadron halted at the churchyard of Ars-Laquenexy, which is patrolling towards Colombey.

MARCH QUARTERS AND FLANK MARCH 111

An inhabitant of the country reports that last night three or four battalions and a battery of the enemy were bivouacked south of Sorbey. Remain in observation."

Required:

- (1) The distribution of troops during the march on the 3rd June, '89.
 - (2) The arrangements made by Colonel A.
 - (3) Reasons for the arrangements made.

FIFTH LETTER

CHANGE OF DIRECTION OF MARCH

I HAVE intentionally given this exercise some resemblance to the second exercise, in order that, by instituting a comparison between them, you may the better notice the points in which they differ. The train of reasoning followed, moreover, in working out this exercise is conducted precisely on the lines that I in the first letter advised you to work upon.

With regard to the network of roads entering into the problem, we must firstly consider the main roads running to Metz—then those leading towards the enemy. If it continues its march on the road on which we find it, the detachment will have, on passing L'Amitié brewery, to descend into the deep and precipitous ravine of the Vallières brook, and then ascend the heights of Belle Croix. The latter constitute a striking point in the country. Thence towards the south the country can be seen, beyond the road from Borny to Colombey, as far as the woods south-east of Borny;—towards the south-east to beyond the Todten Allee, (though Colombey itself cannot be seen, nor the bottom of the Vallières ravine between Colombey and Lauvallières);—towards the west the Metz road as far as Les Bordes is hidden from view from the south by the spur close alongside of it marked 210 and 214. The roads south of the main road through Belle Croix have not much importance for the detachment, as we have no occasion to seek an engagement by moving in the direction of the enemy; but it is far different with the roads to the north, by which we can reach Metz without loss. These are:

- (1) The road viâ Noisseville, Nouilly, and Vallières. This excellent road soon after leaving Noisseville descends into the valley of the Vallières brook, running parallel with and on the north bank of the brook as far as the village of Vallières, after that south of it. An enemy approaching from the south cannot see this road until he gets on the break of the southern slope of the valley, immediately overhanging the brook.
- (2) The road via Gras and Servigny-by-St. Barbe to the main road to Freisdorf (general map). This road has some bad places between the villages of Gras and Servigny-by-St. Barbe.
- (3) The road from Petit Marais, viâ St. Barbe, Krug near Brémy, thereafter the Freisdorf main road—a long détour, to be sure. As soon as the enemy reached the heights of Belle Croix or L'Amitié, he could see a column of troops marching on the Freisdorf main road on the far horizon.

Roads leading in the enemy's direction, or, which amounts to the same thing, available for his advance against our detachment. taking them in succession from east to west, are:

- (1) The main road viâ Colligny.
- (2) The road through Retonfey and Ogy.
- (3) The road through Coincy and Montoy to Ars-Laquenexy.
- (4) The road from Belle Croix to Colombey by Todten Allee.
- (5) The road from Belle Croix through Grange-aux-Bois to Ars-Laquenexy.
- (6) The roac from Borny through Grigy and Ars-Laquenexy.

Hostile infantry, at all events, moving by roads (1), (2), or

(3) would hardly arrive in time to intercept the march of the detachment, though possibly cavalry advancing on these roads might harass our left flank. Road (6) runs from Grigv to the vicinity of the villages of Oueuleu and Plantières, which are held by detachments from the garrison of Metz. The enemy will not be long in ascertaining that these villages are being held, so he will avoid taking this road, and confine himself to roads (4) and (5). The detachment, on the other hand, can employ all these roads in reconnoitring, to ascertain the direction of the enemy's march, and to this end the roads (1), (2), (3), and (6) will be of great value, lying as they do on both flanks of the advancing enemy. After working out the two previous exercises, you will now be quite clear, without my specially directing your attention to it by asking you for an estimate of road-space, as to the position of the various portions of the column on the march when the orders reach them, which the officer commanding the detachment must now issue, basing them upon the report received from the officer's patrol.

According to the special idea, Colonel A. has ridden on in advance to L'Amitié brewery, whence he gets a commanding view, especially towards the west and south-west.

What other persons would be with him? Besides the Brigade-Major, Aide-de-camp, and some mounted orderlies, probably the officers commanding the artillery, the field company of engineers, and the advanced guard would have ridden forward with him. The above-mentioned commanding officers thus can receive the orders verbally, and at once; but the orders will have to be sent to the cavalry of the advanced guard, which is pushed out towards the southwest about $2\frac{1}{2}$ miles, the main body, and the baggage. As we have to transmit important orders, they had better be in writing, and carried by officers, who, moreover, will be able to give verbally any further information that may be desirable.

If no further information need be conveyed, and mounted officers are not available for carrying the orders, copies may be sent by cyclists. The only justification for giving orders verbally is when the commander, who has to issue them, is pressed for time; thus in this case, for instance, it might suffice, on emergency, to send a verbal order to the baggage to turn off to the Freisdorf road. As, however, it is necessary to mention the general situation as regards the detachment, in order to make the whole state of affairs clear to the recipient, there can be no question that written orders are preferable.*

Instead of "combined" (or "formal") orders addressed to your several units collectively, you might now give several separate orders, one to the cavalry, one to the advanced guard, one to the main body, one to the artillery, and one to the heavy baggage; in all five, some verbally, and some in writing. To ensure the thorough combination, however, of all, I prefer the combined orders; for the several subordinate commanders can much more clearly understand their own respective duties, if each knows what the others are about, and they will make their dispositions fit better into the general plan of action. In this case, as the orders are heard by the officers commanding advanced guard and artillery as they are being dictated to the Brigade Major and the Aide-de-camp,†

Transmission of Orders.

Orders and messages should be transmitted in writing when time and circumstances permit.

The bearer of a verbal message must invariably repeat it before riding off. Important orders and messages will, if possible, be carried by officers.

When orders or messages are of great moment, or the road is unsafe, several copies of them should be made, and be forwarded by different routes. It may even be necessary to send with each of them two or more riders together.

In many cases, in particular if the written paper entrusted to a messenger is to be destroyed in case there is danger of its falling into the enemy's hands, it is prudent to acquaint him with its contents. (F.O. I. 31.)

† Who take down in writing the orders to be transmitted to the main body and to the baggage respectively. – Trans.

it actually will take less time to issue combined orders than several separate ones. Bear this in mind; I shall frequently have occasion to advert to it on future occasions.

We will suppose that for deliberating on the situation and giving out the orders only 5 minutes are required—this is very little, and presupposes a very able commanding officer—and that during this time the detachment continues its march. The officer commanding the advanced guard, as we said before, receives the orders at once, that is, at 9.5 a.m., being on the spot. An officer * rides in search of the cavalry commander; another rides to the main body, delivers his orders there, and then rides on to the baggage. The first point to settle is the position of the main body and baggage at 9.5 a.m.; next, their positions when they receive the orders.

It is assumed that the I/Battalion and half the field company of engineers, together with a troop of cavalry, form that portion of the advanced guard which is on the main road; the rest of the cavalry of the advanced guard being pushed out towards the south-west.

The head of the main body will then be about 4600 yards in rear of the advanced party of the vanguard; for

				yards.	yards.
Distance in rear of advanced party			•		1400
Vanguard 4	½ Troop . Distance . 2 C ^{os} I/Battalion .		ı.	. 12	
	Distance	•		. 25	
	2 C ^{os} I/Battalion .	•	•	. 75	
	Distance	•	•	. 25	
(½ Field Co. R. E	•	•	. 9 0	
				227	
	20 °/° opening out .	•	•	· 45	
					272
	Distance .	•	•	•	600

Sent by the officer commanding the advanced guard. — Trans.

The baggage is 1½ miles behind tail of main body.

Distance .

Bearer Co.

20 °/ opening out

Thus, at 9.5 a.m., the advanced party of the vanguard has nearly reached the eastern edge of the village of Lauvallières.

25

2060

The head of the main body is about Petit Marais.

The tail of the main body is about 1½ miles east of Petit Marais.

The head of the baggage is about 3 miles east of Petit Marais.

One can count upon a mounted messenger doing 12 miles an hour, so that the main body will receive the orders within 10 minutes, i.e. at 9.15, when its head will be about half a mile west of Petit Marais. Suppose the officer carrying the orders stops about 5 minutes with the main body, which is sufficient, he sets off again at 9.20 a.m., and has then to ride 2500 yards, say 1½ miles (the length of the main body), + 1½ miles to reach the baggage, which will take him about 13 minutes; thus he will arrive at the baggage at about 9.33 a.m., which at that moment will be about 1½ miles east of Petit Marais.

The report states that the infantry of the advanced guard of a hostile column composed of all arms reached Chamberdine at 8.40 a.m. Regarding the strength of the said column, we have only the report of an inhabitant to depend on, to the effect that three or four battalions and a battery of the enemy had bivouacked the previous night near Sorbey. This is such a definite statement that perhaps it is correct, but only perhaps, for all such kind of reports should be received with caution, even when made by friendly inhabitants, and are not deserving of much attention, unless corroborated, or, at all events, as in this case, have some colour lent them by the reports of our cavalry. Much of the information received on active service is either false, or else most inaccurate and contradictory, and the only intelligence that is really trustworthy is that transmitted by a reliable officer, and based upon what he has distinctly seen with his own eyes from not too great a distance. All that is certain from the news to hand in the present instance is that the enemy is advancing, and has got pretty near the detachment; but this is enough

to compel the commanding officer to come to an important decision. There are several questions to which we have no answer. We have received information from Metz that a hostile Division is on the march northwards, to the west of the Französischen Nied. What connection has the hostile detachment whose advance is reported with this division? If it is its advanced guard, where is the main body of the division or if it is a flank guard, whereabouts is its main body?

If the enemy has continued his advance in the same direction as our officer's patrol reported, (from Courcelles on the Nied towards Ars-Laquenexy), he will be arriving at Chagny-la-Horgne about 9.5 a.m. Thence he will probably, as we saw when considering the network of roads, continue his advance either towards Colombey or on Grange-aux-Bois. From his advanced squadron, he has, at the very least, learnt that it has gained touch with our patrols, and it is quite possible that he has further received information of the advance of Colonel A.'s detached force. The fact of the hostile squadron having halted at the churchyard of Ars-Laquenexy, and provisionally patrolling only to Colombev. leads to the conclusion that, in consequence of news received. it intends exercising great caution as to how it prosecutes its reconnaissance. As, moreover, the churchyard of Ars-Laquenexy is on the road to Colombey, and the enemy's patrols are, for the most part, moving on the latter village. it may be reasonably assumed that the hostile squadron has orders to reconnoitre more towards Colombev than towards Grange-aux-Bois.

It is strange that the officer's patrol has seen only one squadron of the enemy. From this it would seem either that the enemy is very weak in cavalry, or that he is employing some of his cavalry elsewhere; for instance, in the neighbourhood of the great wood of Champel, or of the woods west of Ars-Laquenexy, to reconnoitre towards his left flank

and towards Metz. At all events we have, for the time being, the advantage of being superior to the enemy in cavalry in the neighbourhood of Colombey. This circumstance will not only retard the enemy's reconnaissance—as he will have to advance cautiously—but also his advance as a whole. This, however, means gaining time for Colonel A.'s detachment. If matters turn out as unfavourably as possible for us, the head of the enemy's column passing Chagny-la-Horgne at about 9.5 a.m., may appear on the high ground south of the Französischen Denkmal in 36 minutes, i.e. at 9.41 a.m., and then open fire in the direction of Belle Croix.

If Colonel A. simply continued to advance on the same road as before, the head of his main body would be about a quarter-mile east of L'Amitié brewery by 9-41 a.m., and so the main body and the baggage might have to cross the valley of the Vallières brook under the enemy's fire. The inevitable result of this would be an engagement with the enemy, which would certainly entail losses, which the data say are to be avoided; and in any case the detachment has nothing to gain by bringing about such a conflict on its own responsibility. Any leader, however, who without a definite object engages in a combat which is avoidable, commits an error. The above reasoning leads to the conclusion that the detachment must diverge from its previous line of march. The best plan is for the main body to turn off through Noisseville into the Nouilly valley, where it will be perfectly covered from the view and fire of the enemy, besides keeping the brook between it and the enemy. To cover the main body, the hitherto advanced guard must occupy a good position south of the brook, viz., at Belle Croix, keep off the enemy,* and gain time; at the same

^{* &}quot;Should the advance change into a flank march, it is best to use the old advanced guard as a flank guard—the main body throwing out a new advanced guard, and, if necessary, a rear guard as well."—F. O. I. 84.

time avoiding losses as far as possible, by doing all it can to avoid committing its infantry.

The main body may be considered out of danger when the tail of it has reached the village of Vallières; this will not be until 2 hours (6 miles) after 9.5 a.m., that is to say, at 11.5 a.m. Until at least 11.5 a.m., therefore, the advanced guard has to hold the enemy in check. But as the enemy may possibly begin to make himself felt at 9.45 a.m., it follows that, on behalf of the main body only, the advanced guard may have about I hour and 20 minutes fighting before it. Now we have to consider the baggage. If you purpose to make it likewise diverge by way of Noisseville, the advanced guard will have to hold its ground proportionately longer. It is more convenient to move the baggage out of danger further to the north; and, as the road between Gras and Servigny-by-St. Barbe is too bad, to send it from Petit Marais viâ St. Barbe to the Krug of Brémy on the Freisdorf road. On the assumption that the head of the baggage column reaches Petit Marais at 10 a.m., it will be safe in St. Julien 2 hours (6 miles) after that, that is at 12 noon.

The fact has now to be reckoned with, that in reality tactical operations require very much more time than would appear from our peace manœuvres, where we sometimes carry out several distinct attacks in the course of a forenoon. In reality, our opponent, when operating in a country hostile to him, requires a long time to carry out his reconnaissance, owing to his uncertainty as to, and ignorance of the general situation; especially when, as here, he is inferior in cavalry. You will recollect the remarks I made in the last letter as to the effect of smokeless powder. Again, the circumstance that the enemy in this case will have to be doubly cautious, owing to the proximity of Metz and the awkward obstacle presented by the Vallières ravine, will gain time for our detachment. Time is also required

for his deployment and for the artillery preparation of his attack. In short, not until some hours have elapsed, probably, would the enemy be able to think of an attack on Belle Croix; that is, supposing he decides to do so at all, which is quite uncertain, as, before undertaking an offensive movement against the detachment, he must detach troops in the direction of Metz in sufficient strength to cover his left flank. Yet it would be a false conclusion to say "The enemy will not attack—we can continue the march undisturbed"; for you must ever reckon with the possibility of his attacking.

Colonel A.'s advanced guard should begin by taking up the favourable position of Belle Croix in readiness for possible contingencies.* As the advanced party of the vanguard was just entering the village of Lauvallières at 9.5 a.m., it will take 24 minutes to reach Belle Croix (1½ miles), and the whole advanced guard can be formed up there in 26 minutes more, as its length on the road is 2600 yards.

The principal duty of the advanced guard is to gain time, without committing itself to an obstinate and bloody infantry engagement, if such can be avoided. To enable it to accomplish this, it is reinforced by both the batteries, whose fire will compel the enemy to deploy early and to advance for some distance in extended order. Our object, thus, is to conduct the fight at the outset with artillery fire only; which will, moreover, probably mislead the enemy as to the strength of the force holding Belle Croix, as usually the presence of two batteries implies a considerable force of infantry acting with them. If the two batteries are ably handled, the enemy

^{*} It will depend on circumstances whether the flank guard advances alongside of the advanced guard or main body, or whether it takes up a favourable position to let the main body pass behind it, and then joins on to the main body. (F.O. I. 85.)

will not be long in becoming painfully aware that there is more than one battery in action; but how many, can be found out only by degrees, when smokeless powder is employed at such long ranges. I admit that one battalion is rather a small escort for the two batteries, but this does not matter, considering the strength of the position, as the guns have a good line of retreat if seriously endangered, or, in case of need, infantry reinforcements can easily be sent up from the main body. There would be no trouble in carrying out the latter measure, as there are plenty of passages across the Vallières brook, which is also fordable by infantry. At the outset there is no need to reinforce the infantry of the advanced guard.

The decision, therefore, is: The advanced guard, with the addition of the two batteries, to take up a position at Belle Croix; the main body to turn northwards viâ Noisseville; the baggage via St. Barbe. You will, perhaps, wonder why I have hitherto occupied your attention so much with calculations. It is by no means "colourless theory," for the correct estimation of space and time is the foundation on which correct tactical decisions have to be based, and is a process which has constantly to be gone through in working out tactical problems. A pair of compasses is thus the troop-leader's best friend. A hasty estimate of space and time will ensure one against great mistakes, although it has no pretensions to the absolute accuracy of a mathematical calculation, which is thoroughly reliable. In tactics, moreover, nothing is certain or accurate, as a general rule. We are often dependent on several possible contingencies, which may upset the most careful dispositions. Without, therefore, attributing an exaggerated value to the product of your calculations, there can be no question as to the advantage of these estimates of space and time. Remember the manœuvres in which you have taken part, and how easy it is, for instance, for a cavalry or artillery commander to wax impatient over the "incredible slowness" of infantry; and how natural it is for the infantry commander often to wonder how it is the reports from the cavalry are so long in reaching him, or why artillery cannot change position in a moment. Just calculate how long it would take the two batteries, in the present instance, to reach Belle Croix under the most favourable circumstances.

Before writing out the orders, you have first of all to consider the existing distribution of the troops, which the special idea does not give. I will assume it to be as follows, without, on this occasion, again giving reasons for it.

DISTRIBUTION OF TROOPS.

1. Advanced Guard: Major C.

I/Battalion.

1st Squadron (less a Troop) and 11nd Squadron 1st Dragoons.

Field Co. R.E.

2. Main Body (in order of march).

1 Troop 1st Squadron 1st Dragoons.

II/Battalion.

1st Field Battery R.A.

2nd Do.

Field Co. R.E.

III/Battalion.

IV/Battalion.

Bearer Co.

L'Amitié brewery. 3. vi. 89. 9.5 a.m.

DETACHMENT ORDERS.

- N. B. No "distribution of troops." This was settled at the time of starting.
- A Hostile Column of all arms is advancing from Courcelles on the Nied to Ars-Laquenexy.
- 2. The detachment will turn off northwards, and continue the march to Metz.
- 3. The Advanced Guard will at once be reinforced by the 1st and 2nd Field Batteries, and will take up a position near Belle Croix, to delay the enemy, until further orders. It will watch Ars-Laquenexy and Laquenexy through Grigy, Colombey, and Coincy, and along the Vallières brook.
- The Main Body will proceed, viâ Noisseville, Nouilly, and Vallières, to the east edge of Les Bordes.
- The Baggage, escorted by two companies of the IV/Battalion, will proceed viâ St. Barbe, and Krug of Brémy, to Metz.
- 6. Reports will reach me at Belle Croix.

A., Colonel.

Verbally to the advanced guard and artillery. Copies sent to the main body and the baggage by Lieut. J. Having here given you the whole of the orders, to afford a general idea of the measures adopted, which is necessary as a preliminary, I will now go through them one by one.

- No. 1. There is no occasion to mention in the order the report concerning a hostile squadron having halted by the churchyard of Ars-Laquenexy at 8.30 a.m., for you cannot be sure it is still there at the moment the order is issued. Your cavalry, whom the information principally concerns, will have meanwhile long ago observed for themselves whether the hostile squadron is remaining halted there or no.
- . No. 2. The words "turn off northwards" forthwith summarize your general intention, so they are not redundant; although in subsequent paragraphs the fact that the detachment will turn off northwards is repeated, together with instructions as to how it is to be done.
- No. 3. The Vallières ravine requires special attention (more particularly after the enemy reaches Colombey), to prevent his infantry moving along the bottom of it, and suddenly appearing on the flank of our position. The cavalry will in addition reconnoitre all the roads leading in the enemy's direction, on a very broad front. In so doing they will tend to become much disseminated, especially as, owing to the woods and ravines, it is difficult to obtain a view over the country. This is a disadvantage, as we have more chance of obtaining information by outnumbering the enemy's cavalry at some one point, and driving it back on his infantry. It is a disadvantage, however, not easy to avoid when one is on the defensive, awaiting the enemy's advance; and you had better take note of it, so as to endeavour to avoid it in subsequent exercises. As soon as the enemy has decided on the direction of his advance, you must endeavour, above all things, to watch his movements from a position on his flank; for nothing more can be learnt from a position in

front when once you are engaged with the infantry of his advanced guard. Send the bulk of the cavalry towards that flank of the enemy which is most dangerous to you (in this case his right flank, because of Colombev), to find out all they can. The other flank, in this case less dangerous to you, because of the proximity of Metz, must be watched by weaker bodies-half troops and patrols. The nearer the enemy's infantry approaches, the more will your cavalry close in on the flanks of your position. For the most part. however, it is better to leave the cavalry commander a free hand as to the details of the distribution of his commandat any rate when the enemy is yet distant—for he, being in touch with the enemy, is in a better position to judge of such matters. You can leave him, provisionally, the freedom he has hitherto had, although you are dictating the roads to be especially watched by the advanced guard. As the officer commanding the detachment remains at Belle Croix, close to the officer commanding the advanced guard, both these officers will receive information from the cavalry patrols simultaneously.

The advanced guard is left to make its own arrangements for taking up a position near Belle Croix, but is instructed to hold out "till further orders," because the officer commanding the detachment will require it to stand fast until the main body and baggage are in safety. By what time this will be accomplished may, of course, be estimated approximately, but not with absolute certainty, as unforeseen delays may occur. The commander of the whole force will constantly note the position of the main body and baggage, and generally supervise the whole force; while the advanced guard commander can devote his whole attention to the enemy's advance and the fighting.

No. 4. The main body must halt at the east end of Les Bordes, so that the commanding officer may retain it in his

power to dispose of the several units composing it, as occasion may demand, at a later stage of the proceedings—perhaps to reinforce the advanced guard at Belle Croix, or possibly to take up a position for the advanced guard to fall back on. A subsequent order will dictate the further action of the main body on arrival there. Nor would I recommend that, at present, any officer should be specified as the person to whom subsequent orders from the main body will be sent. The main body is the detachment itself, and to name a special officer to receive orders for it, would amount to the commanding officer appointing a deputy in his place, for which there is no occasion. When the officer commanding the detachment is not present at the head of the main body, the officer commanding the leading battalion of infantry assumes the duty of temporarily leading the main body without being specially ordered to do so; and on receiving an order, he would ride back and communicate it to the other officers commanding battalions. I consider it unnecessary in this case for the main body to form a new advanced guard,* because of the proximity of Metz.

No. 5. The order for the march of the detachment (given on the previous evening) doubtless detailed a cavalry officer to conduct the baggage, but it now becomes necessary to give it a special escort. This must be considered an exceptional measure, justified by the necessity for protecting the baggage, which might at any moment be attacked by strong bodies of the enemy's cavalry moving northwards through Colligny or Marsilly. In general, complete units should, as I said before, be employed as seldom as possible to protect the baggage, as it weakens the combatant arm. Two companies are ample for the purpose, and it is most convenient to select

^{* &}quot;Should the advance change into a flank march, it is best to use the old advanced guard as a flank guard—the main body forming a new advanced guard, and, if necessary, a rear guard as well."—F.O. I. 84.

the two rearmost companies in the main body, which can wait at Petit Marais until the baggage arrives there. As to which two companies of the IV/Battalion it will be, Colonel A. can hardly say, for the several companies change their places in the column of march almost daily on service, in order that each in turn may have the comfort of marching in front. On this account Colonel A. says "two companies."

No. 6. In noting the manner of communicating the orders to the troops, it is indicated that one and the same officer rode with them to the main body and to the baggage. The cavalry receives the orders through the advanced guard.*

In conclusion, compare the various measures which we have adopted, in the exercises so far worked out, with regard to the baggage. The first exercise dealt with a simple advance a collision with the enemy being probable—so the baggage remained behind at a suitable place, after proceeding a short distance, only just enough to get the wagons into their places. In the second and third exercises we had to do with flank marches, and the baggage in both cases followed close on the main body without special escort. If, however, there had been suitable roads for it to travel on, on the side further from the enemy, we should have caused it to move by them. It had to follow close on the main body without any distance, so as to reduce as far as possible the length of the column. In the present exercise, also a flank march, there is, on the contrary, a serviceable road running parallel, on which the baggage is at once placed under escort, as soon as the enemy threatens the flank.

FIFTH EXERCISE.

(See map Ars on the Moselle.)

A convoy of provisions intended for troops in the unfortified town of Metz, occupying a road-space of a mile and a quarter, escorted by—

I/Battalion,
II/Battalion,
I/ and II/lst Dragoons,

under Colonel A., after an exhausting march in a friendly country halts for the night 1/2 August, 1889, in and south of Marieulles, where it arrives late in the evening. Having been informed by an inhabitant of the country that the enemy was advancing, vià Novéant, on Metz, and that a hostile column of all arms had reached Gorze in the afternoon, Colonel A. had sent out his cavalry towards Novéant. The cavalry had encountered the enemy's cavalry east of Corny, and drove it back into that village, but came under fire from Corny itself and the brick-kiln* south of it, and was consequently unable to advance to the bridge over the Moselle. A trooper of the enemy, who was taken prisoner, stated that a squadron of his regiment was at Corny, and that two companies of infantry brought up from Gorze in carts had followed it to that place; also that a stronger body of infantry would cross the Moselle next day near Novéant.

Colonel A. places outposts for the night, consisting of the II/Battalion and a troop of I/1st Dragoons, on the line Bois-le-Comte—Wald von Arry. All the bridges over the Moselle between Corny and Metz have been destroyed by the Metz garrison.

Required:

The arrangements made by Colonel A. for the 2nd August, with reasons for the same, assuming that up to the time of starting no fresh information is to hand respecting the enemy.

[&]quot; "Zgl" on map. - Trans.

SIXTH LETTER

PROTECTION OF A CONVOY

T the conclusion of the last letter, I purposely made no allusion to the fact that the present exercise deals with something quite different from an ordinary advance, with a flank guard, such as formed the subject of the last two exercises; because I wished you to find out for yourselves that the protection of a convoy demands measures somewhat different from those usually adopted for the protection of an ordinary march. This follows from the fact that a convoy is always more or less slow and clumsy, and that it is not easy to bring it into a place of safety, should the enemy attack it. The difficulty of escorting it increases in proportion to the length of the convoy-especially when, as nearly always happens on service. but few troops can be detailed for the purpose. On coming in contact with the enemy, a very little is enough—say rifle bullets or shells taking effect on the wagon teams-to throw the whole convoy into confusion, and cause a check, to say the least extremely inconvenient, generally very dangerous. With drivers organized as soldiers. these difficulties can perhaps be, comparatively speaking, easily got over; but, in dealing with impressed, possibly disaffected country folk, with their own horses, nothing but the most uncompromising severity of the officers, N.C.O.'s and men appointed to supervise the convoy, can maintain the order which is so vitally important. Such officers, &c., are

responsible for the order of the convoy, and for it keeping strictly to one side of the road, so as not only to leave room for other traffic, but that any broken-down wagons may be readily drawn out of the column and repaired; subsequently joining the tail of the convoy with as little delay as possible. If, as is usually the case, it would take too long to repair a wagon, the soldiers superintending the convoy have to transfer its contents to other wagons, or destroy them if necessary, rather than they should fall into the enemy's hands. Such interruptions as this generally involve a loss of time.

From the above considerations it follows that, with a view to the protection of the convoy, arrangements must be made to prevent it, as far as possible, coming in contact with the enemy. In this case, the principles usually regulating the strength, distance from the main body, &c., of detachments intended to provide for its security on the march, must lapse. The protection of a convoy demands exceptional measures. On encountering the enemy it must, at any rate, be possible to bring the convoy into a place of safety in good time. This generally involves taking a new road, though it may frequently be necessary to make a complete change of direction. Should matters take the most unfavourable turn, and the loss of the convoy appear inevitable, the escort must, at all events, make every effort to gain at least sufficient time for either destroying it or rendering it unserviceable (by removing teams, wheels from wagons, &c.). When a convoy has to be protected, the detachments thrown out in the direction of the enemy have the brunt of the fighting. They must therefore be exceptionally strong, and the distance between them and the convoy must, as a rule, be greater than that of an ordinary advanced or flank guard from its main body. escort should be distributed so that at least half the available infantry is thrown out in the direction of the enemy, whether

as advanced, rear, or flank guard, supported by the bulk of the cavalry, and by artillery in the exceptional cases when guns form part of the escort. The circumstances of each case alone can decide how far these troops should push out towards the enemy, or in other words, the distance between them and the convoy. The "main body" will consist of the convoy itself, with about half the infantry as its immediate escort, marching part immediately in front, part in rear of the convov. Thus about a quarter of the toal infantry is at the head of the main body, followed by the convoy, while a quarter of the infantry forms the tail of the column; though tactical units must not be broken up to obtain these exact proportions. The infantry marching at the head and tail of the convoy has also to furnish the personnel to superintend the drivers. For this purpose cavalry is more suitable, but we have generally so little of it, that we have to make shift with infantry.

The above general principles being premised, we will now turn to the special case in hand, which, without doubt, involves dealing with a flank march. According to the information received, the enemy's main body arrived at Gorze on the afternoon of 1st August, and our cavalry has definitely ascertained Corny to be held by the enemy. The prisoner's statement is probably truthful (though doubt may be entertained with regard to what he says of the enemy's numbers), as, when collated with the other news, it presents a likely picture of the situation as regards the enemy, who, having halted at Gorze on his march to the Moselle, will have endeavoured to secure the important bridge at Novéant on the same day; the most suitable means to which end would be, after a long march, to send on some infantry in wagons. This, however, indicates that only a small body of infantry has been so pushed forward, as for the conveyance of a battalion about 100 ordinary farm wagons would be required, and such a quantity could hardly be collected without making

arrangements beforehand. Neither can the enemy's cavalry. up to the present, be in any strength, or it would not have fallen back on Corny. It is possible that there is no infantry at all in Corny, but that up to now the enemy is holding it with cavalry only; as, without driving an attack home, it is impossible to be certain whether an opponent's fire is from carbines or rifles. provided the led horses are well concealed. Formerly, one could have at least formed some idea to what extent the place was occupied, by the number and distribution of the puffs of smoke; but nowadays this cannot be done, owing to smokeless powder. Besides, the more that fire-arms are perfected, the more will cavalry, as is only human nature, shrink from riding too near the enemy. It will, therefore, be able to find out less, and one will often have to make the best of the bare fact that the cavalry has been fired on from such and such a locality. Who has fired: whether infantry or dismounted cavalry; how many have fired, and even the exact quarter whence the fire comes, cannot always be ascertained; for the sound may deceive, especially if there is a wind blowing, and the enemy will be invisible if he is at all cleverly hidden away. From this it follows that reconnoitring cavalry must not shrink from incurring losses in obtaining reliable information: also that, nowadays, they must think twice before reporting rifle fire, i.e. infantry fire: also that the fire of dismounted cavalry, by which an enemy can so easily be deceived, has greatly gained in importance.

It is doubtful whether it will be possible for the convoy to reach Metz if the enemy crosses the Moselle on the morning of the 2nd August, and succeeds in striking in between it and that town. It seems probable, however, for the reasons about to be given, that the enemy, having heard of the presence of hostile troops on the march to Metz from the south, intends to attempt doing this very thing.

The enemy could proceed from Corny, by way of Jouy-aux-Arches, to Metz, but in that case he would find it awkward passing out of the Moselle valley near Jouy-aux-Arches, and might easily be thrown back on the defile by troops from Metz.

He would never take this route while troops, whose strength is unknown to him, are so far south of Metz as to endanger his line of retreat; but will seek to advance on Metz on a broader front, after having first endeavoured to cut off the troops south of Metz from that town. Thus we may expect him to move with the bulk of his forces on Féy, which will be most unfortunate for the convoy. A flank guard must be thrown out between the convoy and the enemy, and suitable measures adopted to prevent, or at any rate delay, him gaining possession of Féy, which is an important junction of roads; that is to say, we must endeavour to obstruct his exit from the valley of the Verchot brook. Thus Féy is the important point.

That hostile infantry will pass Féy, by moving through St. Blaise for instance, can hardly be supposed. It is possible, of course; but the road is bad, and very steep, so that the enemy's rate of progress would be slow. At all events we shall know in good time through our cavalry if the enemy begins to move in this direction, as from the slopes of St. Blaise the whole Moselle valley lies in full view. Should the enemy's infantry advance in any strength by way of St. Blaise, the flank guard must quit Féy, and move as quickly as possible on Grosyeux, there afresh to oppose him. The commanding officer must undoubtedly contemplate the possibility of this, and can even send on an officer to look about for a position, possibly the wood of St. Jean. mention of it, however, should be made in the order, which should inform the flank guard solely that Féy should be held. Should large bodies of hostile cavalry move by St. Blaise to turn the flank of our flank guard, it would be unfortunate, as from St. Blaise the whole country for a long way to the east can be seen, and therefore the convoy would be visible. though protected against cavalry, however strong, by the infantry marching with it. It may occur to you that the flank guard might take up a flanking position. The enemy's line of advance is the main road from Corny to Fév, which is, of course, commanded from the neighbourhood of Sommy. If the flank guard takes up a position here, facing south, the enemy must attack it before marching on Féy. In such case, however, the most important condition for a flanking position is wanting, viz., security for the threatened right flank, and so the position could easily be rolled up. Besides, the flank guard is not strong enough to occupy such a position properly, and the retreat on Augny down the steep hillside is difficult, while the almost impenetrable Bois de la Goulotte would also impede the retreat. I am therefore opposed to a flanking position, and prefer the simpler plan of occupying Féy. Still, should you meditate taking up a flanking position here, it would show considerable thought on your part, and your proposal would undoubtedly be favourably entertained by an examiner. Neither am I in favour of taking the offensive, i.e. attacking Corny, although the idea is a tempting one. We do not know enough of the general situation.

Suppose that the enemy during the night puts more infantry into Corny. Our infantry attacking that place might then find themselves in an awkward predicament, and the safety of the convoy be imperilled. Besides, I do not consider it suitable to the object in view to provoke an engagement, so long as it is possible to meet the case by other means.

We have now to decide when, approximately, the enemy will reach Féy. His cavalry, which is already across the

Moselle, will probably resume their reconnaissance as early as possible next morning, and may be expected in the neighbourhood of Féy soon after daybreak. In opposition to it our cavalry has to perform the duty of screening: and the event will show whether it will succeed in checking the enemy's patrols on the line Côte-de-Favé-St. Blaise, and preventing them getting a view from the hills over the country between the Moselle and the Seille. It is not likely that any infantry which may already be in Corny will march by itself to Fév, for such a course would be too risky. will await the arrival of reinforcements from Gorze, keeping the defile open meanwhile. Thus, apart from the cavalry, the main consideration is the troops from Gorze. Assuming the distance from Gorze, vià Novéant, to Féy as about 61 miles, the head of the enemy's column, starting from Gorze at sunrise, say 5 a.m. (and he can scarcely start much before that), can reach Féy about 7 a.m., which is assuming that he experiences no delay in crossing the Moselle.

Accordingly it is desirable to get the convoy past Fey or the country east of that village by 7 a.m. Perhaps you suggest the advisability of pushing on to Metz during the night. This, however, is impossible, as the convoy did not reach Marieulles till late in the evening, after a tiring march, so that both men and horses are worn out, and stand in urgent need of rest. An immediate start is thus out of the question, though the march must be resumed early next morning. The latest hour of starting can be approximately calculated.

We have now to consider the roads available for the advance of the convoy. From Marieulles to Metz there are two main roads; one viâ Vezon to Féy, the other to Sabré, whence either direct to Coin-bei-Cuvry, or by the main road to Cuvry. It is inadvisable to pass through Augny—besides which it is better to keep on the main road

Fév-Cuvry, then on the road Pournoy-Metz. The road through Bury to Pournoy-la-Chétive might also be considered. though it would probably be too difficult for the convoy wagons, and would therefore require to be carefully explored beforehand. The only advantage it offers is that it is the shortest cut to the main road Loyville-Metz. The shortest way to Metz is the road through Féy and Augny; but, as has been above shown, the convoy would run most risk by this road. I therefore prefer the road through Sabré for the convoy, while the escort proceeds to Féy. The greater the distance the convoy puts between itself and Féy, and the sooner it does it, the better: yet the convoy had best keep to the main road after passing Sabré, as its progress will be quicker than on the road to Coin by Cuvry. convoy may be considered pretty well out of danger as soon as it has passed the cross-roads west of Cuvry. As we calculated above, the enemy can hardly reach Féy before 7 a.m., so it will do if the convoy gets past the abovementioned cross-roads by that hour. Thus we come to the conclusion that it will be possible to solve the problem without crossing the Seille. Otherwise you must get the Seille between the convoy and the enemy-a course which I do not consider necessary in the case before us.

The convoy is 1½ miles long. Half of the infantry, i.e. a battalion, accompanies it, throwing out two companies as an advanced guard. The baggage of the troops had better move with the convoy, and we may assume the road-space occupied by it as about 270 yards.

I will take the distance from the head of the vanguard to the tail of the main body as about $2\frac{1}{2}$ miles=about 50 minutes. The distance by road from the northern exit of Marieulles to the cross-roads west of Cuvry is roughly $3\frac{3}{4}$ miles=75 minutes; thus the vanguard must start 50+75=125 minutes, say 2 hours before 7 a.m., i.e. at 5 a.m. This

is the *latest* time of starting. It would be well, however, to start rather earlier than this, as one can never be sure when the enemy will start, and *delays* may occur with the convoy, in spite of the road being good. I would therefore start at 4.30 a.m., and should have no great objection to starting even at 4 a.m. The tactical situation does not, of course, admit of much regard being had to the convenience of the troops, nevertheless I would not start *earlier* than 4 a.m., as after the long march of the previous day men and horses require some rest. To start at 4 the camp must be in movement before 3, so I prefer 4.30 a.m.

The convoy may be considered perfectly safe as soon as it has passed the practice-entrenchment (Übungs Schanze) at the junction of the road from Augny with the main road Pournoy-Metz. From the cross-roads west of Cuvry to this point the tail of the main body has about $2\frac{1}{2}$ miles to march = 50 minutes. If the vanguard leaves the northern exit of Marieulles at 5 a.m., then, assuming that the enemy starts from Gorze at the same time, we have to check him at Féy for at least 50 minutes—after which the flank guard can retire on Augny. The earlier we start, the more chance we have of being able to get to Metz without any fighting. The flank guard also ought to get to Féy in good time, so as to establish itself there; it can therefore march off at the same time as the advanced guard.

Colonel A. therefore arrives at the following decision:— The convoy to commence its march at 4.30 a.m., moving by the main road through Sabré; a left flank guard to hold Féy until the convoy has passed the practice-entrenchment on the roadside.

Under existing conditions the simplest arrangement is for the battalion on outposts to form the flank guard, while that camping with the convoy remains with it on the march also. In connection with this arrangement, it is, of course, unfor-

tunate that the same troops which, although worn out, have been on duty during the night should again have the more arduous task imposed on them the next day. If you detail the I/Battalion for flank guard, then, to save the outpost battalion unnecessary marching, it had better assemble somewhere on the road to Sabré, about Bois-le-Comte (i.e. on the right flank of the outpost line). There must naturally be some cavalry with advanced guard and main body, not so much to reconnoitre the route as to keep touch with the flank guard and the troops in Metz. A troop, however, must suffice for this purpose, so that we may have as much cavalry as possible out towards Corny. This troop again to be so subdivided that the larger part of it goes to the advanced guard, to serve as advanced party of the vanguard and to keep up connection; while the smaller part of the troop moves at the head of the main body, furnishing orderlies as required, and some patrols towards the flank guard. The rest of the cavalry will belong to the flank The distribution of troops then will be as follows: guard.

DISTRIBUTION OF TROOPS.

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1. Advanced Guard: Capt. R.
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2 Cos I/Battalion.

1 troop I/1st Dragoons (less a section).

2. Main Body (in order of march).

r section I/1st Dragoons.

2 Cos I/Battalion.

The Convoy.

Baggage of troops.

or in reverse order.

4 Cos I/Battalion.

3. Left Flank Guard: Lt.-Col. M.

II/Battalion.

I/1st Dragoons (less a troop).

11/1st Dragoons.

As it is not impossible that up to the moment of starting important news about the enemy may come to hand, which might perhaps alter his decision, Colonel A. issues two sets of orders—one for the assembly, the other for the march. The I/Battalion and the cavalry will be, for the most part, quartered in Marieulles for the night, but will furnish a guard over the convoy, which will bivouac south of Marieulles. As there must be no unnecessary marching prior to assembling, the I/Battalion and the baggage of the detachment can assemble at the end of the village nearest Sabré, the convoy remaining in its bivouac until it is time to start, and marching straight out of it. The rear half battalion of the I/Battalion will, of course, have to wait till the convoy has passed their place of assembly. But the baggage has to assemble at the same place as the I/Battalion, so at least half the road must be left clear, for a block would be in the highest degree critical, and cause loss of time. It must therefore be expressly ordered that the baggage wagons keep well to the left of the road. It will be apparent that here again special provision must be made for conducting the baggage, in the shape of a suitable personnel, responsible for this duty. According to our distribution of troops, however, the baggage is in the middle of the main body, and forms, to some extent, merely a part of the convoy which has to be protected; so the duty of conducting it is considerably easier than when the baggage moves independently. Therefore in this case, as an exception, a N.C.O. (cavalry or infantry) with a few men are sufficient to direct it. The baggage may precede the convoy on the march, and I prefer this arrangement, because thus the numerous wagons will fall into one column in the easiest and simplest manner; a more convenient arrangement, to say the least, than making the whole convoy pass the baggage on the road. Whichever plan is adopted. it is suitable for the object in view to have the baggage

assembled by 4.15 a.m., so as to be sure of the wagons being in their proper order and places by the time the advanced guard starts.

The battalion and one troop of the left flank guard are on outpost duty, so it will be most convenient for the flank guard to assemble as far forward as possible, say at the bend of the road 700 yards north of Vezon. The officer hitherto commanding the outposts, now about to become the commander of the flank guard, will make his own arrangements in detail for assembling his battalion, and adopt measures for the troop being handed over in good time to the officer commanding the cavalry.

The several commanding officers can detail officers to take orders. For instance, the mounted officers of the I/Battalion might attend; and in the case of the flank guard only the battalion commander, with his adjutant, and both the squadron leaders. An early hour must be fixed for issuing the order; because, after receiving it, the several commanding officers or their representatives, as the case may be, have some distance to go in returning to their commands or corps. The distribution of troops will naturally be given out with the assembly orders.

To prevent the column being too long, the advanced guard need be only some 500 yards in front of the main body. The I/Battalion must also be instructed to furnish the personnel necessary to superintend the convoy. The best plan would be that the men who have been on guard over the drivers and horses during the night should supervise the convoy on the march. The convoy should be divided into groups of 10 wagons, with a N.C.O. and a few men to each, the whole being, if possible, under a mounted officer.

But as the battalion has marched with the convoy on the previous day, it is doubtless familiar with such arrangements as these, and the orders need not go into these details. The officer commanding I/Battalion is responsible for the convoy starting from its bivouac in proper time; and the smallness of the force will render this task easy. As will appear from what follows, it is generally advisable to count to some extent on the officer commanding the I/Battalion exhibiting capacity for independent action. The only instructions that need be given to the flank guard are that it is to at once occupy Féy, and hold it till further orders. How to do it is the business of the officer commanding the flank guard. What is to happen thereafter will form the subject of a subsequent order.

As to the measures to be adopted for reconnoitring, the officer commanding the detachment may so far interfere as to make sure that the several roads leading in the direction of Corny are reconnoitred, and that in particular the road from Corny to Jouy-aux-Arches, along the Moselle valley, is watched, in order to as far as possible drive back hostile patrols into the Moselle valley, and prevent them getting a view to the eastward. The baggage need not, of course, even be referred to in the order for march.

A word as to the position of the officer commanding the detachment. As concerns the convoy, all that he need trouble about is to satisfy himself, from time to time, of its satisfactory progress. Whatever else may have to be seen to in respect of the convoy may be entrusted to the officer commanding the I/Battalion, bearing in mind that an officer to command the main body must be mentioned by name in the order, if the officer commanding the detachment does not intend to be present with it. The latter has a far more important duty to perform, viz., keeping an eye on the action of the left flank guard. He must remain in its vicinity, and watch the enemy's advance, but must refrain from interfering with the free action of the commander of the flank guard, even should there be fighting. The officer commanding the

detachment must ever strive to keep an eye over the whole force, and leave details to others; thus only can he appreciate the right moment to order the flank guard to break off the fight. His closest attention must be given to the difficulties of the retreat of the flank guard, since its line of retreat is to a flank (the right flank), taking at the same time into his consideration whether the four companies at the tail of the main body can occupy a position for the flank guard to fall back on, after the convoy is in safety. If the officer commanding the detachment were not present with the flank guard to hold Féy till 7 a.m., or, to be on the safe side, till 7.30 a.m., and then retire on Augny, so that the officer commanding the flank guard may be certain that no fresh orders will reach him from the officer commanding the detachment.

The following orders are therefore issued:-

Marieulles.

1. VIII. 89.

II p.m.

I.

DETACHMENT ORDERS.

DISTRIBUTION OF TROOPS.

- Advanced Guard: Capt. R.
 C^{os} I/Battalion.
 - 1 troop I/lst Dragoons (less a section).
- 2. Main Body (in order of march).
 - 1 section I/1st Dragoons.
 - 2 C[∞] I/Battalion.

Baggage of the detachment. The Convoy.

- 4 Cos I/Battalion.
- Left Flank Guard: Lt.-Col.M. II/Battalion. I/1st Dragoons (less 1 troop). II/1st Dragoons.

- The detachment will be formed up to-morrow morning in readiness to march off, as follows:—
 - At 4.30 a.m.
 - The I/Battalion and I Troop
 I/lst Dragoons at the outskirts of Marieulles on the
 Sabré road.
 - The Convoy, and the infantry furnishing the guards on it, at the bivouac.
 - The Left Flank Guard on the road from Vezon to Féy, at the bend in the road 650 yards north of Vezon.
 - At 4.15 a.m.
 - The Baggage, conducted by a N C.O. and six men furnished by the I/Battalion, in column of route on the road to the Sabré on north-east side of Marieulles, with the rear of the column at Marieulles, keeping well to the left side of the road.
- Officers representing units will attend to receive orders at 4.15 a.m. on the outskirts of Marieulles next Vezon.

Dictated to the officers representing the several units.

A., Colonei. Outskirts of Marieulles nearest Vezon.

I. VIII. 89. 4.15 a.m.

DETACHMENT ORDERS.

- The Enemy is on the march to Metz, viâ Gorze and Novéant, and occupied yesterday Corny and the brickkiln* south of Corny.
- The Detachment will march to-day on Metz, which is held by friendly troops.
- 3. The Advanced Guard will start at 4.30 a.m., moving by the main road through Sabré and the cross-roads west of Cuvry to Metz, and will open communication with the garrison.
- 4. The Main Body will follow at 550 yards distance. The I/Battalion will furnish the party to supervise the Convoy.
- 5. The Left Flank Guard will at once occupy Féy, and hold it till further orders; reconnoitring by Côte-de-Fayé, the Verchot valley, and St. Blaise towards Corny. All hostile patrols to be driven back on the Moselle valley.
- 6. Reports will reach me with the left flank guard. The 1st Squadron will place six orderlies at my disposal.

Communicated verbally to the assembled commanding officers.

A., Colonel. There is another solution of the problem which I am far from altogether condemning, viz., for the bulk of the detachment to move on Féy, under the officer commanding, leaving half a battalion for the immediate escort of convoy and baggage. This solution practically turns the detachment itself into a left flank guard. Four companies would be sufficient protection for the convoy, at a pinch, against any enterprises of the enemy's cavalry, and the convoy is safe from his infantry until such time as it may have fought its way through the detachment itself. Think out this plan for yourselves, and weigh its attendant advantages and disadvantages.

In conclusion, let us consider what sort of a decision Colonel A. would have come to had the special idea been as follows:—

"The convoy is advancing viâ Marieulles and Féy on "Metz. When the main body reaches the southern outskirts "of Marieulles, a report is received to the effect that the "enemy is advancing on Corny," or "that his advanced guard "has already arrived there." In this case we should, at the commencement of the march, have thrown out an advanced guard consisting of a battalion, with the bulk of the cavalry, well in front (a mile to a mile and a half in advance), the other battalion moving with the convoy. On receiving the report, the officer commanding decides to make the convoy change direction towards the east. The convoy is ordered to move by Sabré, and provide for its own security.

It accordingly throws out a small advanced guard on its own account, while the troops, till now composing the advanced guard and the cavalry, take up a position at Féy as a left flank guard, subsequently following vià Augny as a rear guard. Thus what was originally an advance becomes first a flank march, and then a retreat.

Had it been stated in the exercise that the enemy was already in occupation of Féy, and the woods to the east of it,

it would be hopeless to try to reach Metz by the west bank of the Seille. The convoy would have to make a complete wheel, and endeavour, covered by the hitherto advanced guard, to move on a wide arc via Pommérieux and Verny. All these exercises are more or less similar to the exercise discussed in the last letter. It would be good practice to work out the appropriate orders in the above described circumstances. I should also recommend you to settle for yourselves what would be the distribution of troops and the other arrangements, if, in this exercise, the troops at our disposal had been

- (1) I Battalion and I squadron.
- (2) 3 Battalions, 3 squadrons, and a battery.

SIXTH EXERCISE.

(See General Map, and Maps Gravelotte and Metz.)

A detachment under Colonel B., in a friendly country, is quartered in and north of Maizières-bei-Metz, and places outposts during the night of the 2/3 August, '89, under the command of Lieut.-Colonel A., consisting of the I/Battalion and the 1st and 2nd troops I/14th Hussars on the line Calembourg—Ladonchamps—La Maxe. Reliable information has been received that, on the afternoon of the 2nd August, the machinery-house south-west of Plappeville, and the brick-kiln in the north-east outskirts of Longeville-bei-Metz, were held by a company of hostile infantry. An officers' patrol, which had pushed forward viâ St. Maurice, had been received with infantry fire from St. George, and had seen the enemy's sentry line on the high ground east of St. George. Hostile cavalry patrols had been seen near Woippy and Saulny.

At 3 a.m. on the 3rd August, Lieut.-Colonel A. receives the following despatch from Colonel B.:—

"Information has reached me that a detachment of the enemy is halted at Maison Neuve, west of Moulins-bei-Metz, which is awaiting the arrival of reinforcements from Verdun. The unfortified town of Metz, which up to the present has not been occupied by the enemy, will be occupied this morning by Colonel C.'s detachment from Antilly. I shall start from Maizières at 5 a.m. with the main body of the detachment, for Maison Neuve, moving by Woippy, Le Coupillon, Plappeville, and Lessy, to prevent the enemy advancing on Metz. The advanced guard will be formed of the outposts under your command, with the addition of the remainder of the I/14th Hussars and the II/14th Hussars, the 1st Field Battery, and the 1st Field Co. R.E., all quartered together in Amelange. The baggage of the I/Battalion to remain on the northern outskirts of St. Remy till further orders."

- (1) Criticise the state of affairs from Lieut.-Colonel A.'s point of view.
- (2) State the arrangements made by Lieut.-Colonel A., with reasons for the same.
- (3) Show on the map the order of march of the advanced guard 40 minutes after starting, indicating clearly how the cavalry is employed.

MODEL FOR

ADVANCED GUARD ORDERS.

Flace. Date. Hour of issue.

ADVANCED GUARD ORDERS.

DISTRIBUTION OF TROOPS.

- Advanced Guard Cavalry.
 Commanding officer.
- 2. Vanguard: commanding officer.

Cavalry.

Infantry.

Cavalry.

Engineers.

3. Main Guard (in order of march).

Cavalry.

Infantry.

Artillery (under some circumstances last).

Infantry.

Bearer Company (seldom in the case of detachments).

4. Right or Left Flank Guard.
Commanding officer.

Infantry.

Cavalry. Engineers.

- Information concerning the enemy, and our own troops in other quarters.
- 2. Object to be attained by the Advanced Guard.
- 3. Order for the Advanced Guard Cavalry, (time and place of starting, road by which to march, what reconnoitring is to be performed, and any special duties).
- 4. Order for the *Vanguard* (as in 3).
- Order for the Main Guard (distance in rear of vanguard, or place and time of starting).
- 6. Order for the Flank Guard (as in 3).
- 7. Order for the Outposts.
- E. Order for the *Baggage* (very seldom).
- Position of the officer commanding advanced guard.

Signature.

N.B.—On a level with the signature, on the left of the fold, it must be stated how the orders were communicated to the troops. Should a flank guard have to be furnished by the main guard, it is best, to make the orders more readily intelligible, to detail the flank guard in the Distribution of Troops (as in the above model); but if it is to be furnished by the vanguard, the latter must be made strong in proportion, and the order relating to it must contain the necessary instructions as to its sending out a flank guard. (In this case there is no heading "Flank Guard" in the distribution of troops.)

The Distribution of Troops is necessary only for large forces. In very small advanced guards it is not required, but in that case the orders must contain all necessary instructions.

SEVENTH LETTER

ADVANCED GUARD ORDERS

TIEUT.-COLONEL A.'s position, as defined in the exercise, is a somewhat exceptional one: for the officer commanding a detachment usually fixes time and place of assembly of the advanced guard, as well as measures for reconnaissance by his own orders. Again, it is unusual, and must appear strange, after the preceding letters, for the outposts to be detailed for advanced guard; this being contrary to the general rule that the outposts stand fast until the vanguard of a fresh advanced guard has passed their lines. We have thus to deal with an exceptional state of affairs; though how brought about the exercise does not state. This is a not uncommon procedure. not only in exercises but in practice; especially when an officer commanding a detachment desires his advanced guard to start in good time, and is uncertain whether his other infantry can be brought up in time enough; or when, for some reason, he is prevented using any of his other infantry as advanced guard. Think of the last exercise.

The way in which the exercise is expressed designedly makes the commander of the advanced guard so independent in order to afford you an opportunity of reflecting over the whole situation, and deciding on the necessary measures. In other respects the problem is easy, so that I can discuss it briefly. I shall subsequently refer to the manner in which the exercise is expressed.

I do not propose to enter on the question of the detailed distribution of the outposts in the present case, as I shall deal with outposts later on (20th letter).

The measures adopted by Lieut.-Colonel A. on receiving Colonel B.'s despatch must comprise the following:—

- (1) The outpost troops must be concentrated somewhere before the march is commenced.
- (2) While they are assembling reconnaissance of the enemy must be going on.
- (3) The troops detailed to reinforce Lieut.-Colonel A.'s command must be acquainted when and where they have to join the outpost troops.
- (4) Lastly, the advanced guard orders for the advance must be given out.

The place of assembly must be on the road by which the advanced guard will march, not visible from the hills held by the enemy, and so selected that all the advanced guard troops, especially the piquets and supports of the outposts, can reach it without inconvenience, or having any considerable détour to make. The choice lies between the north outskirts of Ladonchamps and the north outskirts of Maison Rouge. The advantage of the latter is that many of the roads leading from the outpost position into the road on which the advanced guard is about to march meet in its vicinity; thus facilitating the assembly. other hand, this place is so near the enemy's position that the security so indispensable for a place of assembly is not ensured. It would be dangerous to assemble there, and it would be more prudent for the advanced guard to assemble somewhat further from the enemy, i.e. on the northern outskirts of Ladonchamps, which is about the centre of the outpost line, and concealed from the enemy's view by the trees in the park.

In conformity with the instructions contained in preceding

letters, you will doubtless have studied for yourselves the entire network of roads affecting the advance, as well as the country between the roads. There is therefore no need for me to discuss the various roads with such minuteness as before, and I shall confine myself to observing that the road between Woippy and Le Coupillon lies very low, and that between Le Coupillon and Lessy it is completely commanded by the heights on either side. It would be a serious matter for the advanced guard to be attacked unexpectedly from the heights on either side; we must therefore reconnoitre on a broad front. The road, in fact, presents great difficulties to the advanced guard.

The enemy holds the commanding position of St. Quentin and the heights west of Plappeville, whence he has an extensive view over the whole Moselle valley; consequently he cannot fail to perceive the advance of our detachment.

Lieut-Colonel A.'s first duty is to endeavour to gain these heights with the force at his disposal. If the enemy retires. the advanced guard must follow him to Maison Neuve. he offers resistance, it will depend on the reports received whether the advanced guard attacks him (which it could not do unless he were very inferior numerically), or only commences and prepares the attack until such time as the main body arrives to carry it out. It is not likely that the enemy will leave his excellent position and advance against the detachment. The only thing that might cause him to do so would be if he had received considerable reinforcements. In such case Lieut.-Colonel A. would have to endeavour. wherever the advanced guard happened to be at the moment, to check the enemy until the main body was prepared for Meanwhile, all he can do is to action, i.e. deployed. commence the march, though prepared for all these contingencies.

From the moment the enemy observes the advance of the

detachment, he is debarred, failing some new development of affairs, from himself advancing on Metz. According to the information received from Colonel B., there is only a detachment of the enemy at Maison Neuve. This information is probably correct, for otherwise the enemy would have ere this made a move towards gaining possession of such an important town as Metz, from which he is only about four miles distant. The rest of the information to hand concerning the enemy further leads us to the conclusion that his outpost line extends from Longeville-bei-Metz, past the machinery house south-west of Plappeville, to St. George. The enemy's position thus forms an obtuse angle. whose point is at hill 345, west of Plappeville. His outpost line is about 3 miles long, according to which he has at least a battalion on outpost duty. The whole of this line would be much too extensive for a detachment to occupy as a defensive position, and is not therefore so advantageous as it appears at first sight; irrespective of the fact that the northern and eastern slopes of the hills favour an attack, owing to the thickets and woods clothing them, and the villages of Plappeville and Lorry-bei-Metz. The right flank of the position, of course, rests on the Moselle; but the left flank is quite open, and this is the more unfortunate for the enemy, as his line of retreat on Gravelotte runs from this flank. To menace the left flank, by advancing on St. George, will touch the enemy at a very sensitive point, and perhaps compel him to abandon the whole position; provided, of course, that he does not intend an obstinate defence; especially as the deep and precipitous Montveau valley in the rear of the position renders his retreat extremely difficult. In short, Lieut,-Colonel A. can say to himself that an obstinate defence of the position, if we have really only a detachment of the enemy to deal with, is very unlikely—but that, if it is only a weak detachment that is holding the position, *i.e.* only the present outposts acting as a rear guard, the easiest way to overcome the resistance is by sending part of the advanced guard against St. George. At any rate the attempt must be made.

By detaching part of the advanced guard in the direction of Lorry, we gain possession of the commanding ground west of the low-lying road we are about to march by. Cavalry alone would not suffice for this purpose, as, should the enemy advance via Lorry—though it is improbable, as we have seen above—he must be held until the advanced guard has deployed for action out of the low ground. You will rightly appreciate the circumstances which in the present case have justified the formation of an infantry flank guard, comparing them with those existent in former exercises.

You would probably find out very little by sending all the cavalry of the advanced guard straight against the enemy's front—towards Tignomont, for instance—as it would very soon encounter hostile infantry. The cavalry should aim at the enemy's flanks, and in moving against his left flank it will find the plateau west of Lorry more favourable to its action than the slopes of St. Quentin would be, or the Moselle valley. The bulk of the cavalry will therefore be employed against the enemy's left flank, only a few patrols being required to watch Tignomont and Ban St. Martin.

Conformably with the above considerations Lieut.-Colonel A. comes to the following decision: Assemble near Ladon-champs, and advance by the road ordered, detaching a right flank guard towards St. George, and employing the bulk of the advanced guard cavalry in the direction of St. George.

The two troops on outposts must remain in observation while the outpost infantry are concentrating, so will be more or less extended when the forward movement is commenced, subsequently concentrating little by little. On this account they had best be employed on some unimportant duty in vanguard and flank guard, and for reconnoitring towards Ban St. Martin; while the 1½ squadrons arriving fresh and compact from Amelange move on Lorry. To detail, however, two fresh troops for vanguard and flank guard would mean disseminating the cavalry at the commencement of the operation; and you would have, to begin with, only one squadron as advanced guard cavalry.

Let us detail two companies, with some cavalry, as a flank guard; two companies, with the necessary cavalry and the engineers as vanguard; there remains for main guard half a battalion and the battery.

Thus the following will be the

DISTRIBUTION OF TROOPS.

- Advanced Guard Cavalry: Major N.
 II/14th Hussars.
 I/14th Hussars (less 2 troops).
- Vanguard: Major S.
 Nos. 1 and 2 C[∞] I/Battalion.
 1st troop I/14th Hussars (late on outposts).
 1st Field Co. R.E.
- 3. Main Guard (in order of march). A half-section from I/14th Hussars. Nos. 3 and 4 C^{on} I/Battalion. 1st Field Battery R.A. Nos. 5 and 6 C^{on} I/Battalion.
- Right Flank Guard: Capt. P.
 Nos. 7 and 8 Cos I/Battalion.
 2nd troop I/14th Hussars (late on outposts).

It is assumed that Nos. 7 and 8 Cos. were on the right flank of the outpost line. It is not necessary for these two companies to rendezvous near Ladonchamps, but, to save them unnecessary marching, they may start from some other place, on the road by which they will march to Woippy; for instance, from the cross-roads 650 yards west of St. Anne.

We thus calculate the time by which the advanced guard troops must be assembled:—From the northern outskirts of Ladonchamps to the southern outskirts of Maizières-bei-Metz is three miles, which can be traversed in one hour, so the head of the main body will reach the northern outskirts of Ladonchamps about 6 a.m. But there should be a distance of half a mile between the advanced guard and the main body, and the road-space occupied by the former is some 1400 yards, say $\frac{3}{4}$ mile. Then $\frac{1}{2}$ mile $+\frac{3}{4}$ mile $=1\frac{1}{4}$ miles; so the advanced guard must start about twenty-five minutes before 6 a.m., i.e., at 5.35 a.m. This calculation of the time of starting can, of course, be only approximately correct, and therefore the proper distance must be got in the course of the march.

I arrive at the length of the column on the march by counting from the head of the vanguard to the tail of the main guard (assuming that there is half a troop about $\frac{1}{2}$ a mile in front of the vanguard,* broken up into centre and flank groups of four men each); and allowing for a distance of 700 yards between the tail of the vanguard and the head of the main guard.

The infantry detailed for right flank guard should start rather earlier than the vanguard, as it has to march by a more roundabout road, and must be clear of Woippy when the vanguard arrives there, so as to prevent the two bodies meeting in the village itself. This procedure is, at any rate, both simpler and safer than to cause the flank guard to traverse the village by a different road to the advanced

^{*} This half-mile is not taken into account in calculating, as the half-troop can trot out till it is half a mile ahead of the vanguard, though starting at the same time with it.

guard. As the flank guard forms vanguard and main guard, just like the advanced guard, it will occupy about 500 yards road-space, and may start say fifteen minutes before the vanguard.

Lieut-Colonel A. receives his orders at 3 a.m., and had best issue his orders for the assembly at once, as they have to be sent to Amelange, for the information of the reinforcements quartered there, and the compilation &c. of the orders and assembling the troops takes time. The piquets and supports have also their preparations to make, and the outpost cavalry have to feed and re-saddle, so as to be in observation of the enemy while the advanced guard is assembling. The orders. moreover, must be couched in very definite terms as regards these two troops, to ensure their joining the vanguard and right flank guard respectively at the right time. Nor need these troops, in so doing, return to Ladonchamps or to the point of assembly of the flank guard west of St. Anne. will do if they join their respective commands in and near Woippy, as meanwhile the advanced guard cavalry will have got far enough to the front to have taken up the reconnaissance and observation of the enemy along the whole line. The piquets and supports must remain in their positions as long as possible; so it is best to leave officers commanding sections of the piquet line to fix their own time for assembling the companies, which they will arrange so as to arrive at the appointed places at the time ordered.

I shall take another opportunity • of referring to the mode in which the orders would have been drawn up supposing that Lieut.-Colonel A. had not received his instructions by a special message, but had to frame his advanced guard orders on the basis of *general* detachment orders; and of discussing the relation that the orders of subordinate commanders bear to the Detachment Orders. On the present occasion I

^{*} See oth Letter.

will content myself with merely alluding to the subject in order that you may reflect on it.*

The orders must contain all instructions necessary to meet the contingency of the enemy falling back on Maison Neuve; but should he hold fast to his present position or retreat even beyond Maison Neuve, *new* orders will be required to give the necessary instructions.

The news that the enemy is expecting reinforcements from Verdun had better not be communicated to the subordinate officers: -why cause them anxiety before it is necessary? If the news is correct, it will be time enough to tell them later on. On the other hand, they should be informed that a detachment of our own troops is at hand, and will occupy Metz in the course of the forenoon, as this is favourable news, dispelling all anxiety respecting the left flank of the advance, and promising an assured line of retreat, should the enemy be encountered in superior force. On the other hand, the orders should direct the attention of the advanced guard cavalry towards Gravelotte; in order to ascertain, by reconnaissance, whether it is a fact that reinforcements for the enemy are on the march from Verdun. If a single patrol succeeds haply, by a wide détour, in working round the enemy's flank as far as Gravelotte, which is far enough on the road to Verdun, it will be able to transmit invaluable information. It is, moreover, advisable that no one but the officer commanding the advanced guard cavalry should know of the disquieting report concerning the enemy's

^{• &}quot;It is not advisable that the orders of a subordinate leader should be merely a copy of those of his superior, with his own additions tacked on. It will be clearer, and serve his purpose better, if he writes an independent order containing whatever is necessary. Where, however, large bodies are working together, the orders of the smaller units will usually be based on the divisional orders. A subordinate leader is usually obliged to confine himself to a brief direction for the concentration of his command, and then gives all further instructions verbally."—
F.O. I. 9.

reinforcements—it being communicated to him verbally. He will then give his patrols special instructions to report to him even if they observe nothing on the Verdun road.*

The following therefore would be the orders issued by Lieut-Colonel A:—

[&]quot;It is often important to a leader to know that during a given time the aspect of affairs has not changed, or that the enemy has not been found at a certain point."—F.O. I. 14.

Bivouac north of St. Remy. 3. VIII. 89. 3.10 a.m.

I. ORDERS SENT TO THE OUTPOSTS.

- Nos. 1, 2, 3, 4, 5, and 6 C^{ox}
 I/Battalion will be formed
 up, in readiness to march off,
 at 5.35 a.m., at the northern
 outskirts of Ladonchamps;
 Nos. 7 and 8 C^{ox} at 5.10
 a.m., at the cross-roads 650
 yards west of St. Anne.
- 2. No. 1 troop of I/14th Hussars will resume the reconnaissance, as before, towards Woippy, at 4 a.m., and No. 2 troop towards Saulny, at the same hour. No. 1 troop will join the vanguard, under Major S., at 5.55 a.m., at Maison Rouge, No. 2 troop the right flank guard, under Captain P., at 6 a.m., at the old church of Woippy.
- The Baggage will wait for further orders on the northern outskirts of St. Remy.
- 4. * Field Officers to attend for orders at 5.10 a.m., on the southern outskirts of St. Agatha.

A., Lt.-Col.

Copies despatched to the piquets and supports by cyclists. Communicated verbally to the reserve of the outposts.

* "Field officers" represents "Kompagnie führer," "officers commanding companies," of the original; the Prussian company being equivalent to our double-company. It here strictly means the senior officer of A and B companies, the senior officer of C and D companies, the senior officer of G and H companies (see note on next page).

Bivouac north of St. Remy. 3. VIII. 89. 3.15 a.m.

II. ORDERS SENT TO THE REINFORCING TROOPS.

- 1. The II/14th Hussars, the remainder of I/14th Hussars, the 1st Field Battery R.A., and the 1st Field Co. R.E., will form to-day, together with the outposts under my command, the Advanced Guard of the Detachment, and will be formed up, in readiness to march off, at 5.35 a.m., on the northern outskirts of Ladonchamps.
- 2. *Field Officers to attend for orders at 5.10 a.m., on the southern outskirts of St. Agatha.

Copies despatched by Lieut. G. to the several commanding officers.

A., Lt.-Col.

* "Field officers" represents "berittenen Offiziere," "mounted officers," of the original. It here strictly means the senior officers of double-companies of infantry (see note to preceding order), and all the officers of cavalry, artillery, and engineers. In attempting to paraphrase the German organisation, the nearest equivalent to the German company of infantry, of which the captain is mounted, and which is about 250 strong on war footing, is our double-company, the senior officer of which is usually a field officer, though dismounted.

Southern outskirts of St. Agatha. 3. VIII. 8

3. VIII. 89. 5 a.m.

III. ADVANCED GUARD ORDERS.

DISTRIBUTION OF TROOPS.

- Advanced Guard Cavalry:
 Major N.
 II/14th Hussars.
 I/14th Hussars(less 2 troops).
- Vanguard: Major S.
 Nos. 1 and 2 C^{on} I/Battalion.
 1st troop I/14th Hussars.
 1st Field Co. R.E.
- Main Guard (in order of march).
 A ½ section I/14th Hussars.
 Nos. 3 and 4 Cos I/Battalion.
 1st Field Battery R.A.
 Nos. 5 and 6 Cos I/Battalion.
- Right Flank Guard: Capt. P. Nos. 7 and 8 C[∞] I/Battalion. 2nd troop I/14th Hussars.

- A Detachment of the enemy is reported to be at Maison Neuve, west of Moulins-bei-Metz, and small bodies of infantry at Longeville-bei-Metz, the machinery house south-west of Plappeville, and St. George.
 - Our Detachment starts from Maizières-bei-Metz at 5 a.m. Colonel C.'s detachment from Antilly will occupy Metz this morning.
- The Advanced Guard will move on Maison Neuve, west of Moulins-bei-Metz.
- 3. The Advanced Guard Cavalry
 will start at 5.35 a.m., and
 move by Woippy, Lorry-beiMetz, and St. George, to
 Maison Neuve, west of
 Moulins-bei-Metz, and will
 reconnoitre towards Lessy,
 Scy, and Gravelotte.
- 4. The Vanguard, starting at the same time, will move viâ Woippy, Le Coupillon, the Kriegsstrasse, Plappeville, and Lessy, to Maison Neuve, and send patrols

viå Ban St. Martin in the direction of Maison Neuve.

- 5. The Main Guard will follow at 700 yards distance.
- The Right Flank Guard will start at 5.20 a.m., for Woippy by the direct road; thereafter moving via Lorrybei-Metz and St. George on Maison Neuve.
- 7. Reports will reach me at the head of the main guard.

Verbally to the assembled commanding officers.

A., Lt.-Col,

In the first orders, to prevent any doubt, the two troops of cavalry are informed not only the units they are to join, but the respective commanding officers to whom they have to report themselves.

In the second orders, all officers commanding double companies of infantry, and all officers of cavalry, artillery, and engineers are warned to attend to receive orders; this being the usual procedure in the case of small bodies such as advanced and rear guards and flank guards. By this means, each of these officers is quickly made acquainted with the situation, and the only subject for regret is that circumstances often render it impossible to assemble all the infantry officers as well, and that information as to the situation has to be transmitted to them by the officers commanding double companies. In the present instance, the officers commanding the two troops of outpost cavalry cannot attend to receive orders at St. Agatha, as they are engaged in reconnoitring the enemy when the advanced guard orders are issued; but they receive all necessary information subsequently, through

the officers commanding vanguard and flank guard respectively. An early hour is fixed for issuing the orders, so that the officer commanding the flank guard can be back with his command in good time.

It may be pointed out, in conclusion, that it would be quite admissible to allot two troops of cavalry to the vanguard, which should, in that case, have orders to push forward one of them as a flank guard, from Le Coupillon, via Ban St. Martin, towards Maison Neuve. The reason for this measure would be that, possibly, something more than a few patrols is required to reconnoitre the enemy's right flank. It would also be perfectly correct to issue one set of orders only for assembling the troops, applying both to the outposts and to the troops in Amelange: which might also, to simplify matters, contain the distribution of troops. Moreover, we might put the bulk of the cavalry in the same heading with the right flank guard. This would entail some modification of my arrangements for the distribution of the cavalry. I am, however, opposed to this measure, because the freedom of action, so requisite in this case for the cavalry, would be interfered with by making them conform to the slow-moving infantry following the same route. Again, less than a troop might be detailed to the right flank guard (say I N.C.O. and o men = 3 patrols), with a view to making the advanced guard cavalry as strong as possible. The vanguard, however, cannot do with less than a complete troop. A special guard for the few baggage wagons of the outposts is unnecessary; they can simply remain where they are till further instructions concerning them are given. As the name "Maison Neuve" appears in two places in the tract of country entering into the exercise, care is necessary to prevent any misunderstanding.

When you get an exercise like this, in which there are several points which seem to you irreconcilable with actual service conditions, I advise you to adopt a cautious way of expressing yourselves in writing your solution, since you can scarcely see why the person who set the exercise has expressed it in such and such a particular way. Avoid anything which might be interpreted in a sense unfavourable to you, and pay special attention to the wording of the exercise. I have raised this point, in this exercise, on purpose to warn you against this error. The less this exercise has pleased you, the more glad am I. In the case before us the following questions might reasonably be asked:—

- (I) Why are the outposts taken for the advanced guard?
- (2) Why does not the officer commanding the detachment himself fix the place and time for the advanced guard to start, and any special reconnaissance to be carried out by it?
- (3) Why does not he himself send the reinforcing troops at the right time to Lieut.-Colonel A.?
- (4) Why does not he advance via Lorry and St. George, instead of by the route selected, which is low-lying and restricts manœuvring?

We should have to reflect in a like manner if the exercise ran: "Lieut.-Colonel A. will ask for such troops as he considers necessary"—or took some other similar form.

All that I need say as to showing the order of march of the advanced guard on the map, is that in so doing you should clearly show your ideas as to the measures to be adopted by the advanced guard for protection and reconnaissance. You should, above all, clearly show the distribution of the cavalry, *i.e.* where you employ complete units for reconnoitring, and where only patrols, based on the principle that at least the roads, even the less important ones, must be observed in some way or another.

You must, as far as possible, avoid sending out whole troops, much less squadrons, to reconnoitre in this case, as an

action is to be expected, although the difficult nature of the country and the distances to be ridden may seem to require it. I will confine myself to these suggestions, since I assume that you require no assistance to show your ideas clearly by means of a diagram. There are certain difficulties in the problem on which I have not touched; the disposal of this question, however, might prove a matter of great complexity. There are certain difficulties in this problem to which I have made no reference, for they will admit of various interpretations,

SEVENTH EXERCISE.

(See General Map and the map Verny.)

The 2nd and 3rd Divisions, reinforced by three batteries of Corps artillery, are encamped in the neighbourhood of Grigy and Borny, throwing out a detached force, under Major-General A., composed of

I/Battalion.
II/Battalion.
III/Battalion.
IV/Battalion.
1st Dragoons (less rvth Squadron).
1st Field Battery R.A.
"A" Battery R.H.A.
1st Field Co. R.E.
Bearer Co.

towards Delme (General Map), which on the 1st July, 1889, is obliged to fall back, viâ Solgne, before the enemy in superior force, and occupies close cantonments for the night in Pontoy, with outposts (II/Battalion and I/1st Dragoons) on the line Liéhon-Haute-Beux. Nos. 1 and 2 Cos., with 12 troopers, are posted south of Liéhon; Nos. 3 and 4 Cos., with a troop I/1st dragoons, at a point on the main road due east of Liéhon; Nos. 5 and 6 Cos., with 12 troopers, at Haute-Beux; while the reserve of the

outposts, consisting of Nos. 7 and 8 Cos., with the remainder of I/1st Dragoons, is on the main road about 1100 yards south-east of Pluche.

According to the reports reaching Major-General A. up to 10 p.m., a hostile column of all arms had reached Solgne, being joined there by another from the direction of Secourt; and a body consisting of about a battalion with two or three squadrons of dragoons was bivouacked south of the Berupt Wald; the enemy's cavalry patrols having reached the line Goin, Silly-en-Saulnois, Beux. According to the statement of one of the enemy's hussars taken prisoner near the last named place, the squadron he belonged to was quartered for the night in Luppy. An order had been received from headquarters for General A. to continue his retreat on the 2nd July, and, without becoming engaged seriously, to check the enemy's pursuit as far as possible. The main body intends to accept battle on the 2nd July, in a position west of Mercy-by-Metz.

- (1) Write out the orders issued by General A. on the evening of 1st July.
 - (2) Give your reasons for the same.

MODEL FOR

ORDERS FOR RETREAT.

Place. Date. Hour of Issue.

DETACHMENT ORDERS.

DISTRIBUTION OF TROOPS.

- 1. Troops sent on in advance:
 Officer commanding.
 Infantry.
 Cavalry (seldom).
 Artillery (seldom).
 Engineers (often).
- 2. Main Body (in order of march).

 Bearer Co., or Field or in Hospital.
 Engineers.
 Infantry.
 Artillery.
 Infantry.
 Cavalry.
- Rear Guard: Officer commanding.
 Infantry.
 Cavalry (in considerable strength).
 Artillery(always, if possible).
 Engineers (seldom).
- Right (or Left) Flank Guard.
 Officer commanding.
 Same as rear guard.

- Information as to the Enemy and our forces in other quarters.
- 2. Object to be attained by the Detachment. (Intention of the officer commanding.)
- Order for the Baggage (generally well on ahead; place of starting, hour of ditto; route; guides or escort, as the case may be).
- 4. Order for the Troops sent on in Advance. (Place and hour of starting; route; special duties, e.g. preparing for blocking the road, blowing up bridges, &c.)
- 5. Order for the Main Body.

 (Place and hour of starting; either to follow the troops sent on in advance or special route.)
- 6. Order for the Rear Guard.

 (Distance to be observed; or place and hour of starting; reconnoitring especially to the side roads, often

carried out by keeping touch of the enemy with patrols. Special duties.)

- 7. Order for the Flank Guard. (Same as 6.)
- 8. Order for the Outposts.
- Position of the officer commanding at the commencement of operations.

Manner in which the order is communicated to the troops.

Signature.

Note.—As a rule cavalry is not employed independently. The terms "Head," "Tail," "Right," "Left" are used as if the detachment were facing the enemy. Thus the rear guard is at the "head"—the troops sent on in advance at the "tail" of the force.

EIGHTH LETTER

ORDERS FOR RETREAT

I HAVE purposely chosen for the first orders for retreat which I have given you to work out almost the same piece of country as we worked over in our first orders for a march (first exercise); so it will save time now if you will refer to what was there said respecting the roads and the country. (See pp. 21, 22.)

The exercise asks you to describe the arrangements for a simple retreat; and bear in mind that the detachment is not demoralised by a recent battle. General A. has orders from headquarters to continue his retreat; the direction of which is left to him to decide, as he has no precise orders on this subject. If the detached force retires direct to its rear by the main road, it will, if the enemy follows-which is to be expected, as he has followed up to now-mask the fire of the main body from its commanding position. It must therefore clear the front of the position probably taken up by the main body, and has the choice of retreating round the right or the left flank of it, i.e. either towards Bévoyela-Basse or towards Mercy-by-Metz. The lie of the roads is all against the latter alternative; so it is better to retire first of all by the main road, and then via Chesny and Crepy on Bévoye-la-Basse. The road through Orny and the Hospital Wald is unsuitable, being not only further to go, but also the portion between Orny and Chesny would

probably be impassable for guns and wagons. The by-road, also, leading from the north of Pontoy to the main road is impracticable, as the portion south-east of Pierrejeux, between the 260 and 240 contours, is too steep to be sure that some accident might not happen to the vehicles accompanying the troops. Even if you had not noticed the closeness of the contours at this point, the zigzag course of the main road would call your attention to the steepness of the slope just here. Thus, although there is no reason why one should not use by-roads, as such, or even field tracks, provided they are in good repair, to march on, yet they should be avoided when they have bad places like this, especially when, as in this case, there is no pressing necessity for taking a short cut.

It will thus be better to leave Pontoy by the western outlet, and get on the main road at Grève-la-Haute. Tactical considerations favour this route, as the outposts are sufficiently advanced to prevent the enemy obtaining a *clear* view.

In pursuance of orders from headquarters, the enemy's advance has to be delayed as far as possible, without allowing ourselves to become obstinately engaged. This can be done by the rear guard from time to time taking up a position, to force the enemy to deploy, immediately continuing the retreat, as soon as this object is attained. When and where such positions are to be taken up cannot be foreseen at the time of issuing the order, and must be arranged next day, while on the march, and on the spot, or be left wholly to the discretion of the officer commanding the rear guard. Best of all is to compel the enemy, by taking up a position completely blocking the way, to lose time in deploying, or make a wide détour. There is no such position, however, in the present case, so we must be content with at all events causing the enemy some delay by destroying the road at

suitable points. First of all the bridges over the stream flowing by Chérisey can be destroyed, *i.e.* the bridge on the main road south of Grève-la-Basse (a difficult job), and the two bridges near Chérisey. The enemy will have to make them passable at any rate for his vehicles, which will cause some delay.

(The fact of there being meadows on each side of the brook, and near the bridges, makes it more necessary to keep to the roads; for, although they are marked on the map as "dry" meadows, the passability of meadows, especially for cavalry and artillery, can never be depended upon, and depends on the dryness of the weather.) The bridges over the St. Peter brook, near Crépy, should, on the other hand, not be destroyed by the detachment, as they come within the sphere of the main body, and we cannot be sure whether it would fit in with the plans of the main body to destroy them. The engineers may, however, prepare a position, to serve as a rallying position, at the entrance to the Hospital Wald north of Orny.

The baggage should be sent on as far in advance as possible, so that it may not retard the retreat of the troops. Two hours' start is none too much for it, though it cause some inconvenience to the troops, to be obliged to have the baggage wagons packed so early. The safety of the march far outweighs all considerations as to convenience.

The information as to the enemy is as explicit as can be expected in the field. As to his strength we have, of course, no accurate information, though we know for certain that a strong force is resting for the night at Solgne, and a small force of infantry, (about a battalion though,) is in bivouac, with two or three squadrons of cavalry south of the Berupt Wald. Thus the enemy is marching in two columns at least, and will advance on the morrow by the main road and a road parallel to and west of it, it may be viå Vigny on

Chérisey, or via Buchy and Liéhon. It is not likely that the western column will advance via Pournoy-la-Grasse, and round the west side of the Hospital Wald, as that would entail the separation of the two columns during their march by the Hospital Wald. The western column will therefore probably move by Orny.

It is worth remarking that, whereas dragoons were noticed in the western column, one of the enemy's hussars was taken prisoner near Beux, from which it may be inferred that the pursuing enemy has more cavalry than our detachment, as the presence of two different regiments is already established. Whether these regiments are in full strength at present is, of course, uncertain; but, if what the prisoner says is true, the enemy has at least one squadron in Luppy during the night, so that we may count upon cavalry pursuing next day viâ Beux and Pontoy. As it is to the advantage of a pursuing enemy to cover a wide front, so as to work round our flanks, it is probable that what the prisoner says is the truth, and we must make arrangements accordingly.*

As to what strength the enemy's cavalry is in east of the main road, that cannot be ascertained from the prisoner's statement; but, even supposing that he had given detailed information on the subject, it would not do to attach too great importance to his statement; for the rank and file, as a rule, are not in a position to give reliable information as to the numbers and dispositions of their own forces, even assuming they have every wish to do so—and that is not often the case. It is, however, improbable that the enemy has exactly one squadron of hussars, and no more. So it will be as well to be prepared for the appearance of several squadrons of hussars, east of the main road, on the morrow.

^{• &}quot;Touch with the enemy must be maintained by the rear guard cavalry, particular attention being directed to attempts of the enemy to pass our flanks."

—F.O. I. 89.

It is, moreover, quite possible that the enemy has sent detachments to the important line of railway leading to Saarbruck (through Remilly and Herlingen), to secure it as early as possible, and that he has a flank column marching on Metz viâ Remilly. Though the detachment cannot prevent the advance of this latter, information concerning it, if its existence be established, must be sent as early as possible to the main body.

The portion of the enemy's force which most embarrasses General A. is that which is advancing west of the main road, as this. should it succeed in making a rapid movement on Chesny, will be in a position to harass the retreat of the detachment on Crépy. Counter measures must therefore be adopted, i.e. we must likewise detach a flank guard composed of infantry; in connection with which, it becomes a matter for consideration whether such flank guard shall be furnished by the main body of the detachment, or by its rear guard. The most obvious plan is to detail for this purpose those companies which are already constituting the piquets and supports south of Liéhon (Nos. 1 and 2 Cos. II/Battalion), Consequently they will naturally form part of the rear guard. It is, therefore, best to entrust all the arrangements to the rear guard, the officer commanding which can judge, from the reports arriving up to the hour of starting, of what strength the flank guard should be. But, in any case, the orders must be so worded as to direct the attention of the rear guard to the necessity for checking the enemy's advance on the Hospital Wald, as General A. cannot absolutely depend on his rear guard commander holding the same views as himself. This formation of a flank guard is inconsistent with the principle I have previously taught you, that flank guards should not, as a general rule, be used if they would be separated from the main column by natural features. In this case, the flank guard would, as a matter of fact, for some time be so cut off by the eastern portion of the Hospital Wald. The circumstance, however, that the enemy's advance has to be delayed, justifies a breach of the general rule. Thus we see that in tactics there are many exceptions to general rules, that all theoretical principles have but a very qualified value, and that the special circumstances of each individual case are invariably determinative.

The strongest column of the enemy is moving, according to reports received, on the main road. To prevent the enemy pressing us too closely is the duty of the rear guard, which will have to find several suitable positions, and is able to select them beforehand. It is the duty of the main body to ensure the march not being checked by any obstacles, so that the rear guard, being relieved of all responsibility on this head, can offer an obstinate resistance.—The question may be asked whether any counter measures should be taken in respect of the hostile cavalry which is reported to be in Luppy. As the country east of the main road is commanding, thus facilitating observation on the part of the enemy, we must endeavour to check an advance on the part of his cavalry in this quarter. Our cavalry might drive away hostile patrols, though it is open to doubt whether the enemy may not possess such a marked superiority in cavalry that our cavalry may not be able to accomplish this end unaided. It would be fruitless to detach two or three companies of infantry to assist the cavalry. This measure would fail to attain the desired end, since the enemy's cavalry would merely have to take a wide sweep to get past the infantry, which could not prevent them doing so. In this case, also, therefore, we must confine ourselves to observation by means of cavalry, transmitting information promptly to headquarters at Grigv.

The officer commanding the rear guard should be entrusted with the carrying out of these arrangements also, for

the reasons above cited; thus all the measures to be adopted for the protection of the retreat are in the hands of one and the same officer.

The outcome of the above considerations is the following decision on the part of General A.:—Fall back via Chesny on Bévoye-la-Basse, the rear guard moving on a broad front, and the baggage being sent on in advance.

The principal point to be observed in the distribution of troops is that a rear guard should generally be stronger than an advanced guard, so as to have a fairly strong first line to oppose the enemy, should it become necessary to stand on the defensive.* Two battalions are not too much in this case. The officer commanding the rear guard is thus enabled to take up, with part of the troops under his own command, a rallying position for those others of his troops most exposed to the enemy, and no delay is caused to the main body of the detachment.

Unlike an advance, where the outposts generally stand fast at first, and then join the main body, in a retreat the outposts usually join the rear guard, and hold as long as possible the

* The rear guard, unlike the advanced guard, cannot always reckon on support from the main body, but it can more frequently choose its ground for an action. In positions with obstacles in their front it will often be able to force the enemy to delaying deployments and to turning movements, and so gain time for the main body. It is advantageous to achieve this object without entangling the troops, particularly the infantry, in a fight. In extreme cases, however, the rear guard should not hesitate to offer an obstinate resistance, and it should be composed with a view to this. A rear guard, therefore, should generally be stronger than an advanced guard, especially in artillery, as this is the only arm capable of forcing the enemy to deploy at a considerable distance. Horse artillery is here in its right place. As a rule, all the available cavalry is placed under the orders of the rear guard commander, and forms the rear guard cavalry. The rear guard divides its column of route into a main guard and a rear party, the composition of which resembles the corresponding divisions of an advanced guard. Touch with the enemy must be maintained by the rear guard cavalry, particular attention being directed to attempts of the enemy to pass our flanks. Care must be taken, on facing the enemy, to confront him at once in some strength.

(F. O. I. 87 and 89.)

line they have occupied during the night. The object of this is to keep the enemy in ignorance till the last moment as to the retirement of the troops in rear. It will not much matter if this causes the outposts to get rather too far behind, for they can soon recover their proper position, as small bodies can get over the ground quicker than can a mixed force.

It would also be possible to form up some other portion of the rear guard, in a sort of rallying position, and make the outposts pass through it, but it would take more time to get into column of route this way, besides which it is a somewhat complicated manœuvre, and therefore less suitable to the object in view. The whole column must be well on the move when its head (i.e. the end nearest the enemy) commences to fall back. We have to take into the bargain the disadvantage that the same troops which have borne the brunt of fatigue during the night will again have the most arduous duties to perform next day.

All the available cavalry should be placed in the rear guard, as this arm has not only to maintain touch with the enemy, but also specially watch the parallel roads, and promptly oppose any attempt on the part of the enemy to pass our flanks. It will have to maintain touch not merely with the enemy's advanced parties, but in particular with his main body, as otherwise the enemy might be pursuing us with only a detachment, while the bulk of his force is either, it may be, stationary, or taking some new direction, or even retracing its footsteps. The stronger the pursuing cavalry, the more arduous the duties of our cavalry, which will have to make unusual exertions, and make the most of its numbers. It would be a pity for a single trooper to be absent when such important duties lie before the cavalry.

As was pointed out in the note to the model of orders, cavalry

^{• &}quot;A small column, consisting of infantry only, marches, under favourable conditions, at the rate of 3½ miles per hour." (p. 25.)

is not as a rule employed independently in a retreat, as it is highly desirable to leave the execution of all measures for information as well as for protection to the officer commanding the rear guard, to whom all information concerning the enemy is to be sent direct and at first hand. When the enemy, however, is so distant that cavalry intended to maintain touch with him must be left very far behind, thereby virtually losing all connection with the rear guard, or when our cavalry has to keep touch with some movement of the enemy very far towards a flank, the cavalry may be independent, and placed directly under the officer commanding the detachment. In such a case, however, there must be a sufficiency of "Rear Guard Cavalry" in addition, more than would be allotted to an advanced guard under similar conditions. Here all three squadrons should be allotted to the rear guard—the officer commanding the detachment being satisfied with a few orderlies: which will be ample in this For example, a single cyclist conveying a report along the main road is all that is wanted to keep up communication with the 2nd and 3rd Divisions. The officer commanding the rear guard must be perfectly free to dispose of his cavalry in his own way, the officer commanding the detachment merely informing him in what direction he may consider it specially important to reconnoitre.

Should the strength of the force render it in any degree possible, artillery should be attached to the rear guard, as this arm can force the enemy to deploy at a great distance, thereby frequently gaining time without the co-operation of the other arms, for the enemy not only loses time in deploying, but must quit the roads and move across country in extended order, which entails a slower rate of progress. Thus frequently a battery, or even two, may be allotted to a rear guard composed of only one battalion of infantry—a measure which would be considered exceptional if it were an

advanced guard instead of a rear guard. In the case of detachments, of course, more than one battery in the rear guard is seldom necessary, though it would not be altogether wrong to put both the batteries in the rear guard in the present instance, on the grounds that, when an engagement appears certain, one should bring into action from the earliest possible moment a number of guns superior to that of the enemy. Remember, however, that for a rear guard it is more a question of gaining time than of the scientific employment of the three arms combined.

It will frequently happen that the officer commanding the *detachment* will have an opportunity of covering the retirement of the rear guard battery by the fire of the battery of the main body. In the case of *larger bodies*, Divisions, &c., there will naturally be *more artillery in proportion* in the rear guard.

Since there is, just as in the second exercise, a battery of horse artillery with the detachment, let us consider how it may best be utilized. In the very exceptional cases in which a detachment comprises a horse battery, its place in a retreat is, according to tactical principles, with the rear guard, since it can, thanks to its superior mobility, extricate itself from difficult situations, thus rendering it possible to keep the enemy under artillery fire till the last moment.—Only under the most exceptional circumstances would there be no artillery in a rear guard, such as when the roads are so very bad that it would be almost a certainty that the guns would be lost. Guns would not then be attached to the rear guard unless it were absolutely necessary to sacrifice them to save the other arms.

As previously stated, engineers are very frequently sent on ahead in retreat; for all operations conducted by them, no matter of what nature, require some *preparation*, and a *reasonable time* must be guaranteed them when any result

worth having is looked for. We should not hear so many unjust complaints at our peace manœuvres if this fact were sufficiently realized. On this account they are, as a rule, quite out of place in the rear guard at the commencement of a retreat, for in such a position they would seldom have the necessary time. If not sent on in advance, they should at least move at the head (end furthest from the enemy) of the main body, either in front of or immediately behind the bearer company. When they have finished their work, say, for instance, prepared a bridge for blowing up, a few of them remain behind to carry out the actual demolition or to remain on guard at the spot, subsequently joining, as a rule, the "Rear Party" of the rear guard. In certain cases engineers are sent on in carts, to save time and labour. As, however, from 20 to 25 ordinary farm wagons would be required to transport a company on war strength, and probably wagons will have to be requisitioned from Pontoy for the transport of the sick, &c., it is doubtful whether this measure could be carried out, and I prefer not to count on it, but merely desire to mention its possibility.*

^{• &}quot;In order to delay the pursuing enemy, roads are to be blocked, bridges destroyed, &c., wherever possible. This work can be more thoroughly done, and time and force saved, by sending forward in carriages the engineers or infantry destined for its execution."—F.O. I. 91.

We shall, therefore, fix upon the following Distribution of Troops:—

DISTRIBUTION OF TROOPS.

- 1. Sent on in Advance: Major G.

 1st Field Co. R.E.
- Main Body: (in order of march).
 Bearer Co.
 IV/Battalion.
 Ist Field Battery R.A.
 III/Battalion.
 I section from II/1st Dragoons.
- Rear Guard: Colonel B.
 I/Battalion.
 II/Battalion.
 1st Dragoons (less Ivth Squadron).
 "A" Battery R.H.A.

The exercise expressly asks for General A.'s orders for retreat issued on the evening of the 1st July, in order to make you employ the method of issuing orders for a march with only one order. We assume that no fresh information is likely to come to hand during the night, so that all the arrangements for the march can be settled overnight, thus enabling us to dispense with separate orders for assembling the troops.

We must so arrange that the detachment (with the exception of the outposts, which must stand fast till the officer commanding the rear guard sends them the order to retire) shall be drawn up at an appointed time on the western outskirts of Pontoy, ready to march off. These instructions, applicable to the whole detachment, may be contained in the order (No. 2) detailing the object to be attained by the detachment (intention of the officer commanding).

The information as to the enemy (No. 1) must be as complete as possible, so that the rear guard cavalry in particular may receive precise instructions in what directions they have principally to reconnoitre, and may know to what extent the commanding officer of the detachment is already informed as to the enemy's dispositions (so as not to waste time in reporting on what is already known to him). It is further important for the rear guard cavalry to know that the presence of hostile dragoons is reported near the Berupt Wald, and of hussars near Beux; and it will make every effort to obtain more definite information, especially concerning the latter, concerning which our present knowledge is most incomplete. Moreover, every subordinate commander must be informed that the 2nd and 3rd Divisions intend standing on the defensive west of Mercy-by-Metz; for this will tell him, on the one hand, that he will there find support in case of need; and, on the other, that he must not dawdle about longer than necessary in front of this position. the sake of brevity the two first headings may be partially abbreviated. The order for the baggage is framed on the same lines as in an advance, with the sole distinction that the road to be taken by it must be carefully defined. It must be sent far enough to the rear to be out of the way if an obstinate engagement takes place on the heights of Mercyby-Metz. Provisionally I should select as a position for it the eastern churchyard of Metz, and I would send it to the rear by the main road, as at present it is impossible to foresee where the detachment will pass the next night. If the officer commanding the 2nd and 3rd Divisions has sent his baggage further back, he will cause the necessary orders to be given to the baggage of the detachment as it passes through the position; since the officer in charge of the baggage has in any case to report his arrival to him. The arrangements for conducting the baggage are the same as in an advance. An

energetic officer is even more requisite here than in an advance, as we must have absolute security that the road is not blocked by any broken-down wagon, and that the march of the main body is not delayed at awkward places on the road, such as bridges, &c.; for in a retreat every check engenders uneasiness, and may entail the most serious consequences. It is a disadvantage that this officer (since it must be a cavalry officer) is withdrawn from the duty of reconnaissance, now so doubly important; but it cannot be helped, as a non-commissioned officer would be even more out of place here than in an advance. It would not be correct to order the baggage to retire "to Metz," for Metz is a large place, and one might be a long time finding it there. A definite and unmistakable place must be appointed.

The order for the engineers must be so worded that the officer commanding the field company shall know exactly what is expected of him, while perfectly free to distribute his company as he deems best to the various tasks. To this end he will ride on ahead with his officers, and consider on the spot the measures to be adopted.* For the officer commanding the detachment to interfere in details would not only be superfluous, but positively harmful. As, in the case before us, the engineers have a special duty entrusted to them, there must be a separate heading of the order for them. For the main body, too, the route to be followed must be distinctly stated, to prevent any possibility of a misunderstanding, especially as in this case the main body

^{* &}quot;The senior officer of an engineer detachment should be instructed by the commanding officer as to his general intentions. He therefore remains with the C.O.'s staff till the employment of his detachment. He submits his proposals to the C.O., and obtains his decision. He must try to anticipate the requirements of the troops, and in so doing must not wait for orders; on the contrary, he must often act on his own initiative.

[&]quot;He may utilize his junior officers for reconnaissance purposes, all except one, who remains in temporary command of the company."—F.O. II. 73.

has to move by a different road to the baggage. The hour of starting is left to General A.'s discretion, so he fixes on 5 a.m., and sends the engineers and baggage off two hours earlier.

The distance between the main body and the rear guard is, as a rule, much greater in a retreat than that between main body and advanced guard in an advance, to minimize any danger caused by possible hindrances to the march of the main body, and remove the main body out of range of the enemy's artillery fire. The distance, in the case of detachments of this strength, may be 1600 to 2200 yards. In this case it is, for example, desirable for the main body to have got well through Chesny before the enemy's artillery can reach the height marked 270.8, south-east of Pierrejeux.

Orders, as a rule, are so worded as to make the officer commanding a rear guard far more independent than an officer commanding an advanced guard, for most of the measures to be adopted by the former are dependent on the manner in which the enemy presses the pursuit. A small force in retreat has to make its actions conform to a far greater extent to those of the enemy than has a strong force which is advancing. Moreover, in a retreat the officer commanding the detachment will often be at a far greater distance from the rear guard than he would be from an advanced guard in an advance, as it is often necessary for him to ride on ahead. "After once the column is on the march he should not attempt to assist in all conceivable details. for this is the duty of the subordinate commander. By abdicating his functions at the right time he will best achieve success." (Schlichting). He must confine himself to telling the rear guard commander what reconnaissance is desirable, and what is expected of him generally, leaving him perfect freedom of action in other respects. The only way I should feel inclined to interfere with the rear guard commander's freedom of action in the present case would be to direct him to cause the outposts to hold their ground as long as possible. as otherwise he might possibly call them in too soon. When the march begins, the commanders of both main body and rear guard will watch in company, from some point affording a good view, whether the enemy is pressing the pursuit, and, if so, in what manner. The best point for this purpose will be the high ground by Grève-la-Haute, but later on the officer commanding the detachment will probably hurry on in advance, firstly to the point 270.8 south-east of Pierrejeux, and then to other suitable points, till finally he has to make arrangements for forming up the detachment according to the orders he receives from headquarters of the 2nd and 3rd Thus in a retreat the position of the commanding officer is far more undetermined than in an advance. orders he can only make known his first position, and care must be taken, by leaving orderlies behind, that when he quits this position, reports &c. are forwarded on to him by the shortest route. General A. must never lose sight of the importance of maintaining communication with the 2nd and 3rd Divisions, and will, during the night, report to the supreme commander what he has decided on doing. simplest way of doing this is to send a copy of the detachment orders to the officer commanding 2nd and 3rd Divisions. from which he can see at a glance what will be done next morning. The fact of a copy having been sent should be noted on the order, on the left margin.

The detachment orders issued by General A. will be as follows:—

Pontoy. 1. VII. 89. 11 p.m.

DETACHMENT ORDERS.

DISTRIBUTION OF TROOPS.

- 1. Sent on in advance: Major G.
 1st Field Co. R.E.
- Main Body (in order of march).
 Bearer Co.
 IV/Battalion.
 1st Field Battery R.A.
 III/Battalion.
 l section from II/1st
- 3 Rear Guard: Colonel B.

 I/Battalion.

 II/Battalion.

 1st Dragoons (less Ivth Squadron).

 "A" Battery R.H.A.

Dragoons.

- I. The Enemy has reached Solgne in pursuit, with a force of all arms; a body of his infantry, with two or three squadrons of dragoons, is bivouacked south of the Berupt Wald; his cavalry patrols have shown themselves on the line Goin, Silly-en-Saulnois, Beux. A hostile squadron of hussars is, according to the statement of a prisoner, quartered in Luppy to-night.
- 2. The Detachment, with the exception of the outposts, will be formed up at 5 a.m., ready to march off, on the western outskirts of Pontoy, and fall back on the 2nd and 3rd Divisions, which will be holding a position west of Mercy-by-Metz.
- 3. The Baggage, conducted by an officer and a section furnished by the II/1st Dragoons, will be formed up at 3 a.m. on the western outskirts of Pontoy, and move by the main road, through Grigy, to the east churchyard, south of Plantières, where it will await further orders.

- 4. The 1st Field Co. R.E. will leave Pontoy at 3 a.m., prepare for demolition the bridge on the main road south of Grève-la-Basse, and the two bridges near Chérisey, and prepare a rallying-position on the south-east border of the Hospital Wald, north of Orny.
- 5. The Main Body will start at 5 a.m., moving by the main road, through La Horgneau - Cheval - Rouge, thence vià Chesny and Crépy, to Bévoye-la-Basse.
- 6. The Rear Guard will follow at a distance of 11 miles, keeping touch of the enemy by patrols, and reconnoitring towards Vigny and Luppy. Should the enemy attempt to advance on the Hospital Wald, he must be delayed. but the rear guard must not become seriously involved. The rear guard will detach a flank guard which will move viå Orny and Chesny. Patrols are to be sent, viâ Aube, towards the Saarbruck railway.
- 7. The Outposts will remain in their present position as long as possible.

8. Reports will reach the General Officer commanding, from 5 a.m. onwards, near Grèvela-Haute.

Dictated to officers representing the several units. Copy despatched to Headquarters of 2nd and 3rd Divisions by Lieut. J. By order,
(Signed) R., Major,
Brigade-Major.

There could be no objection to fixing an earlier hour for the start of the main body, for in a retreat it is desirable to assure the main body's safety by a very early start. In that case, however, you must make the rear guard stand fast awhile, which means increasing the distance between main body and rear guard, as otherwise you will not satisfy the requirement of the exercise to the effect that the enemy's advance must be delayed as much as possible. The baggage and engineers, too, would, in such case, have to make a correspondingly earlier start. Such an arrangement is, of course, attended by the danger that the rear guard would be left to its fate more than is required by the general situation in this instance, for it would be a difficult matter to afford it opportune support. In practice, the amount of fatigue the troops have been called upon to undergo the previous day, has an important bearing on the hour of starting, for it is absolutely essential for their efficiency that they should have a sufficient period of rest, though it may frequently amount to only a few hours.

It might appear, at first sight, advisable to cause the main body to halt, and stand on the defensive somewhere between Pontoy and Bévoye-la-Basse, with a view to rendering support, if necessary, to a rallying position taken up by the rear guard; but the objection to this course is that such an arrangement is very apt to tend to fatal errors, as it would make it far more difficult for the detachment to disengage itself from the enemy on arriving in the vicinity of the position held by the 2nd and 3rd Divisions. It would be incorrect for the officer commanding the detachment to be present with the rear guard. He could only be so for a very brief space, for what principally concerns him is to direct the movements of the main body. It is possible that an order might arrive from headquarters of the 2nd and 3rd Divisions to change the direction of the detachment's march; and, if so, it would take too long to reach him if he were with the rear guard. It is a less important matter that reports concerning the enemy take longer to reach him when he is with the main body, for it is the officer commanding the rear guard who is immediately concerned with the enemy.

Similarly I should not approve of the outposts being assembled in the vicinity of Grève-la-Haute, since that would render it much more inconvenient to detach the flank guard, which is so absolutely necessary, and would not satisfy the principal requirement of the exercise, viz., to delay the enemy's advance.

EIGHTH EXERCISE.

In continuation of the Seventh Exercise, describe the arrangements made by Colonel B., commanding the rear guard; on the supposition that no fresh information is received concerning the enemy up till 5 a.m.

NINTH LETTER

REAR GUARD ORDERS

BY making this exercise a continuation of the previous one, I gain an opportunity of going somewhat more thoroughly than I have hitherto into the subject of orders.

The first thing that will have occurred to Colonel B., as to the officer commanding the detachment, is that, in order to conceal the resumption of the retreat from the enemy as long as possible, both the outpost cavalry, which takes up its duties again at daybreak, and the infantry battalion on outposts must maintain their positions until the main body of the detachment has got under weigh and gained a start. As a preliminary measure, it will suffice if by this means the enemy is delayed till the main body has passed the high ground by Grève-la-Haute; provided that we find an opportunity of getting ready some means of causing the enemy a further delay. This can be done by the rear guard halting for a short time in a suitable position, and compelling the enemy to deploy.

The main body occupies about $\frac{3}{4}$ mile road-space, and has about $\frac{3}{4}$ mile to traverse from the western outskirts of Pontoy to Grève-la-Haute, so will have got a sufficient start by 5.30 a.m., up till which time the outposts must hold their ground. The enemy has, from Solgne, or the southern border of the Berupt Wald, as the case may be, to the line held by our piquets about $2\frac{1}{4}$ miles to go. He will, however,

be under the necessity of proceeding here with caution, i.e. slowly, since the opposing forces are at such close quarters: therefore, assuming that he is not on the move much before 5 a.m., he can hardly attack the piquets before 5.30 a.m., so in all probability the latter will commence their retreat unmolested. There would be no advantage in causing the piquets and supports to remain thus isolated a moment longer than necessary, as they should arrive as early as possible, and without being closely pressed, at the first position in front of which we intend forcing the enemy to a serious deployment of his force. In the fight that will probably thereupon ensue our infantry should not become too closely engaged; as, once engaged, this arm is with difficulty extricated. The fighting might easily assume an obstinate character (though the detachment orders enjoin us to avoid it), and if so it would be difficult to extricate the infantry from a perilous position, owing to its slowness of movement. Only the flank guard and the rear party, if possible, should be engaged at this first position, the infantry of the main guard remaining under cover in readiness for whatever result may ensue, and, above all things, close to the main road, so as to be able to resume the retreat promptly, when the time comes, or, if absolutely necessary, take up a rallying position for the flank guard and rear party to fall back on. It is most essential to a thorough comprehension of the problem before us to realize that the intended resistance must be of brief duration, to be immediately succeeded by a resumption of the retreat. If this were not the case, i.e. if we were purposing to offer a longer resistance, it would be better for the officer commanding the rear guard to issue an order for taking up a regular position for defence, instead of an order for retreat: subsequently directing the resumption of the retreat by means of another order. Any of the cavalry not engaged in reconnaissance or in warding off the hostile cavalry patrols

can fight dismounted. Suppose, for example, the enemy comes under the fire of dismounted cavalry posted in the gardens of Orny or of Pournoy-la-Grasse (their horses being at hand close by in the village), he cannot at first tell whether he has not to deal with infantry, and so he will have to feel his way cautiously. In a retreat, therefore, the fire of dismounted cavalry, able by means of their horses to rapidly withdraw from a position of danger, can greatly conduce to deceiving, and consequently checking, the enemy. Our cavalry may also by similar tactics be of great service in Pontoy, or, possibly, in the Hospital Wald, or in the Bois Cama, by causing the enemy to think there is a considerable force of infantry opposed to him, especially if he sees formed bodies of infantry here and there. Thus it is the duty of the cavalry of the rear guard to act so as never to lose touch with their own infantry, and always to be ready to take their part in the impending conflict. As soon as a close touch of the enemy is gained, the tactical employment (i.e. the application in combat) of the cavalry takes the precedence of its other functions, but even then the reconnaissance must not be interrupted.* In the case before us, however, it is very far from easy to satisfy both requirements. It calls for great ability and prudence in the commander, not to let slip the right moment for retiring over the Chérisey brook.

The principal part in the action will, however, be played by the horse artillery battery, with an infantry escort, which should be so placed as to command the main road (as being the principal line of route), and the country to the west of it, which will probably be traversed by another column of the enemy.

[&]quot;The principle that thorough reconnaissance is the best protection involves that a force should push the bulk of its cavalry beyond the advanced (rear) guard. The cavalry may either remain under the immediate command of the leader of the entire force (independent cavalry) or be attached to the advanced (rear) guard, (advanced (rear) guard cavalry). . . . Their movement should be so regulated

The Detachment Orders * direct Colonel B. to hold the enemy, should the latter move on the Hospital Wald, leaving him free to make his own arrangements for doing so, although ordering him to throw out a flank guard. receiving the orders, he must first and foremost consider whether it is advisable for him to do anything during the night. The orders, however, direct the outposts to stand fast as a preliminary measure, and tell the remaining troops composing the rear guard where to assemble, so Colonel B. can postpone making any further arrangements till next morning, for nothing more can be done during the night than has been already seen to in the detachment orders. A difficulty presents itself in connection with the squadron of cavalry on outpost duty, which must be met by the timely issue of instructions, for otherwise the officer commanding the outposts might send it in some direction, or employ it in some manner not harmonising with Colonel B.'s intentions, thus tending only too easily to an undue dissemination of the Touch of the enemy has to be kept up, and all avenues by which he might advance have to be watched; but Colonel B. must be careful that the outpost squadron's cohesion is restored. should it become lost, to prevent fractions of different squadrons being of necessity jumbled up together to perform some duty. The rôle of the outpost cavalry, as such, terminates, however, the moment the rest of the rear guard cavalry gets touch of the enemy. Colonel B. has plenty of time to think over how he will employ the troops at his disposal, and can wait to see whether news of importance may not come in even up to the moment of

that, while fulfilling all their reconnaissance duties, they never lose touch of their own infantry, but keep in a position to be always at hand when the force deploys for the fight. . . .

[&]quot;Even after close touch with the enemy has been gained, the principal work of the divisional cavalry is still reconnaissance. Its tactical employment at a favourable opportunity is, however, not excluded."—F.O. I. 72.

^{*} p. 189, No. 6.

starting. It has thus been no small advantage to him to have received the Detachment Orders so early, as it has given him time to comprehend the situation, and the intentions of the officer commanding the detachment. On the following morning he will be better off than the officer commanding the detachment was on the previous evening, inasmuch as he will know this much, at least, that the enemy has not set out on his march at an abnormally early hour (for, were it otherwise, the outposts would have already reported it). He will therefore be in a position to decide definitely what measures to adopt for checking the enemy; whilst the officer commanding the detachment had to confine himself to making arrangements for the troops commencing the march.

To attempt the first resistance in a position south of the Chérisey brook is not advisable; for, if the enemy pressed his attack, it is doubtful whether the piquets and supports could make good their retreat over the brook. A stand may well be made, though, along the line Orny, Grève-la-Basse, and Pontoy, having the little brook of Chérisey in front of us. The infantry of the right flank guard, quite irrespective of the participation of the cavalry, may defend Orny; the infantry of the rear party. Grève-la-Basse and Pontoy: and the battery of horse artillery fire from the high ground by Grève-la-Haute; thus the enemy comes under the fire of a position nearly 21 miles in extent. It will be impossible for him to tell at first sight in what strength it is occupied, so he will have to advance cautiously, thus losing time, before getting a clear idea of the situation, and deciding on a resolute assault. Imagine vourself in the position of the officer commanding the enemy. Formerly, before the introduction of smokeless powder, the puffs of smoke gave him at any rate some idea of his enemy's strength-nowadays he merely hears the report of firearms in various directions along a line some 21 miles long. By degrees he receives more definite

reports from the various parts of the battle-field, and as the situation slowly unfolds itself he can decide what to do. But all this takes time, and his artillery, at all events, is still further delayed by the demolition of the bridges. We can confidently rely on having no difficulty in checking the enemy until the main body of the detachment has got the wished-for start of a mile and a quarter, when it will be, for a time, sufficiently protected by the high ground 270.8 southeast of Pierreieux. If he can manage to deceive the enemy still longer, Colonel B. need not be particular about scrupulously preserving the distance, laid down in the Detachment Orders, No. 6, of 1½ miles from the main body; for, as was pointed out in the last letter, the longer the hostile artillery is in reaching the spur south-east of Pierrejeux, the easier the retirement of the main body of our detachment. Colonel B. will be fully justified in thus understanding his duty; for obedience in an officer, especially one in command of a considerable force, bears a different meaning to obedience in the rank and file. Colonel B. should not so much place a literal interpretation on the order as carry it out in accordance with the spirit of it, and in accordance with the intentions of the officer commanding the detachment, which in this case are to check the enemy; while it is of no consequence—provided this is done—if the distance between the rear guard and the main body of the detachment be greater or less than that laid down in the Detachment Orders.

It would be a mistake to lay down in advance in what manner the rear guard is to retire from the first position, and whether it is to take up another position later on, or whether the main guard should occupy a rallying position. It is impossible to settle how long the resistance is to be protracted, or in what manner it is to be made, until we have got a clear perception as to the degree of vigour with which the enemy is pursuing. Such points as these will be dealt with

in later orders. Of course, subordinate officers must not be left in ignorance in what direction they are to retire, when driven back by superior numbers; since it is doubtful whether, when once the action has commenced, orders to this effect would reach them in time enough to be acted upon. In the present instance, therefore, as an exceptional case, there can be no doubt that the line of retreat should be indicated before the action begins, for in this case it is equivalent to making known the route by which to march. The Field Service Regulations, I. 10, do not apply to this case.

The above considerations will lead Colonel B. to the following decision: take up a position for a short time on the north side of the Chérisey brook, and compel the enemy to deploy.

The rear guard may now be divided into Main Guard, Rear Party, Cavalry of the Rear Guard, and Right Flank Guard. The employment of the cavalry is subject to the following considerations:—on the main road we shall not be long in encountering the enemy's advanced guard, and little information will be obtainable in this quarter; so it may be assumed that the enemy is pursuing, so far as applies to the main road, as before. On the other hand, it is important to reconnoitre both the parallel roads, with a wide sweep towards the enemy's flanks, for by so doing we shall obtain information much sooner than by watching the heads of the enemy's columns on the roads themselves; especially as, in all probability, the enemy is stronger than us in cavalry on both roads. Our cavalry cannot attain much by being aggressive, so must confine itself to warding off hostile patrols, and following the movements of the enemy's

^{*} On the subject of Orders, "Conjectures, expectations, reasons for measures adopted, and detailed prescriptions for a variety of possible events are little calculated to raise the confidence of troops, and should therefore be omitted.

[&]quot;Arrangements for a possible retreat should be communicated only to the next senior officers, and always confidentially."—F.O. I. 10.

columns with bodies diminishing in strength from without inwards; taking care, at the same time, not to lose touch with its own infantry.

The road which most lends itself to an enemy threatening Chesny is the western parallel road; the greater part of our cavalry must therefore be employed in its vicinity. eastern one (Luppy-Beux-Pontoy) is less important, as for the time being we suppose (though merely as a conjecture) that by it next day one or more squadrons of the enemy's hussars only will advance: so in this direction we can do with less cavalry. In order to guard against the danger of unduly disseminating the cavalry, which is liable to arise when a force is retreating with a broad front, the available squadrons are apportioned, some to a "main," some to a "secondary duty"; the bulk of the cavalry, allotted to the former, being kept more concentrated, while weaker bodies can perform the secondary duty.* From this it follows that two squadrons should be detailed to reconnoitre west of the main road, while one will do for the main road and the road (Beux-Pontoy) east of it. As the outpost squadron is already, for the most part, posted on the main road during the night, it is best to entrust to it the duty of watching the main road itself and Beux, and sending patrols towards the Saarbruck railway. In the present instance, therefore, it is perfectly correct for the officer commanding the rear guard himself to detail the Ist Squadron for this duty; whereas, under other circumstances, it would be more proper to leave the selection of the squadron to the officer commanding the regiment, so as to avoid interfering in any way with details. Besides, it is an advantage to have the two fresh squadrons for the main duty. In the flank guard the cavalry should work in close co-operation with, and be supported by, the

^{*} Cf. the "main" and "secondary" attacks in letter 13.—Trans.

infantry; therefore it is best for both cavalry and infantry to be united in one command.

Of infantry, Colonel B, has the I/Battalion (concentrated), and the II/Battalion (at present on outpost duty): the former will form the heart of the rear guard, viz., the main guard: the latter the rear party and the flank guard. This distribution follows as a matter of course, but we must not shut our eyes to the attendant disadvantage that, in case of an engagement, the two battalions are almost bound to get mixed up. If it becomes necessary to support the front line. it will be difficult to prevent the companies of the two battalions becoming merged together. On the other hand, to remedy this would involve us in too many complications. It naturally fits in for Nos. 1 and 2 Cos. to join the flank guard (as they are south of Liéhon), similarly for Nos. 3, 4, 5 and 6 Cos. to form the rear party (see data, seventh exercise); but there is room for doubt as regards Nos. 7 and 8 Cos. Four companies are enough for the rear party, nor is the main guard short of infantry; but it would be a good thing to strengthen the important flank guard, which will probably have a great deal of trouble with the western column of the enemy, which is already well advanced, and superior to it in Nos. 7 and 8 Cos., therefore, may be allotted to the right flank guard, joining Nos. 1 and 2 Cos. at Orny. The latter, though they should make occasional brief halts, even though the enemy press them, as they fall back from Liéhon, will find it easier to retreat across the Chérisev brook by themselves, than if joined by Nos. 7 and 8 Cos. on the south side of the brook.

The battery of horse artillery will, at the outset, accompany the main guard.

We thus arrive at the following

DISTRIBUTION OF TROOPS.

- I. Main Guard: (in order of march.)
 "A"/R.H.A.
 I/Battalion.
 I N.C.O. and a half-section from I/1st Dragoons.
- Rear Party: Major E.
 Nos. 3, 4, 5, and 6 C^{os} II/Battalion.
 section from I/1st Dragoons.
- 3. Rear Guard Cavalry: Captain N. I/1st Dragoons.
- 4. Right Flank Guard: Lieut.-Colonel K.

 II/Battalion (less Nos. 3, 4, 5, and 6 Coa)

 1st Dragoons (less 1st and 1vth Squadrons.)*

With regard to the publication of the orders on the part of subordinate commanders, I have a few remarks to make which I purposely omitted making in the seventh letter. In the sixth exercise † the officer commanding the outposts, subsequently in command of the advanced guard, had received a despatch from the officer commanding the detachment which he could not communicate to the outposts in the same form as he received it. At the same time he did not know to what extent or in what form the reinforcing troops at Amelange had received instructions. He was therefore under the necessity of assembling his advanced guard by means of assembly orders, and subsequently issuing verbal

[&]quot; In naming units from which a portion is excluded, the unit should be named, and the words 'less ———,' appended" (as here).

[&]quot;If more than half the unit is detached, the unit itself should not be named, but only its staff and the troops concerned"; (thus if only two companies of the II/Battalion were here detailed for the flank guard, the order might be thus expressed, "Headquarters, and Nos. 1 and 2 Cos II/Battalion").—F.O. I. 48.

† p. 148.

advanced guard orders, which comprised in detail all the points concerning orders with which you had so far been acquainted. It made no odds if in his "Advanced Guard Orders" (No. 1)* he told the troops from Amelange what they knew already.

This procedure was in strict conformity with the Field Service Regulations, which lay down that, as a rule, the subordinate commander should not repeat the whole of the orders received from superior authority, with his own additions thereto, but independently issue clear and suitable orders on necessary points,† A subordinate commander is usually obliged to confine himself to issuing brief assembly orders, and then giving all further instructions verbally. conformity with these regulations, independent, verbal, advanced guard (or other) orders might invariably be issued, but that the paragraph quoted proceeds to say, "Where large bodies are working together, the orders of the smaller units will usually be based on the divisional orders." "Divisional orders," however, correspond generally to the "detachment orders" of these exercises, which deal with smaller bodies. So it is on detachment orders that advanced or rear guard orders, &c., must be based, but only when, as, for instance, in the present exercise, it can safely be assumed that the detachment orders have reached all the troops in question.

Whenever, therefore, you are in doubt whether in a case like this you should issue entirely independent orders, you should consider—

^{*} p. 164.

[†] It is not advisable that the orders of a subordinate leader should be merely a copy of those of his superior with his own additions tacked on. It will be clearer, and serve the purpose better, if he writes an independent order containing whatever is necessary. Where, however, large bodies are working together, the orders of the smaller units will usually be based on the divisional orders.

[&]quot;A subordinate leader is usually obliged to confine himself to a brief direction for the concentration of his command, and then gives all further instructions verbally."—F.O. I. 9.

- (1) Have all the units belonging to the body in question (advanced guard, rear guard, flank guard) received the detachment orders or not? In the *latter* case independent orders should be issued, exactly in accordance with the model.
- (2) Supposing that all the units have received the detachment orders, do these orders require supplementing in any respect? (e.g. information concerning the enemy). If so, make the addition under a special heading at the beginning of your orders.
- (3) What special instructions have to be given to ensure the execution of the detachment orders? Such instructions for the most part constitute your new orders.

You will have no difficulty in knowing what to write if you exercise some imagination in realizing the situation, as I have often advised. In the (German) army there has arisen, without it being explicitly ordered, a custom that the officers to take orders for all the several units assemble, at a time fixed by the officer commanding the detachment, to receive the detachment orders, which are dictated to them. Those officers representing units which next day will be associated together for some particular duty (here a rear guard), then report themselves to the officer who will command this group of units (say rear guard), for the purpose of receiving from him any instructions he may wish to add to the detachment orders.

In the present instance the following attended to receive the detachment orders *—the adjutants of the four infantry battalions and of the 1st Dragoons, and officers representing respectively the R.A., the R.E., and the Bearer company. (If now the German procedure were followed,) as soon as the detachment orders had been dictated, the adjutants of the 1st Dragoons, the II/Battalion, and the I/Battalion, and an

officer representing A/R.H.A. would at once report themselves to Colonel B. The latter need only inform the adjutants of the cavalry regiment and I/Battalion, and the officer representing the horse battery, at what hour next morning he will issue his orders, and the adjutants of the battalion on outposts takes with him similar directions for his own battalion and for the squadron on outposts.

With regard to the latter, it is as well that it should, during the night, have the detachment orders communicated to it by the officer commanding the outposts, so that the officer commanding the squadron may get a general idea of what the detachment is going to do, and of the manner in which the retreat is to be conducted, so as to be able next morning to communicate direct to those whom it principally concerns news of importance to them, notwithstanding that he will somewhat later receive Colonel B.'s rear guard orders. Colonel B. would thus have merely the following orders to issue overnight:—

Pontoy. 1. VII. 89. 11.30 p.m.

REAR GUARD ORDERS.

- I. The Squadron on Outpost Duty will arrange to receive orders at 5.30 a.m. tomorrow on the main road . east of Liéhon, without thereby ceasing to observe the enemy.
- 2. Officers will attend to receive orders at 4.50 a.m., at the western outskirts of Pontoy.

B., Colonel.

Dictated to officers representing the several units.

Communicated to the squadron on outpost duty through the adjutant of the II/Battalion.

The time for issuing orders is fixed 10 minutes before that appointed for the assembly, in order that the cavalry may commence their operations with as little delay as possible, and all the fractions of the rear guard receive their march orders in good time, especially the piquets and supports, who require time to make their preparations and arrangements for the start.

With regard to the march orders, it is optional for Colonel B. whether he sends a separate (or "immediate") order to each of the scattered portions of his command, or whether they all receive one and the same set of "combined" (or "formal") orders, applicable to the rear guard as a whole. According to the principles laid down in the fifth letter the latter course is preferable, so that in this case the commanding officer of each unit may at once obtain an insight into what the rear guard has to do, for thus is unity of action

among the various portions of the rear guard best ensured. I have purposely given no model of rear guard orders, as it is good practice for you to adapt the models of advanced guard orders, and orders for retreat to the purpose, in doing which you should not experience any special difficulty. It will be as well for Colonel B. to inform his subordinates, first of all, that up to the moment of issuing his orders no fresh information concerning the enemy has come to hand, so that they may all know that the situation remains as described in the detachment orders. Nextly, each commanding officer must be acquainted with Colonel B.'s intention not to retreat forthwith, but, first of all, compel the enemy to deploy. To prevent, however, any misconception as to the character of the intended action, Colonel B. again lays stress on the necessity for avoiding any obstinate fighting.

The main guard, which has later on to halt and stand prepared for whatever may turn up, will proceed as far as the hollow 700 yards north of Grève-la-Haute, where it will be under cover, remaining for the most part in column of route. It can, however, first of all follow close on the main body of the detachment, without any distance, so as to arrive at the proposed position as soon as possible, the distance being gained later on. The officer commanding the detachment must obviously be informed of this intention. The order for the rear party can be very short. All it has to say is the hour at which the rear party is to start, and the position it is to occupy at the outset. Any further orders will reach it later on, nor is there any likelihood of any difficulty arising in this respect, as Colonel B. will be close to it.

The order for the right flank guard should enter somewhat more into detail, as this body will be detached to such a distance from Colonel B.'s position that some freedom of action should be accorded to it in respect of selecting its own time for resuming its retreat beyond Orny; and it must receive instructions in advance in what direction the said

retreat is to be made. The officer commanding the right flank guard should also know when the outposts are to be withdrawn, and at what hour, consequently, Nos. 7 and 8 companies will be at his disposal. It is left to him to employ these two companies as he thinks fit. It should also be specially impressed on the right flank guard that it is not to confine itself to merely keeping touch of the enemy, but that it is expected of it to reconnoitre boldly towards the left flank of the enemy's advance.

The rear guard cavalry must be instructed to patrol towards the Saarbruck railway. This is a duty requiring prudence on the part of an officer, for he must have great freedom of action permitted him. He will send reports as to the state of affairs in the vicinity of the railway, even if he observes nothing. He need be accompanied by only a few troopers, for the stronger the patrol is made the more difficulty will it probably have in stealing past the hostile cavalry. Colonel B. can therefore give express orders for an officer's patrol consisting of a section to be sent, to ensure that a stronger body is not unnecessarily employed.

There will be some difficulty in ensuring that the bridges prepared by the engineers for demolition are actually destroyed at the right moment. If it were done too soon, it would be disastrous for the cavalry in particular, compelling them to make a wide détour. It would be impossible for Colonel B. himself to decide the right moment; he must therefore make the commanders of the right flank guard and rear party responsible for it, making special mention of it in the orders, so that there may be no misunderstanding on such an important point.

Colonel B. will at first be with the officer commanding the detachment, near Grève-la-Haute, whence he can give the order to bring his battery into action, and can supervise as far as may be necessary all other operations. Colonel B.'s march orders would therefore run:—

Western outskirts of Pontoy. 2. VII. 89. 4.50 a.m.

REAR GUARD ORDERS.

DISTRIBUTION OF TROOPS.

- Main Guard (in order of march).
 - "A"/R.H.A.

I/Battalion.

- N.C.O. and a half-section from I/1st Dragoons.
- 2. Rear Party: Major E.

 Nos. 3, 4, 5, and 6 C^{oa}

 II/Battalion.
 - r section from I/1st Dragoons.
- Rear Guard Cavalry: Capt.
 N.
 I/1st Dragoons.
- 4. Right Flank Guard: Lieut.-Colonel K.
 - II/Battalion (less Nos. 3, 4, 5, and 6 Cos).
 - 1st Dragoons (less 1st and 1yth Squadrons).

- Up to the present, no further news has been received of the enemy.
- 2. The Rear Guard will endeavour to compel the enemy to deploy at the Chérisey brook, without itself becoming involved in an obstinate engagement; thereafter following the main body of the detachment to Bévoye-la-Basse.
- The Main Guard will at first follow the main body of the detachment without any distance, as far as the hollow 700 yards north of Grèvela-Haute, where it will await further orders.
- The Rear Party will start at 5.30 a.m., and hold Grèvela-Basse and Pontoy, to delay the enemy till further orders.
- 5. The Rear Guard Cavalry will keep touch of the enemy by means of patrols on the main road, and viâ Beux. An officer's patrol consisting of a section is to be sent, viâ Aube, in the

direction of the Saarbruck railway.

- 6. The Right Flank Guard will check the enemy in Orny, and at the Hospital Wald: retiring, when compelled to do so by superior numbers, through the Hospital Wald and Chesny. Nos. 7 and 8 Cos II/Battalion will be under Col. K.'s command after 5.15 a.m. Col. K. will commence his retirement, viå Chérisey, with Nos. 1 and 2 Cos II/Battalion at 5.30 a.m. The flank guard will keep touch of the enemy viâ Buchy, and reconnoitre viâ Vigny.
- The responsibility for destroying the bridges over the Chérisey brook at the right time will devolve on the right flank guard and the rear party.
- 8. Reports will reach me at Grève-la-Haute.

Verbally to assembled commanding officers. — Copy sent to the outposts through Lieut. S. B., Colonel.

You will have doubtless noticed that orders in connection with a retreat present, as a rule, more difficulties than orders in connection with an advance. I shall therefore afford you

another opportunity in the next exercise of practice in framing Orders for Retreat.

NINTH EXERCISE.

(See General Map, and the Maps Gravelotte and Ars on the Moselle.)

General Idea.

A western force, consisting of the 1st and 2nd Divisions, 11nd Army Corps, operating in an enemy's country, has been defeated on the French Nied, and crossed the Moselle at the unfortified town of Metz, pursued by an eastern force.

Special Idea for the Detachment from the Western Force.

Late on the evening of the 4th August, 1889, the rear guard of the western force encamps at Moulins-bei-Metz, with outposts from St. Quentin to the Moselle. The 3rd Brigade, consisting of three battalions of infantry, commanded by Major-General C., is billeted in St. Ruffine, with the 1st Field Co. R.E.—the rest of the force being in and about Ars on the Moselle. The enemy has pursued as far as Metz. It was not possible to destroy the bridges over the Moselle at Metz, but all the bridges between Metz and Pont-à-Mousson are blown up. A hostile column, consisting of several battalions, with cavalry and artillery, was seen towards evening on the march from La Maxe to St. Eloy. At 10:15 p.m. General C. receives the following despatch from the officer commanding the main body.

"Headquarters, Ars-on-Moselle, "4th August, 1889, 9.50 p.m.

"Our patrols have been received with infantry fire from Lorrybei-Metz, and the French gate of Metz. A few patrols of the enemy have been seen at Devant-les-Ponts. It is probable that the enemy has occupied Woippy; and he has thrown a bridge across the Moselle at Olgy. The main body will continue its retreat at 5.30 a.m. to-morrow, viâ Ancy on the Moselle, Gorze, and Chambley, to Sponville. I am adding to your command the IIIrd and IVth Squadrons 9th Lancers, the 1th and 2nd Field Batteries R.A., and a bearer company. These troops will be formed up in readiness at your disposal at 5.15 a.m. on the western outskirts of St. Ruffine. You will also take into your command the 1th Field Co. R.E., and act as a left flanking detachment to the main body, moving viâ Gravelotte and Mars-la-Tour to Hannonville-au-Passage. You will make your arrangements for the disposal of the baggage of the battalions now under your command. That of the troops coming to reinforce you will be at the western outskirts of Gravelotte at 4.45 a.m. to-morrow, conducted by Captain L., 9th Lancers."

Required:---

- (1) The opinion formed by Major-General C. on the situation, and how he proposes to perform the duty allotted to him.
 - (2) The orders issued by Major-General C.
- N.B.—The woods west of Metz have thick undergrowth. Infantry could move through them, off the roads, only in extended order, and slowly.

TENTH LETTER

RETREAT OF A FLANKING DETACHMENT

MY object in the preceding exercise was to induce you to make more use of the general map, so that you might get accustomed to rapidly reading on the map the natural features of an extensive tract of country. I must again impress upon you the necessity of reference to the scale of the map, especially when making use of several maps drawn at different scales, for otherwise it is easy to entertain false conceptions as to questions of space.

The exercise is, on this occasion, presented in a somewhat different form to those preceding; viz., a general and special idea. Bear in mind, in connection with this, that a general idea contains what is actually known to both forces, whereas a special idea depicts only the situation as regards one force; and then either, as in this case, proceeds to define some particular duty to be performed, or leaves the commander to decide for himself, from the data contained in the special idea, what he had best do.

The answer to the first question, how General C. proposes to carry out the task before him, affords you the opportunity of explaining your views on the general situation; in fact, the answer to this question furnishes *the reasons* for the orders to be given.

General C.'s orders have to comprise arrangements for a retreat. The time when the detachment must start is regu-

lated by the hour at which the main body starts: the road by which the detachment will march is decided by the officer commanding the main body; thus far there are no difficulties. There might be some doubt whether you should select the road from St. Ruffine through Rozérieulles, which is somewhat shorter, or the main road passing south of Rozérieulles. It is a matter of no importance. The road through Rozérieulles is good, though rather steep near Le Pointdu-Jour. No doubt it runs along the bottom of a deep and steep-sided valley, but this would be no disadvantage unless the enemy unexpectedly appeared on the spur north of Rozérieulles, which is most improbable at the commencement of the march, as the nearest troops of the enemy affecting the question are at too great a distance; besides which they would first have to cross the Montveau valley. The main road has the advantage of being rather more convenient, and, as it quickly scales the heights, safer from surprise. If, therefore, great caution be desired, you can take this road. The baggage of the troops billeted in St. Ruffine had, in any case, better keep to the main road.

The next point to be considered is where General C.'s detachment is likely to meet the enemy. The rugged and precipitous *Montveau valley* is unsuitable for *obstinate* defence, as its west edge is covered with dense thickets and woods. The enemy's infantry could, it is true, advance here but slowly and with much difficulty off the road, but eventually it would work its way through; besides which the various woodland roads and footpaths would facilitate the advance of troops in compact formation. If the enemy advance via Moulins-by-Metz, he will first of all encounter our rear guard; and if the latter have already started, he has to traverse a difficult uphill road to the high ground by Le Point-du-Jour, before he overtakes the flanking detachment. This high ground could thus, in case of need, be utilized

for a brief halt of the rear guard of the flanking detachment.

The portions of the enemy's force situated to the north of Metz, in Lorry-by-Metz and Woippy, would, in advancing, be tied to the roads through Scy, Lessy, and St. George, all three of which entail a steep descent and ascent in crossing the Montveau valley, so the enemy's progress would be retarded, and he would have to exercise great caution in view of possible surprises. But as soon as the enemy is once established on the western side of the Montveau valley, the broad patch of wood west of Chatel St. Germain is so near the high ground of Le Point-du-Jour, that our detachment would not be able to remain long in occupation of the latter, especially as immediately in rear of it is the deep and precipitous Mance valley. This valley infantry can, of course, cross at any point. but cavalry in compact formation only by the main road, and by a few indifferent field-tracks, and artillery only by the main road. We should therefore endeavour to get this obstacle between us and the enemy, and gain the heights of Gravelotte and Mogador as soon as possible, where, with luck, we ought to hold the enemy some time. The main body of the pursuing force, whether it advance via Moulins-by-Metz or further to the north, will be tied to the main road in crossing the Mance valley, and we can sweep the road with our fire, especially from near Mogador.

It is possible the enemy might attempt a détour, such as viâ the Mance mill (rather more than a mile south of Gravelotte), which is invited by the oblique direction of our line of retreat, or near Malmaison; but it would cause him to lose time, and we could, if we do not wish to limit ourselves to the simple defensive, either seize the right moment for assuming the offensive, with a view to checking the enemy as he is in the act of laboriously emerging from the Bois des Ognons or the Bois des

Genivaux, or gain our next position for defence between Gravelotte and Rezonville, west of the Gorze brook. Other positions suitable for defence exist in the high ground west of Vionville, or the high ground at the junction of the several streamlets forming the Yron brook. There is thus no lack of favourable positions, with more or less considerable obstacles in front of them, to check the enemy.

The road by which the main body is to march is so distant (3 to 5 miles) from that to be followed by the flanking detachment that we cannot count on any support from the main body or the rear guard. It is, however, the more important to maintain connection, so as always to know how far on their way the main body and rear guard respectively have got. There are sufficient cross-roads available for this purpose, so that, notwithstanding the distance, there will not be much trouble in effecting this. It would not be admissible for the detachment to guit the main road, in order to be nearer the main body, for in so doing it would be leaving open to the enemy the shortest road to Verdun; -nothing could be more fortunate for him. It was not voluntarily that the officer commanding our main body decided not to take this road, and there must have been powerful reasons which led him to select the southern and more roundabout road.

As soon as our detachment has taken up a position, the enemy pursuing it will be on his guard against detaching a considerable force in a south-westerly direction to interrupt the march of our main body, as to do so would too much endanger his flank, especially as he cannot be sure, at so early a stage of the proceedings, what is the strength of the detachment. There is no good road leading to Verdun between that by which our detachment is to march and that by which our main body is to march; but there are several by-roads available for the movement of troops, and for keeping up connection between the two main roads—several in particular running from the northern main road to Puxieux, Xonville, and Chambley. North of the road by which the detachment will march, the road through Malmaison and St. Marcel to Ville-sur-Yron must be considered. According to the principles laid down in my previous letters, it would not be correct for a small force of infantry to move by this road to protect the left flank, for it is too distant from the main road (about 2 miles); but it is very well adapted for the cavalry protecting our flank

We now turn to the situation as regards the enemy, who, according to the information received by us, had continued the pursuit till the evening, as far as Metz. It is noteworthy that a column of all arms had been seen on the march from La Maxe to St. Eloy. Coupling with this the news that a bridge has been thrown across the Moselle near Olgy, and the report made in the evening of Woippy and Lorry-by-Metz being occupied by the enemy, the conjecture becomes almost a certainty, that we have in this quarter to deal with a reinforcement coming to the enemy either from the north (Diedenhofen), or the north-east (Bettsdorf). These fresh troops are already to the north of Metz during the night, so will probably next morning take up the pursuit by the northern of the two main roads leading to Verdun (that through Gravelotte and Mars-la-Tour). Possibly it was this consideration that decided our main body to diverge more to the south. It may be assumed that it is known to the enemy that the main body of the western force is at and near Ars on the Moselle, as from the east bank one can see the roads on the west side of the river. A portion of the eastern force will, therefore, in any case move on Ancy. But we cannot say in what direction his main body may pursue, therefore we cannot yet foretell with what force the flanking detachment may have to contend, especially as nothing is known concerning the strength of his reinforcements to the north of Metz. The enemy can be pretty sure that the western force is retiring on Verdun. He will therefore endeavour to gain the Gravelotte—Mars-la-Tour road, as being the most direct.

Should the enemy at the same time endeavour to drive our flanking detachment off the Gravelotte—Mars-la-Tour road, he will probably not only pursue along that road, but also utilize the Malmaison—Ville-sur-Yron road for this purpose. The latter road therefore must be specially watched by us. The detachment must therefore ward the enemy, from whatsoever direction he comes, off the main body, and give the latter time to reach Sponville. The enemy's advance on the Gravelotte—Mars-la-Tour road must be delayed by all possible means.

The flanking detachment should not fight unless it be unavoidable, and, if it does, must endeavour, like a rear guard, to prevent the engagement assuming an obstinate character. Artillery will, therefore, play the principal part in any such action, and aim at compelling the enemy to deploy at long ranges. Any infantry fighting at short ranges, more particularly in villages or woods, should be avoided as much as possible. All this is greatly facilitated by the numerous strong positions for defence available, for the enemy will be unwilling to attack them in front, and have to make wide flanking or turning movements, thereby losing time. The cavalry should lose no time in seeking to get touch of the enemy, and, once gained, must not lose it throughout the day. The reconnoitring should be thorough towards both flanks, especially the left, to discover any turning movements as early as possible, and repulse any attempts on the part of the enemy's cavalry to pass round our flanks. It might be as

well to offer a somewhat *protracted* resistance in two positions, for the following reasons:—

The main body has, at the beginning of its march, to cross the plateau of Dornot, which is lofty and has steep slopes; and, while so doing, must be protected against any attack coming from the north until it has passed Gorze. means that the detachment must not leave the heights of Gravelotte too soon. Between Gorze and Sponville the main body will encounter no particular difficulties, but every precaution should be taken, as the main body, after passing Chambley, again comes closer to the Gravelotte-Mars-la-Tour road. To prevent the enemy pressing the pursuit from an easterly direction, i.e. through Gorze, is the duty of the rear guard of the western force, but to prevent him pressing too closely from a north-easterly direction, i.e. through Rezonville or Vionville towards Chambley or Xonville, is the duty of the flanking detachment, which consequently may again have to offer resistance in the neighbourhood of Vionville until the main body has got a sufficient start.

General C. therefore decides to perform the task before him in the following manner:—The detachment to march at 5.20 a.m. from the western outskirts of St. Ruffine (covered by a rear guard, which will halt, if necessary, for a short time at Le Point-du-Jour), and proceed, first of all, as far as the high ground east of Gravelotte, where it will take up a position, and wait to see in what direction and manner the enemy is advancing. This position to be held, if possible, until the main body has passed Gorze. The cavalry will endeavour to at once get touch of the enemy, some watching the main road and keeping up communication with the rear guard of the main body, while the remainder provides for security north of the main road.

As soon as the main body has passed Gorze, the flanking detachment will fall further back, keeping approximately

level with the rear guard of the main body. If the enemy presses forward impetuously, the retirement must be conducted in a formation deployed on each side of the main road. either with or without a rallying position. opportunity for such by Rezonville. At Vionville another attempt is to be made to hold the enemy until news is received that the main body has passed Xonville, on which the detachment will fall back on Hannonville-au-Passage.

It would be most disastrous if any delay were occasioned in passing any of the various bad places on the road, so the baggage should be sent well on ahead, though at the same time arrangements must be made to protect it against hostile cavalry which might cut across the main road from the north, i.e. from Malmaison, it may be, or Vernéville. In some places it will be possible to prepare for delaying the enemy by blocking the road, for which purpose the engineers must be sent on ahead.

The baggage of the 3rd Brigade must start early enough to join the baggage of the troops to reinforce General C.'s command at 4.45 a.m., at the western outskirts of Gravelotte. The baggage of the whole detachment thus united will go on in advance to Hannonville-au-Passage. The Field Company R.E. will leave St. Ruffine along with the baggage of the 3rd Brigade, with instructions to prepare obstructions at suitable points on the road.

For the execution of these plans General C. will have to issue several orders.

- (1) The 3rd Brigade must receive overnight the orders for its assembly on the following morning, and for sending on its baggage to Gravelotte.
- (2) The Field Company R.E. must also receive overnight instructions for next day.
- (3) The officer to command the massed baggage must get his orders in good time.

(4) Next morning the march orders proper for the retreat have to be issued at the place of assembly of the detachment.

The first three may be either issued separately or combined in one. The despatch from headquarters is received at 10.15 p.m.—General C. requires some time to consider, during which the adjutants are being assembled. The first set of orders, therefore, can scarcely be dictated before 10.30 p.m., and the others correspondingly later.

The baggage of the infantry must start at such an hour as to ensure its arrival at the western outskirts of Gravelotte at the right time. The engineers must likewise start very early. so as to serve as escort to the baggage until it has passed the Mance valley (i.e. got to Gravelotte), and have plenty of time for the work to be done by them. After passing Gravelotte the massed baggage of the detachment will have got sufficient start to be able to dispense with a special escort. Definite orders should be given that the Field Company R.E. be accompanied by all its wagons, including those for baggage and tents. I should designedly abstain from indicating to the officer commanding the field company any particular localities where the road should be blocked, but leave it to his discretion, as he will be better able to decide on the spot. His attention can be directed by word of mouth to the intention we have of offering a somewhat protracted resistance near Gravelotte, and again near Vionville. As he has to hand over the baggage of the infantry to the officer commanding the massed baggage, he can take with him the orders for the latter.

The officers to whom these several orders are addressed (1, 2, 3, above) are informed upon the general situation only so far as is absolutely necessary.

St. Ruffine.

4. VIII. 89.

10.30 p.m.

I. BRIGADE ORDERS, THIRD BRIGADE.

- The Brigade will parade at 5.15 a.m. to-morrow, at the western outskirts of St. Ruffine.
- 2. The brigade baggage will be formed up at the same place at 3.15 a.m. to-morrow, and proceed, escorted by the 1st Field Co. R.E., by the main road as far as the western outskirts of Gravelotte, where it will join the baggage of the other troops which are about to join the brigade. The massed baggage will then proceed to Hannon-ville-au-Passage.

Dictated to the adjutants I/Battalion, II/Battalion, and III/Battalion. By order,
(Signed) R., Major.
Brigads-Major,
Third Brigads.

St. Ruffine.

4. VIII. 89.

10.40 p.m.

II. TO THE FIRST FIELD COMPANY R.E.

- The 1st and 2nd Divisions will continue the retreat to-morrow, viâ Gorze, to Sponville—a left flanking detachment, under my command, moving viâ Gravelotte to Hannonville-au-Passage.
- 2. The 1st Field Co. R.E. will, in compliance with an order just received by me from headquarters, be attached to the left flanking detachment, and parade at 3.15 a.m., accompanied by its baggage. at the western outskirts of St. Ruffine, in readiness to march, viâ Gravelotte, to Hannonville - au - Passage. The company will escort the baggage of the 3rd Brigade on the main road, as far as the western outskirts of Gravelotte, where it will hand the baggage over to the officer commanding the remainder of the baggage of the detachment, which will there await it.
- Arrangements are to be made for blocking the road to the greatest possible extent, between St. Ruffine and Marsla-Tour.

Copy sent to Major Y., commanding 1st Field Co. R.E., by Lieut. S.

C., Major-General. St. Ruffine.

4. VIII. 89.

10.50 p.m.

III. TO THE OFFICER IN CHARGE OF THE BAGGAGE.

- The 1st and 2nd Divisions will proceed to-morrow, viâ Gorze, to Sponville; and the flanking detachment under my command to Hannonville-au-Passage, viâ Gravelotte.
- 2. The baggage of the flanking detachment will start at 4.45 a.m. from the western outskirts of Gravelotte, and proceed by the main road to Hannonville-au-Passage.

Copy sent to Captain L., 9th
Lancers, through Major Y.,
commanding 1st Field Co.
R.E.

C., Major-General.

It now remains to compose the march orders proper.

Unlike the previous exercises (in which the rear guard retired on a broad front, and therefore required more infantry), the rear guard of the flanking detachment in this case can move by one road only, and has no need to throw out infantry flank guards—therefore one battalion is sufficient for it.

A cavalry non-commissioned officer and 12 troopers (= 4 patrols) may be attached to the main body of the detachment, so that the commanding officer may send out direct the necessary patrols to the flank, and, above all, keep touch with the main body of the western force. Of the rest of the cavalry part should be allotted to the rear guard of the detachment, and part detached northwards. The latter

requirement is, as I said before, of special importance, so it will be best to detach one of the squadrons as a left flank guard, thereby ensuring it the necessary independence. This leaves the other squadron for the rear guard of the detachment. This arrangement separates the two squadrons, it is true; but it is unavoidable, as their respective spheres of action lie in different directions. If both squadrons were put in the rear guard—a course I do not recommend—it would still be necessary to detach a considerable portion to the north. In fact, in the present instance circumstances utterly preclude all possibility of the cavalry acting together.

It is an open question whether one battery or both be allotted to the rear guard of the detachment. Good reasons may be adduced for either course.

The distribution of troops would accordingly be as follows:—

- 1. Sent on in advance: Major Y.

 1st Field Co. R.E.
- Main Body: (in order of march).
 Bearer Co.
 III/Battalion.
 II/Battalion.
 I N.C.O., 12 troopers III/9th Lancers.
- Rear Guard: Lieut.-Colonel F.
 III/9th Lancers (less 1 N.C.O., 12 troopers).
 1st Field Battery R.A.
 2nd Field Battery R.A.
- 4. Left Flank Guard: Captain D. IV/9th Lancers.

In the orders for the retreat it must, above all things, be made clear to the subordinate commanders that the enemy is in occupation of Lorry and Woippy as well as Metz. Although it is not absolutely certain that he has occupied Woippy, yet the other news, when read between the lines, renders it so probable, that we may take it as an absolute fact. Under the head of the commanding officer's intentions it may be intimated that it is only "as a provisional measure" that the detachment is to march as far as Gravelotte; that is to say, that later on the movement will be continued. It would, however, be wrong to state now that the detachment will take up a position near Gravelotte, since it is possible that, for some reason or other, it may not be necessary to do so after all, in which case the order would have to be cancelled. All that General C. has to arrange for in the march order is the retreat to Gravelotte. Anything to be done after that will form the subject of fresh orders.

As to the distance between the detachment's rear guard and main body, precise figures cannot be given,—in this case, for example, the point is to cover the main body of the detachment while it is crossing the Mance valley, so while this is going on, the rear guard must remain on the high ground by Le Point-du-Jour, which means a distance of at least 1½ miles. Reference may be made, in the order, to the necessity for communication being kept up between the rear guard of the detachment and the rear guard of the main body of the western force, although, properly speaking, it should go without saying. The orders may likewise lay down that the cavalry is to lose no time in seeking touch of the enemy, for this duty comes, if possible, into even greater prominence in the case of a retreat than in that of an advance.

When the left flank guard (of the flanking detachment) is ordered to move by some particular road, the squadron-leader concerned should not consider himself strictly confined to such road, but should interpret the order as only approximately indicating the general line on which he is to move,

parallel to the detachment.—It would be impossible for General C. to remain in one fixed place to await reports. This, as you have already seen, is a common occurrence in the case of retreats. At the outset he will certainly remain for some time at the place of assembly until not only the main body, but the rear guard likewise has got under weigh. Then, however, he will gallop past the column to the high ground near Le Point-du-Jour, whence he can get a view in all directions. After that he must ride on in advance to Gravelotte, so as to arrive at a decision on the spot as to the position there to be taken up. He can, therefore, only direct that reports be sent to the main body, with which he will leave instructions where he is to be found. This constitutes another illustration of the rule that a rear guard in a retreat must have far greater freedom of action than an advanced guard in an advance. In this case, for instance, it may happen that the rear guard of the detachment, being closely pressed by the enemy, may be compelled to take up a position on the ridge of Le Point-du-Jour, and check the enemy by artillery fire, until the main body of the detachment has got to Gravelotte without having received express orders to do so.

The Detachment Orders would consequently run as follows:—

Western outskirts of St. Ruffine.

5. VIII. 89. 5. 1

5. 15 a.m.

DETACHMENT ORDERS

DISTRIBUTION OF TROOPS.

- 1. Sent on in advance: Major Y.

 1st Field Co. R.E.
- Main Body: (in order of march.)
 Bearer Co.
 III/Battalion.
 IN.C.O., 12 troopers III/9th Lancers.
- 3. Rear Guard: Lieut.-Colonel F.
 III/9th Lancers (less 1
 N.C.O., 12 troopers).
 1th Field Battery R.A.
 2nd Field Battery R.A.
- 4. Left Flank Guard: Capt. D. IV/9th Lancers.

- The enemy occupied Metz, Lorry-bei-Metz, and Woippy yesterday evening.
 - The 1st and 2nd Divisions will move to-day via Ancy on the Moselle, Gorze, and Chambley, to Sponville.
- The Detachment will move as a left flanking detachment; retiring to Gravelotte in the first instance.
- The Main Body will march off at once, by the main road to Gravelotte.
- 4. The Rear Guard will follow at a distance of 1½ miles, keeping touch of the rear guard of the 1st and 2nd Divisions; and will endeavour to obtain touch of the enemy through Moulins-by-Metz, Scy, and Lessy.
- 5. The Left Flank Guard will start at once for Malmaison, viâ Chatel-St. Germain and Moskau, keeping a look out towards Plappeville and Saulny, and endeavouring to get touch of the enemy in the direction of Lorry-bei-Metz

6. Reports will reach me with the main body.

Verbally to the assembled commanding officers.

C., Major-General.

Should you have had the intention, in spite of the objections above detailed, of throwing out a flank guard composed of infantry, to move by the road Malmaison—Ville-sur-Yron. I should not wholly condemn the measure, for there is this amount of justification for it, that it is desirable to afford support to the cavalry in that direction, and enable it, in particular, to ward off an attack by possibly superior hostile cavalry on the left flank of the detachment. In such case, however, I should not detach this flank guard until I arrived at Gravelotte, and this would have formed the subject of later orders, as the first set of orders deals with the retreat as far as Gravelotte only. Considering the distance between the Malmaison-Ville-sur-Yron road and the Gravelotte-Mars-la-Tour road (about two miles), I should not detach less than half a battalion for this purpose. In view of the distance between the two abovementioned parallel roads, I must express myself decidedly against dividing the main body of the detachment between them; though otherwise, especially in the case of larger bodies of troops, one would be glad to make use of several roads in a retreat, as by so doing one gets away from the enemy twice as quick, and the duration of the resistance to be offered by the troops nearest the enemy need be only half as long The latter consideration, however, in the case of detachments is seldom of importance.

TENTH EXERCISE.

(See General Map, and map Ars on the Moselle.)

General Idea.

A northern force, operating in a friendly country, garrisons Metz, which is secured against any attack in force.

A southern army is concentrated north of Toul (on the Moselle, 20 miles south of Pont-à-Mousson).

Special Idea For Detachment from Northern Force.

Information having been received that, on 1st February, 1889, strong bodies of hostile infantry and artillery, with a few cavalry, had crossed the Moselle at Pont-à-Mousson, detachments from the northern force had been pushed forward to Arry and Marieulles respectively, to observe that portion of the frontier line lying between the Moselle and the Seille.* These detachments have instructions to check any attempt on the part of the enemy to advance on Metz. A third detachment is in observation to the east of the Seille, in the neighbourhood of Fleury. In addition the line Freskaty—practice entrenchment† on the main road—paper mill is held by troops from the fortress of Metz. On the afternoon of the 2nd February the detachment from Marieulles, consisting of

- 3 Battalions,
- 2 Squadrons,
- 1 Field Battery,
- Field Co. R.E.,

commanded by Colonel A., had been obliged by a greatly superior force of the enemy to fall back from the woods between Sillegny (General Map) and Marieulles, after suffering heavy losses, and had

- * The frontier line between France and Germany runs nearly east and west between Pagny-sur-Moselle (2 miles S.W. of Arry) and Sailly (some 11 miles E.S.E. of Arry). Thus Arry is about 1 mile and Marieulles 2 miles on the German side of the frontier.—Trans.
 - † "Übungs-Schanze," about I mile N.W. of Marly Bridge.—Trans.

been driven back on Féy, where it had gone into close cantonments On arrival at Féy, Colonel A. is informed that late at night. scarcely a fourth of the ammunition can be found. March outposts are thrown out (1 battalion, 2 troops cavalry) on the line Vezon-Bury-Pournoy-la-Chétive, each village being held by two companies, (as piquet and support), and half a troop; the remaining two companies, with the rest of the cavalry of the outposts, being posted at Sabré, as the reserve of the outposts. The troops till now forming the Arry detachment bivouac, after suffering severe losses, in and about Corny—the enemy pursuing as far as Voisage, in this quarter. Marieulles and Coin on the Seille have not been occupied by him, but Lorry (near the former) and Loyville (near the latter) are occupied by him in force. Just before evening fell, the enemy had unlimbered two batteries on hill 213, west of Loyville, which had opened fire on the piquet and support at Pournoy-la-Chétive; and a battery of the Fleury detachment had come up to prevent hostile infantry attacking Pournoy-la-Chétive through Coin on the Seille.—No hostile troops had so far been seen east of the Seille.

Required:-

- (1) The opinion on the situation formed by Colonel A., and the manner in which he proposes to carry out the duty assigned him (of checking the enemy's advance on Metz).
 - (2) The orders issued by Colonel A. for the 3rd February.
 - N.B.—The woods south of Metz have thick undergrowth.

ELEVENTH LETTER

RETREAT AFTER A DEFEAT

THE data for this exercise are somewhat longer, and comprise various details which have all to be taken into consideration in working out the solution; besides which, the way in which they are framed presents more difficulties than has been the case in the preceding exercises. I advise you, when dealing with data presented in this form, to mark lightly with different coloured chalks on the map the positions of the troops, your own as well as the enemy's, which will assist you in comprehending the general situation.

The road in the Moselle valley leading to Metz, viâ Jouy-aux-Arches, is being watched by a special detachment, so Colonel A.'s detachment need not trouble about it, especially as the lofty ridge of Côte-de-Fayé and St. Blaise intervenes, rendering it impossible to act in concert with the neighbouring detachment. All that Colonel A. need do in this connection is to have a look-out kept, during the morning of the 3rd, from St. Blaise, to see how matters are going in the Moselle valley, as otherwise the enemy might push on to Jouy-aux-Arches and fall on Colonel A.'s flank, or even threaten his retreat. It may fairly be calculated that the Corny detachment can unaided make a stand for a considerable time against a superior hostile force, but Colonel A. should inform the officer commanding it of his intentions.

On the other hand, Colonel A. must give his special atten-

tion to the country between the above-mentioned ridge and the Seille, especially to the main roads running through Marieulles and Pournoy-la-Chétive to Metz;—more particularly to the former of these two, as the detachment is on it. Should the enemy attempt to advance by Marieulles and Féy, the presence of woods on both sides of the road will oblige him to exercise a certain degree of caution, so as to guard against surprises. We may, therefore, safely assume that he will not enter on this tract of country till it is broad daylight.

In the woods themselves the enemy would have the greatest difficulty in moving, on account of the thick undergrowth, and his advance would be proportionately slow; practically, therefore, he is confined to the road. West of the road begins the steep ascent to the Côte de la Rique, Côte-de-Fayé, and St. Blaise, and although infantry can move over it, yet their progress would be slow, so that the enemy can for the most part use only the narrow tract of country immediately adjoining the road for his advance. This is irrespective of the season of the year, which will further determine the practicability of the country. From all this it follows that Colonel A. should be able, with a comparatively small force, if skilfully handled, to deceive the enemy for some time as to his strength, and delay him, should such a course become absolutely necessary.

A retreat from Féy to Augny would be covered from view by the spur stretching from Féy to Cuvry; this suggests the advisability of reaching Augny before the enemy can get there.

The country is quite open on both sides of the second important road to Metz, that viâ Pournoy-la-Chétive. If you trace the course of this road north of Coin a. d. Seille, you will see that the village of Pournoy-la-Chétive, which is well adapted for defence, forms the first point for resisting the

enemy's advance. A small force could check him here for a short time. Between Pournov-la-Chétive and Coin-bei-Cuvrv the road runs across a valley which can be swept by fire from the south edge of the latter village. After this the road climbs the spur Fév-Cuvry, which here, too, offers a good position for a short defence. There is yet another good position between Haute Rive and Prayel, so that thus we can delay the pursuit on this road in several positions, if necessary; -- bearing in mind the desirability of paying special attention to the road Marieulles-Sabré-Augny, so as not to be taken unexpectedly in flank from that quarter. In fact, as a rule, running fights like this, made by small forces in presence of superior numbers, call for great ability and foresight in a commander, to prevent the troops running great risk of being annihilated.

It must be remembered that the best part of the main road through Pournoy-la-Chétive is visible from the high ground east of the Seille. It follows that the artillery of the Fleury detachment can co-operate with Colonel A.'s detachment, unless its attention be taken up in another direction by an advance on the part of the enemy by the right bank of the Seille.

As the enemy had not crossed the Seille on the 2nd February, we may reasonably count upon this support from the Fleury detachment during the early part of the morning of the 3rd. It is, however, unlikely that the enemy will endeavour, the first thing in the morning, to press his advance along the west bank of the Seille; because, although on the 2nd February he will have got a tolerably accurate idea of the strength of the three detachments opposed to him, yet this knowledge avails him nothing as a means of forming his plan of action for the 3rd, on account of the proximity of the fortress, whence, for all he knows, the detachments might have been reinforced. He will, therefore, be apprehensive of

an unexpected counter-attack, in which case the Seille on his right flank would be a source of danger; so, before he can make use of the main road through Pournoy-la-Chétive, he must push back the Fleury detachment to some extent, and reconnoitre towards Féy, and especially towards Augny.

Colonel A., too, is so cut off from the Fleury detachment by the Seille that any concerted action is almost out of the question; still communication must be kept up through Marly, and he must inform the Fleury detachment of his intentions.

We have lastly to consider the road from Marieulles, through Sabré, running just west of Prayel. As far as the main road Féy-Cuvry this road is metalled; beyond that it is in bad condition, especially at this time of year. Although this cannot be seen from the map, yet the numerous cuttings there shown suggest the advisability of caution. As soon as the enemy, moving on this road, leaves Marieulles he will come in view of the piquet at Bury, which must fall back, as Bury is not suitable for defence. The same applies to both Sabré and the ridge just south of it, so that the first position suitable for defence is on the Féy-Cuvry spur, already so often referred to. The enemy, therefore, will have no difficulty in advancing by this road, and it will be specially valuable to him if, as may be expected, he intends advancing on a broad front towards Metz. The more he gains ground on this route—and it will be difficult to prevent him so doing —the easier will be the progress of his other troops on the parallel roads. It is hardly necessary to point out that the enemy will not confine his advance to the road, but, so far as the season of the year permits, avail himself of the open country east of it, where he will find cover from the fire of the batteries of the Fleury detachment. The above considerations, therefore, lead to the conclusion that the enemy will probably advance the following morning through Marieulles—possibly on Féy, but certainly on Sabré—while on the other hand, it is unlikely that he will advance the first thing in the morning through Pournoy-la-Chétive.

In face of this the situation of Colonel A.'s detachment is far from good. He has opposed to him greatly superior forces—as will always be the case in the first engagements in front of fortresses—and consequently has already been obliged to fall back some distance. We have proof, however, that the enemy has somewhat slackened his pursuit, in that Colonel A. has been able to post outposts, and under cover of them bring his detachment under shelter in Féy. Had the enemy closely pursued till the very end, it might have become impossible to do either, and the two opposing forces would have passed the night under arms in immediate contact, snatching a few hours' rest on the battlefield, with a view to resuming the engagement with daylight. For all that, though, the situation is quite difficult enough.

I leave it to your imagination to conceive the state of affairs that evening in the streets of the village of Féy. It will require the most strenuous exertions on the part of officers of all ranks to restore such order among troops and vehicles of all sorts as to get them in hand for the next morning.

The day's fighting, with the strain of being under fire, will have so disorganized the troops, especially the infantry, that nothing but necessity can justify requiring a weak detachment, which has fought till dark, and been compelled to retire with heavy loss before greatly superior numbers, to again on the following day make a resolute attempt at resistance in the open field—although in this case, favoured by the proximity of the fortress, it is possible to replace the expended ammunition during the night.

In this case, however, the general situation does not require another obstinate resistance on the part of the

detachment. Such detachments as these have later on to take part in the defence of the fortress for months together, and should not be utterly used up at the outset. All that can be expected of them is that they watch the enemy's advance, and check him long enough to give the fortress a few days for preparation. There is, therefore, no need for Colonel A. either to make a stand at Féy or to commit himself to the obstinate defence of any other position, e.g. at Bois de la Goulotte. Nor would it be advisable to make a protracted defence of Augny, as the southern border of the village is awkwardly shaped for the purpose, and the enemy's attack would be much facilitated by the Bois St. Jean, and the high ground south and south-west of the village.

Although a protracted combat is to be avoided, there is, of course, no reason why measures should not be taken with a view to forcing the enemy to deploy, so as to gain time. This, however, must be done in the vicinity of the nearest troops from the fortress, so that, covered by them, we can rapidly fall back before the enemy. Somewhere near Augny is the best place for the purpose—(although the village itself is unsuitable for a protracted defence)—because here we command the roads leading to Metz, and the village would, in the hands of the enemy, form a valuable point d'appui for the attack on the Freskaty-Übungs-Schanze position. It is true that this will be letting the enemy come very near the fortress, but it must be remembered that we are limited by the fact of the recent defeat we have sustained to but an imperfect solution at best of the problem before us. The enemy can hardly arrive before Augny till noon; if the battery does its duty he will have to deploy at a distance, and, as it gets dark about five o'clock, it is very doubtful whether he will assault at random the same day. To take up a defensive position, therefore, at Augny will gain time, and facilitate the retreat of the troops hitherto on outposts.

Colonel A. should, however, clearly recognize that Augny should be held only as a temporary measure, and that it is not within his province to oppose attacks in force on the fortress. How long Augny can be held will depend on the rate at which the enemy progresses in the Moselle valley, as Augny will have to be evacuated the moment the enemy gets possession of Jouy-aux-Arches.

It is desirable to maintain the "moral" of the troops, that the retreat from Féy to Augny be made in good order, and not be unduly hurried. With a view to this the outposts should have orders to stand fast to begin with, and not follow the detachment until the latter is out of danger. Here again I must lay emphasis on the point already dwelt upon in the eighth letter, viz., that a premature withdrawal of the outposts informs an enemy who is in close touch with one that the detachment is retreating, and has the effect of making him start correspondingly earlier in pursuit. The longer the outposts hold their ground, the longer, in all probability, will the enemy be in advancing.

If, however, the outposts are attacked in force before the main body of the detachment is out of danger, they must fall back, doing all they can to delay the enemy as far as possible; to which end, as we have seen, the country between Marieulles and Féy, and between Coin a.d. Seille and Prayel, is favourable; that on the Marieulles-Sabré road unfavourable. In such case a rallying position would perhaps have to be taken up for the outposts.

It is, however, as well to impress upon you that it would be possible thus to keep back the outposts, or, what amounts to the same thing, the rear guard, only on the supposition, implied by the data, that some sort of order has been restored in the Féy detachment. If, on the contrary, the main body of the detachment consisted of troops no longer fit for battle, time would be absolutely necessary to restore order. It might, in that case, be necessary to reinforce the outposts with some of the most reliable infantry, and with the battery, for a hurried retreat would utterly ruin the "moral" of the troops, and cause an even greater loss in prisoners and matériel than would an obstinate rear guard action.

We have now to consider the situation as regards the enemy. Concerning his strength, all that is known is that infantry and artillery, with a little cavalry, have crossed the Moselle at Pont-à-Mousson on the 1st February. As to whether more followed on the 2nd we do not know. though it is probable, for, as I said before, more than two or three divisions are required to invest a fortress like Metz. At all events the enemy was in superior force all along the line on the 2nd February, and was advancing on a broad front by three roads, in doing which he had already pushed forward strong bodies of troops towards the Seille-that is to say towards the east, as he has driven Colonel A.'s detachment back on Féy, i.e. in a north-west direction. His feeble attempt to occupy Pournoy-la-Chétive the same evening has failed, but has acquainted him with the presence of the troops near Fleury, with which he will have to reckon the following morning. The fighting of the 2nd February will have left its mark on him likewise, for even the victor will have experienced no small dissolution of tactical formations in the course of the day's fighting, especially when it is a case of fighting in woods, always so destructive of order. Therefore even the victor needs time to recover, and this is where the close pursuit of a beaten enemy, which theory demands,* so often fails in practice. To carry it out calls for extraordinary will-power in a commander, so as to finally triumph over human weak-

^{*} See Soldier's Pocket-book, by Lord Wolseley, p. 351, and his remarks on Wellington's failure to pursue.—Trans.

ness. In this connection bear in mind Colonel A.'s success in forming outposts, and the abandonment of the enemy's attempt on Pournoy-la-Chétive after the failure of the first attack.

We may therefore confidently assume that the enemy is not likely to resume his advance too early, *i.e.* before day-break; he will probably, indeed, delay some little time in front of Pournoy-la-Chétive, as he must await the development of events to the east of the Seille. Hence Colonel A. arrives at the following decision:—

The main body to retire on Augny at daybreak, and temporarily occupy it, while the battery does all it can to make the enemy deploy. The outposts to stand fast at first, then fall back rapidly on Augny—the six companies at Vezon, Bury, and Sabré assembling at St. Claude, while the two companies at Pournoy-la-Chétive retire as a left flank guard, moving first by the main road, and then viâ Prayel to Augny. Should the enemy attack Augny in force, or should his other column in the Moselle valley gain possession of Jouy-aux-Arches, Augny to be evacuated, and the detachment to retreat viâ Orly to Tournebride, so as to quickly clear the front of the Freskaty—paper mill position.

We may now decide when the detachment should start; not too early in any case, so as to give the troops as much rest as possible after the exertions of the previous day; nor yet too late, so as not to be compelled to fight sooner than intended. In February the sun rises about 7 a.m., and, to march off then, the troops must assemble at early dawn, which is never pleasant, especially after a defeat—though in this case they will have had sufficient rest. It is unnecessary to start earlier than this, as the enemy also is in need of rest and can scarcely be in motion earlier.

From Féy to Augny is about 2 miles = 40 minutes. Add to this about 20 minutes for the length of the main body;

therefore, starting at 7 a.m., the whole of the main body will be in Augny in 1 hour, *i.e.* at 8 a.m., and till then, if possible, the enemy should not be allowed to reach the spur stretching from Féy to Cuvry. The distance to this spur from Vezon and Bury is from $1\frac{1}{2}$ to 2 miles, 30 to 40 minutes' marching, so that the piquets and supports can leave their positions at 7.30 a.m.

The place of assembly for the main body is naturally the northern exit of Féy, where, too, the cavalry may assemble, as it is conveniently situated for reaching all the roads to be reconnoitred.

The baggage must be sent on in advance, and an hour's start is not too much to give it. As we do not yet know where we shall pass the coming night, it can go on to Montigny, beyond the point where the main road crosses the railway at the siding. It will be out of the way there, and can be readily got at if wanted. No special escort is necessary for it, beyond the usual conducting party, and there is no prospect of there being any obstructions on the road which might render it desirable to send a detachment of engineers with it.

Next come the measures to be taken for making up the deficiency of ammunition from Metz. With a view to this, the first thing to be done is to completely empty as many infantry small-arm ammunition carts as possible, so far as this has not been already done, and distribute the ammunition among the men, company officers taking the opportunity at the same time of seeing that it is equally divided among the men.

The empty S.A.A. carts, together with the empty wagons of the battery, should proceed without loss of time to Metz to receive ammunition, and must be back at Augny at the right time next morning. The best position for them then will be at the north corner of the park, where they will not be in the

way, and can be easily got at from all parts of the village. I explained in my first letter that it is only exceptionally that arrangements concerning ammunition come within the sphere of tactical orders; in this case, however, the data expressly refer to the subject of ammunition, you may, therefore, as an exceptional case, give orders relative to the measures to be adopted for replenishing the ammunition supply. It would, however, not be incorrect to omit to do so, and assume that this detail is provided for in the "Orders of the Day,"* or that the battery and battalion commanders make their own arrangements in the matter.

The officer commanding the outposts, who will command the rear guard, will find it no easy matter to personally supervise the withdrawal of his companies on the broad front required. The two companies forming piquet and support at Pournoy-la-Chétive are the most removed from his supervision; but on his right he can, at all events, employ the two companies hitherto forming the reserve of the outposts (at Sabré) to support any point where the enemy may be pressing.

All the available cavalry must go with the rear guard, and by thorough reconnaissance prevent the infantry of the rear guard being taken by surprise and prematurely driven in. It will be all the better if the cavalry can, by dismounted action, strengthen the hands of the infantry, and thereby deceive the

(1) Operation Orders.

(2) Orders of the Day.

^{*} The Germans divide all orders issued in the field into two kinds:-

⁽¹⁾ Are orders bearing on the direction of an army or force against the enemy; the handling of its parts as pieces in a game in which the enemy's commander is the other player.

⁽²⁾ Are orders dealing with the administrative and disciplinary management of a force.

[&]quot;All orders not directly concerned with the operations, such as those referring to interior economy, returns, &c., should be issued separately. They are best headed 'Orders of the Day,' (i.e. Corps orders of the day, Divisional orders of the day,)"—f.O. I. 11.

enemy as to the strength of the rear guard. The main body also requires some cavalry to maintain communication with the neighbouring detachments and with the fortress, so we allot to it a troop.

There will be no artillery with the rear guard in this case, as the infantry is too disseminated to be able to give sufficient protection to the artillery.

We can now draw up the distribution of troops.

When, as in this case, the exercise specifies no troops by name, take any regiments, &c., you like.

DISTRIBUTION OF TROOPS.

- Main Body (in order of march).
 ¹/₈rd 1st Field Co. R.E.
 I/Battalion.
 1st Field Battery RA.
 II/Battalion.
 1 troop II/1st Dragoons.
- Rear Guard: Lieut.-Colonel D.
 III/Battalion (on outposts).
 II/1st Dragoons (less a troop).
 I/1st Dragoons.

In framing the orders, great care must be taken not to describe the situation as a desperate one, so as not to dishearten the troops. At the risk of repetition I must impress upon you that an injudicious order, even if it be imparted verbally, and only to officers, may in certain cases work much mischief. Troops, when in a dangerous situation, can judge by the bearing and demeanour of their officers whether the latter consider the situation a desperate one or not. A touch of acting, provided it be not overdone, has a good effect on the rank and file, especially in a retreat. On this account, Colonel A. must not omit to state in the orders that the

enemy has not yet crossed the Seille, that we have been able to keep possession of Pournoy-la-Chétive, that we shall find other friendly troops on the line Freskaty—Übungs-Schanze—and that there are other neighbouring detachments south of Metz who might lend us assistance.

After giving out the orders and conferring with the officer commanding the rear guard, Colonel A. will ride on rapidly in advance to Augny, to decide on the measures to be adopted as soon as the troops arrive there. Subsequent orders will detail how Augny is to be occupied. Our orders would, therefore, run as follows:—

Féy. 2. II. 89. 10 p.m.

DETACHMENT ORDERS.

- I. As many as possible of the S.A.A. carts will be at once emptied, and then proceed, conducted by an officer detailed from the I/Battalion, together with the empty ammunition wagons of the 1st Field Battery R.A., to Metz, there to refill, returning to the north angle of Augny park by 8 a.m. to-morrow morning.
- 2. The Baggage, conducted by an officer detailed from the II/1st Dragoons, will be formed up in column of route at 6 a.m. to-morrow in the northern outskirts of Féy, and proceed, viâ Augny, to the gasworks at Montigny.
- 3. The Detachment will be formed up at the north side of Féy at 7 a.m. to-morrow.

All mounted officers to attend at the same place to receive orders at 6.45 a.m.

 The Outposts will stand fast till further orders, continuing in observation as hitherto.

Dictated to officers representing the several units.

A., Colonel. Northern outskirts of Féy. 3. II. 89. 645 a.m.

DETACHMENT ORDERS.

DISTRIBUTION OF TROOPS.

- I. Main Body (in order of march).
 ¹/₈rd 1st Field Co. R.E.
 I/Battalion.
 - 1st Field Battery R.A. II/Battalion.
 - 1 troop II/1st Dragoons.
- Rear Guard: Lieut.-Col. D.
 III/Battalion (on outposts).
 II/1st Dragoons (less a troop).
 - I/1st Dragoons.

- The Enemy pursued yesterday to the line Lorry-Loyville, but did not cross the Seille, and an attack made by him on Pournoy-la-Chétive was repulsed. Corny and Fleury have been occupied by neighbouring friendly detachments; and the line Freskaty—Übungs-Schanze—papermill by troops from the fortress.
- 2. The Detachment will continue the retreat on Augny.
- The Main Body will start at once for Augny by the main road.
- 4. The Rear Guard will endeavour to keep up communication with the Corny and Fleury detachments, and keep touch with the enemy; the piquets and supports commencing the retreat on Augny at 7.30 a.m.
- 5. Reports will reach me at the churchyard of Augny.

Verbally to the assembled commanding officers.

A., Colonel. In No. 4 of the second set of orders you might equally well say "the rear guard will so time the commencement of its retreat on Augny as to hold the enemy south of the spur extending from Cuvry to Féy till 8 a.m." This mode of expression leaves the outposts rather more freedom of action, yet I prefer the way it is worded in the order above, because it will make the piquets exert themselves to maintain, if possible, their position up to the precise time mentioned in the order—a result not equally guaranteed by the other mode of expressing the order.

If you apprehend that the enemy may attack the outposts very early in overwhelming strength, so that the latter might suffer heavy losses in effecting their retreat, I have no objection to your ordering a battalion of the main body, with the battery, to take up a position to cover the withdrawal of the outposts. The actual position to be taken up in such case is principally the affair of the battery, the infantry affording it protection, and only fighting if compelled to. In selecting such a position it has to be borne in mind that the troops engaged (whose retreat it is sought to cover) cannot choose their own line of retreat, the direction of which will generally be perpendicular to the front they are formed on. The rallying position must therefore lie to one side of their line of retreat, and near enough to prevent the retreating troops becoming utterly disorganized (before reaching it). Suppose, for example, that in the present instance you propose to take up a position to cover the retreat of the infantry falling back out of Féy, I should recommend a position at the edge of the wood north-west of Hanau, to enable the rear guard to re-form unmolested north of Gros Yeux. The infantry who occupy this rallying position (north-west of Hanau) would then, in its turn, in case of need retire under cover of the troops holding Augny.

It would be good practice for you to try and combine the two sets of orders given by me into one, issued overnight.

ELEVENTH EXERCISE.

(See General Map and Metz Map.)

A western force consisting of two weak divisions is encamped at Amanweiler, being in a friendly country. The officer commanding intends to throw a bridge across the Moselle at Malroy, to pass his force over; and on the 1st August, 1889, sends a detachment consisting of—

- 4 Battalions,
- 2 Squadrons,
- 2 Field Batteries,
- r Field Co. R.E.,
- 1 Bearer Co.,

commanded by Major-General A., to proceed via Metz (which may be considered an unfortified town), and cover the crossing at Malroy on the 2nd, by operating on the right bank of the river.

The detachment goes into close cantonments on the night of the 1/2 August in St. Julien-bei-Metz, with outposts (1 battalion, 2 troop, cavalry) on the line Mey—Ruine Chatillon—the Moselle.

The inhabitants report that a hostile column of all arms is advancing from Saarlouis (30 miles N.E. of Metz) viâ Bettsdorf, and on the afternoon of the 1st hostile cavalry patrols were seen near Argancy and the Wald von Failly, and hostile infantry requisitioned provisions in Vigy.

- (1) State the arrangements made by Major-General A. for the 2nd August.
 - (2) Give reasons for the same.

[The reader is recommended to make for himself a rough hand sketch of the country north-east of Metz, showing the principal roads between Metz and Bettsdorf, as by so doing the comprehension of the problem will be facilitated.]

Trans.

TWELFTH LETTER

ORDERS FOR A MARCH

RECAPITULATORY

I T should not have taken you long to work out this exercise, which involves only a simple advance. The situation here detailed forms a convenient introduction to the next exercise, which relates to orders for attack. If you ever get two exercises connected with one another to work out at the same time, you must not allow the second one to influence you in working out the first.

A careful study of the map shows that the road between St. Julien and Antilly ascends and descends several spurs and Looking from the first of elevations which run across it. these, from the Ruine Chatillon, one has an extensive view over the country to the north, bounded by the long ridge north of Charly. From the Ruine Chatillon one can overlook the intervening spurs of Chieulles and Rupigny. spurs, however, give some cover from the view of anyone standing at the point 204.8 on the main road (I mile N.E. of Malroy). Between the latter point and Antilly, again, is a long spur on the south bank of the Bévotte brook, which latter flows in a valley of moderate depth. The view from the Ruine Chatillon is limited to the north-east by the Wald von Failly, and to the north-west the ground falls abruptly to the Moselle.

There have to be reconnoitred, besides the main road to

Bettsdorf viå Antilly, the main road through Malroy and Argancy, and the road through Chieulles, Rupigny, Charly, Méchy, and Vigy, which is in parts paved.

To cover the construction of a bridge at Malroy, General A. has two positions to choose between, viz., either the high ground north-west of Charly, or the ridge just south of the Bévotte brook. Both are capable of defence, and cover the bridge from the enemy's view and fire,—both would answer the purpose in view,—but the former is rather too near Malroy, being scarcely a mile from that village,—rather too near to allow the western force ample room to deploy on the right bank after crossing the bridge. General A. will therefore endeavour to gain the position on the Bévotte brook, with Antilly and the Schloss Buy as supporting points. This position is nearly two miles from the place where the bridge is to be constructed. There are, however, certain points in favour of the nearer position.

The detachment therefore marches to Antilly by the direct main road. It does not lie within the sphere of our calculations to query why the main body of the western force intends to cross the Moselle at Malroy, instead of availing itself of the bridges at Metz.

Of the enemy little is known, so we must be content with imagining his situation. The report made by the inhabitants respecting the enemy's advance on Metz viâ Bettsdorf is confirmed by the fact that his cavalry patrols have been seen near Argancy and the Wald von Failly, and especially by the circumstance of hostile infantry having made requisitions in Vigy. This latter piece of information enables us to judge approximately how far the enemy has already advanced, since such requisitions are seldom made by infantry far in advance of their own outposts. We may therefore assume that the enemy is in or near Bettsdorf.

If this be a correct assumption, General A. must expect,

since the ridge which is his objective is about half-way between Bettsdorf and St. Julien, to encounter the enemy in the neighbourhood of Antilly; that is, assuming he starts at the same time as the enemy; but the earlier the enemy starts the sooner, and the nearer Metz, will he be encountered. In any case we must prevent him approaching the bridge at Malroy.

The enemy's route too is along the main road running south-west from Bettsdorf, past Antilly, his immediate objective being the important town of Metz. It is most unlikely that he knows as yet of the design to throw a bridge across the river at Malroy; if, however, his cavalry patrols arrive on the high ground east of the Moselle, say near Argancy, before ours, they will have an extensive view over the Moselle valley, and see the columns of the western force in the low ground west of the Moselle marching on Malroy. We must therefore drive off any hostile cavalry which may show itself on the heights commanding the Moselle valley.

But it will also be necessary for the enemy to reconnoitre towards his *left* flank, especially in the direction of the woods about Failly; it is probable, therefore, that he will detach some cavalry from Bettsdorf to pass through Vigy. This, however, is only guess-work; our cavalry must get information on this point, for General A. would not, on the strength of a mere conjecture, be justified in detaching a strong right flank guard. We must employ only cavalry for purposes of protection and information to the east of the line of advance.

These considerations lead General A. to the following decision—the detachment to advance by the main road, to Antilly, keeping a good look-out towards Vigy and Argancy. Should the enemy be encountered south of Antilly, he must be promptly driven back, if the relative strength of the two

forces in any way renders it possible. The distribution of troops and the orders will offer no great difficulties.

The orders are naturally only the usual orders for an advance, such as we had in the first exercise.

In accordance with the rules I gave you in the second letter* the cavalry should be attached to the advanced guard, the composition of which in other respects should be regulated by the usual principles. I do not consider it necessary to have a battery in the advanced guard. The engineers may be attached to the advanced guard, because we are not certain of finding the road free from obstructions, and because on arrival at Antilly they will have to begin to prepare the position for defence without loss of time.

Either one or two sets of orders may be given for the march; the former procedure being justified by the consideration that, owing to the distance of the enemy, no further news regarding him is likely to come in up to the moment of starting.

As the detachment is a large one, the advanced guard and main body may assemble at different times and places, so as not to keep the main body unnecessarily long under arms before starting. I will assume that the officer commanding the detachment decides that the advanced guard start from the public-house (Krug) just south of the Ruine Chatillon, and the main body from the churchyard on the northern outskirts of St. Julien;—the advanced guard starting at 6 a.m.

The time of starting of the main body is thus calculated. From the public-house to the churchyard is about 450 yards; but as the main body must follow the advanced guard at a distance of 800 yards, we have to calculate for only 350 yards distance. The main body therefore will start later than the advanced guard by 350 yards + the length of the advanced guard = 2000 yards = 2350 yards = say

^{*} See p. 30.

1½ miles = 25 minutes, *i.e.* at 6.25 a.m. To remove all doubt, the distance at which it is to follow the advanced guard can be given the main body as well as the time of starting.

With regard to the outposts, see my observations in the fourth letter. You will do well to arrange the orders throughout, so that the outpost cavalry, although it has to resume at daybreak the duties of providing for protection, does not remain wandering about too long after the mass of the cavalry has taken over the duty of reconnaissance. I would, for instance, arrange for its moving to Chieulles soon after the cavalry of the advanced guard starts. If this appears in the orders, then the officer commanding the cavalry will know how to re-attach the two troops to his command in the simplest manner. Instead of Chieulles you could detail some other suitable point.

The baggage must be kept back pending the development of events at Antilly, and had better be sent back behind the Vallières brook. To prevent the baggage wagons blocking the village street while the troops are assembling, it is advisable that they leave the village somewhat later than the troops, so they may stand fast at first. It is a matter of indifference when they assemble. To facilitate their subsequent movement, they should be formed in column of route on the main road, and not be massed in some open space.

The orders will therefore be as follows:-

St. Julien-bei-Metz. 1. VIII. 89. 10 p.m.

DETACHMENT ORDERS.

DISTRIBUTION OF TROOPS.

- Advanced Guard: Col. B.
 I/Battalion (Rifles).
 I/1st Dragoons.
 II/1st Dragoons (less two sections).
 1st Field Co. R.E.
- Main Body: (in order of march).
 section from II/1st Dragoons.
 II/Battallon.
 Field Battery.
 III/Battalion.
 IV/Battalion (on outposts).
 Bearer Co.
- The Enemy is believed to be advancing, viâ Bettsdorf, on Metz. His cavalry patrols have been seen this afternoon at the Wald von Failly, and near Argancy, and some of his infantry at Vigy.
 - Our Main Body intends to cross the Moselle to-morrow by a bridge to be constructed at Malroy.
- 2. The Detachment will march to-morrow to Antilly, to cover the crossing.
- 3. The Advanced Guard will start at 6 a.m. from the public-house* south of the Ruine Chatillon for Antilly, moving by the main road, and reconnoitring towards Bettsdorf, Méchy, and Vigy. Any advance of hostile cavalry on the high ground about Malroy, Olgy, and Argancy is to be prevented.
- 4. The Main Body will be formed up by 6.25 a.m. in column of route on the main road, with the head of the column at the churchyard in the northern outskirts of St.

[&]quot;Krug" on map.—Trans.

[&]quot;Khf" on map. - Trans.

- Julien, and follow the advanced guard at a distance of 800 yards.
- 5. The Outposts will close in on the road to Antilly as soon as the vanguard has passed through the line of piquets. The outpost cavalry will join the advanced guard cavalry at 6.15 a.m. at Chieulles.
- 6. The Baggage, conducted by a section, under an officer, furnished by the II/1st Dragoons, will assemble at 7 a m., in column of route, south of the tannery* on the Vallières brook, where it will await further orders.
- 7. Reports will reach me at the head of the main body.

Dictated to the officers representing the several units.

A., Major-General.

Note that in these orders I have, with a view to impressing this method of procedure on you, neither arranged for a common place of assembly, nor stated where the several fractions of the force (Advanced Guard, Main Body, and Outposts) are to be formed up (prior to marching off). Instead of this I have detailed the points whence advanced guard, main body, &c., are to start; leaving it open to subordinate commanders to make their own arrangements as to where their respective commands are to assemble and parade, to

^{* &}quot;Gerberei." 1650 yards south of the churchyard whence the main body starts.—Trans.

⁺ Each subordinate commander will select a place central and of easy access from the place where the units composing his command have been quartered

which they may do either by written orders overnight, or verbally next morning. In the case of the main body only, for which there is no special commanding officer, the officer commanding the detachment himself must order where it is to parade next morning.

TWELFTH EXERCISE.

As the head of the vanguard reaches the point on the main road where a side road from the western end of Chieulles joins it (184 mètres above sea level), General A., who has ridden on in advance to the Ruine Chatillon, receives the following message from his cavalry which has trotted on ahead:—

"Enemy has taken up a position on spur extending from point 204.8 on main road to the south-east corner of Charly, with about 2 battalions, I squadron, and I battery, and has entrenched himself. He has unlimbered the battery just east of point 204.8 on main road. His squadron has retired from Rupigny on the Wald von Failly. A patrol which reached the Schloss Buy viâ Malroy reports main road south-west of Antilly clear of enemy."

- (1) Show on the map the distribution of the force on the march at the moment of receipt of above report.
 - (2) State the arrangements made by General A.
 - (3) Give reasons for the same.
- (4) Show on the map the distribution of attacking force just before assault.

N.B.—The Wald von Grimont has no undergrowth, and can be easily traversed.

the previous night. The place of parade need not be that of starting, e.g. suppose the I/Battalion and the R.E. had been quartered at the south end of the village of St. Julien, they might form up into one command, i.e. parade together as an advanced guard, at any convenient place in or near the village, the units concentrating there; after which the now formed advanced guard would march as a body to the P. H. so as to start thence at 6 a.m.—Trans.

MODEL FOR

ORDERS FOR ATTACK.

Place. Date. Hour of issue.

DETACHMENT ORDERS.

(No Distribution of Troops.)

- Information as to the enemy
 (in detail), and as to our
 other forces.
- Intention of O.C. Detachment (generally a brief statement which flank of the enemy is to be attacked). An order for the rôle of the Advanced Guard, as such, to come to an end.
- Order for the Artillery; (first position, first target [as a rule the enemy's artillery].)
- 4. Order for the Infantry, (stating in general terms how the secondary attack is to be carried out, and in rather more precise terms the route by which the troops, destined to carry out the main attack, are to move;—stating clearly the objective of the main attack, and, where more than one battalion is concerned, giving the name of the officer to command the main attack.)

- 5. Order for the General Reserve: (the troops to compose it, and what it is to do).
- 6. Order for the Cavalry: (protection of one flank by the greater part of it, patrols being sent to the other flank).
- 7. Order for the detachment reserve S.A.A. carts.* Position of dressing station of Bearer Company (only when both can be known beforehand).
- 8. Order for the Baggage.
- 9. Position of officer commanding (usually near the first artillery position).

Manner of communicating the order to the troops.

Signature.

In difficult ground, officers commanding brigades will give special directions as to their ammunition carts (the Infantry Brigade Reserve of ammunition).

(I.D. s. 132.)

THIRTEENTH LETTER

ORDERS FOR ATTACK

(Attack on an enemy already deployed in a position prepared for defence.)

N receipt of the report from his cavalry, General A. cannot doubt but that he must attack, as it would scarcely be possible for the bridge to be constructed at Malroy while the enemy holds the high ground north of Charly. In this case, therefore, it is a simple matter to arrive at a decision at once; still, for your future guidance, let me remind you always to make sure whether the attainment of the desired end really requires you to attack or not; and further, whether such attack has any reasonable prospect of success. Having once come, however, to a decision to attack, then make all your arrangements with a view to utilising to the full the strength of the detachment, for in the employment of such weak bodies as detachments, nothing is more reprehensible than half measures. In accordance with the advice I gave you on a previous occasion, always, before issuing important orders during a march, make an exact calculation as to the position of the several portions of the marching column (see fifth letter). In practice, General A. would not need to do so, as, looking from the Ruine Chatillon, he would see vanguard and main guard in the country before him; but it is necessary in working on a map, in order to guard against false ideas.

The advanced party of the vanguard will be about 400 yards north of the point (176) where the Chieulles-Malroy road crosses the main road; the head of the vanguard is just south of point 184 on the main road; the head of the main guard about point 190; and the head of the main body is south of the Ruine Chatillon.

The cavalry at this moment will be feeling the enemy along his whole front, and trying to ascertain his strength, the extent of his position, and how occupied; endeavouring at the same time to drive the hostile cavalry behind its own infantry, clear the heights bordering on the Moselle of the enemy's patrols, and then pass round the enemy's flanks and get a view of what is behind his position. The report received by General A. shows that the cavalry has already accomplished its task towards the enemy's right flank, thus enabling the G.O.C., at this early stage of the proceedings, to form a fairly clear idea as to how the position is occupied. On the left flank of the position is posted a complete hostile squadron, against which the bulk of our cavalry must now act—the more so as the orders for march specially enjoined observation through Méchy, and towards the Wald von Failly.

Special importance attaches to the fact that a patrol has already succeeded in seeing what is behind the enemy's position, and reported that no troops are moving along the main road near Antilly.

This lets General A. know that, at the present moment at any rate, no reinforcements are coming to the enemy from that quarter; and that, therefore, provided no reinforcements arrive vià Méchy, he has to deal solely with an enemy whose strength is as reported, to whom he is superior, if the cavalry report is correct, by two battalions, a squadron and a battery, so that he has a fair prospect of success in attacking.

The two extra battalions would not of themselves ensure superiority, for the advantage of being twice as strong in infantry is almost annulled by the fact that the enemy, from his defensive position, can utilize the breech-loading rifle to a far greater extent than can the attacker, who has to advance over open country. Our superiority in artillery is, however, of great importance, because it makes it possible to quickly put the enemy's battery out of action, and prepare the infantry attack with artillery fire so thoroughly that it will come off with, comparatively speaking, little trouble. Superiority in cavalry holds out a promise of good information during the action, the enemy being debarred from a like advantage.

If the half-battalion in the vanguard has not yet come under artillery fire (2800 yards), it may any moment expect to. Our artillery cannot co-operate until the infantry has deployed north-west of Chieulles in some strength. You thus see that, in this case, it would not be much use if there were a battery in the advanced guard, as it would be unwise on the part of the advanced guard to make its artillery trot forward and open fire unless adequately protected—the artillery being unable to fire from the ridge north of the Ruine Chatillon on account of the great distance, (besides which the trees along both sides of the main road would be in the way). The advanced guard should gain the protecting high ground of Chieulles with the least possible delay.

The enemy's position, from the main road to the south-east corner of Charly, has a frontage of about 1100 yards, which cannot be held in great strength by the force estimated in the report (2 battalions, I battery, I squadron). There can scarcely be more than a battalion holding Charly, the other being posted west of the village, and for the protection of the battery on the main road, part of both battalions being held in reserve.

It is as well here to state that it is but seldom in practice that cavalry can make such clear and precise reports as I have here given you in the data. The information which in this instance is conveyed in a single report will as a rule appear little by little from a quantity of reports, some true, some false. It is thus very often extremely difficult on service or in manœuvres to correctly decide the moment when the situation may be considered cleared up, that is to say, when the time is ripe for deciding on one's plan of attack—much more difficult than in theoretical exercises. The deciding agent which ensures this right moment not being allowed to let slip, is the ability of the commander to deduce his decision from the reports as they come in.

I take for granted that, in accordance with the advice I gave you in the first letter, you read the sections of the infantry and artillery drill books bearing on the subject of the attack of the three arms before you began to write out the orders. If so, you will observe that both books agree in emphasising the difference that exists between the collision of two forces when both are in movement, and the attack on an enemy already deployed in a position prepared for defence. The attack in this case must from the very outset be a carefully planned one. In particular, the circumstance of the enemy having prepared Charly for defence shows clearly that he has given up all idea of assuming the offensive to begin with; General A. consequently has the advantage of being able to choose the direction and manner of his attack. The deployment, covered by the advanced guard, can take place whenever and wherever best suits General A.'s plans, and before coming into action, (neither of which might be possible in the case of two forces meeting on the march). This deployment should, if possible, be effected not too far from the enemy, so as to avoid having to move a long distance across country in extended order. It is the direction and manner of attack that

in each case decides, as a rule, where the deployment from column of route is to take place.

In this case General A. is enabled to settle from the very outset how he will attack. The plan of attack, where detachments are concerned, is only a question, for the most part, as to whether the right or the left flank of the enemy is to be attacked. To attack both is possible only when the attacker greatly outnumbers the defender, for otherwise a detachment runs the risk of extending too far and being broken through by a counter-stroke on the enemy's part. To envelop a flank is a means of bringing about in the easiest manner the fire superiority which is indispensable to the success of an attack. Such envelopment, however, must be provided for in the first deployment, either by moving one's force to the front by separate roads, or by employing an échelon formation (of the several lines of attack). attempt to envelop the enemy with infantry already deployed in the first line, and possibly already engaged, would lead to no result except extending the front of the first line, i.e. to undue dissemination of it, unless the ground in some wholly exceptional manner favours such a procedure. Such is not the case in the present instance, however: so from the very first a mode of deployment must be adopted with a view to enveloping the enemy's position.

Only in exceptional cases is one under the necessity of making a frontal attack only,—generally when the ground renders it impossible to envelop the position. With detachments, however, this will seldom be the case, as such small forces require comparatively speaking so little space for the purpose of carrying out an enveloping manœuvre. When limited to a frontal attack, it is necessary to have strong reserves following the first line, to fill the gaps created by the numerous casualties caused by the enemy's fire; this implies small frontage with great depth. In ordinary cases, however,

when one is wholly unrestricted in enveloping a flank of the enemy, the frontage can be greater and the reserves • comparatively weaker.

With a view, however, to developing one's superiority to the utmost in attacking the flank, the troops must be so distributed that the assault is really decisive only on the flank; the rest of the enemy's position being merely kept occupied. The attacking force is therefore divided into a main and a secondary attack, the former being made as strong as possible, which implies cutting down the number of the troops composing the secondary attack. The art of commanding troops in action, therefore, lies chiefly in distributing the troops so as to best attain the object in view. But for a mixed detachment consisting of 3 or 4 battalions, with some cavalry and artillery, a frontage of I mile in attack is the very utmost that can be conceded; for, if it be more, not only is unity of command rendered very difficult, but the line would become too attenuated to deliver the decisive assault on the flank with the required vigour.

The secondary attack is generally carried out by the advanced guard; the main attack by the main body. If, however, it be intended to leave a large gap between the advanced guard carrying out the secondary attack and the main attack, the advanced guard would, in the case of a detachment, possess far too little power of resistance to permit of this being done without danger; for it would be

[•] The term "Reserves" is apparently employed in the same sense as by Clery (p. 343, 11th edition), meaning all troops in rear of the firing line, with the exception of the third line.—Trans.

^{† &}quot;If a brigade be ordered to assault and carry a particular point in the enemy's position, its frontage should not exceed about a third of a mile. . . . Where the attack is not to be pushed home a brigade will occupy a frontage of about half a mile."—I.D. 127.

In this paragraph of the *I.D.*, however, the brigade is not viewed as an independent force, but as forming part of a large force.—*Trans.*

positively inviting the defender to attack and overwhelm the isolated advanced guard, since it is so weak.

In view of this always remember that our (in the German army) brigade manœuvres frequently convey a false idea, in that in seeking to gain the enemy's flank the attacker often extends his front most inordinately. The mile of frontage which I have quoted above was the frontage of a whole division* in attack in the great battles of 1870.

As to which flank of the enemy is to be attacked, it depends principally on where the infantry can find most cover in their advance; for it is this alone which determines the question. If the infantry succeeds in setting foot in the enemy's position, the victory is won; all other measures adopted in attack are of importance solely in so far as they render it possible for the infantry to assault the position. Again, the longer the enemy remains in uncertainty as to the direction of the main attack, the more chance of success has the attack, as there is more likelihood of the enemy's reserves failing to arrive at the right place at the right time.

What assists the infantry attack more than anything is a good artillery preparation, to which end batteries should be massed. One will, therefore, in the second place make the main attack where the artillery can find a commanding position with a clear field of fire which promises an effective result.

Besides this, one attacks the flank which is weakest, or that which lies nearest to the enemy's line of retreat, so as, by threatening it, to compel the enemy to an early abandon-

^{*} The German division is 12 to 16 battalions, say 10,000 to 12,800 men; which would be 6 to 7 infantry per yard in attack.

The *I.D.* gives 1 division = 8 battalions = 6400 infantry per mile = $3\frac{1}{2}$ infantry per yard where attack not to be pushed home. 1 division = 8 battalions = 6400 infantry per $\frac{1}{2}$ mile = 7 infantry per yard where attack is to be pushed home.

ment of the position; or that where the attack can be made in greatest security with regard to its own flank and rear. There are other reasons, mostly of a strategical nature, which may induce one to attack this or that flank, with a view to forcing the enemy to retreat in a certain direction.

You thus see that several considerations enter into the question, and that, naturally, it is very rarely that one flank will satisfy all the above requirements. It rests with a commander, after weighing the situation, to select for attack that flank which combines in itself most of these conditions.

In the present instance we must first of all carefully consider the nature of the country in front of both flanks of the enemy.

On the right flank the hostile battery is posted on the hill by 204'8, and there will be infantry pushed out five or six hundred yards in front of it to protect it—probably at the break of the slope of the hillside in a direct line between Charly and Malroy, whence it has a clear field of fire to front and flank up to 800 yards and more. The attacker will come under this fire as soon as he tops the spur west of Rupigny. The enemy's artillery has a very good field of fire from the high ground by 204'8 towards the south and south-west. In brief, the approach to the position on this side is difficult.

Matters are more favourable to attacking infantry on the left flank of the position. Charly stands on a hillside, which rises tolerably steep behind the southern border of the village which the enemy holds. A slight spur or rather salient of the ground between Rupigny and Charly approaches within about 500 yards of the latter village, so that here, therefore, attacking infantry have but a comparatively short distance to advance under the full effect of the defender's infantry fire. Add to this that the houses and gardens of Rupigny favour the attack in that they give cover from the

enemy's artillery fire, and that Rupigny can be reached from Chieulles without our coming under artillery fire. The best line of advance on Chieulles itself is through the Wald von Grimont and the little hollow north of it. The infantry, therefore, will meet with most cover in attacking the enemy's left flank.

With regard to the question as to how the artillery can prepare the infantry attack, both flanks are about the same. The break of the slope between Charly and Malroy can be swept by fire without difficulty from the high ground west of Chieulles, at a range of about 2100 yards; if a shorter range be desired, there is a position on the spur just west of Rupigny. The attack on the south-east corner of Charly can be prepared either from the spur just west of Rupigny, at a range of about 1300 yards, or, (if we want to command the whole east side of the village,) from a position about 700 yards east of Rupigny. There is, therefore, no special difficulty to be encountered as regards artillery positions in front of either flank.

The enemy's left flank is weaker than his right because of the limited field for his infantry fire caused by the low-lying position of the south edge of the village of Charly. Besides this, the general situation of Charly, with a hill rising close in front of the village—the way in which the houses form a salient at the south-east outlet—and the vineyards bordering the village are all so unfavourable for defence that Charly cannot be considered a very strong supporting point, or one which we need hesitate to attack. At any rate it would be far more difficult to attack up the glacis-like slope in front of the enemy's right flank.

With regard to the enemy's line of retreat, it is a matter of indifference where we attack, as he has two roads to retreat by, either to Antilly or to Méchy.

It might be worth inquiring whether other considerations

might not induce us to attack the enemy's right flank. It must be borne in mind that the high ground about 204.8 is nearest to the point where the bridge is to be made at Malroy, so that we might conclude that the first thing to be done is to drive off the enemy from that quarter, and that therefore the main attack should be made there. If purely tactical considerations favour the attack on a flank, but other considerations do not, then in the majority of cases the former outweigh the latter, for the first and foremost requirement is, in general, to rout the enemy, to which all other considerations are subsidiary; such as, for instance, the compelling the enemy to retreat in a certain direction. In the case we are considering, the Moselle, lying close to the left flank of the attack, imposes the necessity of special caution. Imagine the main attack carried out west of the main road, and then a sudden counter-stroke made by troops hitherto unseen, issuing out from the Wald von Failly in the direction of Rupigny and the Moselle-and the detachment would be in a very critical position. It is therefore safer to make the main attack on the enemy's left flank, i.e. deliver the assault on Charly, while keeping the enemy occupied along the remainder of his front.

The detachment can manage well with the frontage of a mile (which I have said is the utmost allowable), providing it does not extend too far west of the main road—for which, indeed, there is no motive. The main attack, advancing viâ Chieulles and Rupigny, may extend almost to the Wald von Failly, while the secondary attack will advance, keeping east of the main road for the most part, against the hill between the village and the main road.

It is not, however, always the case, as here, that the commander is able, immediately on receipt of the decisive report, to issue his orders for attack; he will, on the contrary, often have first to ride nearer the enemy *himself*, to get a good

point of view. "In most cases a forward position best enables the G.O.C. to (1) superintend the first deployment of the troops (which influences, to a very great extent, the future progress of the battle); (2) gain an advantage over the enemy by quickly coming to a decision; (3) spare his own troops any unnecessary détours; (4) direct their action into appointed channels; and (5) guard against arbitrary decisions on the part of the officer commanding the advanced guard." (Infantry Regulations, II. 114.)

Were it not for the excellent view to be had from the Ruine Chatillon, General A. would have to take a good look round, say from the high ground west of Chieulles, before he could arrive at his important decision. In the present instance it is specially advantageous to be able to save time in this manner, because the orders ought to be issued as soon as possible. seeing that the main body comes in view of the enemy as soon as it passes the Ruine Chatillon, when also it will begin to feel his artillery fire. Whether the deployment is to be to the right or to the left, or on both sides of the main road, the main body ought to know as early as possible, before the first shells fall among them, and before it descends from the high ground, lest it take a wrong direction at the outset. There is, therefore, no time to be lost. Let me here again remind you, whenever making out orders for attack, before you fix on the place whence the orders are promulgated, to imagine yourselves in the commanding officer's position. If you do so, you will have no trouble in fixing on the right spot on the map, provided you always bear the above-quoted axioms of the Infantry Regulations in mind.

We must now come to the employment of the several arms in the attack. I can, in this place, only briefly refer to some of the principal points of view; very little, however, will suffice for our purpose, if you have mastered the sections of the drill books bearing on the subject.

Observe, first and foremost, that such coherent ("formal" or "combined") written orders for attack as the model I gave for your guidance, can in practice be given only if, as in the present instance, one is enabled, thanks to good cavalry reconnaissance, to form an accurate idea of the enemy's position, as well as, to some extent, in what manner his troops are distributed.

Otherwise, the ("immediate" or "separate") orders for attack are evolved by instalments, one after another, being composed in the saddle; since frequently it is not until the introductory movements are on foot that the actual decision as to how the attack is to be made, and with it the allotment to each subordinate commander of his individual share in the action, is matured in the mind of the G.O.C.* Able commanders, however, who are gifted with the power of swift comprehension and prompt decision, will always endeavour to issue, at the very start, combined orders for the whole detachment; for, as explained in the fifth letter, such orders are always preferable for ensuring the joint action of all; as the several subordinate commanders can much better work together towards a common object, if they are all simultaneously informed what duties are imposed on the other component parts of the force. As a rule, too, it occupies very much less time to make out one set of orders than when several separate orders with different wordings have to be sent to subordinate commanders. To send important orders verbally, by aides-de-camp, &c., as is often done in peace manœuvres under pressure of circumstances, is not reliable, for it opens the door to every sort of misunderstanding.

[•] See an able article by Major Pennington, in the *United Service Magasine* for June, '97, in which he contends that there must be occasions when only the most general orders for *attack* can be issued at the outset—the localities for *assault* being chosen as the attack develops, perhaps not until the first line is established at 500 yards or so from the enemy.—*Trans*.

Written orders, dictated to the adjutants, &c., are always preferable.

The intelligent co-operation, however, of all concerned is still further ensured if, instead of sending to them written orders, the officer commanding the detachment can assemble his subordinates on some commanding point overlooking the scene of operations, whence he can point out to them how the land lies, convey his orders personally, by word of mouth. explaining them, if necessary,—answer questions, and remove any doubts. In the present instance, circumstances forbid this in the case of the officer commanding the cavalry, who has ridden far on ahead, and the officer commanding the advanced guard, whose presence is indispensable at the front, where at any moment his troops may come under artillery It is possible, however, in the case of the senior artillery officer, and of the officer commanding the field company of engineers, whose place up till now is with the G.O.C.; as well as in that of the officers commanding units in the main body. These latter, therefore, must assemble to receive orders at the Ruine Chatillon.

The more complete the absence of all hurry or flurry in giving the orders, and the more forethought employed by the several subordinate officers in making their arrangements, the more orderly will be the advance, and the less likelihood will there be of confusion. Any urging on of the troops with a view to closing with the enemy as quickly as possible, is to be avoided; for experience shows that the men's impetuosity in attack needs reining in, not spurring on. The short time lost in assembling officers commanding units in the main body is therefore compensated for; since, as a rule, time cannot be said to be lost which is given to wise deliberation.

The officer commanding the detachment has very few arrangements to make, as he must above all things endeavour

to retain a general supervision over his whole force. Any attempt on his part to arrange too many details or to interfere everywhere with orders would dissipate his energies and cause him to lose the power of supervision. Errors in leadership would ensue, the more fatal as, once troops are set in motion in a given direction by his orders, that direction can only with the greatest difficulty be subsequently changed in the course of the action. there is nothing to be gained by his personal interference, for he would be taking over functions intended for his subordinates: while his own, for which he needs his undivided attention and bodily strength, would only too easily suffer detriment On this account the commander should reflect with due deliberation over his first orders for attack, for as a rule (but not always—the present case, for instance, is an exception) there is no great need for hurry.

When, however, the orders have been given, the subordinate officers must be left a free hand as to how they will perform the tasks imposed on them. The supreme commander contents himself with seeing that his orders are carried out; taking care, however, that the independence of subordinates does not degenerate into licence, and that the general deployment is properly made. In accordance with these principles, we have now to decide upon the several headings of the orders for attack, in conformity with the model I gave you.

At the moment when the report from the cavalry is received, the head of the vanguard, which started at 6 a.m., has covered about a mile and a half of road. It is therefore about 6.30 a.m. Allow the G.O.C. ten minutes for reflection—and that is very little—during which time the main body either continues marching or receives an order to halt, and officers commanding units in the main body are assembling at the Ruine Chatillon. The orders can then be issued.

"Ruine Chatillon. 2. VIII. 89. 6.40 a.m."

The information concerning the enemy must be given in considerable detail, thus:—

1. "The enemy, strength about 2 battalions, 1 squadron, and "1 battery, is in position from 204.8 on the main road to the south-"east corner of Charly, and is entrenched. The enemy's battery is "unlimbered at point 204.8, and his squadron is at the Wald von "Failly."

Of the western force there is no news beyond what the subordinate officers have already learnt from the orders for advance; there is, therefore, no occasion to again refer to it. The intention of the O.C. detachment may be tersely expressed, as the details are contained in the subsequent headings: "The detachment will attack the enemy, so as "to envelop his left flank."

With regard to the expressions "envelop"—"envelopment," take place on the battle-field itself, consequently under the eyes of, and directly influenced by, the G.O.C. "Turning movements," on the other hand, lie outside the actual field of battle, being executed by troops detached for the purpose, and it is very difficult, if not generally impossible, for the G.O.C. to directly influence them. A detachment attacking is concerned, as a rule, with envelopments (or flank attacks) only.†

The hitherto-existing rôle of the advanced guard, as such, comes to an end the moment the G.O.C. determines upon committing his whole force to the attack. There must be no uncertainty whatever upon this point, nor the slightest

[•] English "Flank attack."

[†] See WILKINSON SHAW'S *Tactics*, p. 311. "A small force may, however, sometimes with great advantage detach cavalry and mounted infantry, to threaten the adversary's communications,"—*Trans*.

misunderstanding as to the conditions under which the orders are issued. The advanced guard is a protection only while the force is on the march, and therefore has its raison d'être only so long as the force which it covers is marching; or while, in exceptional cases, it (the advanced guard) has to engage unaided an enemy who is in inferior force. When, however, the entire detachment is committed to the fight, the advanced guard has fulfilled its object, and the troops composing it must rejoin the several tactical units to which they belong. A perfectly clear understanding as to the conditions under which the orders are issued is of such importance in battle that my advice to you is always to expressly notify, through the orders, that the rôle of the advanced guard, as such, has come to an end.

Artillery is the arm which first comes into action. I am going to refer to many sections* of the artillery regulations, all of which you must carefully peruse if you wish to obtain, for the purpose of our exercise, a clear insight into the employment of artillery. Those officers in particular who do not belong to the artillery should not grudge this labour.

In action two or more batteries work together as a brigade division. If one of the batteries be employed in the advanced guard, it would, as soon as a general attack by the whole detachment is decided upon, cease to be under the command of the officer commanding the advanced guard. In the case of a detachment, however, there is a special reason for forming the artillery under one common leadership, because there is, as a rule, such a paucity of this arm that nothing but massing will render its action effective. Under any circumstances the orders must be so framed as to obviate any possibility of individual batteries fighting on their own account. The artillery commander must control every

[•] As this refers to the German drill books, I omit the reference in translation, but refer the reader to parallel passages in our Field Artillery Drill.—Trans.

available gun for the attainment of his object, firmly repressing any tendency to free will or independence on the part of battery commanders. Supposing, however, this done, it is further necessary that the artillery receive distinct orders from the G.O.C. At each individual moment of the action it must have orders as to in what direction the G.O.C. wishes its fire directed; for he alone can judge where at each moment the tactical situation requires the co-operation of artillery. The principle is that orders for the artillery never go direct to the several battery-commanders, but to the officer commanding the brigade-division. The latter tells the batteries their positions, the targets, the nature of projectile,* and the rate of fire, endeavours always to understand the plan of the officer commanding the troops, in so far as it has not already been detailed to him in the orders, and keeps an eve on the general course of the action; while his battery commanders are fully occupied with the technical service of the guns, and only when danger threatens take it upon themselves to order a change of target. It is, naturally, not only the right but the duty of every subordinate commander, as also of the officer commanding the brigade division, to take it upon himself to deviate from the orders he has received if such a course be urgently demanded; if, for instance, the situation be suddenly changed by movements on the part of the enemy. Guns must not, however, change position without the sanction of the officer commanding the detachment. The only exception to this rule is when the tactical situation demands an immediate advance, and then a report of the action taken must at once be made to the superior officer whose sanction has been anticipated. In all other cases the officer commanding the brigade division has to notify the officer commanding the detachment when he

^{*} NOTE.—The choice of projectile is generally left to the battery-commander with us. See Field Artillery Drill, 1896, chap. iii., sec. 8.

considers a change of position desirable. Slight movements, however, in order to give more effect to the fire, or for purposes of cover, are not to be considered as changes of position in the above sense.

Some amount of independence with regard to the handling of his batteries is accorded to the officer commanding the brigade division in attack; for the position of the guns is only approximately indicated to him,—the selection of the exact position being left in his hands. With this object he gallops on ahead to look out for positions, accompanied by his battery commanders. These latter then order their batteries into their positions.

With regard to the choice of position for the batteries. I may state that the guns, having been unlimbered behind cover, must be moved forward until the target is visible over the sights, for direct fire is always preferable to indirect. The latter should be employed only when the nature of the country or the tactical situation precludes the use of direct fire. Its employment is therefore exceptional, for, although there is no difficulty in firing from behind cover at a stationary target, yet the preparations for opening fire and the firing itself take a long time, comparatively speaking, and time is usually an important factor in engagements between detachments. Add to this that in such engagements one must retain the power of changing the target at any moment, but how difficult it is to do this with indirect fire requires no demonstration. In exceptional cases, of course, one must not shrink from overcoming all these difficulties, but it must be a matter of compulsion, and a case of there being no other position available. It is not advisable to seek out such difficulties if they can be avoided, merely for the sake of getting cover.

"Effectiveness of fire first; cover from the enemy's fire second," is a tested axiom, unaffected by the introduction of

smokeless powder, and in spite of clinometer or spiritlevel.*

The first artillery position, which is fixed by the officer commanding the detachment, is intended to open the engagement, and is, as a rule, about 2000 vards from the enemy's artillery; whereas to carry out the attack will generally necessitate a change of position to ranges under 2000 yards. Hence we proceed in practice as follows: the position of the enemy's artillery being known, take on the compasses a distance of 2000 yards, and look for a suitable position not too far outside this distance from the enemy's artillery, and only under specially favourable circumstances further than 2700 yards. The conformation of the country will, of course, often decide at what distance from the enemy our first artillery position will be. Longer ranges render it too difficult to observe whether shots are short or over, without which ranging is impossible. Accuracy of fire, however, is the most essential preliminary condition for the efficacy of artillery. In choosing a position, therefore, you must be careful to see that no hills, gardens, hedges, rows of trees, &c., hide the clouds of smoke from the projectiles bursting on graze used as trial shots. The employment of smokeless powder facilitates ranging both in attack and defence, as the battery commanders are no longer hindered in observing the fire by the smoke of their own guns or of those of the enemy. If the defender's artillery is well placed, there will be almost nothing to be seen of it; on the other hand it is of great importance to the attacker to take up his position as unnoticed as possible, for cover from the enemy's fire, and especially from his view, is, as a rule, the preliminary condition for obtaining a superiority of fire. In any case the

[•] For the detailed procedure in "indirect laying" see Field Artillery Drill, 1896, chap. iii., sec. 7. See also Prince Kraft's Letters on Artillery (translated by Major Walford), p. 147.—Trans.

officer commanding the detachment should avoid bringing his artillery into action at too long ranges in the attack.

In the present instance the first suitable position is on the high ground west of Chieulles, as far east of the main road as possible, as the best, as well as the most secure, position for the artillery is between the main and the secondary attack. So placed, it can support either, as required.

If you have allotted a battery to the advanced guard,* and have assumed that, while the orders are being issued, the enemy's artillery opens fire on the advanced guard, and that the battery of the advanced guard, by order of the officer commanding the advanced guard, has taken up a position more to the southern part of the above-mentioned hill:—then it will be the duty of the officer commanding the artillery to bring up the artillery of the main body somewhat in front of the advanced guard battery, in a position where it will be covered by the northern part of the spur (at a point on the map north of the words "Soldatengrab"). The officer commanding the detachment, however, would not order him so to do, but would be satisfied with merely telling him to take up a position on the high ground west of Chieulles. How he does it is his business. As in this instance the enemy is reported to have only one battery, the advanced guard battery (if there were one) need not hesitate to go into action by itself; but if the enemy had two or more batteries it would unquestionably have to await the arrival of the battery of the main body.†

If, on the other hand, there is (as I assume to be the case) no artillery with the advanced guard, both batteries would

^{*} The author does not do so. See p. 253.—Trans.

[†] The position of guns should, if possible, not be indicated to an enemy until the first gun fires; and, as batteries opening fire in succession are likely to be overwhelmed in succession, a simultaneous advance, and, as a rule, a simultaneous opening of fire, are essential. The advance should be so timed that the batteries come simultaneously into view of the enemy.—Field Artillery Drill, 1896, chap. i., sec. 2.

simultaneously come into position, covered from the enemy's view and fire, so as to open fire as unexpectedly as possible. The high ground west of Chieulles affords an opportunity for so doing. As it is of importance to bring into action a superior number of guns from the very commencement of the action, and to concentrate the fire as early as possible, it would in the present instance be highly desirable for the advanced guard battery (if there be one) not to open fire alone. In practice, however, this is not always possible. At any rate, simultaneously with the issue of the detachment orders the senior artillery officer assumes command of both batteries.

[The wagons conform to the movements of the batteries, and will follow them at 200 to 400 yards distance. On the batteries going into action, one wagon of each section goes forward at an increased pace, and joins the line of guns (wagon supply). Captains of batteries will halt the remaining wagons (3 per battery) under cover behind the hill, and not directly in rear of the guns.]*

As the enemy is entrenched, it is desirable to search him out behind his cover with high explosive shell with as little delay as possible.† To decide the artillery duel the batteries must move closer in, as soon as the infantry has advanced far enough; for instance, their next position may be on the spur west of Rupigny (1500 yards range). This change of position, as it will take place later on, need not be provided for in the first orders.—The first target for the artillery, to attain fire-superiority, is the enemy's artillery (supposing that

^{*} The sentences in brackets are not a translation of the original text, which describes the arrangements in the German artillery, but summarise the corresponding procedure in our drill.—Trans.

[†] I here omit certain technical details referring to the German artillery organisation. In the German army each battery has 2 wa one packed with high-explosive shell.

For the details of drill for a battery to come into action, see *Field Artillery Drill*, 1896, chap. i., sec. 8., and chap. iv., sec. 9.—*Trans*.

it has shown itself), the more so, in the present instance, because the enemy's artillery fire must be diverted as soon as possible from the infantry, whether of the advanced guard or of the main body. The order will therefore run,—"The batteries will take up a position on the high ground west of Chieulles, and fire on the enemy's battery."

The infantry of the advanced guard should, prior to the receipt of the orders for attack, enter into action only to such extent as is necessary for the protection of the main body. It will deploy first of all behind the hill west of Chieulles, and will endeavour by a direct advance to gain the high ground west of Rupigny, where it will, at the outset, stand on the defensive, to cover the artillery position. The head of the infantry of the main body has to move across country for about two miles to get to Rupigny, so some time must elapse before the infantry of the main body can join that of the advanced guard in attack. During this interval the advanced guard infantry must take care that it does not fritter away its strength before the main attack comes off; holding itself in check, so as not to forestall the intentions of the officer commanding the detachment by any independent enterprises.

As soon as the detachment orders for attack are promulgated, the infantry which has hitherto been in the advanced guard will endeavour to gain possession of the spur west of Rupigny, and hold its ground there until the main attack comes up. As soon as the main attack has deployed, this infantry assumes a new rôle, that of keeping the enemy occupied along his front, that is to say, the delivery of the secondary attack, which is intended to draw upon itself as much of the enemy's fire as possible, and especially to occupy the attention of part of his reserve, so that the enemy can employ as little of it as possible on his threatened left flank. It can hardly be expected that we shall succeed in drawing the whole of the enemy's reserve to the defence of

his front, considering the small extent of the battle-field, and the ease with which it can be overlooked. The duty imposed on the secondary attack, however, demands something more than a mere demonstration against the enemy's front. The frontal attack must be carried out with as much energy as the main attack, and differs from it only in that it need not always proceed to an actual assault. The secondary attack can therefore confine itself to approaching within "decisive "range" (500 yards) of the enemy's position,—there establishing a superiority of fire over the defence (this, however, requires corresponding superiority in numbers),—and bringing an effective fire to bear in support of the flank attack. The troops delivering the secondary attack do not therefore require great depth of formation, and can be formed on a broader front than those carrying out the main attack, where the protracted strain of battle requires great distribution in depth.

Thus the I/Battalion can, in attacking the space between Charly and the main road, extend on a frontage of about 500 vards, nearly double that suitable for a battalion* in the main The orders must, however, be so worded as to attack. closely define the extent to which the secondary attack is to deploy. This can be done thus:-"The I/Battalion will maintain its position on the ridge west of Rupigny, and will subsequently advance, east of the main road Metz-Antilly, in support of the main attack," &c. Although it is possible that in the course of the action a part of this battalion may have to extend west of the main road, yet the bulk of the battalion will be kept east of it in connection with the main Such details as where the battalion is to deploy for attack, and how it is to support the main attack, are left to the officer commanding the battalion, as it is his affair. It would, moreover, be impossible to give decided orders on these points beforehand, since they depend on the enemy's

^{* 800} strong. - Trans.

attitude at the moment. At any rate it is desirable that the main (or flank) attack be supported by fire to the last moment. The artillery cannot always do this, because at the final stages of the attack they will find it difficult to distinguish between their own side and the enemy, especially as with smokeless powder there are not two separate lines of smoke opposite one another; it is therefore frequently the duty of the secondary attack to establish itself in a good defensive position all along the enemy's front, and support the flank attack by its rifle fire. Whether it will answer, in practice, to leave the officer commanding the secondary attack a free hand as to all details will often depend on his personal character.

For the main attack and the reserve there are three The main attack must be as strong as possible; i.e. two battalions, which must be placed under one common leadership; the reserve consisting of one battalion. could hardly be a worse mistake than to tell off an insufficient force for the main attack, or to reinforce it by driblets, for this would be to forego the advantage of superior numbers, and an unsuccessful attack would not only cause useless losses, but wreck the "moral" of the troops. The objective of the main attack must be well known to all other parts of the force, above all to the artillery, as the assault on the selected point requires to be prepared by artillery fire for some time, as soon as the enemy's battery has been silenced. The way to the objective, however, need be defined in only general terms, so as to leave the officer commanding the flank attack sufficient independence as to how he will perform the duty laid upon him. This officer must be given at the outset most precise instructions as to what he is to do. so that no subsequent orders need be sent him. General A. will be strongly tempted to take charge of the main attack himself, or to be continually sending it orders, as a G.O.C. likes to see

it handled as he would handle it himself were he leading it; such interference, however, unless for some most urgent reason, would be a great mistake; as it might run counter to the plans of the subordinate commander, and fatal disorder in these two important battalions would be the immediate result.

The orders may direct that the route of the flank attack be via Chieulles and Rupigny. As, however, our own batteries in action on the high ground west of Chieulles are drawing on themselves the enemy's artillery fire, the main attack, in order to avoid unnecessary loss, must quit the main road and the meadows east of it, as modern artillery fire will sweep the whole country south of the position of our batteries with fragments of high explosive shells. To avoid this the main attack will leave the main road at the public-house (Krug) south of the Ruine Chatillon, and move on the Wald von Grimont. The order will therefore run:

"The I/Battalion will hold the ridge west of Rupigny, advancing subsequently, east of the main road Metz-Antilly, in support of the main attack, which, consisting of the II/Battalion and the III/Battalion, under Colonel C., will at once leave the main road, and move, viâ the Wald von Grimont, Chieulles, and Rupigny, against the south-east corner of Charly." When, where, and how he will deploy his battalions is entirely left to Colonel C.

In distributing the battalions for attack, bear in mind the order of march they are already in. The IV/Battalion, being at the rear of the column, will naturally form the reserve.

Let me now take this opportunity of drawing your attention to the following point. In this case, the main attack must move off to the flank very early, leaving the road, and breaking off from the advanced guard. This must be considered an exception to the usual procedure, peculiar to this

case. In very many cases the main body will be able to continue advancing in column of route, on the road by which it was marching, for some time after the G.O.C. has decided on his plan of attack, not deploying for attack until compelled to do so for the sake of cover. The longer its deployment can be postponed, and the longer it can keep to the road, so much the easier and quicker can the attack be carried out, for as soon as the troops have to leave the roads, their advance becomes considerably slower, owing to the obstacles met with in moving across country, though it frequently becomes necessary to move off to a flank, in order, as in this case, to get cover from the enemy's view or fire. One will, therefore, endeavour to postpone, to the last possible moment, the branching off of the main from the secondary attack. Where larger bodies of troops are in question (divisions), and the attack, as here, has to be made on an enemy awaiting it in a deliberately occupied position, so that it is obvious that he has no intention, at any rate, at the outset, of assuming the offensive, then, prior to issuing orders for attack, separate and special orders for deployment can be given. This, however, is very seldom necessary in the case of small detachments. whose deployment does not take long. In the present case it would be more correct to bear in mind the principle that formal deployments take time; a principle of special importance in the case of two forces meeting on the march. I would, therefore, give no orders in the present instance as to where the main attack is to deploy, but leave it to the officer commanding it to decide. You must, however, consider in each case that may present itself whether orders on the subject of deployment are needed or not.

The officer commanding the field company of engineers remains with the staff of the officer commanding the troops till the time arrives to employ his company. If there be no special work for the engineers, such as repairing

bridges in rear of the attacking troops, they should be attached to the reserve. Although engineers can fight as infantry, yet their proper sphere is the execution of works which, as in this case, may be of material assistance to the other arms and to the course of the action. In this case it is desirable to have several temporary bridges thrown over the little stream just north of the main road, from Chieulles to Malroy, to facilitate traffic; and in case of assaulting the village (Charly) the co-operation of the engineers in demolishing barricades, gates, &c., will be invaluable.

The reserve, where large bodies of troops are engaged, is usually stationed at some point in rear until its intervention in the combat becomes necessary; but with detachments this is seldom advisable, for the action is so quickly decided that there would be a danger of the reserve not being at hand when wanted. It is generally better to have it following the main attack at a distance of about 500 yards, and whether écheloned in rear of the right or of the left flank depends on circumstances, the country, &c. If the attack covers a very large extent of front, the best place for the reserve is between the main and secondary attacks. Thus placed, in rear of the gap between the two, it will guard against the danger of a counter-stroke penetrating between them. Otherwise it is best for the reserve to follow the outer flank of the main attack, prepared to prolong the outflanking movement. Either arrangement will suit the case in hand.

If you think the enemy is likely to make a counter-stroke from the west side of Charly, the reserve must be écheloned behind the left flank of the main attack. It might, however, be écheloned in rear of the right flank, since the enemy is probably sufficiently contained along his front by the I/Battalion, supported, if necessary, by the two batteries, so that we are at liberty to move the reserve towards the Wald

von Failly, to threaten the east side of Charly, and protect the main attack against any counter attack from out the wood. It will be necessary to attack the east side of the village simultaneously with the assault on the south-east entrance thereto: especially if, as is likely, the enemy holds the eastern border of the village with his reserves. You will see by this how difficult it is to properly outflank an enemy with a detachment, on account of the small number of troops available. In an attack which is, in a general sense, an enveloping one, the troops actually engaged in attacking the flank have in reality to make a frontal attack, so far as they themselves are concerned, as soon as the enemy has succeeded in forming a new front towards the threatened side. This new front will. however, in many cases, be unduly short and weak, so that the attacker obtains the fire-superiority, and therein lies the advantage of the enveloping attack.

The 5th order will be—"The IV/Battalion and the 1st Field Co. R.E. will form the reserve, following 600 yards directly in rear of the main attack"; or, which would be better, do not put the field company in the reserve, but, as No. 6 order, say "The 1st Field Co. R.E. will construct some bridges across the brook north of Chieulles, between the road Vany-Rupigny and the main road Metz-Antilly."

With regard to the employment of the cavalry, you must in attack, the same as in marches, observe the principle that, in order to have sufficient of this arm at hand to support the attack in case of need, no unnecessary bodies of cavalry should be detached. Bear in mind how much scattered the two squadrons will be when the enemy is encountered. If you assume, in the present instance, that the two squadrons have nearly half their effective strength out scouting, you will not be far from the truth. From this we may draw the conclusion that, wholly irrespective of the effect of smokeless powder, to which I shall refer later on, we cannot, where

detachments are concerned, count to any great extent on the effective intervention of cavalry in the fight. The proper sphere of cavalry is in providing for information and protection, and continues such despite the transition from march to combat, although its employment on the battle-field comes somewhat more into the foreground as soon as a close touch of the enemy has been gained. (The comparatively speaking numerous cavalry attacks that come off at our manœuvres are more for instructional purposes.)

Some time will elapse before the officer commanding the cavalry receives the detachment orders, and before he can collect at any rate a portion of his scattered squadrons with a view to employing them as ordered. It is a tactical axiom that both flanks of the attack should be covered by cavalry. To avoid, however, unduly disseminating the cavalry, the bulk of it must be employed where it is most difficult to provide for protection. It may be that the country affords so much cover from view at some part as to require a great deal of cavalry to reconnoitre there,-it may be that the enemy has posted so much cavalry towards one of his flanks that mere patrols can make no way there, and that therefore a considerable formed body of cavalry must be employed in that quarter,—or it may be that the general situation demands a special protection for the outer flank of the main attack, to protect it against being surprised just before the critical moment of the action by hostile bodies coming fresh into action. When, however, in the absence of any such considerations, you can employ your cavalry on whichever flank you like, choose that flank where the ground affords most facilities to cavalry for intervention in the action by means of a charge. In the present instance a clear view can be had of the country west of the main road as far as the Moselle, so on that side a few patrols are all that is wanted. On the other hand it is more difficult to

provide for the safety of the right flank of the main attack, in the direction of the Wald von Failly, besides which the enemy has an entire squadron thereabouts, the presence of which will greatly embarrass that reconnaissance in the direction of Méchy which is so imperatively necessary. It is here, therefore, that we must have the bulk of our cavalry. The troop which hitherto has been kept with the vanguard will now come under the orders of the officer commanding the cavalry, who can use it to cover the left flank: but in any case the orders must make it clear to the cavalry commander that he is responsible for there being sufficient cavalry on both flanks. If the cavalry has got out of the control of the G.O.C. during the advance, it is quite a matter of chance whether it works in accordance with his plans. It ought, as the infantry advances, to draw off from the front towards both flanks of the attack, and keep tolerably close touch with the infantry, ready to join hands with it in attack, but taking care at the same time that the work of reconnaissance continues without intermission. Although with large forces there is some cavalry with the reserve, this is a rare exception with detachments, where the handful of cavalry usually available has more than enough to do on the flanks; so that with detachments the reserve consists, as a rule, of infantry only.

In our case the orders must be so worded as to cause the cavalry to specially watch those roads by which reinforcements might reach the enemy during the attack, more particularly those passing through Méchy and Antilly; thus:—

"The I/ and II/1st Dragoons will cover the right flank, and reconnoitre towards the Wald von Failly and Méchy; sending patrols through Malroy to the Schloss Buy and Antilly."

Arrangements regarding the establishment of a dressing

station by the bearer company, or as to the position of the reserve of ammunition cannot always be made in the first orders, but here the situation is so simple that the course of the attack can be approximately foreseen. The bearer company may therefore be sent to the south-east exit from Chieulles, there to set up the dressing station close to the houses and water supply, and covered from the enemy's fire. Between this dressing station and the fighting line is the collecting station, whither badly wounded men are. conveyed as they fall in the fighting line, and whence they are passed on to the dressing station in ambulances.* The position of the dressing station must be fixed by order of the officer commanding the detachment, for he alone can judge where the fighting is likely to be so severe that the services of the medical officers attached to units will require to be supplemented.†

- This is in accordance with British organisation, and not as in the original.
- † A bearer company, in the British service, consists of 3 medical officers, I warrant officer, 6 staff-sergeants and sergeants, I bugler, and 53 rank and file; with I officer, I sergeant, 2 artificers, I bugler, and 36 rank and file attached from the Army Service Corps. It has 10 ambulance wagons, I equipment wagon, I medical store wagon, and I baggage wagon, all four-horsed; and I forage cart, I water cart, and one cart for tents, all pair-horsed—the horses (58) being furnished by the Army Service Corps. In action the company is divided into:—
- (a) Two stretcher sections under I surgeon; each section consists of I sergeant and I6 privates.
- (b) A collecting station, where a sergeant is posted, with a field companion in his charge.
 - (c) The ambulances, to which are attached 5 corporals and 5 privates.
- (d) A dressing station under the surgeon-major, assisted by I surgeon, I sergeant-major, I compounder, I sergeant, I bugler, I corporal, and 4 privates (one a cook for the wounded).

First-aid stations are formed by the medical officers attached to battalions, &c., to each of whom two trained men of the battalion are attached, and with each of whom is a mule with medical panniers. To these stations the wounded are brought by the battalion stretcher bearers (2 per company), and from them they are removed by the stretcher sections (a) of the bearer company to the collecting station (b) (above) where the ambulances (c) are assembled. From this point the ambulances convey them to the dressing station.—Trans.

The 8 reserve S. A. A. carts of the four infantry battalions will proceed to Chieulles, where they will remain provisionally. Were it possible for the main body to halt after receiving the orders for attack, it would be as well to issue to the men 50 rounds from the S. A. A. carts, so that every man shall carry 150 rounds on his person. Possibly there will be an opportunity of doing so later on, e.g. on the high ground near Rupigny. The two battalions of the main attack at any rate should receive the extra ammunition, for it is always very doubtful whether the regulations as to bringing up reserve ammunition to the firing line in action can be carried out.*

The orders should never lay down the line of retreat to be taken in the event of failure, as to do so would raise doubts as to the success of the attack. This, of course, is not to debar the officer commanding the detachment from having an eye to the possibility of retreat, and making plans in his own mind in readiness for such an eventuality. As a rule the retreat should be made in the direction of the baggage. No reference need be made to the latter in the orders on this occasion, as the orders for the advance (see last letter) have already stated where it is to remain, and there is no reason for changing that arrangement.

Lastly we have to decide the position of the officer commanding the detachment. It must, above all things, be easy to find, so that reports may reach him without loss of time, and should be in rear of the centre of the firing line, if possible, so that the G.O.C. can take in at a glance the course of both main and secondary attacks, and see not only his own firing line, but

^{*} Here again the original is paraphrased. See I.D. s. 132, according to which two carts per battalion (total 8) would be brigaded, under command of a selected officer, to form a reserve of S.A. ammunition for the detachment. In the German army each company (250 men) has its own S.A.A. wagon, so this arrangement would be impracticable.—Trans.

that of the enemy as well, for even the best reports cannot keep him so well informed about the state of affairs as his own eyes can. The G.O.C. should not, however, be too near the firing line, in order that he be not influenced by the ebb and flow of the combat; and he must also keep an eye on the reserve, which, as the experience of recent warfare shows, has a tendency to get out of his control. Experience also shows that the G.O.C. can better watch the progress of the action by remaining stationary; he should, therefore, select his position so that, if possible, it need not be changed. To be continually riding about, prompted by a nervous anxiety to show himself everywhere, will make it impossible for him to supervise the general course of the action, or calmly consider his plans. Besides, once he leaves his first position, orderlies with reports from the front will not be able to find him, so an officer will have to remain there to forward reports, &c. such a position as I have above described cannot be found. the G.O.C. should take up his stand where he can personally supervise the most important part of the battle-field, that is, the main attack. If the secondary attack has to work across country where it cannot be seen, the G.O.C. will send an officer of his staff who will keep him constantly informed as to its progress. This arrangement renders the G.O.C. independent of reports from the officer commanding the secondary attack, which are frequently far from being as complete as they should be; as the attention of the subordinate commander is, commonly, wholly taken up with the conduct of the attack which he is leading, so that he forgets to send reports to the G.O.C. The most usual place for the G.O.C. is near the first artillery position, which is at the outset about a mile and a quarter from the enemy on an average; and he changes his position together with the guns, when they move closer in to prepare the infantry advance. General A., therefore, immediately after giving out the orders,

would ride rapidly to the high ground west of Chieulles, where he would remain until the infantry of the main attack are deployed on the high ground between Rupigny and Charly.

Before putting the orders together, let me direct your attention to the following points which have to be considered before framing orders for attack:—

- (1) Consideration of our own situation.
- (2) Probable situation and intentions of the enemy. Is he already deployed or not?
- (3) Come to a decision. Is it necessary to attack? Shall the attack be frontal; on the enemy's right flank; or on his left flank?
- (4) Measure the frontage of the proposed attack. What is the smallest force that will suffice for the secondary attack?
- (5) Is (a) the flank, (b) the rear of the attack, protected against surprise? Are there any obstacles towards the flank or the rear? Is the line of retreat endangered?
- (6) How long can the main body remain in column of route? On what point, generally speaking, should the deployment take place? Where is the deployment to take place when an already deployed front of the enemy has to be attacked?

Is it necessary to issue special orders for deployment?

Ruine Chatillon, 2, VIII, 89. 6,40 a.m.

DETACHMENT ORDERS.

- 1. The Enemy, strength about 2 battalions, I squadron, I battery, has taken up a position extending from point 204.8 on the main road to the south-east corner of Charly, and has entrenched it. His battery is at point 204.8, and his squadron is by the Wald von Failly.
- 2. The Detachment will attack the enemy, enveloping his left flank. The rôle of the Advanced Guard, as such, will come to an end.
- 1st and 2nd Field Batteries R.A. will take up a position on the high ground west of Chieulles, and fire on the enemy's battery.
- 4. The I/Battalion will hold the ridge west of Rupigny, advancing subsequently east of the main road Metz-Antilly in support of the main attack, which, consisting of the II/Battalion under Colonel C., will at once leave the main road and move, viå the Wald von Grimont, Chieul-

- les, and Rupigny, against the S.E. corner of Charly.
- The IV/Battalion will form the reserve, following 600 yards directly in rear of the main attack.
- The 1st Field Co. R.E. will construct some bridges across
 the brook north of Chieulles
 between the road VanyRupigny and the main road
 Metz-Antilly.
- 7. The I/ and II/1st Dragoons will cover the right flank, and reconnoitre towards the Wald von Failly: also sending patrols through Malroy to the Schloss Buy and Antilly.
- 8. The Bearer Co. will establish a dressing station at the south eastern exit from Chieulles. The detachment reserve S.A.A. carts will remain at the same place.
- Reports will reach me on the high ground west of Chieulles.

A., Major-General.

- Verbally to the officers commanding the Main Body, the Artillery, and the Field Co. R.E.
- Copy sent to the Advanced Guard and the cavalry, by Lieut, R.

We have, in conclusion, to show on the map the distribution of the attacking force just before the assault. This affords us an opportunity of following the course that the attack will probably take, in pursuance of the above orders. Details are not called for, but the object is to see whether you have a clear idea of the distribution of the troops, and a knowledge of the formation in which they are.

On the extreme right flank are two squadrons (less a troop) in squadron column, with patrols at the Wald von Failly, and in the direction of Méchy.

In the main attack the two battalions are side by side, the firing line being about 350 yards from the border of Charly, the right wing being advanced-frontage about 700 yards at the outside (350 yards for each battalion)—the left of the firing line being on the road from Rupigny to Charly. Each battalion has at least half its strength in firing line and supports, and in many places the supports may have become merged in the firing line. The reserves will be following in line or in company columns—those of the right battalion écheloned in rear of the right flank; those of the left battalion in rear of the left flank*—and are as yet behind cover of the ridge: 500 yards in rear of the firing line are the two S.A.A. mules, and behind the reserve of each battalion two S.A.A. carts. The reserve battalion is in column of companies, in rear of the right flank of the main attack, and at a distance of not less than 550 yards. †

Between main and secondary attack there may be a gap, though not too large a one. The rifle battalion is about 500 yards from the enemy, the firing line being composed of six companies, the other two companies being in rear of the left flank, that is to say extended across the main road. As this battalion is intended to support the assault with its fire, and

Prepared to prolong the fighting line.—Trans.

[†] Prepared to prolong the outflanking movement .- Trans.

not go nearer the enemy than it already is, the six companies are all in the firing line, the left flank of which is west of the main road, the frontage of it being about 500 yards.

A troop of cavalry throws out patrols to cover the left flank.

The batteries will be either just west of Rupigny, or about 700 yards east of that village. I prefer the former position. because from the position east of Rupigny the artillery would have to fire over the heads of the infantry in the main attack. Though this is permissible, yet it should, whenever possible, be avoided. If you choose the latter position, it would be advisable to post one of the squadrons as an escort to the battery behind its right flank, for, although artillery does not as a rule require a special escort, yet sometimes an exception must be made in the case of guns on a flank. The batteries should be both on the same alignment. The practice formerly prevalent of placing batteries in échelon has lost its value with the introduction of smokeless powder and the flat trajectory of modern projectiles.* The limbers and teams, together with three wagons per battery, will be écheloned about 200 yards in rear of the outer flanks.

Note that the following principles must be observed in working out such distributions as this:—

A unit (company, battalion, brigade, &c.) which has both flanks protected (by other troops or natural obstacles) is justified in extending on the widest front possible. A unit which has only one flank protected will have supports and reserves in rear of the exposed flank.

The frontage of a company† in attack should not much exceed fifty-five yards, for a longer front cannot be kept at efficient strength throughout an action of any severity or duration.

[•] See Field Artillery Drill, 1896, chap. i., sec. 3.

^{† 100} strong. The original states that the frontage of a German company (say 200 effective strength) should not much exceed 100 metres or 110 yards.—Trans.

The extreme frontage of a battalion in attack is that of the eight companies deployed side by side, *i.e.* 440 yards. This, however, would mean a surrender on the part of the battalion commander of nearly all that power of influencing the course of the battle which is his so long as he keeps a portion of his force in hand; so a battalion will, as a rule, keep at least a quarter of its strength in "reserve." There cannot be any hard and fast rule as to whether a battalion is to put all eight companies in the front line, or six, or four. It depends entirely on circumstances.

One should in general avoid extending complete companies in the firing line, as they thereby become unmanageable. It is only at the last moment, just before the assault, as in this case, that the whole of a company should be extended in the firing line. Within 880 yards of the enemy, in open country, infantry in close order can only move backwards or forwards, even behind strong firing lines. As soon as the firing line gets to about 440 yards from the enemy's position, the crisis of the action is at hand, and it will soon be decided whether the assault can be carried out, or whether the attacker will have to fall back. With regard to the intervals between men in the firing line, i.e. with regard to the number of men to be extended, you will do well to ask yourselves the question "Is the fire to be decisive, or only preparatory and containing?" If the former, the more rifles in the firing line the better, so enough men are extended to obtain the maximum possible fire effect, which must be kept up in spite of the heaviest losses. In the second case comparatively few men should be extended, as you have to reserve your force for the crisis of the action later on, and the greater extension of the men contributes to reduce casualties in the meantime.

The object in view and the nature of the country regulate the distance between firing line and supports—supports and reserves. In the present instance, immediately before the assault, the reserves must be as near the firing line as possible, that they may assist in winning the day; since the crisis of the action lasts but a few moments. Here the country is favourable for bringing the reserves close up, as they will obtain cover in the various folds in the ground south of Charly.

In conclusion, a word on the subject of *smokeless powder*, in connection with which there are many doubtful points which have yet to be decided by further experiments in peace time, unless, perchance, nothing but actual war experience can clear them up. Enough is already known, however, to enable us to state the following advantages and disadvantages attendant on the employment of smokeless powder:—

The advantages are-

(1) Wholly irrespective of increased range, and power of increasing the number of rounds carried by the infantry soldier, smokeless powder will increase the effect and rapidity of fire, which is now no longer impeded and interrupted by its own smoke; besides giving increased facilities for its supervision. This applies even more to artillery than to infantry. Artillery has consequently increased importance in deciding a battle. Enhanced fire effect, however, means that the fire will be effective at longer ranges than hitherto. A range of about 600 yards will in future be an effective range for infantry. It will be necessary for infantry to take extended order when opposed to artillery very much sooner than hitherto; but as soon as it gets within 880 to 1100 yards of the enemy's artillery, the latter will soon be silenced.

The above advantages alone are so substantial that we were compelled to adopt smokeless powder as soon as any European power led the way.

(2) Subordinate commanders have increased facilities for influencing the moral of their men, because they can keep their men better under observation, while the latter are aware

of this fact; also because the example set by officers can be better seen, and consequently produce a greater effect than formerly, when so many heroic actions passed unnoticed except by the men close by in the firing line.

(3) It will be easier, both for infantry and artillery, to make good shooting (provided, however—and this is important—that we can see the enemy); as, other conditions being favourable, the smoke of the enemy's line will not interfere with the observation of the effect of our infantry fire, nor will the explosion of our own shells be confused with the reports of the enemy's guns. This advantage, however, is hardly worth considering in face of No. 3 of the disadvantages of smokeless powder, which I will now proceed to detail.

The disadvantages are—

- (1) It will be difficult to discover the enemy's position, if he is behind any sort of cover, as it will not be betrayed by his own smoke. Hence also reconnaissance will be more difficult for cavalry, as we have frequently seen in the preceding exercises. It will not do, either, to under-estimate the impression that will be made on the moral of the cavalry, if it suffers losses at long ranges without being able to see anything of the enemy. The result of this will be that reconnoitring cavalry, if they are to be of any use, must be fairly strong, and under the command of an officer or of a very energetic N.C.O.
- (2) With the abolition of the almost perpetual veil of smoke which obscured the view, and with the increased range of fire-arms, cavalry will find it more difficut to surprise infantry and artillery in action. This still further reduces the effect of cavalry on the battle-field. It would be an exaggeration, however, to assume that cavalry will no longer have any effect against infantry. Inattention, all sorts of mistakes, and fatigue—all of which follow in the train of an obstinate engagement—will still give the cavalry its opportunity. The

ground, too, will often assist cavalry, though it may have to make long détours to conceal its approach.

- (3) Smokeless powder gives one very little to aim at, at long ranges; for one will see nothing of infantry or artillery behind good cover, whereas formerly one could at any rate aim at the enemy's smoke. The artillery will feel this disadvantage more than the infantry, for in the future it will have the greatest difficulty in hitting at long ranges an infantry firing line or batteries already in position, the flash of whose guns it will only under the most favourable circumstances be able to see.
- (4) Smokeless powder will make it very much more difficult for superior commanders of large units to generally superintend an action, in the absence of smoke to show the position of their own lines and those of the enemy. Such commanders will, in future, be almost entirely dependent on reports from all parts of the fighting line (though subordinate commanders will probably forget, in the heat of action, to send them in), and on reports from the staff officers sent to different parts of the battlefield. It will take a superior commander more time to unravel the situation, and consequently both the opening stages of the attack and the whole action will last longer, and be attended with heavier losses. Rear guards, flank guards, &c., will be better able to prolong delaying actions to gain time.
- (5) A curtain of smoke will no longer conceal movements, such as the arrival of reinforcements, limbering up, and unlimbering. This will affect artillery rather more than infantry.
- (6) The moral of the troops will be more severely tried in action, for every infantryman, every gunner will clearly see the nerve-shattering scenes of destruction which are going on around him, which formerly were to some extent, at any rate, veiled by smoke. Fire concentrated on a point will be annihilating in less time than formerly.
 - (7) The defender will have more trouble in laying out his

field entrenchments, since it is nowadays of greater importance that shelter trenches, gun epaulments, &c., be not visible from afar, through their shape and colour (newly-turned earth, &c.). If this be not attended to, the advantage of being in an entrenched position, especially as against high explosive shells, may be wholly forfeited.

A consideration of the above points shows us that the introduction of smokeless powder has not entirely revolutionized the art of tactics. The following principles, however, will have to be observed:—Infantry must utilize cover to the utmost, adopt extended formations at the earliest stage of an action, and keep troops in close order as far to the rear as possible. Cavalry must expect losses in reconnaissance; and a commander will have to exercise great vigilance, and possess the power of rapidly forming a decision in action. Artillery must unlimber behind cover, look out for the enemy's batteries as they come into action, and beware of the enemy's infantry creeping up unseen.

THIRTEENTH EXERCISE.

(See General Map and Verny Map.)

General Idea.

A northern force, operating in its own country, is concentrating in the neighbourhood of the unfortified town of Metz. A southern force is advancing from Strasburg (85 miles S.E. of Metz) viâ Chateau Salins (25 miles S.E. of Metz).

Special Idea

For the Detachment from the Northern Force.

- I. A detachment from the northern force, under the command of Colonel A., consisting of—
 - 3 Battalions,
 - 3 Squadrons,
 - 2 Field Batteries,
 - r Field Co. R.E.,

has gone into close cantonments at Sablon on the night of the 2/3 March, 1889, with outposts, 1 battalion, $\frac{1}{2}$ squadron, on the St. Peter brook, and has orders to occupy Verny and Pournoy-la-Grasse on the morning of the 3rd March, to prevent the enemy advancing between the Seille and the Hospital Wald. Another strong detachment, under Colonel B., is to start from Grigy and occupy Orny and Grève-la-Haute on the 3rd March. Touch of the enemy has not yet been obtained, but, according to the report of a trustworthy frontier-official at Solgne (12 miles S.E. of Metz) hostile cavalry occupied that village on the afternoon of the 1st March. The frontier-official had to take to flight.

Required:--

The arrangements made by Colonel A. for the 3rd March, 1889, with reasons for the same.

II. Just as the advanced guard has set out, Colonel A. receives the following message from a cavalry reconnoitring patrol sent out by the outposts before daybreak:—"Point 237 I on the high ground east of the Wald von Avigy, 3rd March, 1889, 6 a.m.—Small bodies of the enemy's cavalry are holding the mill of Chérisey and the northern outlet from Verny."

Simultaneously with this the above-mentioned frontier-official informs Colonel A. that "hostile infantry with a battery entered Liéhon yesterday evening."

Ten minutes later the following message arrives from the same patrol:—

"Brick-kiln at Fleury. 3rd March, 1889. 6.45 a.m.

"A hostile squadron advancing from Pournoy-la-Grasse viâ Notre Dame to Fleury. Is now at Notre Dame. In rear of it on the same road is infantry, strength unknown. A troop of hostile cavalry is advancing at the trot along the main road north of the Bois Lamencé in the direction of Fleury, and two companies of infantry are on the march just east of the Bois Lamencé. I am retiring on Pouilly."

As the main guard of the advanced guard arrives at the St. Peter

brook, Colonel A., who has ridden up to this point, hears artillery fire towards the south-east, and at the same time the following report comes in from his cavalry at the southern outlet of Pouilly:—

"Have encountered hostile infantry on the main road south of Fleury and near Notre Dame. Have been driven back on Pouilly. Some of the infantry of the enemy, whose total strength I estimate at I to 2 battalions, I squadron, and I battery, has just reached Fleury and the brick-kiln on the main road. The enemy is remaining there, and seems to be taking up a position. A hostile squadron remains halted where the road from Fleury to Chesny enters the Hospital Wald."

At the same time Colonel B. reports from Jury-le-Petit:—"The enemy in my front has taken up a position between the point marked 270'8, south-east of Pierrejeux, and the Bois Cama. I am attacking through Pierrejeux."

Required:-

- I. Arrangements made by Colonel A. on the basis of these reports, with reasons for the same.
- 2. Diagram of the distribution of troops previous to the assault.
- N.B.—The Hospital Wald has dense undergrowth, and troops in close order must keep to the roads for the purpose of passing through it

FOURTEENTH LETTER

ORDERS FOR A MARCH AND ORDERS FOR ATTACK

(The collision of two hostile forces in movement.)

THE state of affairs does not justify promulgating assembly orders on the evening of the 2nd March, for at present the enemy is so far off that fresh news may arrive next morning of such a nature as to necessitate the whole of the orders for march being cancelled. Yet it is not incorrect to give two sets of orders, though I prefer one, in view of the absence of all complications in the situation, in connection with which I have but few prefatory remarks to make.

The object being to get touch of the enemy, who is distant, it would be a great mistake to put the bulk of the cavalry in the advanced guard. The work in hand calls for *independent cavalry*, operating far in advance of the comparatively slow-moving advanced guard, and trotting far on ahead in the direction of Solgne. Close connection between the advanced guard and the cavalry will consequently be soon dissolved. If, however, the cavalry were attached to the advanced guard, it would be doubtful whether we should get sufficient notice of the enemy's approach. The advanced guard must, of course, have sufficient cavalry to provide for the immediate protection of its own march, for which purpose I consider two troops sufficient, thus leaving two and a half squadrons for independent cavalry. Neither do I see any special reason for putting a battery in the advanced guard; and as to the

Field Company R.E., it is about the same whether it form part of the advanced guard or not, as there are good reasons for either course.

As the exercise tells you that touch of the enemy has not yet been secured, the orders must notify to subordinate commanders the direction in which he is *likely* to be met. Instead of the way I express it below, you might say "The enemy is advancing from Strasburg via Château Salins. His cavalry reached Solgne yesterday." This latter item of information may be assumed to be reliable, being got from one of our own officials, who is known to be trustworthy.

As to the direction in which Colonel B.'s detachment is marching, it need be referred to merely in general terms in the march orders; so, too, Verny will be given as the immediate objective of the march of our detachment, although the special idea lays down that Pournoy-la-Grasse is to be occupied as well, for when, later on, we are in a position to occupy both the villages (and at present it appears far from certain that we shall be able to do so) it will be time enough to tell the subordinate commanders about it.

In the month of March, when the sun rises about 6 a.m., it is not advisable to commence the march, unless there are special reasons for so doing, till 7 a.m. The places where the advanced guard and the main body respectively are to assemble should lie in the direction of the march, and be so arranged that no détour need be made to reach them, and that the troops composing the main body will not have to stand about unnecessarily before commencing the march. There should, of course, be separate places of assembly for advanced guard and main body respectively; the two I have chosen are about 800 yards apart. The length of the advanced guard is equivalent to about twenty minutes marching, so if the main body starts about twenty minutes later than the advanced guard, it will not take long to get

the proper distance as the march goes on. You can choose any point you like in front of the outpost line for the cavalry of the outposts to join the column of march, but you have to consider what time you will fix for its assembly there. I take for granted that the outpost cavalry actively reconnoitres along the roads leading to the south while the detachment is forming up for the start. Soon after 7 a.m. the independent cavalry trots through the outpost line, and takes over all duties of information* and protection.† The outpost cavalry assembles at a point well out to the front, say the northern outlet of Pouilly, and joins the advanced guard. You can calculate when the advanced guard will arrive there.

As we have not yet got touch of the enemy, the baggage may follow as usual, as, in view of the information so far to hand, it is not impossible that we may reach and occupy Verny and Pournoy-la-Grasse at our leisure, without anything being seen of the enemy. For the sake of convenience the baggage train may be formed up on the main road, late enough not to get in the way of troops marching from Sablon to the places of assembly.

The detachment must, to some extent, co-operate with that under Colonel B. to check the enemy's advance on Metz, and so cover the concentration of the northern force. The two detachments must therefore be in close communication with one another, and keep each other acquainted of their respective intentions. A report must therefore be sent to Colonel B. at Grigy, or else a copy of the march orders. You will do well to make a note on the left of the fold of this having been done, to show that you remembered it.

The orders for the march will therefore be as follows:—

[•] i.e. actively seeking information respecting the enemy's general movements, on which information the movements of the main body will depend.—Trans.

⁺ i.e. passively looking out for his approach, and warding off his attacks. See Cavalry Drill, 1896, vol. ii., part ii., sec. 1:—Trans.

Sablon.

2. 111. 89.

10 p.m.

DETACHMENT ORDERS.

- Independent Cavalry: Major C.
 1st Dragoons (less 1vth Squadron and 2 troops of 11nd Squadron).
- Advanced Guard: Colonel D. I/Battalion.
 troops II/1st Dragoons.
 Field Co. R.E.
- Main Body (in order of march).
 section from II/1st Dragoons.

II/Battalion.

1st Field Battery R.A.

2nd Field Battery R.A.

III/Battalion.

- The Enemy is likely to be met with in the direction of Solgne.
 - Another Detachment of our troops under Colonel B. will march to-morrow from Grigy to Grève-la-Haute.
- 2. The Detachment will march to-morrow to Verny.
- 3. The Independent Cavalry will march from the northern outlet of Magny at 7 a.m. in the direction of Solgne, passing through Verny and Chérisey, observing the Hospital Wald, and keeping up communication with Colonel B.'s detachment.
- 4. The Advanced Guard will start at 7 a.m. from the "old bridge" north of Magny, and move by the main road to Verny.
- 5. The Main Body will be formed up in column of route at 7.20 a.m. on the main road, with the head of the column at the bridge over the Seille south of Sablon, and follow the advanced guard at 770 yards distance.

- 6. The Infantry of the Outposts will form up on the main road Sablon-Verny as soon as the vanguard has passed the piquet line. The cavalry of the outposts will join the advanced guard at 8.20 a.m. at the northern outlet of Pouilly.
- 7. The Baggage, conducted by a section, under an officer, furnished by the II/1st Dragoons, will form up at 7.40 a.m. in column of route on the main road south of Sablon, and follow the main body at 1½ miles distance.
- Reports will reach me at the head of the main body.

Dictated to officers representing the several units and the outpost troops. Copies sent to Colonel B. at Grigy, by Lieutenant H.

Colonel.

After the detachment has commenced its march, Colonel A. receives several reports, not by any means all of equal moment to him.

The *first* report informs him that touch is got of the enemy, concerning whom all that was hitherto known was that he was advancing on Metz, and that his cavalry had got to Solgne on the 1st March. The news that the enemy has occupied Liéhon may be assumed to be correct: it shows

that hostile infantry is following close on the heels of the cavalry now in Chérisey and Verny, and Colonel A. must reckon on encountering the enemy in the course of the morning, as it is probable that the latter, having begun his advance on Metz, will continue it, having it open to him to move from Liéhon either through Grève-la-Haute or through Chérisev. It seems likely that the enemy's main force will keep to the main road along which it has till now advanced (the main road Solgne—Grève-la-Haute—Metz), having only a detachment moving west of the Hospital Wald; as the two main roads are so separated by this wood, which has dense undergrowth and few cross-roads, that the enemy can hardly have two equally strong columns one on each side of it. At any rate, these first reports, which, by the way, have taken a very long time in reaching Colonel A., need not lead to any change in his present arrangements, which perfectly meet the situation.

The second report made by the outpost cavalry reconnoitring patrol shows that the enemy has pushed on as rapidly as unexpectedly, and is approaching Fleury. receipt of this report, Colonel A. will have to ride forward and make observations in person as soon as possible. report says nothing definite as to the enemy's strength; all that is certain is that, not counting cavalry, which is of minor importance, two companies of infantry are advancing by the Verny-Pouilly main road, but we neither know whether any more infantry is behind them, nor the strength of the infantry moving on Notre Dame. Colonel A. has now to decide whether to take the offensive or the defensive. For the present he has no prospect of being able to attain his original object—the occupation of Verny and Pournoy-la-Grasse. He must be satisfied if he can act up to the spirit of his orders by preventing the enemy advancing too far northwards, consequently he must continue his own forward

movement, which will entail assuming the offensive later on, in case the enemy prove not to be so much stronger as to make the success of such aggressive action quite out of the question. To decide from the outset to stand on the defensive. say at Haut Guenot, or on the hill south of Magny, would be to fail in his duty; for he would be surrendering to the enemy all the country between the Seille and the Hospital Wald. The necessity for co-operating with Colonel B. also requires that Colonel A. continue advancing; for the further Colonel A. advances, the more of the enemy's attention will he draw upon himself, and the more will Colonel B.'s work be facilitated. Besides, as soon as the enemy can make use of the important cross-road from Fleury to Chesny. Colonel B.'s troops will be liable to be taken unexpectedly in flank from the Hospital Wald.

It therefore seems a case of the collision of two hostile forces when in movement, the detachment having to deploy from column of route against an enemy who is himself engaged in forming up. The second report, however, does not say when or where the enemy is forming up, so this report will not induce Colonel A. to alter his present arrangements. He will reckon on his independent cavalry very soon getting touch of the enemy, and on then receiving such definite information as to give him plenty of time to issue orders for deployment from column of route, or for taking up a defensive position, if such a course be absolutely necessary. The only thing that will be changed is his own position, as he should be well to the front when fighting seems imminent; and he will lose no time in notifying this change, especially to the advanced guard. A summary of the information so far received, and a notification of his decision to continue his advance must be sent to Colonel B., so that this officer may not be left in the dark for a moment as to what is going on west of the Hospital Wald.

The third report is complete and detailed. From it it appears that the enemy is forming up at Fleury, and taking up a defensive position, thereby foregoing the offensive and acknowledging himself to be the weaker. On learning this. Colonel A. decides to attack, and thereby is in a position to select the manner of his attack. The report approximately estimates the enemy's infantry at one to two battalions, so, even if we accept the higher estimate, Colonel A. is superior to the enemy both in infantry and artillery. To inactively confront the enemy, or merely make a demonstration to delay him, would, besides being open to the objections I have already detailed, enable the enemy, under cover of his position at Fleury, to employ part of his reserve troops to participate in the fighting which has already begun east of the Hospital Wald, in which direction Colonel A. hears artillery fire, that is to say, supposing that the enemy has more troops coming up in rear, which, however, it is impossible for us to know. If Colonel A. succeeds, by a rapid assault, in capturing the position at Fleury, he will be in a favourable position to meet this latter contingency.

The officer commanding the detachment consequently decides to *attack vigorously*, employing his whole detachment for the purpose, even supposing that the enemy should advance beyond Fleury.

The enemy is at this moment himself in the act of forming up; our object therefore should be to get the start of him in deploying, and not allow our deployment to delay the attack. We must arrange the main attack so that, if possible, no time may be lost over preparatory deployments on the base line. The duty of the advanced guard battalion is to gain time and space for the infantry of the main body to deploy, and the artillery must be immediately pushed forward in support of this object. The more the artillery succeeds in attaining this purpose without stronger bodies of

infantry having to come into action the better. By at once bringing the artillery into action we also crush the enemy's artillery as soon as it opens fire, and from the very commencement of the action; thus gaining a superiority of fire as early as possible and preparing the way for the infantry attack.

If you thoroughly understand these important principles, and remember the explanations I gave in the last letter, you will not have much difficulty in framing the orders for attack; so there is not much for me to say.

First and foremost, Colonel A. must ride forward with his staff, which includes the officer commanding the artillery and the officer commanding the Field Co. R.E., from the valley of the St. Peter brook to some point whence a good view can be obtained over the country that will be the scene of operations. (He will also take with him the officer commanding the advanced guard.) The Haut Guenot will do, and there he will issue the orders, having first calculated whereabouts the several portions of his column are, (so far as he cannot see them for himself,) and critically examined the enemy's position at Fleury, to decide which flank of it he will assault.

With regard to the enemy's position, the fact that there is a clear field of fire (1) from the houses north of the brick-kiln, (2) from the road connecting the brick-kiln with Fleury, (3) from the northern part of the western border of the village, and (4) from the western part of the northern border of the village, is in the enemy's favour; but the ridge north-east of the village limits the field of fire to the north-east and east so much that he will probably have to take up a position outside the village in this quarter. The village is compact in form, and the outskirts admit of a strong exterior line of defence; it may, therefore, be considered a strong supporting point. There are suitable

positions for the enemy's guns either between the brick-kiln and Fleury, or on the high ground 218, east of the village. In the latter case, the enemy would have to adopt special precautions to protect them. The whole position has a frontage of about half a mile, and the west flank rests on the Seille, while the Hospital Wald to the east will prevent the attacker getting far round that flank. The position, therefore, is such a good one, that it is highly probable that the enemy will hold to it and await the attack. Although the field of action is narrowed by the Seille and the Hospital Wald, it is still possible to attack a flank, for the enemy cannot extend his flanks far enough to push them close up to the Seille and the Hospital Wald.

Colonel A. decides to make the main attack on the northeast corner of Fleury, for the following reasons:—

(1) The ground gives no cover between Pouilly and the brick-kiln at Fleury; (2) an approach may be made, from the source of the Bouillon brook, sheltered by the copses east of Pouilly, to the hill 218 north-east of Fleury; (3) there is a good artillery position on the under-feature just east of Pouilly, for bringing fire to bear on the north-east angle of Fleury—the point selected for assault; (4) the enemy has not got a clear field of fire from the north-east of Fleury; (5) the proximity of the Seille to the enemy's west flank.

The secondary attack, starting from Pouilly, will advance along the east side of the main road. Moreover it is much better to drive the enemy back on the Seille, thereby separating him from his other forces, than in the direction of the Hospital Wald, where he would effect a junction with them.

The frontage of the attack, from the main road eastwards, should not be more than 1700 yards. The outer flank of the secondary attack can be easily secured against surprise, as

the Seille valley is open to view; but the outer flank of the main attack must be carefully protected against surprise from the Hospital Wald.

It is a disadvantage to have the St. Peter brook in rear of the attack, in case of our being repulsed;—there being only two bridges and a ford available. To be on the safe side, the engineers had better construct one or two temporary bridges east of the main road. It is hardly necessary to construct bridges to facilitate crossing the very unimportant Bouillon brook, though it would not be a positive mistake to provide for this in the orders. The infantry of the advanced guard will begin by occupying Pouilly, which is an important supporting-point, and wait there till the main body comes up and deploys for attack east of the main road, under cover of the advanced guard. advanced guard should not, for the present, go beyond Pouilly, but cover the advance of the main body; not even if, contrary to our expectation, the enemy seems to intend advancing beyond Fleury. The artillery must come into action with as little delay as possible, taking up a position Later on, after some infantry has on the Haut Guenot. been pushed forward, the guns can move to more advanced By holding Pouilly with the infantry of the advanced guard, we satisfy the tactical principle that artillery must be protected from hostile infantry fire by means of detachments of its own infantry pushed out in front of it; even supposing that the enemy were to advance beyond Fleury.

The infantry of the main body can continue advancing in fours, or in quarter-column as the main road is so broad, up to the point where a side road branches off eastwards just north of Pouilly, as up to this point it will be *completely under cover*; but here it will have to deploy obliquely to the left, and the main and secondary attacks will separate. An

almost equally good arrangement would be for the main body to quit the main road at St. Thiébault and deploy to the left.

The reason why in this instance the officer commanding the advanced guard battalion has less freedom of action accorded him, and is instructed not to go beyond Pouilly, is to be found in the uncertainty which exists as to what the enemy is going to do next. The report from the cavalry leaves us in doubt on this point; all we know is that the enemy has at any rate halted for the time being, which gives us a chance of being able to occupy Pouilly without any fighting; but it is quite possible that he may later on advance beyond Fleury. By holding Pouilly on the defensive the battalion in that village could hold its ground against the enemy's advance, at any rate until the main body could come to its assistance, as the enemy will take some time to deploy prior to attacking.

As soon, however, as Colonel A.'s main body comes into action east of Pouilly, it is no longer merely a question of repulsing from Pouilly an enemy who may be assailing that village, but of capturing the enemy's own position at Fleury. In framing his orders Colonel A. must, therefore, so word them as to meet either contingency, whether the enemy, as is probable, remains in his good position, or whether he pushes on to somewhere between Fleury and Pouilly by the time the main body arrives on the scene. The orders should clearly express the G.O.C.'s intention to attack vigorously, no matter what happens. Compare the situation here with that in the preceding exercise, in which you could safely assume that the enemy would confine himself to a defensive rôle. The order here can run on exactly the same lines as in that case, because General A., having thoroughly made up his mind to attack, is seeking to carry out that intention by every means in his

power, and can allot to his subordinate commanders the same duties as he would do under any circumstances.

It would be quite incorrect to order the advanced guard battalion to stop in Pouilly during the attack on Fleury by the main body, with the idea of securing thereby a rallying position in case of the attack failing. This would be equivalent to dispensing with the services of one-third of the infantry, and it is important to note that, in the great majority of cases, detachments, if they attack at all, do so with every available man. I will now give you the complete orders for attack, to show the measures adopted in their entirety, after which I shall have a few observations to append.

Haut Guenot. 2, 111. 89. 8 a.m.

DETACHMENT ORDERS.

- I. The Enemy, strength 1 to 2 battalions, 1 squadron, 1 battery, has reached Fleury and the brick-kiln on the main road. His squadron is halted where the road from Fleury to Chesny enters the Hospital Wald.
 - The Detachment commanded by Colonel B. is engaged with the enemy west of Mécleuves.
- 2. The Detachment will attack the enemy, enveloping his right flank. The rôle of the advanced guard, as such, will come to an end.
- 3. The 1st and 2nd Field Batteries R.A. will come into position at once on the Haut Guenot, and fire on Fleury.
- 4. The I/Battalion will occupy Pouilly, subsequently advancing east of the main road in support of the main attack, which will be carried out by the II/Battalion, which will leave the main road 100 yards north of Pouilly Schloss park, and move by the copses east of Pouilly, and the high ground marked 218, east of Fleury, against the N.E. angle of Fleury.

- The III/Battalion will follow as a reserve, 550 yards in rear of the left flank of the main attack.
- 6. The 1st Field Co. R.E. will throw some bridges across the St. Peter brook between the St. Peter bridge and a point 1600 yards east of it.
- 7. The 1st Dragoons will cover the left flank of the attack, reconnoitring towards the Hospital Wald, Pournoy-la-Grasse, and Orny, and will send a patrol along the bank of the Seille, viâ Moulin-de-Fleury. Communication must be maintained with Colonel B.'s detachment.
- 8. The Detachment Reserve S.A.A. Carts will halt on the north side of Pouilly.
- The Baggage will remain where it is on receipt of these orders.
- 10. Reports will reach me on the hill just east of Pouilly.

A., Colonel.

Verbally to the officers commanding advanced guard, the artillery, and the engineers. Copies sent to the cavalry by Lieut. P.,—to the main body and the baggage by Lieut. W., and to Colonel B. by Lieut. S.

No. I says nothing as to the position of the enemy's battery; our artillery will therefore have to be on the lookout. No. 1, however, tells the subordinate commanders what the artillery fire meant which they heard on the other side of the Hospital Wald. In No. 3 the artillery is ordered to fire on Fleury, because the enemy's battery has not yet shown itself. As soon, however, as our guns open fire on the village, the enemy's battery will show itself, and the target of our guns must be changed by order of the officer commanding the artillery. The fire, therefore, of our batteries on their first target (the village in this case) partakes more of the nature of reconnaissance, by causing the enemy's artillery to open fire, and thus disclose its position. The Haut Guenot is about 2700 yards from Fleury. The hill 2179, south of the Haut Guenot, is not suitable for an artillery position, on account of the copses in front of it.

The officer commanding the I/Battalion has to judge the right time to advance beyond Pouilly in support of the main attack, but, should he be behindhand in so doing, an order will have to be sent to him. In any case the officer commanding this battalion should be given to understand from the very first that in all probability he has only to occupy Pouilly as a temporary measure. On this account the general rule not to make arrangements too far in advance is not followed in this case.

As the main attack consists of only one battalion, it is unnecessary to specify the officer who is to command it.

In the order for the cavalry it is as well to refer to the necessity of keeping up communication with Colonel B.'s detachment, which might otherwise be easily forgotten in the excitement of battle. Patrols will be able to get through the Hospital Wald by the footpaths.

The baggage train may either halt at once, or await further orders at the northern outlet of Magny, but it should not

on any account cross the St. Peter brook, and it is better for it to remain north of Magny, to ensure the main street of the village being unobstructed, should we have to retreat. It would be an excess of caution to send it back to Metz.

As soon as the advanced guard occupies Pouilly, Colonel A. takes his stand on the hill just east of that village, as from there he can better watch the advance of the main attack, and is near the battalion hitherto in the advanced guard. The artillery will come into position on the same hill later on. A copy of the order is sent to Colonel B. as the quickest way of letting him know how things are going on west of the Hospital Wald.

Though I have given you one set of "combined" (or "formal") orders, you have doubtless said to yourselves, in view of my observations above (in the thirteenth letter), that the orders would probably not be given in this complete form in practice. The orders might, for example, have come in the following sequence:—first of all Colonel A. sends an "immediate" order to the advanced guard battalion to occupy Pouilly, and to the artillery to move up into action; in addition to which a statement as to the general situation would be necessary. as in No. 1 of the above orders, for the information of the subordinate commanders concerned, (the officers commanding I/Battalion and artillery). After a time "immediate" orders are again issued on the subject of the arrangements contained in Nos. 6, 9 and 10 of the above orders, accompanied likewise by a brief statement as to the general situation. Finally, when it becomes a matter of certainty that the enemy intends holding to his position at Fleury, "immediate" orders would be issued on the subject of the arrangements detailed in Nos. 4, 5 and 7 of the above orders, again accompanied by a review of the general situation, and by mention of the arrangements dealt with in Nos. 8 and 10 of the above orders. If you have issued your orders for

attack in such form as this, it is, of course, not incorrect. Such procedure is unavoidable when the G.O.C. is in the dark as to the enemy's mode of action, but it is much more diffuse than one set of combined orders.

In issuing only one set of orders ("formal" or "combined,") you must be careful to mention, in your reasons for the same, that the G.O.C., before issuing them, was perfectly certain that the enemy intended to await attack in his position at Fleury. It would be good practice to put the orders in the other form, and, in so doing, you must consider what amount of information must be given to the subordinate commanders to ensure their working in accordance with your intentions. For instance, the order to the Field Co. of Engineers would run as follows:—

Haut Guenot. 3. III. 89. 8.10 a.m.

TO THE OFFICER COMMANDING THE 1st FIELD CO. R.E.

I am about to attack the enemy, who is reported to be at Fleury. Construct some bridges across the St. Peter brook, between the St. Peter bridge and a point 1600 yards east of it. Reports will reach me on the hill just east of Pouilly.

* Verbally by Lieut. R., A.D.C.

A., Colonel.

[•] The following is extracted from a lecture on the subject of orders contained in the *Journal R.U.S.I.*, July, 1896.

[&]quot;Of course, many orders in presence of an enemy must be verbal, of necessity ... When time presses, it is best to send a separate order to each portion of the force. ... As regards attack, ... it will be rare indeed that the exact position of the enemy will be known until the troops are in collision. Also time will seldom

FOURTEENTH EXERCISE.

By 11.30 a.m. Colonel A. has succeeded in dislodging the enemy (strength 2 battalions, 1 squadron, 1 field battery) from his position at Fleury. Colonel A.'s infantry have got into great disorder, but have ceased firing on the enemy, who has got out of range. Colonel A.'s batteries are in position on the road between Fleury and the brick-kiln, and are firing in the direction of the Bois Lamencé. towards which the enemy has retreated in confusion. The I/Battalion is at the brick-kiln and in the western part of the village: the II/Battalion, which has suffered heavily in the assault on Fleury. in the eastern part of the village; and the III/Battalion has re-formed on the eastern outskirts of the village, north of the vineyards. The Field Co. R.E. and the infantry reserve S.A.A. carts are entering the northern outlet of the village. patrols have pushed on through the Hospital Wald, and have reported that Colonel B.'s detachment, though confronted by an enemy in superior strength, is holding its ground on the line Hospital Wald-Pot-de-Vin-Mécleuves. Colonel A., standing by the brick-kiln, observes that the enemy is re-forming a firing line

permit of elaborate arrangements. The shape which the formal (or combined) battle order will generally assume will be an order for an advance on a broad front to a rendezvous position. Further orders will depend on the results of reconnaissance, the action of the advanced guards, and on the gradual development of the fight."

The following from Captain James' Handbook of Tactics (p. 194): "Immediate enters are those which must be carried out at once, e.g. an order to a particular body to attack. Circumstances alone can determine in this case whether it is necessary or not to describe the situation. If issued to troops in the immediate neighbourhood of the officer issuing them, it would hardly be necessary. If sent to an officer some distance off, as, for instance, to a division or army-corps five or six miles away, to press on its advance or make a flank attack, it would be better to state briefly the position of the enemy and of the troops engaged. . . . Immediate orders are written in the second person, but are signed as usual by the senior staff officer. Formal orders include those which do not, as a rule, require instant execution; e.g. orders for the march next day. They are written in the third person, and signed by the senior staff officer (A duties), not by the officer giving them."

along the ridge about 550 yards north of the Bois Lamence, and extending east and west of the main road, and that a battery is coming into action east of the main road on the same ridge, when the following report arrives from a cavalry patrol:—

"Southern Border of the Bois Sembrone. 11.15 a.m.

"Three hostile battalions and a battery on the road from Chérisey viâ Pournoy-la-Grasse to Fleury. Head of the column just passing the northern outlet of Pournoy-la-Grasse. None of the enemy in Orny. Two hostile batteries firing in a northerly direction on the high ground 270.8, south-east of Pierrejeux. An infantry action apparently going on about Pierrejeux."

State the arrangements made by Colonel A., with reasons for the same; marking on the map the distribution of the troops in the position selected.

ORDERS FOR TAKING UP A DEFENSIVE POSITION.

Place. Date. Hour of issue.

DETACHMENT ORDERS.

(No Distribution of Troops.)

- I. Information as to the enemy and our other forces.
- 2. Intention of G.O.C.

(A brief statement, in general terms, as to the position which is to be defended. Sometimes it may be mentioned that the hitherto-existing rôles of the various portions of the column of march may be considered as terminated.)

- 3. Order for the Artillery.

 (Position, and target, and whether artificial cover for guns is to be constructed.)
- 4. Order for the Infantry of the first line. (Division into sections—allotment of troops to sections—whether field entrenchments are to be constructed. Dividing lines between sections to be defined in unmistakable terms.)

- Order for the General Reserve.
 (Troops composing it, and its position.)
- 6. Order for the Engineers.

 (Steps to be taken to prepare the position for defence.

 Bridges to be constructed in rear of the position.)
- Order for the Cavalry. (The bulk of it to protect one flank of the position. Patrols on the other flank.)
- 8. Order for the Infantry reserve S.A.A. carts, and position of the dressing station.
- 9. Order for the Baggage.
- 10. Position of G.O.C.

Manner of communicating the orders to the troops.

Signature.

FIFTEENTH LETTER

ORDERS FOR THE OCCUPATION OF A DEFENSIVE POSITION

A T 11.30 a.m. Colonel A.'s efforts are being directed towards restoring order among his troops, who have lost all formation in the course of the assault on Fleury. It is not enough to have captured the position, but the success must be rendered permanent and assured by re-forming the troops who have been thrown into the confusion which inevitably accompanies a charge, fortifying the position against any attempt at recapture, and preparing as quickly as possible for any new duties that may present themselves. Such a fresh task now lies before the detachment, for three fresh hostile battalions and a battery are reported to be moving on Fleury by the Pournoy-la-Grasse-Notre Dame road, and the G.O.C. himself observes how the hostile troops who had been driven back on the Bois Lamencé are endeavouring to rally. It is quite impossible to continue the offensive under such circumstances; on the contrary, the G.O.C. will be satisfied if he can, in view of the enemy's superiority in numbers, hold to the position that he has won. To do so is necessary not only in pursuance of the duty incumbent on him of preventing the enemy's advance on Metz, but also to co-operate with Colonel B.'s detachment, which is apparently engaged along the line Hospital Wald-Mécleuves.

Colonel A.'s own observations and the very complete report made by the cavalry patrol, leaves no room for doubt as to the mode of the enemy's attack. Three battalions are moving on Fleury direct, by the Notre Dame road; while it seems probable that at any rate some of the recently defeated troops will simultaneously advance along the main road against the brick-kiln. The situation being thus clear, Colonel A. is at once able to issue orders for taking up a position for defence, to resist this fresh attack.

For the purposes of future exercises, you must thoroughly understand that it is impossible to occupy a regular position for defence until the way in which the enemy is advancing is apparent, as here;—that is to say, until we can form an approximate idea as to the way in which his forces are distributed, should he be advancing in several columns. If, however, either we have as yet no notification of the enemy's advance, or are in doubt as to how he intends to attack, the practice is first to take up a preparatory position in readiness for contingencies, from which later on, after the receipt of more precise information, is evolved the occupation of the position for defence proper. Beginners, both in theory and practice, are apt to slur over this distinction, and to commit the mistake of taking up a defensive position too soon. But how extremely detrimental to a commander's prestige and authority with his subordinates if his measures for defence have to be completely changed all of a sudden! It is one of the most serious disadvantages in connection with the defence, that one is frequently kept in uncertainty as to the way in which the enemy is advancing: and, (especially if the cavalry fails to send in serviceable reports.) cannot proceed to select and occupy the appropriate points until comparatively late in the day-frequently not until it is too late.

In this case there is no doubt whatever that the enemy means attacking; otherwise why should he have pushed forward fresh troops west of the Hospital Wald? The Seille and the Hospital Wald limit the ground in such a manner that the enemy cannot pass by Fleury in his advance on Metz: he cannot turn the position, but must attack it. This important condition in a defensive position is therefore satisfied.

This being so, let us see whether the position possesses that which may be considered the principal point in favour of the defence, the power of turning to account to the utmost the range and accuracy of modern fire-arms. It is just such a position as would be chosen for defence nowadays, being a commanding position with a clear field for fire for artillery and infantry, and with supporting points well adapted for defence.

Artillery requires a clear field of fire up to 3300 yards if possible, and even further; and it should be possible to command the enemy's lines of approach from the position so as to force him, especially his infantry, to quit the roads and take extended order while still at a great distance from the position, thereby delaying his attack. Both these requirements are here satisfied to the full; from the present position of the batteries east of the brick-kiln, all the country in front can be swept with fire, as well as the main road and the road from Pournoy-la-Grasse passing through Notre Dame, up to a range of 2200 yards. For the protection of the guns, however, their position should, if possible, be somewhat in rear of the infantry firing line, or else it must be practicable to detach to the front of the general line, at certain points, bodies of infantry for the express purpose of protecting the guns from the approach of hostile infantry. As we are already told in the data that the batteries are in position on the road between the village and the brick-kiln, and as there is at present no reason for moving them forward. the guns will be sufficiently protected if the brick-kiln and the southern border of Fleury are occupied by infantry.

In this respect, therefore, the situation is favourable enough, but I may as well tell you that you will often, in defensive positions, be unable to protect the artillery by infantry as it ought to be, as the ground often necessitates artillery and infantry being on the same line, and it is, therefore, difficult to protect artillery against hostile infantry, as the artillery regulations lay down, by throwing out infantry some 660 yards in advance of the guns. Considering the great importance of artillery in deciding the infantry action, this is another great disadvantage of the defence.

Infantry in defence requires a clear field of fire for at least 1400 yards, though it often has to be satisfied if the field of fire is clear through the decisive and medium ranges, say to 700 yards.

From the high ground about the brick-kiln there is a clear field of fire towards the Seille, to the south, and to the southeast, as also there is from the gardens between the brick-kiln and the village. It is not so, however in Fleury itself. The vineyards in front of the south border of the village would not materially obstruct the fire, for in March the vines have not yet got their numerous tendrils and dense foliage. (Were it August, the vinevards would be a great disadvantage, unless there were time to remove the vines.) The spur itself. however, on which the vineyards stand, almost immediately in front of the eastern part of the south border of the village, obstructs the fire from the edge of the village, so that the defenders will here have, in places, to move up into the There is, besides this, another spur, about halfvinevards. way between Notre Dame and Fleury, which will cover the enemy's infantry, and enable it to get within about 450 yards of the village. This constitutes the weakness of the position. As, however, there is no other position available, we must take the country as we find it. It is very difficult to find a position without any defects.

There is no obstacle in front of the position, for the insignificant brooks are of no tactical importance. I will take this opportunity of saying a word or two on the subject of obstacles in front of positions. Beginners are apt to overestimate the importance of such obstacles, and, in selecting a position, to think more of an obstacle in front of it than of commanding ground or a clear field of fire. It is seldom that there is any advantage in having an obstacle along the whole front. Such an obstacle would limit one to a purely passive defence, as in the case of rear guards, flank guards, and outposts, where the object is to gain time; or in the defence of bridges, villages, and railway stations; or in holding some particular bit of ground. In such cases, of course, an obstacle in front is a great advantage, especially when it also covers both flanks, or at any rate the most threatened flank. The attacker's infantry has difficulty in getting over it; his artillery still more so; it renders mutual support and communication difficult; and the attacker may be placed in a critical position if, after passing it, he is driven back again on it. In such cases, however, it is a matter of doubt whether the enemy who finds you occupying a position difficult to attack will not prefer to profit by the circumstance that you, yourself shut in by the obstacle, will have great difficulty in getting out of your position, and endeavour to attain his object without fighting, by marching past you, and so outmanœuvring you. To attain decisive results in defence. you must, above all things, so place yourself as to entice the enemy into attacking you. Having done so, however, do not confine yourself to a mere defensive, for that never can lead to the annihilation of the enemy, but let your general reserve take the offensive and drive back the enemy, who has already been shaken by the fire of your other troops, so that he will "forget to return" to the attack. In such case, however, an obstacle in front of your position, at any rate in front of the

flank from which your reserve has to sally out to deliver the counter-stroke, would be an obstacle to you yourself. So beware of obstacles. The best obstacle to oppose to the enemy in the majority of cases is the grazing mass fire* of modern weapons.

Let us now collate what I have just said with the cavalry reports as to the way in which the enemy is advancing. The bulk of his force is moving against the very flank which we ourselves recognize to be the weaker (the vineyards), so we may count upon the enemy making his main attack there, for he is pretty sure to do the very thing that is most awkward for you. But although everything points to the probability of the assault being made on this flank, it is none the less always desirable to take such precautions on both flanks as to obviate the possibility of being taken by surprise, and to give us plenty of time to adopt counter measures. As to the country towards the Seille, there is no cause for anxiety, for we have a clear view over it, and, irrespective of the reasons above detailed, the enemy is unlikely to attack in any strength in this quarter, on account of the river-but there is no clear view in front of the threatened left flank, owing to the folds in the ground south of Fleury. The cavalry must be active in this quarter, to keep us continually informed as to how far the enemy has got. There are, of course, no grounds for expecting a wide outflanking movement by way of the western border of the Hospital Wald, because of the impenetrability of the wood; still we must not wholly omit to keep a look-out in this direction, especially as we know that there are other troops of the

[•] Means that each man fires in his own time a given number of rounds at a given objective, which should be large, the object being to pour a continuous rain of concentrated fire on the enemy at a certain point. It is used in foreign armies, though not in the English service. Is practically a compromise between volley and independent firing; and the nearest approach possible to volleys at short ranges, when the latter are not practicable,—Trans.

enemy in action east of the wood. The above must be borne in mind in framing the order for the cavalry. In other respects the flanks of the position require no special attention; Fleury is a sufficiently strong supporting point for the left flank—the brick-kiln, the position of which is strong for fire effect, for the right flank. Admitting that the ground favours the enemy's advance against our left flank. the reserve must be posted so as to protect it, as I shall show later on.

Let us finally take a glance at the country behind the position. It can be traversed in all directions: the line of retreat runs straight back from the front; bridges have by this time been made over the St. Peter brook; and, in case of our being driven from the position, Pouilly would be a good rallying position.

The extent of frontage of the position has next to be considered. In the attack 1700 yards is a suitable maximum frontage for a detachment consisting of 3 or 4 battalions with some cavalry and artillery. The frontage of a similar force for an obstinate defence should not exceed 1100 yards, or under extremely favourable conditions, 1400 yards, as in defence much greater depth of formation is necessary, and the reserve bears a larger proportion to the whole force, and consequently the frontage has to be less than in attack. The narrower the frontage held at the commencement of an action the better, for the act of bringing up the reserves is bound to increase the frontage during the course of the action. There is no objection to the position on the score of frontage, it being about 880 yards in a direct line between the brick-kiln and the eastern side of the village. This original frontage will, however, be at once increased when Colonel A. brings up his general reserve east of the village, whether for offensive or for purely defensive action as a counter measure to the enemy's enveloping movement.

As to the distribution of the infantry, the position is divided into sections, for the defence of each of which a battalion is detailed. Hard and fast rules cannot be laid down as to the number and frontage of these sections. Note for general guidance that when the position is on broken ground, much cut up by woods, &c., rendering supervision difficult, the sections must have less frontage, and consequently be more numerous. In the present instance that portion of the position between the brick-kiln and the western border of the village lends itself easily to defence and can be defended by few troops. The village itself is not so well adapted to defence, so requires a larger garrison. Thus the position is not only held in varying strength in different parts, but the defenders are not evenly distributed even inside the sections,—only the important points, e.g., the brick-kiln and the gardens between it and the village being strongly held; the ground between these points being either very lightly occupied or even merely watched, and defended by fire from the points that are occupied. Moreover the artillery has to be considered, for this arm cannot always fire over the heads of the infantry, and therefore will occupy a portion of the front line, thus materially cooperating in the defence of the section to which it belongs. A section, therefore, which comprises some artillery, may have a correspondingly increased frontage. The frontage at full interval of a battery in action is 100 yards (5 intervals of 20 yards, but, if space be limited, the intervals between guns may be reduced to 10 yards or even 4 yards). (Field Artillery Drill, 1896, p. 126.)

Each section in defence must provide its own "section reserve," whose strength will vary according to circumstances and affect the frontage of the section.

A battalion* can defend a frontage of 220 to 440 yards, and under favourable conditions more than 440 yards,

^{* 800} strong. - Trans.

provided there is some artillery in the section. If we in this case detail a battalion to the section from the brick-kiln inclusive to the western border of the village exclusive, the frontage will be about 550 yards, rather large, even reckoning the two batteries east of the brick-kiln. The line to be occupied along the south border of Fleury is about 440 yards in a straight line, again rather too much, considering that the enemy will probably make his main attack on the village. It is not, however, advisable, considering the troops available, to cut up the village into two sections. It is better to be satisfied with holding the first line weakly, i.e. a battalion to the village, and keep an entire battalion as general reserve, which must, however, be so placed as to be able to lend a hand in the defence of the village if necessary. Supposing even we had 4 instead of 3 battalions in the present instance, it would be better to have two complete battalions in the general reserve than to hold the village with two battalions for it is as a rule preferable to have rather a weak first line and a strong general reserve.

In framing the orders we must be very careful to accurately define the dividing lines between sections, and prevent there being any uncertainty as to whose duty it is to defend some particular piece of ground, some road or locality. With a view to this I recommend you to employ to the full the words "inclusive" and "exclusive."

The general reserve therefore consists of one battalion, and in this connection it is as well to note that with detachments the general reserve is, (in defence, as in attack) as a rule, composed of infantry only, as all the artillery and cavalry are wanted in the first line. It is only where large forces are concerned that some cavalry and artillery can be attached to the general reserve. The best place for the general reserve is, as a rule, in échelon behind the threatened flank, where it will guard against enveloping movements, which are what the

defence has most to fear. It must at the same time be so placed that it can easily come out from behind cover to deliver a counter-stroke, and should be well off to the exposed side of the flank, so that by a direct advance to its own front it will fall on the flank of the enemy's flank attack. From the above we see that it is impossible to hit upon a suitable place for the general reserve so long as we are in doubt what point the enemy intends to assault. Highly desirable as it is to be able to convert the defensive attitude into an offensive one, yet it is in practice very difficult to do so. Even in our peace manœuvres efforts in this direction almost invariably To sally out in counter-stroke from the centre of a position would be to deprive ourselves of the advantage which we have hitherto had over the enemy, for our own fire will have to cease, while the enemy will pour a converging fire on the troops delivering the counter-stroke. Any such attempt, even in face of an already demoralised enemy, will result in speedy destruction, considering the range and rapid fire of modern weapons. It is quite a different thing when a general reserve makes the counter-stroke round a flank. In that case the fire from the position co-operates with the counter-stroke. It must not be forgotten, however, that such action, though it should always be attempted, is difficult of performance, because the numbers usually at our disposal do not allow of making the reserve sufficiently strong. defender is generally the weaker, and it is often a question with him throughout the whole action, whether he will not require his reserve for the passive defence of the position.

In the case now before us there are two possible places for the general reserve, either just east of the north-east corner of the village, or under cover behind the western portion of the under-feature marked 218 east of Fleury. From either of these positions a counter-stroke can be made against the enemy's enveloping movement, though perhaps from

the latter there is more prospect of falling on the enemy's flank; nevertheless the first portion is preferable, because from it it is easier to directly support the defence of the village, which, as we have seen above, it may be necessary to do, as Fleury is rather weakly held.

As the data state that the II/Battalion has suffered heavily in the assault on Fleury, it would not be advisable to entrust this battalion with the important and arduous task of defending the village, but make it the general reserve, thus giving it time to restore its formation and "moral," in case the latter has suffered through the casualties. will be simplest for the I/Battalion to remain in its present position, re-forming as quickly as possible. Let us try and realize, with a little effort of imagination, the existing state of affairs in the streets and farm-buildings of Fleury. The simplest way of sorting out the confused mob made up of the two battalions would be to shout out to the men. I/Battalion, assemble west of the village; II/Battalion, north of the village!"

The III/Battalion, which was the reserve during the attack, has already re-assembled on the eastern outskirts of the village, and consequently is in a more fit state to occupy Fleury than would be the jumbled-up companies of the II/Battalion. There is ample time to carry out this arrangement, as the enemy is yet at some distance. There will not, of course, be very much time to spare after the III/Battalion has occupied the village, but it must be utilized to the full. The least that should be done is to take the ranges of any prominent objects in front of the position, and clear the field of fire by removing the vine-stakes,—an easy task, which need not take long. Entrenchments may also be commenced, as work can go on up to the moment of opening fire; even the simplest artificial cover is of great value.

The I/Battalion will also, after occupying its section, be

able to set about distributing itself between the brick-kiln and the gardens west of the village. Colonel A. will see that both sections are at once placed in a state of defence, so as to be sure that the work is performed in the most efficient manner. It is not by any means superfluous to include in the orders express instructions that the position is to be prepared for defence, as experience shows that our troops do not naturally take kindly to the construction of entrenchments.

The engineers will lend their assistance with the most difficult tasks, and wherever the services of skilled workmen will be most valuable, *i.e.* in the village, and in the buildings round the brick-kiln, but the officer commanding the field company will distribute his men between these two localities as he thinks best. If it comes to severe fighting, the engineers can act as infantry, and join in the defence of the position; but, if they are required so to act, a separate order had better be sent to them later on; for I repeat that their principal duty is the execution of field works,—fighting as infantry being with them the exception, not the rule. It will soon become matter for regret, as a campaign goes on, if the engineers have had their numbers thinned by casualties in action.

The artillery has no time for making epaulments or gunpits, as it has to open fire at once. During the pauses in firing the gun detachments may kneel down to minimise losses.

Colonel A. has finally to see that his infantry make up their ammunition, which will have been almost expended during the attack on Fleury, from the small-arm ammunition carts; he must therefore notify that the detachment reserve S. A. A. carts have been brought up to the northern outlet of Fleury. As the action is to be a defensive one, supplies of ammunition must be deposited in the firing line, either in

^{*} i.e. German troops.

boxes or in bags.* The ammunition should be collected from the men killed and wounded in the attack, and carried by the men in their haversacks and pockets, if necessary. As soon as three S. A. A. carts are empty they must return to Metz to refill. Officers commanding battalions are responsible for the timely replenishment of the contents of their ammunition carts.

To renew the ammunition of a battery of artillery, when the captain ascertains that the three wagons in the gun line are nearly emptied he sends up the remaining three wagons. The following is the detail of the supply of ammunition to guns in action direct from the wagons, which is the general When a battery comes into action three wagons should be sent up to it, one to each section (two guns), the remaining three being kept 200 to 400 yards in rear of the line of guns, where also the gun limbers and all the horses of the battery are stationed. As the ammunition of the three wagons with the guns runs out, the other three wagons are brought up to replace them, and the empty wagons are sent back to the wagon line, taking any wounded men. (The supply, however, is from limbers (1) when batteries are likely to remain a very short time in position, (2) in the close support of an infantry attack, (3) in pursuit, (4) in retreat, and (5) always in the case of horse artillery acting with cavalry.) †

Colonel A. may, for the present, remain where he is, by the brick-kiln, as from this point he can overlook the whole field of action. As soon, however, as the enemy develops

[&]quot;Troops on the defensive should have an ample supply of ammunition. The men in the firing line should have at least 150 rounds on the person, and in addition may have an extra 40 or 50 rounds beside them in the trenches they occupy."—Handbook of Tactics, CAPT. JAMES, p. 21.

[†] Here again, instead of a literal translation of the original, which would be useless to English readers, a brief extract is made from the *Field Artillery Drill*, 1896.—*Trans*.

his attack against the eastern side of the village, he will move to the under-feature 218, east of Fleury, to be near his general reserve, and be able to take steps for bringing about the decision of the fight.

The orders will be issued at the brick-kiln, where Colonel A. will assemble the officers commanding battalions, the officer commanding the artillery, and the officer commanding the Field Company R.E. A copy of the orders will have to be sent to the cavalry, as it is too far distant. It will take the subordinate commanders quite five minutes to assemble, so the hour of issue of the orders will be 11.35 a.m. In this case also a copy of the orders will be sent to Colonel B. for his information. The orders are as follows:—

Brick-kiln at Fleury. 3. 111. 89. 11.35 a.m.

DETACHMENT ORDERS

- I. The Enemy, who has just been defeated by us, has re-retired in disorder on the Bois Lamencé, but his battery is just coming into action again on the ridge north-west of the Bois Lamencé, and three fresh hostile battalions with a battery are advancing from Pournoy-la-Grasse viâ Notre Dame on Fleury.
 - Colonel B.'s detachment is holding its ground on the line Hospital Wald—Mécleuves.
- The Detachment will hold the brick-kiln and the village of Fleury as a defensive position.
- The Artillery will remain in its present position, and fire on the enemy's battery north of the Bois Lamencé.
- 4. The I/Battalion will occupy the section brick-kiln inclusive to western border of Fleury exclusive. The III/Battalion will defend Fleury. The position will at once be placed in a state of defence.

- The II/Battalion will form a general reserve, at the northeast corner of Fleury.
- The 1st Field Co. R.E. will assist the I/Battalion and the III/Battalion in preparing their sections for defence.
- 7. The 1st Dragoons will cover the left flank by reconnoitring the Hospital Wald, and in the direction of Pournoy-la-Grasse. Patrols are also to be sent along the Seille towards the Wald von Avigy, and communication is to be kept up with Colonel B.'s detachment.
- 8. The detachment reserve S.A.A. carts will halt at the northern outlet of Fleury.
- Reports will reach me at the brick-kiln.

A., Colonel.

Copy sent to the cavalry by Lieut. R.;—verbally to the other assembled commanding officers.

Copy sent to Colonel B. by Lieut. H.

The situation demands as prompt execution as possible of the orders, on which account it is better to assemble the commanding officers, and give them *one* set of ("formal" or "combined") orders by word of mouth. If in this case several ("separate" or "immediate") orders were issued, more time

would be taken in promulgating the orders, and the execution of them correspondingly delayed. We see thus, that, provided the troops are not unduly scattered over the country, it is better to issue combined orders for taking up a defensive position. Remember also that, when taking up a defensive position, even more than under any other circumstances, each subordinate commander must become acquainted with the various measures to be adopted, in their mutual connection with one another as a whole, and clearly understand the significance, in relation to the action of other commanders, of that particular measure which applies to him. It may frequently happen, especially in making arrangements for defence on a large scale, that the orders will have to go much more into details than orders usually do, because the least friction may interfere with the efficient joint action of the various portions of the force. In such a case the independent action of subordinate commanders has often to be considerably limited, as there are certain details which it would be unadvisable to leave to their discretion. We have here an example of the necessity for being on one's guard against applying cast-iron rules and forms to all sorts of tactical situations. In tactics one must carefully distinguish between different situations; there are no models capable of universal application. For instance, I should be far from calling it a mistake if, in the present case, you gave more detailed instructions under No. 4 of the above orders as to the manner in which the two battalions are to occupy the sections allotted to them.

As when treating of the attack, I will now specify the points to which attention must be given before making out orders for defence :---

- (1) Consider whether the time has already come for occupying the position for defence.
- (2) Is the enemy obliged to attack the selected position, or can he march past it?

- (3) Has the position a clear field of fire for artillery and infantry, and is the artillery sufficiently protected?
- (4) If there be an obstacle in front of the position, how will it affect it?
 - (5) Where will the enemy make his main attack?
 - (6) Are both flanks sufficiently protected?
- (7) Is there anything to prevent *free movement* over the country *in rear* of the position? In what direction does the line of retreat run? Is there a good rallying position?
 - (8) What is the frontage of the position?
 - (9) Division of the position into sections.
- (10) In what manner is it proposed to employ the general reserve? Position of general reserve.

There are other points to which I shall refer in the next exercise.

In conclusion a few words about the distribution of the troops which has to be shown on the map. This must, above all things, accurately show how many troops hold the first line, and how many are detailed as Section reserves and General reserve respectively.

Beginning from the right flank, you must show a few cavalry patrols along the banks of the Seille. In the section held by the I/Battalion there are 4 companies in the first line (firing line and supports), two of them holding the brick-kiln, the other two the gardens west of the village; the other half-battalion forming the section reserve, under cover of the buildings round the brick-kiln, i.e. in rear of the outer flank. At the beginning of the action each company in the front line will have only half its strength*

^{*} In the original it is "each double-company will have only one-third its strength," i.e. a "zug," the German company being divided into 3 "zugs." In translating, I, as usual, render "company" of the original by "two companies," (there being 4 companies in the German battalion, which is about the same strength as the English), but it is impossible to find anything in our infantry organisation corresponding to one-third of a double-company.—Trans.

in the firing line, the other half-company being in support, under cover close behind the firing line. Thus at the commencement of a defensive action the firing line is comparatively weak. The firing line should be made as strong as possible as soon as the manner of the attacker's advance becomes apparent, for he often offers large targets on which our fire may be effective even at long ranges, so that every available rifle should then be brought to bear, especially when the target is exposed to view for a short time only. If the supports were far behind the firing line, they would incur heavy losses in reinforcing the firing line if the ground over which they had to move were exposed to the effective fire of the enemy, and the effect produced by the reinforcement would be considerably impaired. In cases where it is impossible to bring up the supports under cover, it is better to place them close behind the firing line.

Between the brick-kiln and the village come the two batteries, both on the same alignment. In each battery Nos. I, 3, and 5 wagons four yards in rear of and covering their own guns; Nos. 2, 4, and 6 wagons with the teams of the three wagons at the front, in line at twenty yards' interval -(the limbers and the gun teams being formed immediately in front of them)—near the main road, but not on it, 200 to 400 yards in rear, and to one side of, the guns, so as to avoid fire aimed at the latter. (See Plate VII., Field Artillery Drill, 1896.)

The battalion in Fleury has likewise four companies in the firing line and supports. The two companies on the right have their firing line (half of each company) along the crest of the spur in front of the south border of the village, and astride the Notre Dame road, the supports being by the road at its entrance into the village. The firing line of the other two companies is in the vineyards, south of the eastern outlet from the village, the supports being at the south-east

corner of the village. The other half-battalion is the section reserve in the village itself, where it can either support the firing line or defend the entrances to the village, as may be required. Let me remind you to decide, in occupying the village, whether you intend to confine yourselves to holding the border, or whether some of the houses inside the village are to be defended as well. If the object be merely to fight a delaying action, i.e. if you intend leaving the village sooner or later, do not occupy the houses, because the men defending the houses are liable to be cut off when the retirement In the present instance the village has to be begins. obstinately defended, in order to act up to the instructions given to Colonel A. (viz. that he is to prevent the enemy advancing on Metz). If we are driven from the outskirts. we must offer a determined resistance in the interior of the village, and drive the assailant out again, with the assistance of the general reserve. Any buildings, therefore, which command the streets, or which offer special advantages owing to their position at angles, or at open spaces, or through being solidly built, should be placed in a state of defence and held by the general reserve, though its distribution cannot be decided by looking at the map.

The battalion forming the general reserve will be formed in quarter-column, or quarter-column of half-battalions at the north-east corner of the village.

The cavalry should be shown in line of squadron columns hidden behind the column, and near the Hospital Wald.

There is therefore only the strength of 4 companies (eight half-companies), i.e. one-sixth of the whole amount of infantry available, in the firing line at the outset, occupying the most important points; the remainder being kept in hand until the enemy comes nearer; thus not a single man is unnecessarily deployed until the enemy's movements render it necessary. To seize the right moment for employing the men thus kept

in reserve, and to economise them to the utmost, is one of the most difficult problems in the defence, which is complicated by the fact that the defender, being generally the weaker, has to adapt his tactics to those of the attacker. Thus you perceive that in spite of the great advantages conferred by modern fire-arms, the defence has many weak points.

So long as infantry maintains a steady fire, its only vulnerable points are its unsupported flanks; these must therefore be specially protected by reserves, either section reserves or the general reserve, on which account the reserve of the right section is placed in rear of the right flank, and the general reserve in rear of the left flank. The supports are under cover, as near the firing line as possible; the reserves, too, should be as near the firing line as possible, being only far enough back to escape the enemy's fire, but not so far as to interfere with their promptly reinforcing the front line.

The artillery will remain in its present position until the gardens west of the village obstruct its firing on the enemy's main attack. It will then change position, in échelon of batteries, to the hill 218, east of the village, to be able to support the infantry at the decisive moment of the action. It would be a mistake for the guns to remain between the brick-kiln and the village, and continue firing on the enemy's artillery; for as soon as the enemy has committed the bulk of his infantry to the main attack, our whole available strength must be massed against it, with a view to repulsing the assault. It is hardly necessary to mention that it is very difficult to seize the right moment for this change of position. or to remind you that our infantry will form the sole target of the enemy's artillery fire, while our guns are changing position. Bear in mind for future occasions, whenever planning how to prepare a position for defence, that though it is sufficient, at the commencement of the action, if the artillery can command the enemy's lines of approach and the country in front of the position; yet, at the critical moment of the assault, the most effective artillery fire possible must be brought to bear on the enemy's infantry who are delivering the main attack, and if this can be done without our guns having to change position, so much the better. The defeat of the infantry assault is unquestionably the main thing.

The following are the considerations which will regulate the position of the cavalry: In defence, as in attack, the cavalry must, throughout the whole course of the action, continue to provide for protection and information; in defence, again, cavalry will be able to intervene in the actual fighting to a somewhat greater extent than in attack. Its action will consist either in suddenly falling on the enemy's flanks just before the moment of assault, to make him offer a target for our infantry fire (by forming groups and company squares)—in which case, however, the cavalry must be prepared for heavy losses - or in charging the enemy's infantry at the moment when it is beginning to give way before the counter-stroke made by the general reserve, to convert the retreat into a disorderly flight. cavalry must therefore not be too far from the infantry, and is best placed either in prolongation of, or écheloned in rear of the threatened flank; in the present case under cover of hill 218, east of Fleury. The officer commanding the detachment must, in any case, frame his orders in such unmistakable terms as will ensure his retaining perfect control of his cavalry.

MODEL FOR

ORDERS FOR TAKING UP A "POSITION IN "READINESS" (FOR CONTINGENCIES).

Date. Place Hour of issue.

DETACHMENT ORDERS

(No Distribution of Troops.)

- 1. Information as to the enemy, and our other forces.
- 2. Intention of G.O.C. (Point where the bulk of the detachment is to be drawn up in assembly-formation. Termination of the state of march.)
- 3. Order for the Cavalry. (Frequently separate squadrons sent in the direction of the various lines of approach open to the enemy; or the advanced cavalry is kept concentrated, with standing and moving patrols.)
- Order for the Artillery. (Either in readiness behind an artillery position whence the various lines of approach open to the enemy can be swept by fire-gun pits or enaulments being at the same time constructed-or massed and waiting close to the bulk of the infantry.)

- 5. Order for the Infantry.

 (Points outlining the position to be occupied—the bulk being massed under cover, as in 2.)
- Order for a possible preparation
 of the position for defence.
 (Allotment of tasks to be
 subsequently performed by
 the several units, detailing
 engineers for the most difficult tasks.)
- 7. Order for the detachment reserve S.A.A. carts and position of the dressing station. (The latter seldom possible.)
- 8. Order for the Baggage.
- 9. Position of G.O.C.

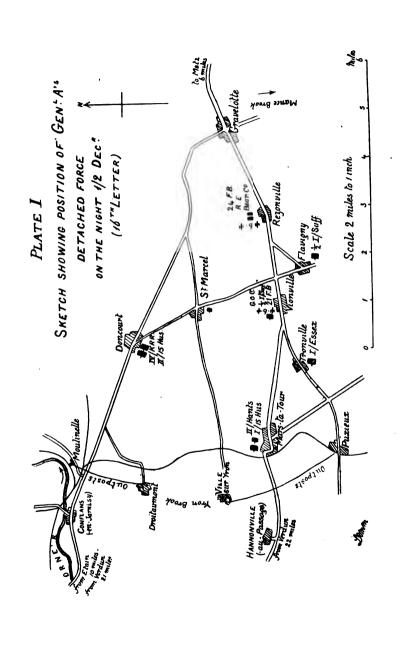
Manner of communicating the orders to the troops.

Signature.

FIFTEENTH EXERCISE.

(See General Map and Gravelotte Map.)

News having been received that hostile troops were advancing from Verdun (40 miles west of Metz) on the fortress of Metz, a detached force under General A. was thrown out from Metz, on the 1st December, 1889, to the Yron brook, with orders to destroy the railway viaduct over the Orne at Conflans-en-Jarnisy (General Map), and observe the roads leading to Verdun and Etain (25 miles westnorth-west of Metz), but, should the enemy advance, to fall back slowly, viâ Rozérieulles (4 miles west of Metz) on Metz, without



engaging the enemy. The detachment had succeeded in destroying the viaduct in the afternoon, and the cavalry had encountered. firstly, hostile cavalry in inferior numbers in the Orne valley, and subsequently hostile infantry 3 miles west of Conflans-en-Jarnisy, and could make no further progress in that direction. An infantry soldier of the enemy who had been taken prisoner said that he had come with his battalion by rail from Etain, as also the other battalions of the same brigade. Late in the evening General A.'s cavalry came on infantry outposts, about 11 miles west of the line Conflans-en-Jarnisy-Friauville-Hannonville-au-Passage.

General A.'s detachment occupies both the roads, and, on account of the extreme coldness of the weather, is billeted for the night as follows :---

```
General A. and staff
                                    Vionville.
                                    Doncourt-en-Jarnisy (between
                                      Conflans and Gravelotte), with outposts on the line Moulinelle to Droitaumont.
IV/K.R. Rifles and
II/15th Hussars .
A communicating post of the } St. Marcel.
    II/15th Hussars
II/Hampshire Regiment and
                                  ) On outposts on the line Ville-
I/15th Hussars .
                                       sur-Yron-Puxieux.
Reserve of the outposts.
                                . Mars-la-Tour.
I/Essex Regiment
                                   Tronville.
Right half battalion I/Suffolk
    Regiment, and
      Field Battery
O.C. Arunery,

Left half battalion I/Suffolk

Pariment Flavigny.
    O.C. Artillery)
24th Field Battery, 23rd Field Rezonville.
    Cº R.E., Bearer Cº
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There is a line of telegraph from Metz to Gravelotte, via St. Ruffine and Rozérieulles.]

At 10 p.m. a report arrives from an officer's patrol, which had

advanced towards evening through Sponville, that it had observed a bivouac of the enemy about 4 miles west of Mars-la-Tour, which, judging by the extent of the bivouac fires, it estimated at about 4 battalions.

State the arrangements made by General A. for the 2nd December, and give reasons for the course adopted.

The arrangements for the troops at Doncourt-en-Jarnisy to be given in the form of "Instructions."*

* "Instructions' are the views of superior authorities making known their desires, and are sent to commanders too distant from the place of issue to make it desirable to give them precise orders. They are intended to indicate what is wished for rather than the actual manner of carrying out the operations, which must necessarily be left to those who have to execute them."

Handbook of Tactics, CAPT. W. JAMES.

SIXTEENTH LETTER

RETREAT

N the 1st December, General A. has performed the chief part of the commission laid on him; he has destroyed the viaduct, and established the fact that the enemy is advancing on Metz. The statement of the prisoner bears the stamp of credibility, and his assertion that the other battalions of the brigade to which he belongs had come by rail from Etain is of special importance. If this information be correct, the enemy now three miles west of Conflans-en-Jarnisy will probably next morning continue his advance on Metz either viå Doncourt-en-Jarnisy, or on a more northerly line viå Jouaville, and thence vià Vernéville or Amanweiler. rifle battalion at present in Doncourt, to which the II/15th Hussars is attached, will have no difficulty in gaining information on this point. As, moreover, the officer's patrol sent through Sponville has seen, on the evening of the 1st, a bivouac of several hostile battalions, 4 miles west of Marsla-Tour, it may be assumed that this force will move on Metz next morning by the main road through Mars-la-Tour. It is. therefore, more than likely that next morning General A. will have to deal with an enemy in greatly superior force on both roads.

The information to hand up to the present (i.e. up to 10 p.m. on the 1st December) is, of course, far from reliable. The only thing that is certain is that we have got a general

touch of the enemy, for the prisoner's statement may be incorrect, and the officer may have made a mistake as to the strength of the troops in the bivouac, for it is very difficult to get any sort of correct idea of the strength of a force, merely judging by the extent of the bivouac fires at night. therefore, desirable to get more precise information next morning as to the enemy's strength and intentions, and especially as to the mode of his advance on Metz, this being of the greatest importance for the garrison of the fortress. In all probability the cavalry will not find out anything more until the enemy begins to move: as, after driving in the enemy's cavalry, it can make no further progress in face of his infantry in rear. It is different when the enemy begins to If his cavalry receives no reinforcement next morning, ours will be able to get a closer view from a position on the flanks of his columns; since up to the present the enemy appears to be weaker than us in cavalry, for the patrols of that arm encountered in the Orne valley fell back on their own infantry, nor has it been seen in any numbers on either side of the Verdun main road passing through Mars-la-Tour.

General A. would be going against his orders were he to make a reconnaissance in force with the whole of his detachment, to ascertain the strength and intentions of the enemy, for he has express instructions to avoid fighting. Still he should not begin to fall back until he has ascertained for certain (1) that the enemy is advancing on Metz, (2) in what manner he is doing so. The cavalry will play the principal part in obtaining this information, being supported by the rest of the detachment, should the enemy prove to be stronger in cavalry. Hence he arrives at the following decision:

If, contrary to expectations, the enemy remains in his present positions, General A. will likewise stand fast, and reconnoitre to the best of his ability. If, on the other hand,

the enemy moves nearer Metz, General A. will at once fall back on that town, without, if possible, exchanging a shot.

In the second case, however, the retreat must be commenced soon enough to prevent our being involved in an action by an unexpectedly rapid advance of the enemy in superior force, especially in view of the fact that the valley west of Gravelotte, and the deep and precipitous Mance valley, which forms an inconvenient obstacle, will have to be crossed in retreat. Hence it follows that the detachment must be held in readiness to start betimes, and be formed up so as to be able to begin the retreat at a moment's notice. matter of indifference where and how the detachment is formed up, as we in no case intend fighting; so the arrangements for assembling the troops can be made solely with a view to retreating. But the retreat will be facilitated if separate places of assembly be appointed for the various portions of the marching column, and the troops fall in on the main road itself in column of route. I should therefore be opposed to assembling the troops in mass of quarter-columns, battery quarter-columns, or other rendezvous formations by the roadside, as time would be wasted in forming column of route. Even should it be necessary to send reinforcements on the morning of the 2nd December to the troops at Doncourt, the fact of the detachment being formed up in column of route would not render it more difficult to do so. places of assembly should be so chosen that no unit need make a détour to reach them,—say the eastern outlet of Rezonville for the main body, and the eastern outlet of Vionville for the rear guard. The distribution of troops must be promulgated with the orders for assembly.

As in the present instance there is no intention of delaying the enemy's advance—on the contrary, an engagement is to be avoided—the *infantry* of the outposts must be *withdrawn* early. Suppose General A., with a view to deceiving the

enemy as to his intentions, caused the infantry of the outposts to stand fast provisionally, it is doubtful whether the flank piquets and supports could regain the main road in time, if the enemy were to press his advance. In such event the rear guard might have to fight, against its will, to prevent their being cut off. If, however, the rear guard be involved in an action, it is impossible to say how it may eventually affect the main body. The cavalry of the outposts, on the contrary, must not only keep touch with the enemy as hitherto, but reconnoitre the country on both sides of the main road as soon as day breaks, not only to discover any change in the enemy's dispositions, but further to screen as far as possible from his observation the withdrawal of our outposts.

In December the sun rises about 8 a.m., and the enemy is not likely to start earlier than this, so it will do if the detachment is assembled by this hour, as between the troops in Vionville and those in Doncourt, there is an interval of about 32 miles. The severity of the weather has necessitated the detachment being billeted among several villages, in spite of the proximity of the enemy,—as a bivouac or close cantonments might have seriously affected the health of the troops. The strong outpost position along the Yron brook justifies, to a great extent, incurring this risk, and besides it is unlikely that the enemy will attempt to surprise us by night in country which is strange to him. Should any unit next morning have to leave its quarters before daylight, and wait at a place of assembly, such trifling inconvenience is small in comparison with the comfort of having passed the night in good quarters.

The IV/K. R. Rifles and the II/15th Hussars are to be considered an independent force, for which special "instructions" are required. The existing situation authorizes the employment of these troops as a right flank guard in

retreat, although at the outset they are 4 miles from the main body. It is a good thing, though, that the distance between the two main roads diminishes eastwards, until they join at Gravelotte.

The baggage of the whole detachment must—no matter at what inconvenience to the troops—be sent on at least two hours in advance, being assembled at some point where the wagons from the various villages in which the troops have been billeted can conveniently unite—say at the eastern outlet of Rezonville—the baggage of the IV/K. R. Rifles and the II/15th Hussars joining it at Gravelotte. It is not advisable, at this stage, to send the baggage right back to Metz; it had better await further orders at some appointed place outside the town, as it is at present uncertain where it will be wanted on the evening of the 2nd. It will also be as well for the engineers to accompany the baggage until the latter has got across the awkwardest part of the road—the Mance valley-and, should any accident happen to the wagons there, the engineers can see to keeping the road open. They can also prepare the bridge in the Mance valley for destruction, in case it may become necessary to check a too rapid advance on the part of the enemy. After so doing they had best wait somewhere near the Mance valley for the main body, in order to be at the disposal of the G.O.C. should their services be again required outside Metz.

The subordinate commanders concerned should assemble for orders at 8 a.m., so that the retreat may, if necessary, be commenced at once. Officers commanding units in the main body will have to go to the rear guard for this purpose, as the G.O.C.'s position will be there.

With regard to the communicating post in St. Marcel, a well-mounted orderly officer would have been better in this case, as the distance is not great; as, however, it is there, it must be utilised for expediting communication between

the two main roads. My sole object in introducing this post was to direct your attention to the regulations on the subject of such posts. If the state of the roads allow of it (it being winter) this communicating-post might better be composed of cyclists.

As to the instructions for the officer commanding at Doncourt—(it is not often that instructions are sent)—they are virtually orders intended to remain in force some time, when a detachment is at such a distance as to render it extremely difficult to maintain communication with it by means of a succession of orders, and the G.O.C. must accordingly allow it more independence of action than usual, because his plans may have to be executed under circumstances which he could not have foreseen. Such instructions differ from orders in that they go more into details, the G.O.C. stating in precise terms his view of the state of affairs, and his plan of operations, so that the subordinate commander is in a position to work in harmony with the intentions of the G.O.C. without precise orders being sent him.

Should the idea have occurred to you, with the object of expediting deployment if forced to fight, to reduce the length of the column of route by having the infantry formed up on the main road in column of half-companies at quarter-column distance, I should, in the present case, have no objection; as both main roads are broad enough; and, when making a retreat in such proximity to the enemy, it is always desirable to be able to deploy for action as quickly as possible. If I make other arrangements in my orders, it is because of the impossibility of seeing by the map whether the main road is broad enough, or whether its breadth may not be considerably contracted where it passes through villages, for instance, which would interrupt regular forward movement. Whenever a column of route is shortened, it is desirable that part of the road should always be left clear

enough for mounted officers, &c., to pass backwards and forwards at a rapid pace without being checked or interfering with the troops; as otherwise a regular transmission of orders and messages is almost impossible. It is not safe to order a broader march formation solely on the authority of the map when one is not certain of the breadth of the roads or of that of the village streets. Some previous reconnaissance is often necessary. In the present case, however, these remarks do not apply, as General A. is familiar with the road.

The orders for assembly, and instructions, are as follows:-

Vionville. 1. XII. 89. 11 p.m.

DETACHMENT ORDERS.

DISTRIBUTION OF TROOPS.

- Advanced Party: Major D.
 23rd Field Co. R.E.
- Main Body (in order of march).
 6th Bearer Co.
 I/Suffolk Regiment.
 24th Field Battery R.A.
 I/Essex Regiment.
 N.C.O., 8 men I/15th Hussars.
- Rear Guard: Colonel B.
 II/Hampshire Regiment.
 I/15th Hussars.
 21th Field Battery R.A.
- 4. Right Flank Guard: Lieut.Colonel C.
 IV/K. R. Rifles.
 II/15th Hussars.
- 1. The Rear Guard will be formed up in column of route, prepared to march off, on the main road to Metz. at 8 a.m. to-morrow. with the head of the main guard at the east end of Vionville; and the Main Body in similar formation. on the same road, and at the same hour, with its head at the east end of Rezonville. Special instructions are being sent to the right flank guard.
- The I/15th Hussars will resume the reconnaissance of the Verdun main road at daybreak, and maintain communication with the right flank guard at Doncourt-en-Jarnisy.
- 3. The 23rd Field Co. R.E. will march off from the east end of Rezonville at 6 a.m.,—escort the baggage as far as the Mance valley,—prepare the bridge on which the main road crosses the Mance valley for destruction,—and there await the arrival of the main body.

- 4. The Baggage of the rear guard and of the main body, conducted by a section, under an officer, furnished by the I/15th Hussars, will be formed up in column of route at the east end of Rezonville at 6 a.m., ready to start;—will retire on Metz by the main road, joining the baggage of the right flank guard at Gravelotte;—and await further orders at the east end of Longevillebei-Metz.
- 5. Officers commanding rear guard, right flank guard, and units in the main body will attend to receive orders at 8 a.m., on the hill 550 yards west of Vionville.

Dictated to officers representing the several units.

A., Major-General.

INSTRUCTIONS FOR LIEUT.-COLONEL C., COMMANDING IV/K. R. RIFLES.

Vionville. 1. XII. 89. 11.40 p.m.

According to reports received by me, the enemy's outposts are 11 miles west of Hannonville-au-Passage. A bivouac of the enemy. estimated by the officer who reconnoitred it to be occupied by about 4 battalions, is 32 miles west of Mars-la-Tour. It being further known that hostile infantry and cavalry are in the Orne valley in your front, it may be assumed that the enemy is advancing in two columns by the two roads from Etain and Verdun. We have as yet no definite information as to the enemy's strength. It appears to me that at present the enemy has about three or four battalions of infantry, with some cavalry and artillery, in front of us on each road. We are apparently stronger in cavalry so far, as in your front the hostile cavalry fell back on its infantry, while no quantity of this arm has been seen on the Verdun road in my immediate front. must, therefore, endeavour to utilize this advantage to the utmost to-morrow, with a view to gaining more definite information as to the enemy's strength. I consider it very likely that the enemy will prosecute his advance with the utmost vigour; probably on both roads. Should he, however, advance by one road only, I shall fall back on Metz, as I have precise orders not to fight.

My object, therefore, is to ascertain as soon as possible to-morrow, by means of my cavalry, whether the enemy is continuing his advance on Metz, or whether he intends to remain in his present position.

As soon as he advances, we must move. The detachment orders have informed you the hour and places where my rear guard and main body will assemble to-morrow morning. Be prepared to start at the same hour, and withdraw your piquets and supports soon enough to prevent them coming in contact with the enemy. Retire viâ Malmaison, acting as a right flank guard to me, so as to rejoin me at Gravelotte. Avoid fighting, and reconnoitre with your squadron principally in the Orne valley, and subsequently north of it.

Should the enemy, contrary to my expectations, remain to-morrow in the positions he has reached to-day, we shall also stand fast provisionally, and endeavour to find out his intentions.

Be good enough to at once notify me of any advance on the part of the enemy in your front. I shall let you know as soon as he advances on the Verdun road. Send an officer for orders, to be at the hill 550 yards west of Vionville by 8 a.m.

Should the enemy advance against you, it will be of importance for me to ascertain promptly whether he is pursuing you to Gravelotte, or, as is possible, is moving from Conflans-en-Jarnisy on Jouaville;—and, if so, his line of advance after passing Jouaville.

Send off your baggage early enough to join the rest of the baggage at 6.35 a.m. at Gravelotte. Be good enough to report to me, after 8 a.m., on the hill 550 yards west of Vionville. In case of retreat I shall be first with the rear guard; afterwards with the main body.

A., Major-General.

SIXTEENTH EXERCISE.

At 10 a.m. on the 2nd December, General A. receives, through the communicating post at St. Marcel, the following message from the O.C. IV/K. R. Rifles:—

"Doncourt-en-Jarnisy. 2. XII. 89. 9.25 a.m.

"Information just received from O.C. II/15th Hussars that a hostile column, consisting of several battalions and a battery, is advancing on the Orne valley, which will reach Conflans-en-Jarnisy about 10 a.m. I am about to retire at once on Gravelotte, and am withdrawing the communicating post."

At the same hour the O.C. I/15th Hussars reports from Hannon-ville-au-Passage.—"A strong column of the enemy, strength unknown, is advancing on the main road, and will reach Hannonville-au-Passage about 10 a.m."

State the arrangements made by General A., and give reasons for the course adopted.

SEVENTEENTH LETTER

RETREAT

N the 2nd December General A. awaits information on the hill west of Vionville. On receipt of the two reports at 10 a.m., he will lose no time in issuing his orders for retreat, in framing which he will in particular direct the cavalry not merely to keep touch with the enemy, but to endeavour to push forward from both sides against both roads on which the enemy is marching. The orders can be issued at once, as there is no need for special deliberation. can hardly reach the main body (21 miles distant), however, before 10 a.m., and that is on the supposition that intermediate (signalling) stations have been established, and signals pre-arranged for starting the main body. head of the main body is 2 miles from Gravelotte, it should arrive there a little before II a.m., and should there join the right flank guard, for the latter should leave Doncourt at 9.25 a.m.,—reaching Caulre, if all goes well, at 10 a.m., and Gravelotte about 11 a.m.

The main guard of the rear guard occupies about 600 yards road-space (6 companies and a battery). Its head is at the east end of Vionville; from this to the head of the main body (east end of Rezonville) is 2 miles = 3520 yards; so from the tail of the main guard to the head of the main body is 3520-600=2920 yards = say $1\frac{3}{4}$ miles; the rear guard, therefore, must start at once in order to reduce this to the required distance of $1\frac{1}{4}$ miles.

Although the instructions sent to the officer commanding the IV/K.R. Rifles have fully explained what General A. requires, yet it will be as well for the latter to send this officer a copy of the orders for retreat to Gravelotte, which specify the reconnaissance required of him, in order to make it clear to him that the arrangements made last night are still in force.

By this means also Lieut-Colonel C. will know what the other portions of the force are doing. For the sake of the main body and rear guard, too, the order for the right flank guard ought to be promulgated, in order that they may clearly see the measures adopted for the protection of their right flank.

If you will refer to my previous letters on the subject of Orders for Retreat, it will save repetition in this place of the remarks there made. A comparison of this exercise with previous ones will show the necessity of avoiding working out tactical exercises according to one set form, an error into which beginners easily fall, and to which the models given by me may to some extent conduce. The different way in which this exercise is worked out should impress upon you that there is no greater mistake in tactics than striving after set forms.

In this case the orders are very brief, and run as follows:-

Hill 550 yards west of Vionville. 2. XII. 89. 10.5 a.m.

DETACHMENT ORDERS.

- The Enemy is advancing in the Orne valley on Conflans-en-Jamisy, and by the Verdun road on Hannonville-au-Passage.
- 2. The Detachment will fall back at once on Metz.
- The Main Body will start at once by the main road, and move, viâ Rozerieulles, and Maison Neuve, on Metz.
- 4. The Rear Guard will at once follow, at 1½ miles distance, keeping touch of the enemy with patrols, and reconnoitring through Ville-sur-Yron and Puxieux.
- The Right Flank Guard will
 join the detachment at
 Gravelotte, keeping touch
 of the enemy with patrols,
 and reconnoitring through
 Droitaumont and Jouaville.
- 6. Reports will reach me with the rear guard.

Verbally to officers commanding units in the rear guard and main body.

Copy sent to the right flank guard by Lieut. S.

A., Major-General.

SEVENTEENTH EXERCISE.

The detachment had commenced its retreat on Metz.—At 11.15 a.m. General A. receives at Gravelotte, up to which place the line of telegraph is still working, the following telegram from the Governor of Metz:

"Your message, despatched from Vionville at 10.10 a.m., just received by telegram. Preparations for defence on the heights of St. Quentin not yet completed. Endeavour to check the enemy to-day west of the Montveau valley."

At this moment (11.15 a.m.) the situation is as follows: The tail* of the main body has reached the Mance valley, where the Field Co. R.E. is just finishing its tasks. The IV/K.R.R. was delayed in leaving Doncourt, so that it has only just reached Malmaison. Several reports concerning the enemy have reached General A., from which it appears that the southern hostile column, which has apparently received a reinforcement in cavalry, is at this moment (11.15 a.m.) passing through Mars-la-Tour; while the northern hostile column, estimated at about 4 battalions, 1 squadron, and 1 battery, had not long passed Doncourt. It has not been possible to accurately determine the enemy's strength.

State the arrangements made by General A., and show on the map any positions that may be taken up.

* i.e. the end of the main body column furthest from the enemy; temporarily the head of the column in respect of its movement towards Metz.—Trans.

EIGHTEENTH LETTER

A POSITION IN READINESS

THE telegram from the Governor of Metz orders General A. to check the enemy west of the Montveau valley. General A. must therefore choose a defensive position suitable for this purpose, and has now a totally different duty to perform—that of engaging the enemy. It is purely a case of delaying the enemy; that is, of gaining time,—for a decisive result is out of the question in view of the apparently great numerical superiority which the enemy possesses.

We have, in the first place, to calculate the position of the various portions of the column on the march at 11.15 a.m. A study of the map shows that General A. has the choice between (1) a position near to and north of Gravelotte, (2) a position on the ridge east of the Mance valley, say, from Moskau to the ruin at Le Point-du-Jour, or (3) may endeavour to defend both in succession.

There is no question that the enemy will have to attack both the above-mentioned positions in advancing on Metz. It is also very unlikely that his northern column will try to turn the position from the north, say, by way of Vernéville; for it is more to his advantage that his two columns should join hands and attack in one body than that they should still further diverge, and so leave all unity of action wholly to chance.

The next thing to do is to weigh the advantages and

disadvantages of the two positions; the points to be considered in which process are detailed in my last letter. Omitting what is less important, I have only to deal with the following:—

In the first position there is a good field of fire for artillery from the high ground by Mogador, in a westerly and southwesterly direction; and the road Gravelotte-Rezonville, by which the southern column is advancing, can be well swept by fire; but it is otherwise as regards the road from Malmaison to Doncourt-en-Jarnisy. The only good artillery positions for the enemy are on each side of the road Gravelotte - Rezonville. The maximum frontage that General A., with the troops at his disposal, can occupy is from Gravelotte to Mogador-both points inclusive; and even then the enemy's northern column can easily take the position in flank by merely continuing its advance on the Malmaison road. The village of Gravelotte is not very well adapted for defence, the western border not being sharply defined, owing to the farm buildings in front of it, which would render supervision of the defenders difficult, and tend to their dissemination.

The principal disadvantage of the position, however, is that close behind it is the deep and precipitous Mance valley, clothed with dense woods on both sides, which can be traversed by means of the road only, unless time be no object. If driven from the position, the detachment would find retreat difficult, the more so as, after crossing the valley, the ascent of the hillside to Le Point-du-Jour would have to be made under the enemy's fire. The knowledge that retreat is difficult paralyses the energies of the commander, and is prejudicial to the moral of the troops; and a premature retreat is likely to lead to heavy losses.

The second position gives a clear field for artillery fire from about Moskau against the enemy's line of advance

through Gravelotte, especially on the cutting through which the main road runs just east of Gravelotte, and the bridge in the Mance valley. The fire of artillery would not be quite so good because of the wood, but still good enough in the direction of Malmaison. In attacking the position the enemy will have to pass through the dense woods on both sides of the Mance valley, which are certain to dissolve tactical formations; and on emerging from the woods he will come under our effective infantry fire, the whole slope being swept by fire from the summit. He will find it far from easy to envelop a flank, as from Moskau there is an excellent field of fire in all directions, and there is good cover for defenders in the quarries at Le Point-du-Jour. this case it is a good thing to have the Mance valley as an obstacle along the whole front of the position, as our object is only to delay the enemy, with no idea of taking the offensive.

The enemy will, of course, find suitable artillery positions east and south of Gravelotte, and, still better, near Mogador; but they are all almost 2700 yards from Moskau, that is to say, near the limits of effective artillery fire; nor could his artillery move in closer till a late stage of the attack, when his infantry had got well over the Mance valley. The quarries west of St. Hubert will favour the advance of the enemy's infantry, which, however, our infantry fire will be able to prevent getting beyond St. Hubert.

The farm of St. Hubert must be strongly held as a part of the line of defence, for such points as farms, copses, ditches, hollow roads, etc., which lie within effective infantry range in front of a position, and would, if left to the attacker, assist him in his advance, should be considered as parts of the main position. This is the case with St. Hubert, so there can be no question that it belongs to the main position. It is generally inconvenient for the

defender to have to split up his forces through occupying such points in advance of the general front; here, however, the disadvantage is compensated for by the fact that from St. Hubert effective rifle fire can be brought to bear on the greater part of the road, which here partakes of the nature of a defile. On the other hand, do not over-estimate the importance of St. Hubert, for such isolated farms. especially when exposed to the enemy's artillery fire, are soon rendered almost untenable by artillery fire alone. and then exposed to the first enveloping infantry attack. A protracted defence of St. Hubert is impossible; it would lead to sacrificing the troops holding it; but the defence of this farm will gain time, as the enemy must gain possession of St. Hubert before proceeding to the attack of the main position; besides which his tactical formations will be thrown into such disorder in the attack on the farm that he will have some trouble in restoring order before continuing his advance on the main position.

In rear of this position also there is an obstacle—the Montveau valley—but not so near at hand as the Mance valley is behind the first position; yet the retreat from Moskau on Chatel St. Germain is rendered difficult by the steep descent into the valley, not to mention the wood on the west side of the valley, with its dense undergrowth and paucity of paths. The conditions are more favourable for retreat in rear of the left flank of the position, in the direction of Rozérieulles.

A comparison of the two positions is all in favour of the second.

We have now to consider whether General A. should not defend both positions one after the other. As his object is solely to gain time, there can be no doubt that this object will be better attained if the enemy has first to deploy in front of Gravelotte, and then, after taking it, again

deploy for the attack on Le Point-du-Jour. The retreat across the Mance valley, however, is so difficult that, to avoid heavy losses and complete disorganization, it will have to be carried out under cover of a rallying position already held at Le Point-du-Jour. General A. might either (1) occupy a main position at Gravelotte, and very shortly afterwards a rallying position at Le Point-du-Jour; or (2) make his main position at Le Point-du-Jour, and hold the Gravelotte position lightly, as an advanced position. Either plan, however, would lead to splitting up the force, and be at variance with the general principle that one's whole force should, if possible, be massed in one main position. former arrangement would necessitate a very early withdrawal of the troops to hold the rallying position, if they are to occupy it in good time,—which would deprive us of their assistance in the main action. If, on the other hand, Gravelotte be held as an advanced position—by the rearguard, for example—there would be some difficulty in leaving the front of the main position clear,—for the difficulty of retreating through the dense wood is such, whether on Moskau or on the quarries of Le Point-du-Jour, that nearly the whole of the rear guard would fall back by the main road. Imagine in what fashion the troops driven from Gravelotte would fall back on the main position, and the effect thereby produced on the moral of the other troops, under whose eyes this headlong flight would take place! The advanced troops would probably be quite unfit for further action for the rest of the day, while the enemy would have scored a success in advance.

In pursuance of the above considerations, General A. decides to give up all idea of defending Gravelotte, and to concentrate his detachment at the position of Le Point-du-Jour.

Let me beg of you to bear this case in mind as an illustra-

tion of the difference between advanced posts in front of a position and advanced positions. St. Hubert is an advanced post, within effective infantry fire of the main position; the Gravelotte position is an advanced position, for it is a long way beyond the reach of effective infantry fire, and almost out of artillery range. As a rule there is no reason why advanced posts or points should not be defended, as one cannot afford to abandon them to the enemy. Advanced positions, on the contrary, whether held by outposts, advanced guards, or rear guards, should never, when possible, be defended; * as, irrespective of the difficulty of retreating from them, and the danger of the enemy following so closely on the heels of our retreating troops that we cannot fire upon him, it is as likely as not that the main action may take place in front of the position proper, should the troops in the main position be induced to come to the assistance of the advanced position which is imperilled. You will, doubtless, have noticed that I have intentionally laid the scene of the present exercise in this part of the country in order that you may consider these questions in the light of the history of the late war.

In the battle of the 18th August the French did not hold the Gravelotte position, but they did hold St. Hubert. They had eventually to abandon the farm, after suffering heavy losses, but the disorder into which the attacker was thrown in the attack on St. Hubert contributed in no small degree to the failure of all attempts at carrying the main position by storm. This battle also affords an example of an advanced position in the occupation of St. Marie-aux-Chênes in front of the main position of St. Privat. St. Marie was assaulted by superior numbers, and the French soon had to evacuate it. Little time, comparatively speaking, was gained by defending

^{*} See I.D., 117 (9): "As a rule it is not advisable to detach a considerable force to hold an advanced post," etc.—Trans.

it, though the French made fruitless attempts to come to its assistance by sallying out from the main position, and the defenders of it fell back in great disorder under the eyes of the troops defending St. Privat.

In either case the inevitable rout of the troops thrown out in front discourages the defenders of the main position; and therefore I repeat, if possible, one main position and nothing more!

In the last letter I told you that it is not possible to occupy a defensive position until we know with some degree of certainty in what manner the enemy will attack, and especially how his troops are distributed. In the present instance we are not in possession of information on these points, owing to the unfortunate circumstance that the enemy's cavalry has been reinforced. General A.'s cavalry has therefore been unable to get near enough to the enemy to obtain reliable information as to the strength of the two columns. Of the two, we know more about the northern column: but we have no definite information about the southern column either—a deficiency the more regrettable, as the report sent in yesterday evening by the officer's patrol as to the strength of the troops in the bivouac seen by him requires confirmation. Up to the present, all that General A. knows is that probably several hostile battalions are advancing on each road, and that a battery has been observed in the northern column. The only course open to him, therefore, is to provisionally take up a "Position in Readiness," until the situation clears up more.

A Position in Readiness is, as the name implies, a position in which the troops are merely drawn up at some suitable point in readiness for eventualities, with a view to subsequently either occupying a regular defensive position, or attacking the enemy, or marching in any required direction. In the majority of cases the occupation of a position in readiness is

merely a preliminary step to occupying a defensive position, and, in such case, before selecting the place where the troops are to be assembled in readiness, the line to be subsequently defended must be at any rate approximately fixed. In so doing we have to consider the probable intentions of the enemy.

General A. intends to defend the high ground at Le Point-du-Jour, and the position that he will occupy at the outset will extend from Moskau to the ruin at Le Point-du-Jour, a frontage of about 1100 yards, which he can comfortably defend with his detachment. At the present stage of the operations it is impossible to say whether he may not be obliged to increase this front later on, to meet attacks on his flanks; but in any case the first line should be as short as possible.

The enemy can either make a direct frontal attack, by St. Hubert—though it is very unlikely, as he would have a great deal of trouble in deploying the greater part of his force out of the defile—or can, simultaneously with a frontal attack on St. Hubert, attack Moskau, or the left flank of the position near Le Point-du-Jour. Should he attack the right flank. the northern column need only continue in its present line of advance through Bois-des-Genivaux, where several roads and the shallow depression north of Moskau somewhat favour the attack, though the farm at Moskau will stand General A. in good stead as a supporting point for his flank. Should, on the contrary, the left flank be attacked, General A. will be obliged to prolong the line in that direction by occupying the quarries of Le Point-du-Jour, while the enemy will first have to traverse Bois-des-Trois-Têtes, where there are only unimportant footpaths, and then carry out an attack under great difficulties.—the defender being well under cover. An attack on the left flank carries with it, of course, the special advantage that it will seriously threaten the defender's main line of retreat, which runs from behind the left flank of the position to Rozérieulles.

The above considerations do not enable us to arrive at any definite conclusion as to in what manner the enemy will attack, and we can only say that the most *natural* direction for the enemy's main attack is on *Moskau*. General A. will accordingly do best to fix the place for the assembly of his troops under cover *in rear of the centre* of his position, so as to utilise existing roads for ready access to all parts of the position; that is to say in rear of (*i.e.* east of) the hill 345.2. Here the bulk of his infantry will be drawn up in assembly formation, in two lines of quarter-columns, one behind the other.

At the outset the infantry should occupy only such supporting points as, no matter how the enemy attacks, will under any circumstances play an important part; this is termed "the occupation of the framework of the position." Such supporting points receive sufficiently strong garrisons, which utilise the time at their disposal in putting these points in a state of defence—not too strong, however, in order that as large a proportion of the troops as possible may be kept in hand at this early stage of the operations. Moskau and St. Hubert are such points in the present instance. Two companies are enough for Moskau, and half a battalion for St. Hubert, that being the garrison which this advanced post will require throughout the action, and any subsequent reinforcement would probably have to be made under the fire of the enemy. With a view to avoiding an admixture of different battalions when the position proper is subsequently occupied, the infantry for these two points are drawn from those battalions which will later on have to garrison the sections to which Moskau and St. Hubert will belong. General A. must therefore decide from the very first how he intends (approximately) to divide the position into sections, and what battalions are to hold the first line. The battalion which is to hold the section to which Moskau will belong.

can extend, as there will be two batteries in the section, to the quarry 440 yards south of Moskau, and the battalion for the section to which St. Hubert will belong can carry on the line from that point to beyond the turn of the main road, east of St. Hubert; a third battalion possibly continuing the line further south; though it will depend on circumstances how far south the line will go. The final decision as to the sections will be arrived at when the position is being occupied.

The sooner Moskau and St. Hubert are occupied, the sooner can the preparation of the latter for defence be set in hand. In the case of St. Hubert, in particular, there is no time to be lost, as it will be the first to be attacked. For this reason General A. will detail the I/Suffolk and the I/Essex, who will be the first to arrive, to occupy the most important points—the I/Suffolk garrisoning St. The cavalry will, as hitherto, reconnoitre. should at once report when the enemy quits the roads, and state in what direction he is moving, as from this General A. will infer in what manner the attack will be made. The orders must therefore give the cavalry special instructions to watch the country on both sides of the roads by which the enemy is advancing: the II/13th Hussars reconnoitring in the direction of Jouaville and St. Marcel; the Ist Squadron in the direction of Flavigny, the Bois-de-Vionville, and the Bois-des-Ognons. When a position in readiness has to be taken up, it will often be necessary to send separate and complete squadrons of cavalry in the various directions in which the enemy has been last reported, or where he is probably This will entail an unavoidable splitting up of the cavalry. The employment of the cavalry is in this case, therefore, very different from its employment in the attack and defence of positions, in which cases the bulk of it should be massed on that flank where there is most scope for

its action, while only patrols watch the less important flank. In the case of a position in readiness one flank is about as important as the other, and there must be careful reconnaissance in all directions. If circumstances admit of your keeping your cavalry in one body well to the front, and thus avoiding dissemination of this arm, so much the better! Standing patrols placed on commanding points can then keep the enemy's lines of approach constantly under observation, while at the same time moving patrols endeavour to actively seek him out.

The artillery should be placed at points whence it will have a range of 3300 yards and more, and will command all the avenues of approach open to the enemy, so as to compel him to leave the roads while still at a distance from the position. In the present case we are concerned with the roads through Gravelotte and Malmaison, which can both be commanded from Moskau, where the batteries will accordingly be placed. General A. will, however, only indicate their position in general terms, viz., "near Moskau," leaving the officer commanding the artillery to arrange details on the spot.

It is not always essential that, as here, both batteries should be together, although this arrangement greatly facilitates unity of command. Were it, for instance, necessary in this case, in order to better command the road through Gravelotte, to place a battery on the hill 345.2, there would be no objection to such an arrangement, for the officer commanding the artillery would be responsible that the separation of the batteries did not impair their fire effect. The artillery position must also be so situated as to command any points which may serve as positions for the enemy's guns; such points here are Mogador and the hill north of it. It is an excellent thing when *one* position will meet all these requirements.

When time permits, cover for the guns should be made, or at any rate trenches to shelter the gun detachments. It is seldom that artificial cover can be provided for limbers and wagons in field operations.

The batteries will remain under cover close in rear of their future position until the general direction of the attack is known, and the enemy shows himself; near enough to move into position at the shortest notice; and the nearer the better. It is this that constitutes taking up a position in readiness, "which is suitable even in cases when a position is artificially strengthened, as it is the only means of ensuring that the guns come into a suitable position with regard to the enemy's attack, and that they will not be obliged to resort to an early change of position." (Artillery Drill, 327.) The ranges should be ascertained, especially that of the position which will probably be occupied later on by the enemy's artillery, near Mogador;—the field of fire cleared where necessary;--plenty of ammunition placed close to the epaulments:—and every preparation made, so that, if possible, our guns may rapidly open fire before the enemy's batteries can come into position. An immediate deployment would as likely as not betray the position of the batteries too soon, the evil effect of which in view of the employment of smokeless powder I have already explained.

If suitable artillery positions cannot be found at the outset, the batteries will await the development of events beside or behind the bulk of the infantry, in any convenient assemblyformation.

Having decided what line to defend, no time should be lost in beginning the preparation of the position for defence, which, not counting the placing of the two farms in a state of defence,—in doing which the engineers assist the infantry, is limited to the construction of epaulments for the guns and shelter-trenches for the infantry, or improving the ditches on the by-road to Moskau, and on the main road, measuring ranges, and clearing the immediate foreground. The battalions to occupy sections in the first line prepare them for defence.

Though General A. does not yet know how far his line must extend to the south, he can, at all events provisionally, have the position prepared for defence as far as the quarries. without necessarily having subsequently on that account to occupy it as far as that. There is not much to be done in the southern section, so the II/Hampshire Regiment, hitherto in the advanced guard, which will be the last to arrive, may be detailed for this section. If the exact line to be defended were not vet quite decided upon, it would be a mistake to begin preparations for defence, as undue precipitation in this direction would only tie the hands of the G.O.C., and circumscribe freedom of movement. With positions in readiness it is, as a general rule, not such a simple matter as it is in this case to decide the right moment for beginning to place the intended position in a state of defence. If one has to await the arrival of more definite information as to the enemy's deployment, or if there be several positions suitable for defence and one cannot decide which to defend until later on. it will often happen that there will then be no time available for thorough-going preparations for defence. My advice to you in these cases is to calculate approximately by what time the enemy will get near enough to necessitate work being discontinued. In the present case our preparations can be continued until the enemy's infantry reaches the eastern border of the Bois-des-Genivaux. The time at our disposal in the case of Moskau, for instance, may be thus approximately calculated.

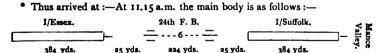
While the orders are being issued, the detachment continues its retreat. The I/Essex Regiment will take 30

minutes to reach Moskau, and so it will be about 11.45 a.m. when it arrives there and begins work. If the northern column advances on Moskau, its leading troops will have about 5 miles to go before reaching the west edge of the Bois-des-Genivaux, which will take them I hour 40 minutes, so they will get there about 12.55 p.m., after which they have to traverse the wood and form for attack inside its eastern border. You will thus have at least an hour and a half in which to prepare Moskau for defence, but probably very much more, as in reality the enemy is not likely to advance so fast as above estimated.

The two S.A.A. carts with each battalion will be emptied, so as to provide the defenders with as much ammunition as possible. There is plenty of time for doing this.

The position of the dressing station cannot be fixed until the direction of the enemy's main attack is certain, so the bearer company will await the development of events, together with the other troops. No change need be made in the existing arrangements for the baggage, so no reference is necessary to it in the orders. General A.'s position will be where he can be easily found, and whence he has a good view of the country; the bend in the high road east of St. Hubert is a suitable place.

In these orders, too, it must be clearly stated that the hitherto-existing rôles of the various portions of the column



Total length of M.B. on the march, 1042 yards. Add 20 % opening out = 1250 yards.

The last man in the I/Essex Regiment has to march 1250 yards to reach the bridge over the Mance brook, whence to Moskau say 1800 yards. Total, say 3000 yards, which, at 100 yards a minute - 30 minutes, so the battalion will arrive at Moskau about 11.45 a.m.

of march (rear guard and right flank guard) are to be considered terminated. For the same reasons as in orders for attack I would make this clear in the orders.*

Under heading 2 of the orders it will be as well for General A. to explain to his subordinates why, contrary to his arrangements for retreat, he is about to take up a position in readiness, so as not to be open to the reproach of having changed his mind.

Telegraphic communication may be kept up between Rozérieulles and Metz, but the section between Gravelotte and Rozérieulles must be destroyed by the engineers.

The following are the orders:-

^{* &}quot;Write your orders with the firm conviction that they will be read by at least one idiot, who will try and misunderstand them."—Journal, R. U.S.I., July, 1896.

Gravelotte. 2. XII. 89. II.20 a.m.

DETACHMENT ORDERS.

- The enemy's northern column is in pursuit through Doncourt-en-Jarnisy, his southern column through Marsla-Tour.
- 2. The Detachment will, in accordance with an order just received from Metz, check the enemy, and take up a position in readiness east of the hill 345'2, 550 yards north-east of Le Point-du-Jour. The state of march is to be considered terminated.
- 3. The II/15th Hussars will reconnoitre in the direction of Jouaville and Doncourten-Jarnisy, and through St. Marcel; the I/15th Hussars in the direction of Mars-la-Tour, Flavigny, Bois-de-Vionville, and Bois-des-Ognons.
- 4. The 21st and 24th Field Batteries R.A. will construct epaulments near Moskau, and take up a position in readiness in rear of them.
- 5 The I/Essex Regiment will occupy Moskau with two

companies, and the I/Suffolk Regiment St. Hubert with four companies; the rest of the infantry and the bearer company will take up a position in assembly-formation east of the hill 345.2, 550 yards north-east of Le Point-du-Jour.

- 6. The I/Essex will put in a state of defence the line from Moskau, inclusive, to 440 yards south of Moskau; the I/Suffolk thence to the bend in the high road east of St. Hubert, inclusive; and the II/Hants thence to the quarries at Le exclusive. Point-du-Jour, The 23rd Field Co. R.E. will assist in preparing Moskau and St. Hubert for defence, obstruct the road where it crosses the Mance Valley and destroy the line of telegraph from Gravelotte to Rozérieulles, exclusive.
- 7. The two S.A.A. carts per battalion with the I/Essex, I/Suffolk, and II/Hants, will be emptied; the detachment reserve S.A.A. carts will remain at my disposal.

8. Reports will find me at the bend in the main road, east of St. Hubert.

Verbally to officers commanding units in the main body. Copies sent to the rear guard by Lieut. M., and to the right flank guard by Lieut. R. A.,
Major-General.

EIGHTEENTH EXERCISE

At 1.15 p.m. the situation has been so far cleared up that General A., who has assembled by him his subordinate commanders, with the exception of the officers commanding the squadrons of cavalry, is aware that 2 hostile battalions and a battery are deploying at Gravelotte, and 4 battalions and a battery are deploying at Malmaison; while the enemy's cavalry is making vain efforts to reconnoitre in the direction of the high ground at Le Point-du-Jour, by way of the Bois-des-Trois-Têtes and the Bois-des-Genivaux. General A. can also see that a hostile firing line, deployed on both sides of the high road, is gaining ground from Gravelotte in the direction of St. Hubert, and that another hostile firing line is advancing from the high ground north of Mogador in an easterly direction, towards the Mance Valley; while at the same time both the enemy's batteries are coming into position south-east of Mogador. There is nothing visible of the enemy south of Gravelotte, except cavalry. The II/15th Hussars reports "Three battalions of the enemy are moving by the field-path running from the middle of the east side of Malmaison towards the Bois-des-Genivaux."

State the arrangements made by General A., giving reasons for the measures adopted, and show on the map in detail the position occupied.

NINETEENTH LETTER

POSITION FOR DEFENCE

HERE is now no doubt that the enemy will make his main attack on Moskau, simultaneously with a weaker secondary attack deployed on both sides of the Gravelotte road, so General A. can now occupy his defensive position; his batteries at the same time opening fire on those of the enemy, which have come into position near Mogador, thereby diverting the fire of the latter from St. Hubert by drawing it upon themselves. The data assume that the enemy's advance has been so skilfully made that our batteries had no opportunity of firing on his columns of route. Thus the first shot is by order of the G.O.C., as it always should be, for a premature opening of fire, possibly on small bodies of the enemy, assists the enemy in reconnoitring the position. Our artillery will not fire on the enemy's infantry until it advances to In order to keep a strong general reserve in hand, General A. intends having only two battalions in the first line, in the hope that the I/Suffolk will be able to hold its ground against the two hostile battalions advancing through Gravelotte. This battalion has, in addition to St. Hubert, a frontage of about 440 yards to defend, which is the utmost possible. Should the line have to be prolonged to the south, it will have to be done at a later period by the general reserve.

The latter may be disposed in two different ways. If its position has hitherto been in rear of the centre, it will now

have to be moved. Both battalions may now be placed in rear of the threatened flank, with a view to their employment defensively or offensively. If in this case the left flank has to be prolonged, the order must be given in good time to the battalion required for the purpose, as it will have a long way to go. Or, if you are apprehensive for your left flank, the general reserve will have to be divided, and the II/Hants posted under cover by the side of the road from Le Point-du-Jour to Rozérieulles. The latter arrangement is justified by the consideration that the detachment has to confine itself to the defensive, and so will probably have to abandon all idea of making an effective counter-stroke.

It is yet a somewhat doubtful question what the enemy's strength in the neighbourhood of Gravelotte really is. According to the data, General A. has ascertained by 1.15 p.m. that two hostile battalions are deploying at Gravelotte, whereas the evening before the officer's patrol reported the presence of four hostile battalions (approximately) in a bivouac on the southern road. It seems probable, therefore, that the officer in question made a mistake, though there is still room for uncertainty. This shows how long, under certain circumstances, the effect of uncertain information lasts. The chance of the enemy being in greater strength than two battalions at Gravelotte is an inducement to divide the general reserve. as well as the circumstance that the line of retreat requires some special protection, owing to its disadvantageous position with regard to the position. In the present case, therefore, I consider that, as an exceptional measure, the reserve ought to be divided.

The cavalry can now be gradually so distributed as to have the bulk of it in readiness on the threatened flank, protecting it by reconnaissance,—only patrols remaining in observation of the southern border of Gravelotte, with orders to report should any considerable body of the enemy advance south of Gravelotte. It will not be easy to find a good position for a dressing station. The heaviest losses are to be expected on the right flank, but if the dressing station were in rear of it, near Châtel St. Germain, it would be too difficult to transport the wounded down the steep valley slopes, and along the rough woodland tracks. Rozérieulles, again, is too far from Moskau; so the dressing station might be formed in the old quarries, 1300 yards east of Le Point-du-Jour, where it would be completely sheltered from fire, and could be easily got at by road; though this position would have the disadvantage of total absence of water and distance from any village. On this account I prefer the west end of Rozérieulles, in spite of the disadvantage of being so far to the rear.*

With regard to the detachment reserve S.A.A. carts, which the previous orders retained at the disposal of the G.O.C., their position must now be settled. There is more than one suitable place; either behind the hill 345.2, i.e. in rear of the centre of the position; or at the junction of roads, 550 yards north-east of Moskau, i.e. in rear of the threatened flank.

General A.'s position will be in the vicinity of the threatened flank.

With regard to the distribution of troops to be shown on the map, see the observations under this head in the last letter. If you are perfectly clear as to the manner in which the position is to be occupied, you will have no trouble in marking the distribution of the troops on the map. Show the troops clearly and distinctly, that is the main thing.

* "An ideal position for a dressing station is from 1000 to 2000 yards in the rear of the fighting troops, at a point not exposed to fire, and communicating with the front by a good road. It should be established, if possible, in a building with large and well-lighted rooms, in sufficient number to hold several hundred wounded lying down, and there should be shade in its vicinity, and a plentiful supply of water for drinking, and for washing and bathing wounded men, and also, if possible, of straw for bedding."—Staff Duties in the Field (translated by Captain Grierson), p. 130.

Bend in the high road east of St. Hubert. 2. XII. 89. 1.20 p.m.

DETACHMENT ORDERS.

- I. Two battalions of the enemy are advancing through Gravelotte on St. Hubert, and four battalions through Malmaison on Moskau. He has two batteries in position south-east of Mogador.
- 2. The Detachment will defend a position extending from Moskau to 220 yards south of the bend in the main road east of St. Hubert.
- 3. The 21st and 24th Field Batteries R.A. will at once open fire on the enemy's artillery.
- 4. The I/Essex will at once occupy the section from Moskau to the quarry 440 yards south of Moskau, both inclusive.

The I/Suffolk the section thence to 220 yards south of the bend in the main road east of St. Hubert. The farm of St. Hubert is to be obstinately defended.

5. The IV/K.R. Rifles, the II/
Hants, and the 23rd Field

- Co. R.E. will form the general reserve. The first mentioned battalion will move to the junction of roads 550 yards north-east of Moskau; and the II/ Hants and the R.E. to the quarries south-east of Le Point-du-Jour.
- 6. The II/15th Hussars will remain near Leipzig, to cover the right flank by reconnoitring towards Malmaison. The I/15th Hussars will reconnoitre with one troop the country south of Gravelotte; the three other troops joining the IInd Squadron.
- 7. The 6th Bearer Company will establish its dressing station at the west end of Rozérieulles. The detachment reserve S.A.A. carts will remain behind the hill 345'2.
- 8. Reports will find me at:
 Moskau

Verbally to the assembled commanding officers. Copies sent to both squadrons by Lieutenants M. and R. A., Major-General.

NINETEENTH EXERCISE.

(See General Map and Gravelotte Map.)

An eastern force has thrown a bridge across the Moselle, between Ay and Hagendingen (both 9 miles north of Metz), by which it has crossed on the 1st September, 1889, and is advancing on the Orne, viâ Pierrevillers and Malancourt, to if possible anticipate the enemy in that quarter, who is reported to be advancing on Briey. The eastern force has a left flanking detachment, under General A., consisting of 3 battalions, 1 squadron, 2 field batteries, $\frac{1}{3}$ of a field company R.E. and a bearer company, which is simultaneously moving, viâ Maizières, Bronvaux and St. Privat, on Auboué. As, at 9 a.m., the head of the vanguard of the detachment strikes, at Marengo, the high road from Saulny to St. Privat, General A., who has ridden up to this point, hears heavy artillery and musketry fire to the northwards, and at the same time the following reports arrive in quick succession:

From the squadron (part of which has trotted on ahead through Marengo, part through Amanweiler, on St. Privat), to the effect that hostile infantry has fired on it from St. Privat, but that Roncourt was found to be unoccupied by the enemy. Except as above, only detached cavalry patrols had been seen.

An officer's patrol, which had pushed forward by way of Batilly in the direction of Auboué, saw a column of hostile infantry, with a battery, on the march from Auboué to St. Marie-aux-Chênes, and estimated that the head of the column would arrive at the latter place about 9.30 a.m.—A N.C.O.'s patrol pushed out in the direction of Montois-la-Montagne reports this place occupied by hostile infantry, which was apparently keeping up a heavy fire in the direction of Malancourt.

As officer commanding the detachment, criticise the state of affairs, and state the course that you would follow.

N.B.—The Wald von Jaumont has dense undergrowth.

TWENTIETH LETTER

ATTACK MADE BY A FLANKING DETACHMENT

(Encounter of two forces, both being in motion.)

In the present exercise I have again purposely chosen as the scene of operations a piece of country which will necessitate the use of the general map as well as that of the map with a scale of $\frac{1}{25.000}$. I do so in order to give you further practice in the simultaneous use of maps with different scales, and to gradually accustom you to read such features of the ground as are of tactical importance by means of the map on a scale of $\frac{1}{100.000}$. The only reason that I work so much throughout these letters with the $\frac{1}{25.000}$ maps, which are so easy to read, is to assist a beginner in tactics by making the map-reading part of problems easy for him. You must endeavour to work as well with $\frac{1}{100.000}$ maps as with larger scale ones, as in practice you will have to use the former almost exclusively, in spite of their being infinitely harder to read.

You are called upon to criticise the state of affairs as a preliminary measure, for it is only after carefully weighing the situation, including circumstances not within the immediate sphere of action of the detachment, that you can come to an approximate decision in the present case. The first requirement of this exercise is intended, therefore, to impress upon you that for the purposes of solving the problem it

is not enough merely to take tactical considerations into account. As conveyed in the data, the eastern force purposes to anticipate the enemy on the Orne, with a view to crossing this river, and advancing further, via Briey. The rôle of the eastern force is therefore an *offensive* one. The information concerning the enemy was extremely vague at the outset, for all that was known was that he was advancing on Briey, but whether or not he had yet reached that town it was impossible to say definitely.

While the detachment is still occupied in traversing the hilly country west of the Moselle, it comes all of a sudden and unexpectedly on the enemy, and the heavy firing heard at the same moment towards the north shows that the main body is already hotly engaged with the enemy.

It seems probable that the enemy is in a defensive position, judging from the report furnished by the N.C.O.'s patrol that the enemy was holding Montois-la-Montagne, and was firing in an easterly direction. At the same time General A. is aware that the eastern force is still for the most part entangled in the hilly and wooded country, from which it has to debouch before anything else can be done. If the enemy were on the offensive, and trying to prevent the eastern force from issuing from the defile, the non-commissioned officer could not have failed to notice it. The defensive attitude of the enemy at the moment when seen by the N.C.O.'s patrol is a favourable sign. We cannot, of course, know for certain whence this enemy has sprung who is now opposing the advance of the eastern force, but an inspection of the network of roads leading to Briey makes it probable that he crossed the Orne at Homécourt.

So far the flanking detachment has only been able to establish the presence of the enemy at St. Privat. As, however, the village of Roncourt, north of St. Privat, is unoccupied by hostile troops, and as some of our cavalry

have ridden round by Amanweiler and encountered no enemy until arriving in front of St. Privat, we may conclude with some degree of certainty that the enemy in front of the flanking detachment has, for the present, only occupied St. Privat, having probably crossed the Orne at Auboué and advanced viå St. Marie-aux-Chênes. He is probably in connection with the column which the officer's patrol reported to be advancing from Auboué on St. Marie, that is to say, is its advanced guard, pushed well to the front. This hypothesis is, at any rate, more probable than that the troops in St. Privat are a detachment from those in Montois-la-Montagne, because in the latter case we should have found Roncourt occupied. No artillery has, up to the present, been seen at St. Privat, but this arm is easily concealed, and it may be refraining at present from firing on the reconnoitring cavalry so as not to betray its presence and position too soon. In any case we must be prepared to find a battery at St. Privat, as well as for an alternative contingency, viz. that the battery which has been seen on the march from Auboué to St. Marie may move up to St. Privat with a cavalry escort. Our cavalry has, however, stated definitely that St. Privat is occupied by infantry, which is more than saying that they were fired upon from St. Privat. I draw the distinction, because the cavalry should not say they were fired on by infantry unless quite sure that it was not dismounted cavalry.

Imagine yourselves in the position of the cavalry in front of St. Privat. Shots are fired from various parts of the border of the village, but no one can tell exactly whence, for sound is deceptive. The enemy is under cover; there is no time for close inspection, for casualties necessitate a hasty retreat. How difficult, then, to say positively to what extent the circumference of the village is occupied, or the numbers of the defenders! There are no tell-tale puffs of smoke nowadays to betray the enemy's riflemen. Under

such circumstances the officer commanding the squadron may think he has done well if he can say positively whether it is infantry or dismounted cavalry that has fired on him.

Nowadays, however, with smokeless powder, it is a matter of far greater importance than formerly to the officer commanding the troops that his reconnoitring cavalry succeed in establishing as a fact the presence (or otherwise) of hostile infantry, for until this point be cleared up he cannot draw any reliable conclusion as to the enemy's arrangements. In the first place it is noteworthy that the officer's patrol expressly states that the column on the march from Auboué to St. Marie comprises only one battery. The statement is probably correct, for the officer was able, having made a wide détour, to watch the column from a position on its flank. Such being the case, we may infer that we have to deal with either the main body of a flanking detachment or the advanced guard of some stronger body in rear-not, in all probability, with the enemy's main body, as in that case there would be more artillery present. As, however, St. Privat is held by infantry, and it is scarcely likely that the enemy has two advanced guards, one in front of the other, it seems probable that the column reported by the officer's patrol is the main body of a detachment which has been delayed in the Orne valley by some accident; while its advanced guard, say a battalion with a few cavalry. is holding St. Privat. But if it is a detachment which is moving on St. Marie-aux-Chênes, the main body of the enemy's forces is probably at Montois-la-Montagne; and this theory accounts for the heavy artillery firing north of Roncourt. There are other possible interpretations of the information to hand, but none likely to be so correct as this.

It thus seems pretty certain that the enemy has crossed the Orne in two columns, and that the advanced guard of the southern one has pushed on ahead and got a considerable

start of the northern one, the advanced guard of which is nearer the river. As General A, now knows that the latter column is standing on the defensive, it is open to him to make further inferences. That is to say, the fact of the enemy's northern column being so near the river, which means having a defile immediately in its rear, points to the probability of it having been forced into this position through encountering the eastern force on the march, the latter being the stronger. Were the enemy the stronger, he would endeavour to drive back the eastern force on the defile behind it. assumption be correct, we have apparently the somewhat peculiar case of a double rencontre. The bulk of the enemy's forces is apparently still engaged in crossing the Orne; the eastern force, too, has yet to finish debouching from the wooded defile, and must then at once assume a most vigorous offensive to drive back the enemy, who every moment is receiving accessions of strength, as quickly as possible on the Orne, and secure the passages over the river.

We thus, in spite of the scantiness of the data, form an approximate idea of the general situation, though of course we cannot aspire to absolute certainty. I admit it would be more agreeable to General A. if, as formerly would have been the case, the puffs of smoke from St. Privat and from beyond Roncourt enabled him to form a pretty accurate idea as to the enemy's strength and position, and where the firing line of the eastern force was. For it will be awkward for him if, as is quite possible, there should, after all, prove to be only a handful of men holding St. Privat, while he, on the contrary, has had to deploy his whole force before trying conclusions with the village; for such would involve a grievous waste of time. Such mistakes have occasionally happened in the past, and will be of frequent occurrence in the future: as it will be difficult to avoid them in the absence of efficient cavalry reconnaissance, which will, in

the future more than hitherto, have to be supplemented by deploying artillery and advanced-guard infantry in front of a locality that has to be attacked, to induce the enemy to show himself. If, however, the country be very favourable to the defender, and his first line be completely under cover—if he can reinforce his firing line unseen, and if his artillery can open fire unexpectedly—then even this expedient will be unavailing, and the officer commanding the attack will, to a far greater extent than hitherto, be in the dark throughout the entire course of the action as to the strength and dispositions of the defender. The ability of the commander to conjure up a correct idea of the situation from the flimsiest materials,—the valour of the troops,—and, finally, luck and chance, have greater weight than ever.

And now for General A.'s decision. It appears from the above considerations that the eastern force has, first and foremost, to debouch from the defile and deploy as far in front of it as possible. The flank detachment must work in subordination to the main body, for such small bodies should never fight on their own account. Their raison d'être is to serve the main body, and assist it to attain the object it has in view. By drawing the enemy on itself the detachment will facilitate the task of the main body. A defensive rôle is wholly out of place here, for that would be leaving the enemy perfect freedom of action. To stand on the defensive in the present instance would be tantamount to doing nothing. St. Privat must be attacked with the utmost vigour; the more so as in all probability St. Privat is, as we have seen above, only occupied by one battalion.

Suppose it turns out that only a company or two are holding St. Privat. It would be a pity to have lost time in deploying for the attack on the village, but still an attack in force, carried through, and, if need be, beyond St. Privat, will oblige the enemy's column advancing on St. Marie to

turn its attention to the flanking detachment, for it will have to hasten to the support of the village, and thus be prevented turning aside towards Montois-la-Montagne, and taking part in the action with the main body of the eastern force. Suppose, on the contrary, that more than a battalion is holding St. Privat. There would be no harm done, provided we entangle the column advancing on St. Marie in an action. We should, however, have to abandon all idea of carrying out our attack to the extent of assaulting the enemy's position (i.e. only make a demonstration), unless we wish to run the risk of being annihilated.

It would in any event be desirable that the attack on St. Privat be got over before the column advancing from Auboué on St. Marie can join in.. To attain this end the attack must be prompt and energetic. General A. must anticipate the enemy in deployment, and will be fully justified in so acting, for there can be no doubt in his mind that such a line of action will be in accordance with the intentions of his superior. To wait for orders what to do would be a useless waste of time.

The officer's patrol reports that the head of the enemy's column will reach St. Marie-aux-Chênes about 9.30 a.m., it will therefore be at St. Privat by 10.15 easily, (2 miles at 3 miles an hour=40 min.), though of course the battery can trot on ahead. Our detachment will take at least thirty minutes before the infantry can be deployed at Marengo to commence the attack, which therefore cannot be earlier than 9.30 a.m., and we shall be uncommonly lucky if the village is in our hands by 10.15 a.m.

A direct line of advance, provided it offers reasonable hopes of success, is preferable in attack, where time is an object. The shortest line here would mean a direct frontal attack on the east side of the village; this, however, is hardly practicable; for, even supposing that there were

only half a battalion holding St. Privat, the defender's fire from behind cover would inflict such severe losses that the attacker would never be able to get near such a strong position. General A. must not therefore be tempted, for the sake of gaining time, to imperil the success of the attack. There must be only a demonstration against the east side of the village, and the G.O.C. has the usual alternative of making his main attack on either the right or the left flank of the enemy.

The head of the vanguard being at Marengo at 9 a.m., the rest of the detachment is passing through the Wald von Jaumont. The exact position of the various portions of the column does not matter, as movement is confined to the road. Even if there were paths through the wood in a suitable direction for our purpose, one would have to think twice before using them without first reconnoitring them, for it is easy to take the wrong turning in a wood, and such a mistake might lead to disastrous results in this case. The detachment must debouch from the wood in one body, and the surest and quickest way of doing so is to keep to the main road. The whole force will therefore deploy for attack at Marengo.

The demonstration against the east side of the village will advance north of and parallel to the main road, but to decide on which flank the main attack is to be made some little reflection is necessary. To begin with the right flank—from the cluster of houses on the main road, called Jerusalem, the enemy has a clear field of fire in a southerly direction to beyond the railway from Amanweiler. There is a fairly good field of fire towards the south-east as well, though the attacker may get some slight cover behind the short spur which the main road crosses about half-way between Amanweiler and Jerusalem. Between this spur and Jerusalem, however, the attacker would have some 1000

yards of open ground to cross. Troops would also suffer heavy losses in reaching the shelter of this spur from Marengo. From this it appears that the attack on the right flank would be attended with great difficulties, nor would there be much advantage in threatening the enemy's line of retreat on St. Marie, for there is nothing to prevent the defenders of the village retiring on Homécourt. An attack on the right flank would also run a risk, especially if anything unforeseen occurred to delay it, of being itself taken in flank by the column from St. Marie, if the latter reached the high ground S.S.W. of St. Privat, while the flank attack were being made. It is very likely that the enemy would attempt this manœuvre, as the flank attack is bound to be seen. the moment it sets out from Marengo. Neither should the consideration that the extreme right flank of the whole of the hostile forces rests on Jerusalem have any weight in inducing General A. to make his main attack in this quarter, for his great object is to gain possession of St. Privat with as little delay as possible. All else is of secondary importance.

There is far more prospect of success with the *left* flank, viz. in attacking the eastern half of the north border of the village, or the whole of the northern border, should the enemy have occupied it notwithstanding the vigorous demonstration against his front. From in front of the northeast angle of the village there runs a long ridge in a northerly direction, which limits the fire from the north side of the village in a north-easterly direction to about 400 yards. A spur runs from this ridge towards Marengo, under cover of which the attacker can get within 400 yards of the north side of St. Privat without coming under fire. Starting from Marengo, he can move along the edge of the wood, till he strikes the road from the Jaumont quarries (Steinbrüche), and then attack straight on St. Privat.

This main attack would remain so long unseen from St. Privat that the column approaching from St. Marie will not know for a long time how to act. Supposing even that this column were to move on Roncourt to take the main attack in flank, it would have to proceed with caution, on account of the proximity of the main body of the eastern force. Again, by so doing it would play into General A.'s hands, as his object is to draw the column on himself. So, too, it would be with unmixed satisfaction that General A. would view any movement of hostile troops from Montois-la-Montagne towards St. Privat.

If you compare the distance which the troops would have to traverse in order to attack the right flank, with that which they would have to pass over in order to attack the left flank, you will find there is not much difference. An attack on the left flank, however, can be carried out in less time, because favoured by the ground. Whether it would be more advantageous to drive the enemy in a north-westerly or in a south-westerly direction, does not enter into the calculation at present. This question will have to be considered later on.

As regards the ground which lies in rear of the attacking troops—the Wald von Jaumont has dense undergrowth, so, in case of having to retreat through it, movement will be confined to the roads, of which there are enough for the purpose. The advanced guard battalion, which will make the frontal demonstration, could retire on Marengo, and thence on Bronvaux, Fêves, or Norroy-le-Veneur. The main attack and reserve would have to fall back first on the Jaumont quarries, and thence on Pierrevillers, and so probably effect a junction with the eastern force. In any case the whole of the west border of the Wald von Jaumont is favourable for defence as a rallying position in case of need.

General A.'s decision, accordingly, is as follows:—A

demonstration against the east side of the village, combined with a prompt and vigorous main attack on the north-east angle of St. Privat, taking the chance of finding the enemy in superior numbers to us.

If, however, the attack is to be carried out with the rapidity which is so desirable in this case, the artillery must be at once brought to the front, even before the advanced guard battalion has finished deploying at Marengo; for by this means we shall ascertain whether the enemy has artillery at St. Privat or not. Should his guns have been up to the present concealed in the neighbourhood of the village, they will show themselves as soon as our battery opens fire. If, however, the enemy has artillery in St. Privat, our batteries must endeavour to silence it as a preliminary measure. although it is to the infantry that we look for a speedy decision of the action. Until the enemy's guns are silenced, our artillery will not fire on the point to be assaulted by the infantry. As the main attack will get hardly any cover in the last 400 yards of its advance, it would, in spite of the defending infantry being numerically weaker, have no chance of success, if it had to work across the last 400 vards under the artillery fire as well as the infantry fire of the defender.

The action, therefore, will in this case be maintained for some time by the artillery alone, without the intervention of infantry. The advanced guard battalion will at the outset only serve as an escort to the batteries,—keeping under cover; while the infantry of the main body moves off towards the enemy's left flank.

If it turns out that at the outset the enemy has no artillery at St. Privat, it will simplify matters for the detachment. Our artillery can, from the first, fire on the north-east corner of the village, and the advanced guard infantry can sooner advance to attack. None the less, however, the artillery must be on the look-out for the enemy's battery

suddenly and unexpectedly opening fire; for, as we know, the approaching column will probably push its battery on ahead. In any case the north-east corner of the village may be indicated as the first target for the guns; if then a change of target become necessary later on, the point selected for assault will have been already prepared by artillery fire.

The officer commanding the artillery is with the G.O.C. at Marengo. The latter will indicate the first target for the guns, and state in general terms that the batteries are to come into action near Marengo, leaving the O.C. R.A. to settle their exact position. While the batteries are trotting forward, the O.C. R.A. will ride over the ground north and south of Marengo, without, if possible, allowing the enemy to see him. Care must be taken that the position of the batteries is not too distant from the entrance of the roads into the wood, to allow of the safe withdrawal of the guns in case of need. There is a suitable position on the spur north of Marengo, close to the quarry.

The officer commanding the artillery must, in view of the uncertainty that exists as to the movements of the enemy's battery, take special care that his guns can move into position without being seen by the enemy, even though they are thereby delayed in opening fire. An omission to do so might entail heavy losses. When the enemy's artillery sees and fires upon guns moving into position, one can tell from what direction his fire proceeds, but it will take some time to fix the exact position of his batteries, and during this time one is as good as defenceless. Even if one can fix his position, it will probably be some time before one can tell the number of the guns in it, although with field glasses one can see the flash of each gun. I have purposely gone somewhat into detail in this matter, to impress upon you the necessity of caution in the selection of the first position of the guns, and at the same time

this is a good opportunity to remind you of the important rôle that artillery plays in deciding the whole action. Much as General A. desires to hurry up his attack, he must avoid undue precipitation. A thorough artillery preparation is even more essential nowadays than formerly, no matter how much the general situation may call for an instant infantry attack.

There is nothing particular to be said about the order for the infantry making the secondary attack; the officer commanding it will decide when it should quit cover at Marengo and move on St. Privat. The infantry of the main body will not come into action till later, when the situation has cleared up more. In the first orders all that General A. can do is to describe its mission in general terms, leaving all details to the subordinate commander—whose action will be guided by whether the enemy's artillery comes into action against him at all, and, if so, when; and to what range the enemy's infantry fire is effective. The officer commanding the main attack must have a free hand in deciding how far he will go in a northerly direction, and in selecting the moment for the commencement of the attack proper.

Consequently, General A. can only direct that the main attack move from Marengo along the west edge of the Wald von Jaumont, and attack the north-east corner of St. Privat.

The reserve battalion had best be écheloned in rear of the outer flank of the main attack; so placed it can either extend the envelopment of the north side of the vill e, or intervene promptly in case the approach of the column from St. Marie renders it necessary.

The squadron has three distinct duties during the attack Firstly, it has to keep up communication with the eastern force, and report the progress of the action in that quarter; secondly, it must instantly acquaint General A. should any

movement on the part of the enemy from the direction of Montois-la-Montagne affect the main attack; and, thirdly, it must keep a look-out towards Roncourt, and the country south of St. Privat—that is to say, towards both flanks—to ascertain the direction in which the approaching hostile column is moving after passing through St. Marie-aux-Chênes. To watch the country south of St. Privat a few strong patrols will be sufficient, which should be able to hold their own against the enemy's cavalry on the high ground south of St. Privat, whence they can overlook the whole country to beyond St. Marie. The bulk of the squadron should be on the right flank of the main attack, and fill the gap between the latter and the eastern force.

There is no time for issuing extra ammunition.

I omit any reference to the remaining orders, as they call for no explanation, but I may here introduce an observation of a general nature: - In the attack of one flanking detachment on another the following question frequently arises-Should we attack the outermost flank of the enemy, thus, in case of success, driving him back on his other troops, and placing ourselves on the flank of the whole line held by the enemy; or should we turn to account the gap in the enemy's general line, and attack, as in the present instance, the inner flank of the troops directly opposed to our flanking detachment? No rule of universal application can be laid down on this subject. The main thing is to observe the principle that the point of most importance is to defeat the enemy by any means open to us, and that therefore we must attack in whatever direction is most favourable. If we have an equally good chance of success with either flank, then ask yourselves the question: How will the flanking detachment best attain that which must ever be its object, viz. to assist the main body in performing the task imposed upon it?

The orders for the attack are as follows:-

Marengo. 1. 1x. 89. 9.10 a.m.

DETACHMENT ORDERS.

- I. The Enemy has occupied St. Privat with infantry, and a column of hostile infantry, with a battery, is on the march from Auboué to St. Marie-aux-Chênes. The eastern force is attacking Montois-la-Montagne.
- 2. The Detachment will attack
 St. Privat, enveloping the
 enemy's left flank. The
 rôle of the advanced guard,
 as such, will come to an
 end.
- 3. The 1st and 2nd Field Batteries

 R.A. will at once move into position near Marengo, and fire on the north-east corner of St. Privat.
- 4. The I/Battalion will advance, north of the main road, in support of the main attack, which the II/Battalion, moving from Marengo along the west edge of the Wald von Jaumont, will make on the north-east corner of St. Privat.
- 5. The III/Battalion and the R.E. will form the reserve.

which will move 550 yards in rear of the right flank of the main attack.

- 6. The I/1st Dragoons will keep up communication with the eastern force,—cover the right flank of the main attack by observation through Roncourt towards Montois-la-Montagne and St. Marie-aux-Chênes,—and send patrols by way of the high ground south of St. Privat towards St. Marie-aux-Chênes.
- The Bearer Company will establish a dressing station at Marengo.
- 8. Reports will reach me at Marengo.

A., Major-General.

Verbally to the advanced guard and artillery. Copies sent to cavalry by Lieut. A., and to main body by Lieut. B. Written report sent to the eastern force by Lieut. C.

TWENTIETH EXERCISE.

(I recommend working with the General Map only.)

The 1st and 2nd Divisions of infantry are engaged, on the 1st September, 1891, in crossing the Moselle by a pontoon bridge between Ennery and Hauconcourt, with a view to effecting a junction on the following day, at Mars-la-Tour, with the 3rd Infantry Division, which is advancing viâ the unfortified town of Metz. The troops are operating in an enemy's country. The enemy has an army corps advancing from Verdun towards the Moselle. The advanced guard of the 1st and 2nd Divisions, composed of—

I/Battalion,
II/Battalion,
III/Battalion,
III/Battalion,
III/Battalion,
III/Battalion,
I** Dragoons (less Iv** Squadron),
I**, 2nd, and 3rd Field Batteries R.A.,
I** Field Co. R.E.,
Bearer Co.,

commanded by General A., has advanced through Fêves. The G.O.C. has received a notification to the effect that the main body would be delayed about two hours in starting, but that the advanced guard is to continue its advance till further orders, and cover the main body as it debouches from the Wald von Fêves. The general officer in command of the 1st and 2nd Divisions is at present at Hauconcourt, and the general commanding the army corps is with the 3rd Division, which will not arrive at Moulins-bei-Metz till 1 p.m. General A., who has ridden up to the head of the vanguard, is about to cross the Metz-St. Privat road towards the high ground just west of the Amanweiler quarries, when he receives, at 10 a.m., the following report from his cavalry west of Vernéville:-"Column on the march through St. Marcel, strength estimated at 4 or 5 battalions and 2 batteries, but only 1 squadron. Its vanguard reached Caulre at 9.35 a.m., and is moving on Vernéville. The tail of the column was then at Grizières. Another strong column moving through Mars-la-Tour on Vionville. No enemy on main road between Jarny and Doncourt-en-Jarnisy."

^{*} The crossing would probably occupy about three hours.—Trans.

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At 10.35 a.m., a report is received from the cavalry at the west edge of Vernéville that the enemy is advancing very slowly on that village, and that at 10.25 a.m. a weak firing line had occupied the copse about half-way between Caulre and Vernéville.

- (1) As officer commanding the advanced guard, state how you propose to cover the main body of the 1st and 2nd Divisions while it debouches from the Wald von Fêves.
- (2) State the measures to be adopted on receipt of the above reports, and the orders issued, giving reasons for the same.
- N.B.—All the woods on the left bank of the Moselle have dense undergrowth. Infantry in extended order would have great difficulty in working through them.

TWENTY-FIRST LETTER

ADVANCED GUARD ACTION

(Collision of two forces in movement.)

In the last exercise we worked for the most part on the $\frac{1}{25.000}$ map, though occasionally referring to the General Map; in the present exercise, however, I ask you to use the General Map only. You will doubtless have more trouble, owing to the smallness of the scale; but, after completing the solution of the problem, you can test the dispositions you have made by transferring them to the $\frac{1}{25.000}$ map. This exercise should further give you practice in measuring all distances with the compasses.

On receipt of the first report from his cavalry, the officer commanding the advanced guard will at once see that he must act on his own responsibility, for the officer commanding the 1st and 2nd Divisions is at such a distance as to preclude the possibility of his directing what is to be done. Neither can the advanced guard look for immediate support from the main body, the latter having been delayed (the data do not state from what cause) for two hours in starting from Hauconcourt. For two hours, therefore, General A. is thrown on his own resources. His duty is to cover the main body while it debouches from the defile formed by the dense woods on each side the Hauconcourt-Amanweiler road. This duty was assigned him at a time when hardly anything was known of the enemy's whereabouts. In fact, the way in which the

data are given shows that the officer commanding the 1st and 2nd Divisions did not intend his advanced guard to continue its advance for *long*, but merely that it should gain ground far enough to the front to enable his main body to deploy, if necessary, from out the woods, covered by the advanced guard.

The enemy's approach having been reported, it might of course be possible to cover the debouching of the main body of the 1st and 2nd Divisions from the defile by offensive action, viz. by the advanced guard attacking and driving the enemy from Vernéville. To be justified in such action, however, it must be first established beyond the shadow of a doubt that the enemy is considerably inferior to the advanced guard in numbers. This though is far from being the case.

If you measure the distance between Caulre and Grizières. you will find it is 31 miles, which is the road-space occupied by the enemy's column, from the head of the vanguard to the tail of the main body. We saw in the second exercise that the road-space (from the head of the vanguard to the tail of the main body) is about 3 miles in the case of a force of 4 battalions and 2 batteries. We may therefore assume that in the present case the enemy has about 5 battalions and 2 batteries approaching Caulre, which agrees with the estimate made by the cavalry. It thus appears that in all probability the enemy is about the same strength as General A.'s advanced guard, so that, to say the least, it is doubtful whether he can be repulsed. The advanced guard, however. cannot afford to commit itself to any undertaking the success of which is doubtful; for, in the event of a reverse, the whole of the 1st and 2nd Divisions would be affected; for they would have great difficulty in debouching from the wood in face of an enemy flushed by a recent success, and would in any case suffer heavy losses in making the attempt. It is therefore safer for the advanced guard to await the enemy in a suitable

position, taking care to go no further in advance of the main body than is *absolutely necessary*, so as to be within reinforcing distance in case of need. Considering the general situation, therefore, the advanced guard must act on the *defensive*.

The following are the only positions for defence that need be considered:—

- (1) A position immediately in front of the Amanweiler quarries, extending either to Marengo or the Wald von Saulny.
- (2) A position near Amanweiler, extending either towards St. Privat or up to Montigny-la-Grange.
- (3) A position approximately on the line Envie—Champenois, supplemented by the spurs north and south of these two farms.

The following calculation will show that time will not admit of the advanced guard reaching a position at Vernéville—irrespective of the consideration that such a position would be too far in advance of the main body—and that it is open to doubt whether even Champenois can be reached in the time available.

The head of the enemy's vanguard can, if nothing occurs to delay his advance, reach the east side of Vernéville 45 minutes after 9.35 a.m., i.e. at 10.20 a.m., as the distance thither from Caulre is about 2½ miles, (88 yards a minute, or 3 miles an hour).

At 10 a.m. the head of General A.'s vanguard is at the road-fork just north-east of the Amanweiler quarries, and by 10.20 it will have got I mile further—not quite in Amanweiler—and is still 3 miles from Vernéville, where it could not arrive till 11.20 a.m., so the enemy has an hour's start if he wish to occupy Vernéville.

Supposing, as before, that nothing delays the enemy, it is 72 minutes marching from Caulre to Champenois, so the head of the enemy's vanguard can be at Champenois by

10.47 a.m. The head of General A.'s vanguard has not quite 3 miles to go, so would be there a few minutes before 11 a.m. Now let us assume that the advanced guard will be prepared to receive the enemy at Champenois as soon as 2 battalions and the artillery are in position there. This would occupy nearly half an hour more, according to the following calculation:—

IOHOWING	Calculation					
					Yards.	
Vanguard	ı troop of cavalry in	secti	ons.	•	24	Total road-
	Distance		•		25	space +
	I/Battalion .				384	20°/, open-
	Distance		•		25	ing out,
	Field Co. R.E.	•			185	772 yds.
	Distance, say	•	•	•	•	1200 yds.
	II/Battalion .		•		384 _\	
	Distance		•		25	
	1st Battery .	•	•		224	
	Distance	•			25	
	2 nd Battery .	•	•		224	Total road-
	Distance	•	•		25	space +
Main <u>.</u> Guard	3rd Battery .	•			224	> 20°/, open-
	Distance	•			25	ing out=
	III/Battalion	•			384	2573 yds.
	Distance		•		25	
	IV/Battalion				384	
	Distance				25	
	Bearer Co				170	

The total road-space to the tail of the II/Battalion is 2432 yards, which, at 88 yards a minute, = 27 minutes.

At the time the first report was sent off, the three squadrons were, of course, still west of Vernéville, and we may assume that they will have compelled the enemy, who has only one squadron, to advance slowly, as his reconnaissance will be crippled by our superiority in cavalry, and he will have to advance

with great caution. If ably led, it is possible that our cavalry may succeed in holding the west side of Vernéville for a time by the fire of dismounted men, but we cannot depend on the time above mentioned being gained. If, however, our cavalry fail to check the enemy's advance, the two opposing vanguards will come into conflict about Champenois—thus bringing about an action between two forces when in movement in entering on which, as we have seen before, General A.'s object will be to seize a position for defence; though it is doubtful whether the Champenois position can be maintained, as the woods near and east of Chantrenne, and the scattered copses north-east of Vernéville run so close to the two farms that they would greatly facilitate an outflanking movement on the part of the enemy. Although the woods on the left bank of the Moselle have dense undergrowth, which greatly impedes the advance of infantry, they are not absolutely impassable, as was shown in the battles of the 16th and 18th August, 1870.* Another great disadvantage of the Champenois position is that its distance from the Wald von Fêves is such as to render it questionable whether the main body of the 1st and 2nd Divisions could lend the necessary support.

We have, therefore, to choose between the position at the Amanweiler quarries, and that west of Amanweiler. An examination of the former shows, without going into details, that the position is not a bad one in itself, for although the Wald von Saulny lends itself to an attack on the left flank, the enemy has, supposing he comes through Montigny-la-

^{*} On the 16th August Stülpnagel's infantry fought their way through the Bois de Vionville. On the 17th August, 1870, the German VIIth Corps marched by Corny and Ars upon Gravelotte, following the Mance brook, and occupying the Bois des Ognons and the Wald von Vaux, though it was not accomplished without some wood fighting. On the 18th August Von Goeben's infantry carried their attack through the Bois des Trois Têtes and the woods in the valley north-west of St. Hubert, while the IXth corps entered the Bois des Genivaux.—Trans.

Grange, first to work his way through the copse west of the railway (Les Rappes on the $\frac{1}{25.000}$ map) and then through the long narrow salient projecting from the Wald von Saulny, where there is also a steep ascent to be climbed—all of which means a delay of several hours, besides disorganising his tactical formation.

I therefore do not consider the weakness of this flank a serious defect, for before the assault could take place our main body would probably be on the spot. The position, however, is too near the mouth of the defile. Imagine the advanced guard engaged on a line extending from the quarries to a point west of Marengo. In such case the main body of the 1st and 2nd Divisions would have to deploy in the narrow space between the quarries and the main road running to St. Privat—for the quarries themselves, though they would favour a passive defence, would impede the deployment of a large force, and especially its forward movement.

All the columns would have to debouch from this one gap between the quarries and Marengo, under the very insufficient cover, (as an inspection of the vertical hachures in the $\frac{1}{100.000}$ map, or of the contours in the $\frac{1}{25.000}$ map will show,) of the insignificant col, which in reality is hardly perceptible, running from in front of the quarries towards St Privat. Should the enemy succeed in placing artillery north-west of Amanweiler, say on the little knoll (marked 322 in the large-scale map) just north of the railway, his guns would be within 2700 yards of the "gap" just referred to, and an undisturbed deployment of our main body would be out of the question. On this account, I do not consider the position at the quarries a suitable one.

In addition to the above considerations it is desirable, with regard to the 3rd Division, that General A. take up a position rather further to the west. We are told that the 3rd Division will reach Moulins-bei-Metz about 1 p.m., so it will be 2 p.m.

(3 miles) before it arrives on the high ground at Point-du-Iour. Our cavalry, however, has reported that what appears to be a strong column of the enemy is advancing through Mars-la-Tour and Vionville. How far this column had got was unknown, but, even assuming that the head of the column did not leave Mars-la-Tour till 9.35 a.m., it can (if it intends marching on Metz-and beyond a doubt it will) be at Point-du-Jour (8 miles) about 20 minutes after noon. At any rate this column, if it occupies the heights of Point-du-Iour, would very seriously embarrass the advance of the 3rd Division up the steep ascent from the Moselle valley—(and doubtless the enemy has already been acquainted by his cavalry of the approach of our 3rd Division, irrespective of the fact that the inhabitants of the country are friendly to him, and will render him ample and reliable information). When, however, the officer commanding this hostile column learns that the column marching parallel with his is engaged with a strong body of the enemy between Vernéville and Amanweiler, he will probably feel disposed to wait the development of the situation awhile before crossing the Mance valley and taking up a position at Point-du-Jour. while matters wear such an uncertain aspect in the direction of his left flank, especially as he is probably aware, from the reports of the inhabitants, that strong bodies of troops have crossed the Moselle at Hauconcourt.

Should—though it is not likely—the enemy's southern column support the northern, if only by sending a detachment to assist it, so much the better for our 3rd Division. General A. will doubtless further the common cause by taking up a position west of Amanweiler, where he will be on the flank of, and in the same alignment with, the Point-du-Jour position.

So far, we have no positive information as to how the enemy is advancing after passing Caulre, so General A.

must for the present wait near Amanweiler before committing himself to the occupation of a definite position; that is to say, he must take up a position in readiness west of Amanweiler. It is still uncertain whether the enemy intends attacking at all, so General A. can provisionally only make arrangements for forming up his troops west of Amanweiler. To settle where to form up, we must closely study the map.

It is unlikely that the enemy, on ascertaining the presence of considerable bodies of troops in the neighbourhood of Amanweiler, will make a direct frontal attack on each side of the Vernéville-Amanweiler road; for this road runs up a ravine which is commanded from the hill marked 3309 in the \frac{1}{25.000} map, and from its easterly prolongation. He will probably have to attack from the north or from the south.

The spinneys north-east of Vernéville and south of the railway will favour an attack from the north, but the spaces of open ground between them can be swept by fire from the high ground about 700 yards west of Amanweiler. If the enemy move in this direction, General A.'s best position would be on both sides of the road from Amanweiler to Habonville, on the high ground referred to.

If the enemy attack from the south, he would not find it enough to go round by Envie, as he would suffer heavy losses after passing that farm, but he would probably make a wider détour, through Chantrenne, and thence up the valley to La Folie, with a view to gaining the hill 340 north-west of La Folie. In that case, General A. should take up a position for defence from the above-mentioned hill 330.9 to Montigny-la-Grange castle, a building well adapted for defence. It is more likely that the enemy will attack from the south, as he will thereby keep better touch with his own main column moving by the main road through Vionville. An attack from the south would likewise be less inconvenient to General A. than would one from the north, because Montigny castle

makes an excellent supporting point for his left flank Were he, on the contrary, compelled to occupy the northern position, he might have no option but to extend his line unduly, which is always dangerous.

The position in readiness must be so situated that the troops can rapidly occupy either the northern or the southern position. I should select the west side of Amanweiler, which is well covered from view by the high ground in front. Here, then, the bulk of the infantry will assemble. The entire length of the combatant portion of the advanced guard, from the head of the vanguard to the tail of the main guard, is, as above shown, 4545 yards, and it is about 13 miles from the road fork north-east of the Amanweiler quarries to the west side of Amanweiler, so the whole force can be formed up on the west of Amanweiler, 86 minutes after 10 a.m. = 11.26 a.m.

I advise you now to again go over my remarks with the aid both of the $\frac{1}{100.000}$ and the $\frac{1}{25.000}$ map. The difficulty of reading the ground on the $\frac{1}{100.000}$ map will be to a great extent removed by a comparison with the $\frac{1}{25.000}$ map.

It is neither likely nor advisable that the advanced guard commander should issue the orders for taking up the position in readiness while he is at the quarries. Far better that these orders be issued after making investigations on the spot. For the present let the whole force continue marching as before,* matters have not yet taken an acute turn.

Not so, however as regards the *orders for the cavalry*, to whose action there now attaches the utmost importance. The three squadrons have a two-fold duty to perform, to delay the enemy's advance, and render such prompt informa-

All the subordinate commanders in the advanced guard are left in ignorance of the fact that the cavalry has sighted the enemy until the arrival of the advanced guard west of Amanweiler, nearly an hour later, when the orders for taking up a position in readiness are issued.—Trans.

tion as to the manner in which he is deploying as to enable General A. to quickly decide which of the above-mentioned positions he will defend.

The best means of checking the enemy's advance is by the fire of dismounted men from the west side of Vernéville. This will compel him to deploy some infantry, as for cavalry to seek to gain time by charging infantry would lead to losses out of all proportion to the effect produced. Neither would much time be gained, even by a successful charge, as its effect lasts but a few moments.

The map shows that the wall round the castle park and the west side of Vernéville generally gives good cover. It may or may not be possible to deceive the enemy as to the number of the troops barring his advance, and as to what arm they belong, but we must, at any rate, endeavour to do so.

We may, of course, safely assume that the officer commanding the cavalry has already, of his own motion, thought of checking the enemy at Vernéville; still it will be as well not to depend on it, but send him an express order to the effect that you expect him to make a brief stand at Vernéville. If he has already thought of doing so, your order will show him that such action will be in conformity with your view of the general situation, which will be satisfactory to him. You must make it clear to him, however, that he is only to make a short resistance, and fall back as soon as the enemy has deployed a superior force, as there is nothing to be gained by the cavalry incurring heavy losses.

While on this subject I recommend you to read the sections in the cavalry drill book dealing with the temporary employment of cavalry as infantry.* In the present case

[•] See Cavalry Drill, 1896, vol. ii., part i., sec. 17, CLERY'S Minor Tactics, pp. 151 and 382, and PRINCE KRAFT'S Letters on Cavalry, Letter XIX. (The latter authority takes it that every third man will be a horse-holder.)—Trans.

one of the squadrons must be told off for a "mounted reserve," to watch the enemy's advance, especially from a position on the flanks; for the copses north-west and southwest of Vernéville, from which a sudden assault might be made on the village, call for special precautionary measures on our part. Active patrolling is not enough, but whole troops must be employed to drive back the enemy's cavalry on its own infantry. This leaves two squadrons for dismounted action; the led horses being kept under cover as near as possible to the firing line, and well out of view from any part of the country in front. The usual procedure in the dismounted action of a squadron is that half the men are detailed to hold the horses. Variations are, of course, permitted, but are only exceptionally to be recommended, as it is generally desirable that the led horses should be capable of rapid transference from one place to another. In this case the two squadrons furnish four troops for dismounted action along the west side of Vernéville. The strength of a squadron in the field may be taken at about 120 mounted men, so there are 120 men available for fire action, no supports being necessary. If the led horses can be left permanently in one place we shall be able to hold the border of the village in much greater strength.

The officer commanding the cavalry is responsible for Vernéville being evacuated in good time, after which his duty is to find out in what manner the enemy is deploying for attack. How he will proceed depends on the enemy's movements. In any case standing patrols must watch the ground between Champenois and Anoux-la-Grange, and between Champenois and Malmaison, to notice the first signs of the enemy diverging to north or south of the main road. It is also of importance to General A. to learn what is going on on the Gravelotte-Vionville road. An officer's patrol can furnish this information.

When discussing the first position in readiness, in the 18th letter, I told you that there are two ways in which the cavalry may be employed when a position in readiness has to be occupied—either the squadrons are distributed between the various lines of approach open to the enemy, which causes a considerable dissemination of the cavalry: or the cavalry is kept concentrated, and the various lines of approach watched by standing and moving patrols. The officer commanding the cavalry is free to adopt either of these two systems in the present instance, as at the moment of issuing the orders this matter cannot be decided by the officer commanding the advanced guard. The latter can only tell the cavalry in the most general terms what he requires done, and any attempt on his part to interfere with details, or to appoint a place for the cavalry to retire on after quitting Vernéville, would be a decided mistake. He must, however, inform the officer commanding the cavalry where the position in readiness is to be, when it will be occupied, and where reports are to be sent. On the other hand, it should be expressly stated that an officer's patrol will be sufficient for observation in the direction of Gravelotte, as otherwise the officer commanding the cavalry might be induced, for some reason or other, to send, it may be, a troop in that direction. General A, should further instruct the cavalry commander to endeavour to establish communication with the advanced guard of the 3rd Division. The only justification for omitting this latter instruction might lie in the fact that at the time of issuing the orders the advanced guard of the 3rd Division will still be in the Moselle valley.

Above all things the orders must reach the cavalry as quickly as possible; every moment is precious; and the orders should find the cavalry still in Vernéville. They should, therefore, be despatched immediately on receipt of the first report. The orders should be written down in his message

book by the staff officer taking it, for it would not do to send such important orders verbally. It is better to send them by a staff officer who knows the views and intentions of the commander, and can give the cavalry commander information respecting the position of the advanced guard, the delay in the advance of the main body, the intentions of the officer commanding the advanced guard, &c.; and who can, on his return, report to the G.O.C. any opinions he may have formed after conference with the cavalry commander. Sending a staff officer supplements not only the orders transmitted to the front, but also the information transmitted from the front.

We will assume that the process of arriving at a decision and dictating the orders occupies five minutes. The cavalry are still west of Vernéville, *i.e.* about 5 miles from the Amanweiler quarries, and should receive the orders in twenty minutes, *i.e.* at 10.25 a.m.; for well-mounted staff officers, as I have said before, can ride at the rate of 15 miles an hour.

The orders to the cavalry are as follows:-

Amanweiler Quarries. 1. IX. 91. 10.5 a.m.

ADVANCED GUARD ORDERS.

- The Advanced Guard will take up a position in readiness immediately west of Amanweiler, where the head of the vanguard will arrive at 10.35 a.m.
- 2. The 1st Dragoons will endeavour, while avoiding heavy losses, to check the enemy by holding Vernéville with dismounted men, and will keep a look out towards Anoux-la-Grange, Bagneux, and Malmaison. An officer's patrol to be detached to reconnoitre the Gravelotte-Vionville road. Communication to be sought with the advanced guard of the 3rd Division.
- Reports will reach me on the hill 330'9 south-west of Amanweiler.

Transmitted in writing by a staff officer.

A., Major-General.

It must not be supposed that, having despatched these orders to his cavalry, the advanced guard commander has nothing more to do.

General A. must now report, not only to his own main body, but also to the general officer commanding the Army Corps, that he has encountered the enemy. Were the news far less important than it is, it would be General A.'s duty to report it in detail, because it is the first encounter with a hostile force, concerning which up to the present next to nothing was known, and information of this nature is of the utmost value to an Army Corps Staff.

Every officer, N.C.O., and even every commander of a patrol should ever remember that, without ample information of what is going on, or of what transpires concerning the enemy, it is impossible for a superior commander to act.* How much that is admirable has been written and spoken on the subject of reports, and yet peace-manœuvres almost invariably show how difficult it is to carry out in practice the requirements of theory. The higher the position of the person who makes the report, the more it is to be desired that, besides clearly announcing the fact for the trustworthiness of which he is responsible, and mentioning the source of his information, he distinctly state the view he takes of his own position, and what he purposes doing; for by such means only will the superior authority be enabled either to simply acquiesce in the proposals of his subordinate, or to send him orders modifying his plans, or to assist him in carrying them out. Thus, the higher the position of the person making the report, the more detailed the report as a rule.

Take the cavalry reports contained in the data. As far as facts are concerned, they are as minute as can be expected on active service; but they convey no resume of the situation, nor do they state what the officer commanding the cavalry intended doing; and the omission is the more felt by the advanced guard commander, as twenty

[&]quot;Safe conclusions can be drawn only from the actual reconnaissance which discovers and observes the enemy, and, above all, from the collation of observations from as many different places as possible. It is therefore the duty of patrols, advanced detachments, outposts, advanced guards, commanding officers, and staff officers to acquaint their superior officers at once and as fully as possible with the situation."—F.O. I. 13.

minutes will elapse before his orders can reach their destination. General A. would have been glad to have been told what the cavalry intended doing after sending off the report.

Information must be sent, on the lines of the cavalry report, to the 1st and 2nd Divisions as to the estimated strength of the enemy now advancing on Vernéville, and what arms enter into the composition of his force, and, in particular, where the head and tail of his column were at 0.35 a.m. The fact, also, that nothing was seen of the enemy on the Jarny road is of importance to the officer commanding the 1st and 2nd Divisions, as it shows that the column whose advance is reported is, for the time being, the only one with which his advanced guard will have to deal. Neither should the fact of a strong column being on the march through Mars-la-Tour be omitted, because on learning this it will be the duty of the officer commanding the 1st and 2nd Divisions to facilitate, as far as lies in his power, the progress of the 3rd Division up the steep ascent from the Moselle valley.

We thus see that General A.'s report must contain, to begin with, a repetition, word for word, of the cavalry report. Next will come a statement that he intends taking up a position in readiness, together with a brief exposition of the reasons which have induced him to select the position west of Amanweiler, and a resume of the orders just sent to the cavalry, as it is necessary that the officer commanding the main body should have a general idea what, measures have already been adopted with a view to reconnaissance before he arrives at Amanweiler and takes over the command. A statement should also be made that a report was sent at the same time to the Army Corps commander.

It now becomes necessary to establish close connection with the main body of the 1st and 2nd Divisions, as well as with the headquarters of the Army Corps. The distances

relays" had better be established. Fèves is a suitable place for a relay to keep up connection with Hauconcourt, and Lorry for communication with Metz. Subsequent events will decide whether the latter relay had not better be moved to Châtel St. Germain, and when the relay in Fèves can be withdrawn. General A. should inform the officer commanding the main body, of a relay having been posted at Fèves, so that he can at once make use of it. If the roads are good, cyclists may be employed instead of cavalry relays. This exercise shows the important service that may in the future be rendered by cyclists in the service of relays.

The following is the report:—

Amanweiler Quarries. I. IX. 91. 10.5 a.m.

REPORT No. 1.

To Lieut.-General B.

O.C. 1sb Dragoons reports: "Column on the march through "St. Marcel, strength estimated at 4 or 5 battalions and 2 batteries, "but only 1 squadron. Its vanguard reached Caulre at 9.35 a.m., "and is moving on Vernéville. The tail of the column was then "at Grizières. Another strong column moving through Mars-la-"Tour on Vionville. No enemy on main road between Jarny and "Doncourt-en-Jarnisy."

Have sent orders to O.C. 1st Dragoons to check the enemy at Vernéville with dismounted men. The advanced guard is about to take up a position in readiness just west of Amanweiler, where my vanguard will arrive at 10.35 a.m., a position at Amanweiler quarries being, in my opinion, too close the outlet from the woods. I am to be found west of Amanweiler. I am observing in the direction of Anoux-la-Grange, Bagneux, Malmaison, and through

^{* &}quot;When during battle messages have to be carried for considerable distances by mounted messengers, skilfully posted relays will render great service and economize time and strength."—F.O. I. 38 A.

Gravelotte towards Vionville. Am establishing a combat relay at Fèves. I am reporting to the officer commanding the Army Corps.

Major-General.*

 The message card used in the German army, and its envelope, are as follows (F.O. L. 50):--Report or Message (reduced).

Whence despatched.	Day.	Month.	Hour. Minut a.m. or p.m.
Received			
,		-!	
		Whence despatched.	Whence despatched.

Envelope (reduced). То 4 Inches. Received Despatched Pace This envelope to be returned to the bearer. 51 Inches.

The report or message should be on strong paper. The narrow margin on the left is to admit of filing with others, and is not to be written on.

The envelope takes the report or message once folded.

The heading "Writer's Rank and Command" should be filled in, not with his name, but with his official title, or that of his corps, or that of the troops with which he is temporarily or duty; e.g. "Advanced Guard of the 1st and and Divisions" (as on p. 427); "Officer's patrol lst Dragoons," &c.

On the envelope the hour of despatch is to be noted, and three crosses tell the bearer to ride as fast as possible. He should also be told to go viâ Fèves, Sémecourt, and Maizièresbei-Metz, to Hauconcourt, where Lieut-General B. is. In view of the great importance of this report, it is better to send a N.C.O. to accompany the orderly, to ensure the report reaching General B. as soon as possible, even if he should have already left Hauconcourt. If only one man be sent, and any accident happened to his horse, the report might never reach its destination, or arrive too late. It is unnecessary to make several copies of the report and forward them by different routes.

The report sent to the General commanding the Army Corps comprises firstly a literal repetition of the report received from the cavalry, as above; after which comes the following:—

"I am about to take up a position with the Advanced Guard west of Amanweiler. Am observing in the direction of Anoux-la-Grange, Bagneux, Malmaison, and Vionville. The main body of the 1st and 2nd Divisions, to which I am sending a report, has been delayed two hours in leaving Hauconcourt. I am establishing a combat relay at Lorry-bei-Metz."

After despatching these reports General A. and his staff will ride at a rapid pace to the hill 330.9, south-west of Amanweiler, to look round before issuing the orders for occupying a position in readiness. Officers commanding units will likewise assemble at the above-mentioned hill, in order to receive the orders verbally, so that any measures which call for explanation may be arranged on the spot. Meanwhile (at 10.35 a.m.) General A. receives the second report from his cavalry.

This will in no wise affect his plans, for it merely shows that his superiority in cavalry has produced the expected

result of delaying the enemy's advance, so that the advanced guard will not be interfered with while marching to, and forming up in, its position in readiness. The situation, however, is in other respects much the same as before, so it is too soon to think about taking up a position for defence.

It is not absolutely essential to forward the second report received from the cavalry to the officer commanding 1st and 2nd Divisions, for it would tell him nothing new; but it would be advisable to do so, as it will show him that the advanced guard commander will be able to carry out his intention, as announced before, of occupying a position in readiness west of Amanweiler, without being interfered with by the enemy. On the other hand, a report to the General commanding the Army Corps is quite unnecessary.

The report to General B. will be as follows:-

Writer's Rank and Command.	Whence despatched.	Day.	Month.	Hour.
Advanced Guard of 1st and 2nd Divisions.	Hill 330'9 S.W. of Amanweiler.	ıst.	Sept. '91.	
Received				

Report No. 2.

To

Lieut.-General B.

O.C. 1st Dragoons reports that 'the enemy is advancing very slowly on Vernéville, and that at 10.25 a.m. a weak firing line had occupied small copse half-way between Caulre and Vernéville.' My vanguard has just passed through Amanweiler.

A., Major-General.

After despatching this report by an orderly (who need only ride as far as Fèves, whence the report will be forwarded on by the combat relay) the orders for occupying a position in readiness have to be promulgated, so as to avoid unnecessary

loss of time on the arrival of the troops on the west side of Amanweiler. Time is of special importance in the case of any troops that may have to be detached to the front, for it will be 10.45 a.m. before the order can be issued, and by this time the vanguard will be close to the hill 330.9.

In the meantime the subordinate commanders join the officer commanding the advanced guard, and now learn for the first time, through the medium of the orders, that the cavalry has encountered the enemy, whose strength, by the way, need be only approximately indicated in the orders.

The orders for march of the 1st and 2nd Divisions will have already informed the subordinate commanders that the ard Division is moving through Metz, so no further reference need be made to this in the advanced guard orders. It must be notified, however, that the main body of the 1st and 2nd Divisions has suffered a delay, although such information partakes of the nature of unfavourable news: still it is necessary that all should know that the advanced guard is temporarily thrown on its own resources, as this circumstance must influence the action of every subordinate commander. more particularly with reference to economising reserves. would be a mistake to follow without consideration the general rule, previously mentioned, that unfavourable news should be concealed as far as possible. To do so in the present instance might lead to serious errors on the part of subordinate commanders.

The cavalry have already been informed what they have to do; still I would include among the orders the reconnaissance that is required of them, so that the other subordinate commanders may clearly comprehend the arrangements made.

As soon as it comes to fighting, artillery will play the principal part, as the object is to gain time. This arm should, by its far-ranging fire, delay the enemy's advance beyond Vernéville, whether he endeavour to move north-

wards or southwards. For this purpose the guns had better take up a position in readiness, under cover of the so often mentioned hill 330. I do not recommend that in the present case any attempt should be made to throw up cover for the guns on the hill, for there is scarcely time available for the purpose, (in favourable soil epaulments can be made in one hour), and at present it is hardly possible to decide the exact position for the batteries.

The only thing for the artillery to do is to watch the enemy's advance and wait.

Whatever turn the action may take, however, the hill 3309 is sure to play an important part; it should therefore be at once occupied by the first infantry to arrive. Four companies may be detailed for the purpose, which will ensure an effective infantry fire from the outset, and prevent the artillery, when it comes into position on the hill, being exposed too soon to the enemy's infantry fire. For this latter purpose it is desirable that the infantry be pushed out some 600 yards in front of the guns, a detail to which the orders need not refer, but which can be arranged on the spot.

The village of Amanweiler itself is not very well suited for defence, as it has a limited field of fire; it could only be utilised as a rallying position should we have to retreat from a position in front. In such event the edge of the village must be obstinately held, so it will be as well for the engineers to at once prepare the western outskirts for defence; especially as, in view of the uncertainty that exists as to where and how we shall have to stand on the defensive later on, it is impossible to make preparations for defence, except as regards the hill 330.9. This will leave the engineers free to strengthen the village.

The Dressing Station will probably have to be established in Amanweiler, but I would say nothing about it in the

orders, as it will be time enough to do so later on, when we know something definite as to how the enemy is going to attack. On the other hand, it will be as well for the orders to lay down that the extra ammunition is to be issued from the S.A.A. carts with battalions, as it is doubtful whether there will be time for this later on.

The officer commanding the advanced guard will retain at his disposal the 8 reserve S.A.A. carts of the infantry.

No order can be given about the *baggage*, as it is far behind with the rest of the baggage of the 1st and 2nd Divisions, and under the orders of General B.

A copy of the orders will be sent to the officer commanding the 1st Dragoons, to let him know what the rest of the advanced guard is doing.

The orders for the advanced guard are as follows:-

Hill 330'9, south-west of Amanweiler. 1. IX. 91. 10.45 a.m.

ADVANCED GUARD ORDERS.

- A Hostile Column consisting of several battalions and two batteries is advancing from Caulre on Vernéville.
- The Advanced Guard, which can expect no reinforcements for two hours, will take up a position in readiness west of Amanweiler. The state of march may be considered at an end.
- The 1st Dragoons will observe in the direction of Anoux-la-Grange, Bagneux, Malmaison, and Vionville.
- 4. The Artillery will move forward at the trot, and take up a position in readiness immediately east of the hill 330.9, south-west of Amanweiler.
- Four companies of I/Battalion
 will at once occupy the
 above-mentioned hill. The
 remainder of the Infantry will
 deploy into line of quarter columns to the right, immediately west of Amanweiler,
 —where also the Bearer Company will be formed up.

- 6. The 1st Field Co. R.E. will at once put the west side of Amanweiler in a state of defence, and the I/Battalion will construct shelter trenches on the hill 330'9 south-west of Amanweiler.
- 7. Officers commanding battalions will issue to the men 50 extra rounds from the S.A.A. carts with battalions. The 8 reserve S.A.A. carts will remain at the road-fork on the east side of Amanweiler.
- Reports will reach me on the hill 330.9, south-west of Amanweiler.

Verbally to the assembled commanding officers. Copy sent to the O.C. 1st Dragoons by an orderly.

A., Major-General.

I do not approve of a suggestion which has been made to the effect that the cavalry should fall back on Champenois, or to a point west of Amanweiler, to cover the artillery,—who are to move into position while the rest of the advanced guard is forming up. Such an arrangement would not ensure adequate protection to the guns against surprise, as three squadrons are not sufficient escort. Though the presence of only one hostile squadron is reported so far, it is impossible to say whether the enemy's cavalry might not, contrary to all expectations, suddenly be reinforced, and, if so, it would be doubtful whether our three squadrons could gain the necessary time for the guns to limber up.

It will be instructive now to compare the measures adopted

in connection with the occupation of this position in readiness with those detailed in the eighteenth letter, as the different procedure adopted in either case illustrates the general principles concerned.

In the eighteenth letter, after the officer commanding the detachment had come to a decision to take up a position in readiness east of the Mance valley, it was pretty obvious that he would subsequently have to defend the line from Moskau to Point-du-Jour. It depended, of course, on the enemy's movements whether this line should be prolonged somewhat, either to north or south; but within the line mentioned, at any rate, it was possible to make preparations, and plans could be made for subsequent action. It was only details that remained uncertain, especially as regarded the limits of the sections into which the position would have to be divided. In the present instance, on the contrary, it remains quite uncertain which of two possible positions will have to be occupied later on. The only preparation that can be made is to throw up shelter trenches on hill 3300, which is the only point which is tolerably certain to be attacked, no matter what turn the action may take. Any other points outlining a possible future position, such as Montigny-la-Grange, cannot be occupied until it has become evident that the enemy will attack them. It will, for instance, be useless to have occupied Montigny at the outset, if the enemy eventually attacks the northern flank.

At the moment of issuing the orders there is absolutely nothing to show whether it will be to the north or to the south of the hill 3309 that we shall subsequently have to deploy. Under such circumstances the G.O.C. cannot commit himself to any position in particular, but must reserve to himself the fullest freedom of decision.

In the Moskau—Point-du-Jour position it would have been a mistake to have omitted to make preparations for defence

when taking up a position in readiness. In the present instance it would be equally a mistake if General A. decided on defending any one position in particular, and set about the construction of field entrenchments, &c. "Undue precipitation in constructing field entrenchments when about to assume a defensive attitude is to be deprecated; for it restricts freedom of movement, and instead of being subservient to the intentions of the commander, hampers him in arriving at a decision."—(Regulations for German Infantry, II. 52.)

It is with a wholly different object that I propose that Amanweiler be fortified, viz. to improve the capacity of the village for defence (for which it is naturally but ill adapted), so that it may be utilised as a rallying position in case of need, for which purpose it will serve, no matter which of the two positions is occupied. It may be as well to say that at the outset no garrison need be detailed for Amanweiler, as it would be wrong to tell off a reserve to cover the line of retreat instead of employing it in the main action.

In the eighteenth letter I said the artillery should come into position at Moskau, as thence there was an equally good field of fire both towards Gravelotte and Malmaison. Similarly in the present exercise a position in readiness is selected behind hill 3300 solely because from that point fire can be brought to bear on the country on both sides of the road from Vernéville to Amanweiler. So soon, however, as the enemy attempts an enveloping movement, a portion only of the artillery will, in all probability, be required to move into position on the said hill, for there is no one artillery position from which all the various lines of approach open to the enemy can be commanded. In addition to this, it is not easy to say at present where the enemy's artillery position will probably be, as both north and south of Vernéville there are several suitable On this account our artillery should be kept in hand until it can come into action against the proper

front of the enemy's attack. This procedure is totally different to that adopted in the eighteenth letter, in which case we could foretell with tolerable accuracy where the enemy's artillery would come into action.

In the seventeenth exercise the cavalry had to watch two separate columns advancing on separate roads, and, in spite of the dissemination thereby entailed, a separate and independent task had to be allotted to each of the two squadrons: as it would have been impossible to watch the different lines of approach and the country adjacent to them had the two squadrons remained concentrated at one point. present exercise the advanced guard has only one hostile column in front of it, for what happens on the main road between Vionville and Gravelotte is for the present of no consequence. The cavalry can therefore remain concentrated. and patrols can find out whether and where the enemy diverges from the main road on which he is marching. Note also that it was necessary in the present instance to allot the cavalry their task earlier than the rest of the advanced guard, as they had to gain time as well as reconnoitre. the seventeenth exercise, on the contrary, it was possible to promulgate one common set of orders for the whole detachment, which none the less reached the cavalry in plenty of time, as this arm was already operating on the roads which it had to continue watching.

In conclusion let me advise you to work out a continuation of the problem on the following data:—

At 11.15 a.m. the officer commanding the cavalry reports from the east side of Vernéville: "Have just been compelled to retire from Vernéville, which is occupied by a battalion of the enemy. During my retreat have been fired on by batteries in position about a mile west of Vernéville. A long column of the enemy, estimated at 3 battalions, on the road from Caulre to la Haye-aux-Mures;

its head just reached the Vernéville-Gravelotte road. I am falling back on Envie."

I intentionally omit the solution in my next letter, as I assume that you can hardly go wrong.

TWENTY-FIRST EXERCISE.

(See General Map, and the Maps Verny and Ars a. Mosel.)

An Army Corps, operating in an enemy's country, is advancing by the Strassburg main road, and viâ Rémilly, on the unfortified town of Metz. On the 1st July, 1896, it detaches a force consisting of 7 battalions infantry, 2 squadrons and 2 field batteries, through Vigny, on Verny, with orders to advance west of the Hospital Wald on Metz. The advanced guard of this detached force, consisting of 2 battalions, 2 squadrons, and 1 battery, has reached Pouilly at 2 p.m. with the head of its vanguard, when the officer commanding the detached force decides to halt and quarter his main body in Verny, Chérisey and Pournoy-la-Grasse. He sends orders to Colonel B., commanding the advanced guard, to place outposts in prolongation of the outposts established by the remainder of the Army Corps, which are on the line Ars-Laquenexy-Grosser Wald von Champel-northern point of the Wald von Crépy, and quarter the rest of the advanced guard in Fleury.

The enemy is advancing from Diedenhofen, and is believed to have reached Sablon. His cavalry patrols have been seen about Grigy, Bévoye-la-Haute, Horgne-au-Sablon, Grange-aux-Ormes and south of Augny.

Write out the Advanced Guard Orders issued by Colonel B., and show on the map the way in which the main guard is quartered in Fleury, marking the positions of guards and sentries, and of the alarm-posts.

MODEL FOR

ADVANCED GUARD ORDERS DIRECTING THE OCCUPATION OF AN OUTPOST LINE.

Place. Date. Hour of issue.

ADVANCED GUARD ORDERS.

(No Distribution of Troops.)

- I. Information as to the enemy and our other forces. (Position of the main body and of the main guard.)
- Order detailing the officer to command the outposts, and the troops under his command.
- 3. Mission of the outpost troops, and any special instructions. (General statement as to the line to be occupied. In the case of a detachment seldom necessary to divide the line into sections, each under a separate commander. Dispositions in case of being attacked. Localities which require to be specially prepared for defence. Points which have to be specially watched.)
- 4. Arrangements for the troops of the advanced guard which are not detailed for outpost duty (e.g. appointment of a

Cantonment Commandant, and of an Officer for Cantonment duty. Any special measures for security to be taken by the main guard direct. Alarm Rendezvous for the main guard.)

- 5. Under certain circumstances special arrangements for the baggage (especially whether to accompany the outpost troops or not).
- 6. Position of officer commanding advanced guard.

Manner of communicating the orders to the troops.

Signature.

TWENTY-SECOND LETTER

(1) ADVANCED GUARD ORDERS DIRECTING THE OCCUPATION OF AN OUTPOST LINE

(2) ARRANGEMENTS IN CANTONMENTS

XPERIENCE has shown me that outpost orders are L the most difficult of all, until you have had some practice in framing them, so I cannot do better than repeat the advice I have so often given you, viz., to imagine yourselves in the actual situation with which you are dealing, and then you will be able to adopt the proper measures in conformity with the instructions contained in the Field Service Regulations. There is more than one way of solving all outpost problems, as is the case with all exercises in applied tactics. so there need be no occasion for surprise if in places your conclusions are totally different to mine. The great point is not to violate any of the principles laid down in the Field Service Regulations, which, however, permit the utmost latitude in all matters of secondary importance. more especially in connection with outposts, for nothing in Tactics is so impatient of the fetters of hard and fast rules under ever-varying circumstances as the service of outposts.

My object in premising in the data so large a detachment as seven battalions, the advanced guard being of corresponding strength, was to have an opportunity of discussing the subject of "advanced guard orders directing the occupation of an outpost line." The advanced guard of a small detachment seldom exceeds a battalion with some cavalry—the

whole of which would generally be required for outposts. In such case the advanced guard commander becomes the outpost commander, so that the orders which he issues are termed outpost orders; for when the whole advanced guard is taken for outposts there are only outpost orders issued. If, however, part of the advanced guard is not wanted for the outposts, both advanced guard and outpost orders have to be issued. In this case, as we shall see, one battalion and one squadron will be sufficient for the outposts, so both sets of orders will have to be given. The outpost orders proper will be dealt with in the next letter.

At the moment when the detachment halts, the cavalry is actively engaged in reconnaissance, which must not be suddenly cut short, patrols providing for security while the outpost line is being taken up. Should exceptional circumstances make the troops detailed for outpost cavalry not yet available, the cavalry for the time being at the front must continue to provide for security till the arrival of these troops. What has hitherto been the vanguard ceases to act that part, and the advanced guard now falls into outposts and main guard.

The officer commanding the advanced guard will be somewhere on the main road, south of Pouilly, and will give his orders as quickly as possible, trusting entirely to the map. Any delay will deprive the troops of some of their rest. When the march is over all ranks will be glad to get to their quarters, or the place where they are to spend the night; any long delay while waiting for orders will be considered a grievance. It is therefore best to make arrangements promptly, even if it become necessary later on to make changes. It may be here noticed, although it is anticipating events to do so, that the same considerations affect the outpost commander, though he, being more concerned with details, will rapidly survey the actual ground from some suitable point before issuing his orders.

As the officer commanding the advanced guard knows that the rest of the outposts of the Army Corps extend to the northern point of the Wald von Crépy, the map will show him that his outposts must carry on the line to the Seille, which will protect the left flank. That is all that need be told the outpost commander, whose business it is to see to everything else. As the enemy is apparently so near that he could without much difficulty reach and surprise Fleury, it will be necessary, not only to block the roads, but also to watch the country between them, to prevent the enemy penetrating unnoticed, either with patrols or in greater strength. As, besides this, the enemy is in his own country. and may receive trustworthy information from the inhabitants, an eye must be kept on the latter, to prevent their having free communication with Metz. It will therefore be necessary to have mixed outposts. A battalion and a squadron are sufficient; for, under ordinary circumstances, as here, they can watch a front of about three miles. For actual protection nothing like so much as a squadron will be wanted. Nevertheless it will be as well to detail a whole squadron for outpost duty, as the enemy is so near that his cavalry may attempt to reconnoitre in strength in the course of the day, to meet which movement our cavalry must be in sufficient numbers. If we had less cavalry, or had this arm been overworked during the past few days, one would of course have to do with less than a squadron in the outposts.—Artillery is very seldom required in outposts, such as when one wishes to hold extremely important defiles. It would be placed in position at some suitable point during the day only, and be brought into a place of safety near the main guard at night.

In connection with the *strength* of outposts, remember that every horse and every man on outposts at night loses his rest, and *therefore cannot be fit for much next day*. As few troops as possible should consequently be employed. You should

always ask yourselves the question, "what arrangement will enable me to do with as few troops as possible?" You may say that I am not applying this rule as regards the cavalry, but the next letter will show you that measures are adopted for securing the night's rest of the greater part of the outpost squadron, so that at any rate the majority of the men and horses will be fit for work next day.

If you have in front of you some obstacle with few points of passage across it (river, swampy meadows, &c.),—if there is a range of heights affording a good view over the whole country in front,—if the flanks of the outpost line rest on natural obstacles or on other troops, thus rendering it unnecessary to double them back, you can do with fewer troops. These three points should be specially attended to in choosing your line of observation.

There is another subject of some importance on which I should like to say a few words. It frequently happens that when an obstacle, such as the St. Peter brook in the present instance, is in the front, and the troops have to continue their advance next day, either the whole advanced guard or only the outposts are placed on the side of the obstacle nearer the enemy, with a view to securing the passage of the main body. In the present instance I do not propose placing any of the advanced guard beyond the St. Peter brook, as the main guard is under orders to stop in Fleury;-neither is it necessary to push the outposts so far out, as the St. Peter brook is too insignificant to be worth securing in itself; and, once across it, we should have to advance the outpost line right up to the Seille, north of Magny,—which is too far.—It may be asked whether, by holding the line of the brook, we cannot do with fewer troops for outposts; but it is too insignificant as an obstacle. Infantry could cross it nearly anywhere, even at night, without much difficulty. The best position is on the high ground between the Hospital Wald and the Seille.

which affords such a good view, and has its left flank so secured, that it can be held by comparatively few troops.

There are bridges over the Seille at Marly, Moulin-de-Cuvry, and Moulin-de-Fleury. That at Marly ought not to be destroyed (though such a measure might make the flank additionally secure), as we shall require to make use of it for reconnoitring west of the Seille during the night and next morning, the enemy's cavalry patrols having ranged even to the south of Augny, and observation being necessary in this direction. The unimportant path which crosses the river at Moulin-de-Cuvry is only fit for small parties of infantry in dry weather, as the meadows are swampy,—so it does not lend itself to reconnaissance. The bridge at Moulin-de-Cuvry, therefore, may as well be destroyed. As to the bridge at Moulin-de-Fleury, it may be either destroyed or kept for the passage of reconnoitring patrols; in the latter case special measures must be taken by the main guard for holding it, as it is beyond the sphere of the outposts.

In case of the enemy attacking, the outposts, supported if necessary by the rest of the advanced guard, must check his advance until the main body of the detachment is ready for action, or for marching, as the case may be. This may be done in two ways. The main stand may be made near Fleury, whither the outposts would fall back slowly, or the outposts may hold their ground, being supported by the main guard from Fleury. In the latter case it will be necessary to hold as long as possible the important village of Pouilly, on the main road, and resting on the Seille, from which there is a good field of fire to north and west. The country, however, between Pouilly and the Hospital Wald must not be left open to the enemy, so the defence must extend up to the A comparison of the two positions will show that that at Pouilly is the best as a line of resistance. The advanced guard commander will therefore give precise orders that, in case of the enemy attacking, Pouilly and the hill 2179 are to be held.

The officer commanding the outposts must in any case receive definite instructions where the main guard intends to make a stand in case of the enemy attacking, for he will be guided by this in making his own arrangements for offering resistance. He should be clearly given to understand whether he may count on receiving ready support from the main guard.

The general situation being so simple, it is hardly necessary to give an order that the outposts are to observe, through Magny, on Metz—for that should go without saying—but if you doubt whether the reconnaissance will be carried out in conformity with your ideas in other directions, e.g. whether the outpost commander will remember to watch the country west of the Seille, you had better give special instructions in the orders as to what you require done. To my mind it were superfluous to give instructions regarding observation in the direction of Metz on the east bank of the Seille. I should leave everything in connection with that in the hands of the outpost commander, while informing him that I expect him to provide for observation west of the river.

The portion of the advanced guard which is not detailed for outpost duty, I battalion, I squadron, I battery, will remain at Fleury, and the question has now to be considered whether these troops are to be sheltered in close cantonments, wide cantonments, or alarm quarters.*

^{• &}quot;Troops are said to be cantoned when they are quartered in the houses and other buildings found at the resting-place. Cantonments are divided into two classes, close and wide. In close cantonments the troops and horses are packed as closely as possible into the buildings available. In wide cantonments only so many are quartered on the inhabitants as these can accommodate comfortably.

[&]quot;Close cantonments will usually be employed when near the enemy, because wide cantonments involve so much extension of the force that it could not be sufficiently rapidly assembled."—Handbook of Tactics, CAPTAIN JAMES.

[&]quot;Troops suffer less under shelter even in the poorest villages than in a bivouac,

A bivouac ensures readiness for action, but at the expense of the health and efficiency of the troops. Close cantonments are a sort of compromise between quarters and a bivouac, and afford the troops little comfort, although far better than a bivouac. Wide cantonments are the most comfortable—and the least safe—as the troops require some time to assemble and form up for action. If you do not like to trust wide cantonments, you can place the troops in separate alarmquarters, thus ensuring their rapidly forming up in case of attack. As in the present case the outposts have a good line of resistance, in which they can check an enemy, even if he be in superior numbers, for some time, there is no need to crowd the troops in Fleury without regard to their convenience. We can, therefore, take a middle course, placing some of the infantry in alarm quarters,* e.g. two companies in one of the big barns on the north side of the village, and two companies at the brick-kiln on the main road, the rest of

In houses they are not only protected from the weather, but can find something to supplement their rations, can cook their food, and clean arms, accourrements, and clothing.

"Should the proximity of the enemy, the necessity for concentrating large forces, or a lack of inhabited places, not permit of wide cantonments, close cantonments will admit of a degree of readiness for battle almost equal to a bivouac, while sparing the troops more.

"All measures both for the interior service and the external protection of night quarters depend upon circumstances. They form an ascending series, from the simple wide cantonments at a distance from the enemy, to the crowded close cantonments of large bodies with extensive protective measures, and finally the general bivouac on the ground before or after a battle. In the immediate neighbourhood of the enemy, when for tactical reasons the troops must be kept, at night as well as by day, within a given area, or in the absence of inhabited places, recourse must be had to the simple bivouac."—F.O. I. 223-226. See also Cavalry Drill, 1896, vol. ii., part ii., section 12; and Regulations and Instructions for Encampments and Cantonments, 1895.—Trans.

* Troops in an increased state of readiness, and kept together in suitable houses, are said to be in alarm quarters. A light would be kept in each room, and at least one man would watch. The two companies in the barn would be practically a large guard, ready to turn out at a moment's notice.—Trans.

the troops being more dispersed, as in ordinary wide cantonments. By this means we ensure that in case of need we can either occupy the north side of Fleury and the brick-kiln at a moment's notice, or send four companies to support the outposts; and in any case the squadron and the battery, who take most time in turning out, will be ready for action before the enemy can attack Fleury. Such an arrangement, besides providing for security, ensures comfortable and secure quarters for the mounted arms, who form the bulk of the main guard.

Colonel B., as the senior officer in Fleury, would be cantonment commandant, but can appoint a staff or field officer for this duty. It is the duty of the cantonment commandant, as different units will jointly occupy Fleury, to see to the distribution of quarters, and to take all necessary measures with regard to interior economy, external measures of protection, and the readiness of the troops for action.

Time will not, in the present instance, admit of making elaborate preparations for distributing the various units in the village; Colonel B. will, therefore, appoint the officer commanding II/Battalion Cantonment Commandant, and direct him to proceed in advance to Fleury, accompanied by the quartermasters, &c., from each unit. The Cantonment Commandant will be assisted in his duties by an officer for cantonment duty, who accompanies him.

The Cantonment Commandant need not himself apportion the village among the troops, but is entitled to detail the officer for cantonment duty for this service. In that case the quartermasters would be attached to the latter officer.

The Cantonment Commandant had better be an *infantry* officer, as he is responsible for providing for all measures of protection in connection with the cantonments, and most of the guards will be furnished by the infantry.

Should the bridge at M. de Fleury not be destroyed, a detached post must be sent there from Fleury, to secure the

main guard against any surprise from the west side of the Seille.

With regard to the baggage, the advanced guard commander must arrange whether it be placed at the disposal of the outposts and main guard or not, unless orders have already been issued on this subject by superior authority. If he thinks it very likely that the enemy will attack, he will leave the baggage south of Fleury, or only allow the troops in Fleury to have access to it, and not encumber the outpost troops with unwieldy baggage-wagons, or run the risk of the latter being captured. On the other hand it should be remembered that it is of importance to the troops to have access to their baggage every day, if possible, if only for a few hours: it is a convenience to all ranks of which they should not be deprived unless absolutely necessary. Neither is there any occasion for anxiety concerning the safety of the baggage at night, as it is seldom that attacks are made on outposts by night, although there is always a possibility of them. In spite of the comparative proximity of the enemy, therefore, I would allow the baggage to join both the main guard and the outposts—the latter for a few hours. The outpost commander will be responsible for promptly sending back the baggage in case the enemy attacks. In cases where the country is less favourable than here, or where the enemy is even nearer than in the present instance, not only outposts and main guard, but even the main body may have to do without their baggage for days together, though it is a great hardship to all ranks. The advanced guard commander will, therefore, order the baggage to be brought up on the main road as far as the Fleury brick-kiln,* where instructions will await it from Fleury and from the outpost commander.

Colonel B. has finally to say where he will be during the night, so that reports may reach him as quickly as possible.

The advanced guard orders will be as follows:-

[&]quot;Zgl." on Map.—Trans.

Main road south of Pouilly. 1. VII. 96. 2.5 p.m.

ADVANCED GUARD ORDERS.

- I. The Enemy's infantry has reached Sablon, and his patrols have been seen near Bévoye-la-Haute, Horgne-au-Sablon, Grange-aux-Ormes, and south of Augny.

 The IIIrd Army Corps has occupied an outpost line
 - The IIIrd Army Corps has occupied an outpost line from Ars-Laquenexy to the north corner of the Wald von Crépy, inclusive. The main body of our detached force is quartered in Verny, Chérisey, and Pournoy-la-Grasse.
- 2. The II/Battalion (which will place two companies in alarm quarters on the north side of Fleury, and two companies in alarm quarters at the brick-kiln on the main road), the II/1st Dragoons, and the 1st Field Battery R.A., will occupy wide cantonments in Fleury.

Lieut.-Colonel D., commanding II/Battalion, is appointed Cantonment Commandant, and will make all necessary arrangements. He will place an independent

N.C.O.'s group * on the bridge over the Seille, at Moulin-de-Fleury.

3. Lieut.-Colonel C. will take up a line of outposts with the 1/Battalion and the I/lat Dragoons.

The line of observation will extend from the north corner of the Wald von Crépy, exclusive, to the Seille. Patrols are to be sent west of the Seille towards Montigny Sablon. The bridge over the Seille at Moulin-de-Cuvry is to be destroyed. If the enemy attacks, a position is to be held running from the hill 2179, east of Pouilly, to Pouilly, inclusive.

- 4. The Baggage will move up to the brick-kiln† of Fleury, and can then join the main guard and the outposts.
- 5. Reports will reach me at the Mayor's house in Fleury.

Copy sent to the O.C. cavalry by Lieut. R. Orders issued verbally to the other commanding officers. B., Colonel.

^{*} For explanation of the term "independent N.C.O.'s group" see footnote, p. 479.—Trans. + "Zgl." on map.—Trans.

It is not necessary to describe in detail the line of outposts taken up by the rest of the Army Corps, as it will not affect the outposts of the detached force.

It will, in practice, depend on the personal character of the Cantonment Commandant whether Colonel B. gives express orders for a group to be placed at the bridge by Moulin-de-Fleury, or leaves the performance of this detail to his subordinate. I prefer to ensure it being done by giving an express order to that effect, as above.

The outpost companies are sufficient for the construction of hasty field entrenchments; and it is unnecessary for Colonel B. to detail a special position for the battery.

The way in which the main guard is quartered in Fleury has to be shown on the map. The best way of doing so is to distinguish the various "districts" occupied by the several units by different kinds of cross-hatching; a district occupied by two or more different arms, e.g. infantry and artillery, being shaded twice as dark. An explanation should be attached.

As time did not admit in this case of elaborate preparations for apportioning the village among the various units,—it being desirable to allow the troops to rest as soon as possible,—Lieut.-Colonel D.,—(who, on hearing the advanced guard orders, will have reported himself to Colonel B., and have received instructions to make all necessary arrangements on his own responsibility, in conjunction with the quartermaster of the infantry and the quartermaster-sergeant of the battery, joined later by a representative of the squadron),—will ride on to Fleury, and make a hasty examination of the village, without, however, wasting time over details. He will arrange for two companies to occupy alarm quarters at the brick-kiln. The village itself is marked off by the main streets into three districts.

That on the north-west and north side, which is most

exposed to danger, will be occupied by infantry only; that on the south side, which is safest, by artillery only; and the central district, which is of circular shape, can be jointly occupied by cavalry and infantry—the former using the stables which are there. Lieut.-Colonel D. will select one of the big barns near the road on the north side of the village as alarm quarters for two companies; and all further details will be arranged by the quartermasters, who, as rapidly as possible, allot houses, &c. The troops can now march in. If, owing to the hurry, any companies are worse provided for than others, it will have to be made up for on a future occasion.

The guards which the officer for cantonment duty, acting under the instructions of Lieut-Colonel D., has to mount are an inlying guard and several outlying guards. He will first decide the position of the former and its sentries. It should consist of as few men as possible, and its conduct is guided by the regulations for garrison duty. The battalion will furnish a N.C.O. to command this guard, and the bugler; also a sentry over the colours, and one over the S.A.A. carts, tool cart, and G.S. wagons of the battalion. The squadron posts a sentry over its wagons; * the battery a sentry on its gun-park, where the Notre Dame road leaves the village. With a small force it is not necessary to have a piquet for police purposes; otherwise the infantry would furnish it. The position of the inlying guard is communicated to the orderly officers of the day of the various units on their reporting themselves to the officer for cantonment duty. The latter will, at the same time, inform them of the arrangements made with regard to outlying guards and alarm posts. The officer for cantonment duty ought to get this finished in good time, so that all orders may be communicated to the men before they disperse to their quarters. He must,

^{*} Two; one S.A.A. and one G.S. with farrier's tools,—Trans.

therefore, after showing the quartermasters their districts, and selecting a house as near the centre of the village as possible for the inlying guard, lose no time in riding to the various outlets from the village to have a look round.

While the inlying guard is composed of sentries from the battalion, the squadron, and the battery (as above) with their reliefs, the *outlying guards* are composed of *infantry only*. The outlying guards are of varying strength, and their conduct is guided by the regulations for piquets.

The north side of the village is most exposed, so the officer for cantonment duty will there post an officer's guard (I officer, 25 men, furnished by the two companies in alarm quarters) at the northern outlet of the village, which will post groups and double sentries the same as a piquet. The arrangements would be as follows:—

The guard itself, with a single sentry over the arms, is on the road at the point where it enters the centre of the north side of the village.

A N.C.O.'s group* (No. 1) holds the road-fork (218) east of Fleury, to watch in the direction of the Hospital Wald.

A double sentry (No. 2) about 400 yards in front of the guard, in the direction of Le Tonneau.

Another double sentry (No. 3) either at the north-west angle of the village, or, still better, on the road between the village and the main road, at a point due north of the north-west angle of the village. The guard must send patrols towards the Hospital Wald, and keep up connection with the reserve of the outposts.

To guard the east, west, and south sides of the village, which are less exposed to attack, *independent groups under N.C.O.'s* will be sufficient. These will be furnished by the four companies quartered in the village.

Independent Group No. 1 (1 N.C.O., 9 men) is on the path

^{*} For explanation of the term "N.C.O.'s group" see footnote, p. 479.—Trans.

to the Hospital Wald, where it enters the village, and throws out a double sentry towards the wood to the far edge of the vineyards (440 yards). This sentry can at night communicate with the group sentry at the road-fork (218). This post takes six men (with relief), which leaves three to patrol towards the Hospital Wald.

Independent Group No. 2 (I N.C.O., 9 men) is at the southern outlet of the village, and throws out a double sentry as far as the bend in the road to Notre Dame. The remaining three men patrol south of the vineyards in the direction of the Hospital Wald.

I do not consider it necessary to occupy the outlet of the village towards the brick-kiln.

The two companies in alarm quarters at the brick-kiln will send out an independent group (I N.C.O., 9 men) to the house at the junction of the road from Fleury with the main road, and this independent group furnishes a double sentry north of it on the main road, and patrols towards Pouilly. These two companies have another independent group (I N.C.O., 12 men) in Moulin de Fleury, and this independent group places a double sentry on the bridge itself, and patrols towards Cuvry and Coin-bei-Cuvry (6+3+3=12 men).

The officer for cantonment duty is the direct superior of all the guards, and is responsible for placing them, giving them their instructions, and supervising them by day and night. An officer for rounds may be detailed to assist him. At the same time as he selects the positions of the outlying guards, the Cantonment Commandant will fix the various alarm posts. These should be so chosen, with reference to the possibility of the enemy attacking, that the ground to be defended in case of attack can be quickly reached from them, and that in this movement, as well as in falling in, the various units do not get in each other's way. Thus the brick-kiln would be held by the two companies already there, who can from there flank

with their fire the west side of the village. The best place for the alarm post for the other six companies is at the main entrance to the village, in the middle of the north side, as probably it is only the north side that would have to be occupied.

The best place for the alarm post of the squadron is outside the village, not in the narrow streets where there is no room to move. You have the choice between the outlet facing the brick-kiln, and the outlet of the path to the Hospital Wald; for the outlet facing Notre Dame must be reserved for the battery, otherwise the cavalry and the artillery would get in each other's way in reaching their alarm posts. The outlet of the footpath is, however, unsuitable, as it is too narrow, so the alarm post of the squadron will be fixed at the outlet facing the brick-kiln.

The alarm post of the battery must invariably be by its gun-park, which is on the side of the village furthest from the enemy, *i.e.* at the outlet facing Notre Dame.

To recapitulate—the alarm posts for the infantry are for the most part *in* the village, and close to the section of the village border, which they would defend in case the enemy attacks. The alarm posts of the cavalry and artillery are *outside* the village, at the various outlets.

A distinction must be made between the alarm posts of the various units here referred to, and an alarm rendezvous of large bodies of troops, on the latter of which brigades and such like units assemble without further orders, when its position has been previously notified. In the present instance the officer commanding the advanced guard has not, in his advanced guard orders, fixed any alarm rendezvous for the whole main guard, but desires that the various units, after falling in at their various alarm posts, await further orders. Should it, however, be desired that the main guard assemble somewhere with as little delay as possible, the advanced guard orders must contain

the following:—"Alarm rendezvous for the main guard at the southern outlet of Pouilly." In that case the various units would first of all fall in at their various alarm posts, and then march to the southern outlet of Pouilly. An alarm rendezvous, however, is, as a rule, only resorted to when the commander can see from the very outset that his whole force will have to come into action from one fixed point.

Finally, the Cantonment Commandant would have to draw up a set of rules for the information of orderly officers of units, such as instructions respecting patrols from the inlying guard, closing of public-houses, allotment of wells among the several units, regulation of wheeled traffic, lighting of the streets, preparations for defence, especially as regards barricading the entrances to the village, disposal of baggage, and what is to be done with it in case of an alarm, &c., &c.

TWENTY-SECOND EXERCISE.

(N.B.—Use the $\frac{1}{26.000}$ Map.)

Give the outpost orders issued by Lieut.-Colonel C. in pursuance of the advanced guard orders in the previous exercise, showing on the map the position of the outposts by day and night, including sentry and vedette posts, and state the strength of the various fractions of the outpost line. (Explanations are required.)

At 4 p.m. the following report is received from the outpost squadron:—"Small bodies of hostile cavalry (6 to 8 troopers each) are posted just south of St. Privat (a group of houses south of Montigny-bei-Metz), at the bridge by which the main road crosses the Seille south of Sablon, and on the hill west of Bévoye-la-Haute. There is about a troop of cavalry at the southern outlet of Montigny, and about two or three troops of cavalry at the point where the road from Magny enters Sablon. Inhabitants report two companies of infantry in Sablon and two companies in Montigny."

MODELS FOR

OUTPOST ORDERS FOR MIXED OUTPOSTS.

Place. Date. Hour of Issue.

I. OUTPOST ORDERS.*

- Information as to the enemy and our other forces. (Places where the main body and the main guard are quartered. Mention of any neighbouring outposts furnished by our other forces.)
- 2. Mission of the Outpost Troops.

 (Troops composing the outposts, and a very general statement as to the line to be occupied.)
- 3. Order for the Outpost Cavalry.

 (Establishment of touch with enemy, approximate line to be occupied—roads which it is of special importance to watch—localities towards which to reconnoitre, or with which communication is to be kept up—orderlies or bodies of cavalry to be attached to the infantry.)
- 4. Order for the Outpost Companies. † (Begin from the

Practically the Day arrangements.—Trans. † i.e. the supports and piquets.

- right flank define the sections of the piquet line *—general line to be occupied.)
- 5. Order for the Reserve of the Outposts. (Troops—position—any measures to be adopted for security by the reserve.)
- 6. Attitude in case enemy attacks.

 (Line or localities to be held.)
- 7. Position of outpost commander.
 (With the reserve as a rule.)

Manner of communicating the orders to the troops.

Signature.

Note.—The outpost commander has, as a rule, two sets of orders to give. The first contains the most urgent measures, to set the service outposts quickly in operation; the second is not issued till later on, after an examination of the situation on the actual ground, and comprises the requisite supplementary orders.

* A section of the piquet line consists of I support and its piquets.—Trans.

Place. Date. Hour of Issue.

II.

OUTPOST ORDERS.•

- Information as to the enemy. (Only required if fresh information has been received since issuing the first set of orders.)
- 2. Outpost Cavalry. (Degree of readiness for action required—at what hour to be withdrawn and where to—any duty required of the cavalry during the night—at what hour next morning the day position is to be taken up again—patrols to go out at daybreak.)
- 3. Outpost Companies. (Degree of readiness for action required—hour at which the night position is to be taken up—under certain circumstances direction in which patrols are to go at night, or places with which communication has to be kept up at night—re-occupation of the day position.)
- Reserve. (Degree of readiness for action required—any special measures by night—at what hour next morning the reserve is to get under arms.)
- 5. Roads on which examining posts are to be placed.
- 6. Any preparations for defence or roads to be blocked.

Manner of communicating the orders to the troops.

Signature.

* Practically the Night arrangements.—Trans.

TWENTY-THIRD LETTER

OUTPOST ORDERS

WHEN the advanced guard halted, the head of the vanguard had reached Pouilly, the cavalry being, as stated in the previous letter, far ahead, reconnoitring in the country north of Pouilly. This reconnaissance must be continued until the outpost line is taken up.

On receipt of the advanced guard orders Lieut.-Colonel C. can either issue his first outpost orders there and then, going by the map, or, unless it takes altogether too much time, he may ride rapidly to some point whence he can get a view of at any rate a great part of the country across which his outpost line has to extend. The orders will have to be sent in writing to the cavalry, for the officer commanding the Ist Squadron is far ahead, and can hardly be there in time to receive the orders by word of mouth.

In the present instance Lieut.-Colonel C., with his second-in-command, and his adjutant, will not be long in reaching the hill north of Pouilly at a gallop, where, after a rapid survey of the ground, he can, with the help of the map, frame his orders. There is no doubt that a more thorough examination of the ground would ensure a more perfect arrangement of the outposts. Such, however, would take a long time, and the main thing is, as I said in the previous letter, to quickly post troops to provide for immediate security against surprise, and let the remaining troops quickly come to rest. The outpost commander will in any case have to

ride round the outposts later on, and can then make any slight modifications and additions that may be necessary. No great changes in the arrangements, of course, should be made if they involve very great inconvenience for the troops.

Mixed outposts fall into the outpost cavalry, the outpost companies,* and the reserve of the outposts. The first thing Colonel C. has to do is to fix the approximate positions of these three bodies. As the enemy is so near, it will not be sufficient, as already stated, merely to watch the main roads, but a regular outpost system, in connection with the outposts of the rest of the Army Corps, will be necessary.

Boiscarré immediately adjoins the north corner of the Wald von Crépy, and next to it is the Haut Guenot, an important point, whence, as the map shows, there is a commanding view of the whole St. Peter brook valley, though the hill 1947, south-east of Magny, hides some of the ground north of the brook. This latter hill commands an extensive view towards the high ground about Bévoye-la-Haute, and of the Seille valley beyond Magny. The Seille valley west of Magny can be seen from Haut Boutan. Colonel C. will at once recognise that these three hills (194.7. Haut Guenot, and Haut Boutan) are suitable positions for the outpost cavalry, and he will now have to choose between the Haut Guenot and hill 1947. If he places his vedettes on Haut Guenot, it will be difficult to prevent the enemy's cavalry, which has already been seen near Bévoye-la-Haute and Horgne-au-Sablon, taking possession of hill 1947, and from there more or less overlooking our outposts. We must. however, prevent it doing this, especially as in any case part of our position will be seen into from the high ground of Bévoye-la-Haute, which it is quite impossible to include in our line. Colonel C. will therefore give the preference to hill 1947, not being deterred by the consideration that the

^{*} See note, p. 456.

cavalry there will be separated from the rest of the outposts by the brook, as there is both a bridge and a ford at hand.

Special measures must be adopted for securing the bridge over the Seille at Marly, and for observing the country west of the Seille. The line decided on, therefore, for the outpost cavalry runs from hill 1947, through Haut Boutan, to Marly. I do not recommend that the cavalry be pushed further out than this, as it would in that case come too near the enemy's cavalry, and continual small encounters would be the result, which would harass the outposts; for the enemy will never allow our cavalry to remain unmolested in such an advanced position. It is not so much the duty of the sentries and vedettes to observe the enemy himself, as to watch the ground in front of their posts, and the roads; the actual observation of the enemy is the affair of the patrols. is only on exceptional occasions, when two forces are in very close contact, that the sentries can watch both the ground and the enemy.

As the outpost squadron is already on the ground where it will be posted, the various vedette-posts, &c., can be established in a very short time.

In the advanced guard orders it was laid down that, in case of the enemy attacking, a position was to be held extending from hill 2179, east of Pouilly, to Pouilly inclusive. The supports should, therefore, unless there be any special reason to the contrary, be posted on this line, for it is their resistance which affords the troops in rear of them time to prepare for action; it is therefore the line of supports which should as a rule be held, while the reserve serves as a support to them. The reserve is thus, as a rule, placed in a suitable position in rear of the line of resistance.

It is seldom that the reserve occupies the line to be held; and in such case the outpost companies must be told to fall back fighting on the reserve.

As we saw in the last letter, it is not advisable to advance infantry up to the bridges over the St. Peter brook; and in addition to the reasons already adduced against adopting such a course, there is this further consideration, viz. that it is over a mile from the brook to Pouilly, which is too great a distance to have between the supports and the reserve. The Field Service Regulations do not, of course, lay down any exact distances, but it is, speaking generally, not advisable to have the reserve much more than 1100 yards in rear of the supports, as otherwise the unity of command may be easily endangered at night.

It might be suggested that the supports be posted on the line Haut Guenot-St. Thiébault (the left flank being doubled back to the Seille west of Pouilly), and the piquets advanced far enough for their sentries to be along the St. Peter brook. Now, irrespective of the fact that this line would involve a very considerable frontage, requiring large numbers to hold it,—the Haut Guenot is 900 yards, and St. Thiébault about 1200 yards from the line to be held in case of attack, which is about the maximum distance permissible between supports and reserve, and the retirement of the supports on the reserve by night would be attended with such difficulties that the Pouilly position would run a great risk of being lost.

There is therefore no reason for deviating from the general rule, especially as the line which I propose to hold with the outpost companies,—north corner of the Wald von Crépy direct to the bend in the Seille west of Pouilly, has a frontage of scarcely two miles, and both its flanks rest on natural obstacles.

With regard to the depth of outpost systems, beginners often make the mistake of not giving sufficient depth. But the safety of the troops in rear depends on the outpost system having sufficient depth.' Taking the distance of the reserve from the supports as 550 to 1100 yards,—the distance

of the supports from their piquets as about the same,—and the distance of the sentries from the piquets as not exceeding 440 yards,—then the whole depth, from reserve to the sentry line, is from 1550 to 2650 yards, i.e. about a mile and a quarter on an average. In front of the infantry there is the cavalry during the day. The enemy will have to fight his way over the above distance, plus the distance from the reserve to the troops covered, before he can endanger the main body of the force.

I now come to the first set of orders.

Officers commanding companies and the officer commanding the outpost squadron must be acquainted with the information concerning the enemy and our other troops, for only Lieut.-Colonel C. has received the advanced guard orders, which have not yet been communicated to his subordinates. The information on these points should be word for word as in the advanced guard orders, with the sole addition that the main guard is quartered in Fleury.

No. 2 indicates the line of observation only in the most general terms, as more detailed instructions are contained under subsequent numbers of the orders.

No. 3 must be so worded as to leave all details in the hands of the squadron leader, as he has already acquired some knowledge of the country. On account of its mobility the outpost squadron is less tied to a position once taken up, and to any special disposition, than the outpost infantry, provided that it, by rendering early information, gives the infantry behind it time to form up to meet an attack. The squadron will, as a matter of course, watch the roads through Bévoyela-Haute, Queuleu, and Sablon, but there is no harm in mentioning these places in the orders, as you thereby ensure that the squadron leader sends his patrols far enough out. Distinct orders must be given, however, for reconnaissance on the west of the Seille, in the direction of Sablon and

Montigny, and for keeping up communication with the neighbouring outposts.

The cavalry will detail four to six orderlies for the reserve of the outposts, and not less than four to six for each support: the supports furnishing two orderlies to each piquet. It must be borne in mind that it is not possible to foretell at the outset how many piquets there will be, and therefore how many orderlies will be required for them, so it will not do to detail too few. Should, however, it be apparent to the outpost commander, at the time that he frames his orders, that any one support will not have to throw out more than one piquet, e.g. when the country is open, he need not attach more than four orderlies to such support. It will however. very rarely be necessary to attach more than four orderlies to the reserve. The primary duty of these orderlies is to carry reports, but any supports posted on main roads should send out cavalry patrols along these roads both by day and night. Say a support posted on a main road has two piquets: four troopers will be required as orderlies for the two piquets, and six for the support (two patrols, each of three men), total ten troopers, and a N.C.O. in command. In such a case no special orderlies need be told off for the support. Do not, of course, assume that a support posted on a main road will always want ten troopers, but in every case calculate the fewest that you can do with. You will observe that in the orders below I attach, from the very outset, eight troopers to the left support. I will explain later on my reasons for doing so. (See page 474.) These troopers are attached to the reserve and the supports from the outset. They must therefore, join them at once, after which they can unsaddle and attend to their horses by day, with the exception, possibly, of one orderly to each piquet and support, and to the reserve. For keeping up connection between the supports and the reserve cyclists may generally be employed.

The line to be occupied by the supports with their piquets extends from the north point of the Wald von Crépy to the bend in the Seille west of Pouilly. This frontage must now be divided into sections of the piquet line. In doing this we have to be guided by the roads. As far as possible there should be a support on each main road leading in the enemy's direction. By night, in particular, the movements of large bodies of the enemy are confined to the roads, so any night attack is bound to encounter a support, if the above arrangement be carried out. Small bodies of the enemy moving across country may, of course, harass the outposts, but cannot be a danger to the main body.

The main road here is the Pouilly-Metz chaussée, on which there must, as a matter of course, be a support, viz. on the north side of Pouilly, which it will hold in case of the enemy attacking, and where it forms a species of bivouac. The exact position of the support will be fixed by the officer commanding the section of the piquet line occupied by it on arrival there. The position of this support is the basis on which we shall found our other arrangements.

In average country two companies furnishing a support with its piquets can guard a front of about 1½ miles, so the left section of the piquet line may extend from the Seille to the Bouillon brook, which forms a natural and suitable line of demarcation. The remaining frontage, as far as the Wald von Crépy—some mile and a quarter,—will form the right section of the piquet-line, held by another two companies furnishing a support with its piquets; the support being placed somewhere on hill 2179, which forms part of the line of resistance. Here again it is left to the officer commanding the section of the piquet-line to find the best position for his support on arriving on the ground. No road of any importance runs from the right section of the piquet-line towards the enemy, the only road that needs to be

watched being an unfenced one leading from the east side of Haut Guenot to Magny, with a branch to Crépy. road, or rather track, is not of sufficient importance to render it necessary to send cavalry patrols along it at night, and so the right support will not require any troopers for patrolling. It must be borne in mind that cavalry patrols should be sent at night only along very important main roads, for the horses employed on this duty after doing a heavy day's work are knocked up next day, and this will make itself felt where the total available force of cavalry is none too great for our requirements. In this part of the position, therefore, infantry patrols may be employed instead of cavalry, such patrols having, among other things, to keep up communication by night with the neighbouring outposts east of the Wald von Crépy. Should, however, it be desired that the right support send out a cavalry patrol, there must be at least seven troopers attached to it.

How the supports cover themselves by infantry piquets and independent N.C.O.'s groups* is their own affair—it is not for the outpost commander to arrange it; though he may occasionally give orders how far to the front patrols are to go. Infantry reconnoitring patrols naturally do not go far out, not much more than 1100 yards in front of the sentry-line; partly because the men are not physically able to do much after a hard day's work, and partly because some rest is essential before entering on the exertions of the morrow. In the present instance the sentries will probably be on the line Haut Guenot—St. Thiébault—so the orders may lay down that the infantry reconnoitring patrols go as far as the St. Peter brook, beyond which the cavalry provide for security.

Officers who do not belong to the infantry may find some difficulty in grasping the arrangements as to the positions of

^{*} See p. 479, note. - Trans.

the outpost companies. I will therefore describe the customary procedure.

First of all consider which is the most important road passing through a position, and place a support on it, which, with its piquets, will hold a section of the piquetline. Then divide the rest of the position into sections of the piquet-line, each having a frontage of about a mile and a quarter; each support together with the piquets it furnishes consisting of two companies. As lines of demarcation between sections of the piquet-line look out for brooks, swampy meadows, marshes, &c., but not roads. The supports not on the main road should be placed as far as possible on roads. If several roads, all about equally important, run through the position, consider whether one or the other might not be sufficiently guarded by a piquet. It is impossible to lay down exact rules, but always endeavour to do with as few troops as possible.

The reserve should be on the main road, covered from view, and so placed in rear of the position to be held as to be able to move rapidly to the support of any part of it. Whether the reserve should be cantoned or bivouac will depend on the degree of readiness for action necessary in each individual case. In this case I would have the reserve bivouac at the western part of the south border of Pouilly, as in that position it cannot be seen from the high ground about Bévoye-la-Haute and Mercy-bei-Metz, and is close to the main road immediately behind that part of the position which is most exposed to attack.

In view of the proximity of the enemy it would not do to let the reserve be cantoned or occupy alarm quarters in Pouilly, as when bivouacked it can afford readier support to the right section of the piquet-line in particular than it could if it had first to get out of the buildings and assemble in the village street.

It might be otherwise if the weather were very wintry or wet. In such case we might put up with any slight disadvantage from a tactical point of view, and put the reserve in alarm quarters in Pouilly. We thus see how the degree of readiness for action which must be required of the reserve is regulated entirely by the circumstances of each particular case. In practice the character of the commander has a good deal to say to it. A nervous, fussy commander will bivouac his men in the worst of weather: another will put them in cantonments even on a fine summer Here again a middle course is the safest, extreme proximity of the enemy makes you anxious for your safety, let the reserve of the outposts biyouac, unless the weather be so bad that it would be highly dangerous to the men's health. In such case ask yourself the question: Does the tactical situation absolutely compel us in the present instance to bivouac? You will find that in the majority of cases you need not hesitate to put the reserve of the outposts in alarm quarters or close cantonments.

There is here no occasion for any detached party to provide for security being sent out from the reserve direct, as the west flank rests on the Seille, and the right section of the piquet-line provides sufficiently for security on the east. Neither is it necessary, the force being such a small one, for the reserve to secure itself with special outlying guards, but inlying and outlying guards may be all in one. All that is wanted is a colour-guard with a sentry over the colours, which will also furnish two double sentries, one on each entrance to the village, to prevent anyone going in.

The men take off their valises. With regard to the degree of readiness for action, it may be further laid down in the orders that cooking may be done, as the enemy is at a sufficient distance. I may as well observe that the outpost commander need only give orders respecting the state of readiness for action required in the supports, piquets and outpost cavalry, when he desires some measures to be adopted differing from those usual in the field. In the absence of any orders on the subject the degree of readiness for action of the above-mentioned bodies is as detailed in the Field Service Regulations, 153 to 183.

The outpost commander will as a rule remain with the reserve, because it is simplest for all reports to be sent there, and on this system all arrangements, especially any measures to be adopted for reinforcing the support line, can be carried out in the least possible time. Should he leave the reserve, e.g. to ride round the whole position, he will hand over the command of it to the next senior officer on the spot, informing him what action is to be taken by the reserve in case the enemy suddenly attacks, and where any important reports that may arrive in his absence are to be sent in order to reach him.

The first set of Outpost Orders is as follows:-

* Piquets and supports. "The men pile arms and take off valises and accourtements, a portion always, however, remaining in readiness near their arms and accourtements. No one may leave a piquet except by order or permission. The troopers attached must not off saddle, but in turn slacken girths, water and feed."

Outpost cavalry. "The officer commanding the outpost cavalry is responsible for the disposition of all his troops. He determines, according to circumstances, and any direction of the outpost commander, the necessary degree of readiness for his force, whether the piquets are to be housed for the night, cooking, fires, loosening girths, watering, feeding, &c."—F.O. 153.

Main road north of Pouilly. 1. VII. 96. 2.15 p.m.

I. OUTPOST ORDERS.

- The Enemy's infantry has reached Sablon, and his patrols have been seen near Bévoye-la-Haute, Horgneau-Sablon, Grange-aux-Ormes, and south of Augny.
 - The IIIrd Army Corps has occupied an outpost line extending from Ars-Laquenexy to the north corner of the Wald von Crépy inclusive. The Main Body of our detachment is quartered in Verny, Chérisey, and Pournoy-la-Grasse, and the main guard in Fleury.
- 2. The I/Battalion and the I/1s

 Dragoons will take up a line
 of outposts extending from
 the north corner of the
 Wald von Crépy to the
 Seille.
- 3. The I/1st Dragoons will immediately establish touch with the enemy, and take up the following line of observation: north corner of Wald von Crépy exclusive,

 —Hill 1947 south-east of

Magny — Haut Boutan — Marly; from which it will observe the roads leading through Bévoye-la-Haute, Queuleu, Sablon, and Montigny to Metz. Communication is to be kept up with the outposts east of the Wald von Crépy. Four orderlies are to be detailed for the right support, 8 for the left support, and 4 for the reserve.

4. Nos. 1 and 2 Companies I/Battalion, commanded by Major T., will form the right support, which, posted on the hill 217'9 east of Pouilly, will hold the right section of the piquet line, extending from the north corner of the Wald von Crépy exclusive, to the Bouillon brook inclusive.

Nos. 3 and 4 Companies, commanded by Major P., will form the left support, which, posted on the north side of Pouilly, will hold the left section of the piquet line, extending from the Bouillon brook to the bend in the Seille west of Pouilly.

5. The Reserve, consisting of Nos. 5, 6, 7, and 8 Cos.

- will bivouac immediately south-west of Pouilly. Cooking may be done.
- 6. In case of the enemy attacking the piquets and supports will hold the line, hill 217.9 east end of Pouilly to Pouilly inclusive.
- 7. Reports will reach me with the reserve.

Verbally to the I/Battalion.

Copy sent to the O.C. I/

1st Dragoons by Lieut. and
Adjt. D.

C., Lieut.-Colonel.

At least two hours will now elapse before the second set of outpost orders can be issued, during which time Lieut-Colonel C. will ride round the outpost position, and confer with his subordinate officers on the ground. During this interval, too, (at 4 p.m.) the report from the squadron arrives, which, so far as it concerns the outpost companies, will have to be taken into consideration when the second set of orders is being framed. Lieut-Colonel C. probably gives the cavalry verbal orders, in the course of his rounds, for the destruction of the bridge over the Seille at Moulin-de-Cuvry; and in like manner tells the infantry supports what preparations for defence to make. In the second orders, however, any such verbal orders that may have been given must be repeated, so that all the outpost troops may know what has been done.

As to the hour of withdrawal of the cavalry for the night, it will be regulated by the fact that the infantry take up their night position about an hour before sunset, which gives it at least an hour to settle down in the night position. As the sun sets about 8 p.m. in July, the cavalry may be withdrawn

at 7.30 p.m.; thus, if the infantry has taken up its night position by 7 p.m., both infantry and cavalry will be in operation together for 30 minutes, which time will be utilised by the cavalry for gradually drawing in their vedettes and patrols.

The action of the cavalry, however, does not entirely cease at night, but only such of this arm as is no longer required goes into quarters near the reserve, whenever possible, in order to spare the horses to the utmost: if such be not practicable they bivouac with the reserve. In this instance we need have no hesitation in sending the squadron back to Pouilly, under protection of the supports, but, on account of the proximity of the enemy, it must occupy alarm quarters, i.e. be kept together in the biggest barns on the south side of the village, which is least exposed to attack, steps being taken to ensure its turning out quickly in case of an alarm by preparing sufficient exits from the barns.* The horses remain saddled. Such an arrangement, however uncomfortable, is preferable to a bivouac with the reserve, as horses suffer more than the men in a bivouac.

If it be not considered safe to quarter the squadron in Pouilly, it may be quartered in Fleury even; in such case, however, previous arrangements must be made with the cantonment commandant there. This latter plan offers some advantages, as although the squadron would not be much more comfortable, it would be more secure in Fleury; it would, though, be quite out of touch with the outposts, to which after all it belongs.

[&]quot;As a precaution against cavalry being surrounded when quartered in stables, &c., the place should be searched, exits prepared, fences broken through, &c. The men and horses should be quartered in complete units (troops, &c.). The men sleep in their clothes in the same place with the horses. Where there is special danger it may be necessary to keep the horses saddled and bridled or harnessed during the night, and to place them outside the stables in yards or open places. Each officer remains with his troop; sentries are placed outside the farms."—F.O., I. 244.

Under all circumstances the cavalry must maintain touch of the enemy by means of patrols by night as well as by day. In the present instance the two directions in which it is most important to patrol are from Magny on Sablon, and from Marly on Montigny. If the patrolling on these two roads were carried out solely by cavalry patrols sent out from the supports, the distance is such from Pouilly to Sablon, and from Pouilly through Marly to Montigny, that very great fatigue would be entailed on the horses.

It is far better to have small stationary parties of cavalry holding advanced points, such as Magny and West Marly, in front of the sentry line of the infantry. I consider this an excellent arrangement in the present case, as it facilitates the maintenance of touch with the enemy, spares the horses, and wards off hostile patrols, thus preventing the infantry in rear being harassed, and ensuring more rest and security to piquets and supports. Of course, such advanced parties of cavalry are not directly concerned with providing for the security of the troops in rear of them; if driven in by superior force it is all the same in what direction they retire, as the line of sentries in rear of them is strong enough. Neither are such parties strictly tied down to one place, but hang on to the enemy's movements.

Each party should be commanded by an officer. To the support posted on the main road, which has to keep up connection with the cavalry posts advanced to Magny and West Marly, there must be allotted, for this purpose, two patrols, in addition to the orderlies required for the piquets. These patrols, however, being patrols inside the sentry line, need be of only 2 men each (including the commander). To this support there will therefore be allotted for this purpose 4 troopers; in all 8 troopers.

You will recollect that these 8 troopers were allotted to this support by the first orders, on the assumption that the officer

commanding the outposts planned, from the very outset, occupying Magny and West Marly by night with small parties of cavalry. One cannot, however, always see one's way in advance like this; and, if so, it becomes necessary occasionally to change existing arrangements in the second set of orders.

It will be convenient for the cooking to be done in the evening. The cavalry loosen girths, water, and feed by sections in turn. The day position must be resumed an hour after sunrise, *i.e.* at 5 a.m.; but day patrols may start earlier than this.

The outpost companies must be told how far to the front infantry reconnoitring patrols are to proceed.

The squadron should be informed at what hour next morning it is to resume operations—the supports being similarly told at what hour next morning they can withdraw their night piquets and groups—and the reserve receiving instructions at what hour next morning it has to get under arms; for in conformity with these instructions the troops make their own arrangements with regard to interior economy.

In the order for the cavalry no reference need be made to examining posts, as it is a standing rule that if an important road run through the line of the outpost cavalry, the latter should provide an examining post on it by day, independently of the fact that the infantry has its own examining post further back. One such post will be enough on the main road, i.e. the Metz-Pouilly chaussée, for all persons not known to belong to our own army who may approach by other roads can be turned back and directed to the main road.

Finally, the orders will detail the steps to be taken for preparing the position for defence.

The second set of orders is as follows:--

Bivouac south-west of Pouilly. 1. VII. 96. 4.15 p.m.

II. OUTPOST ORDERS.

- 1. Small bodies of hostile cavalry are posted at the southern outlet of Privat, at the bridge on which the main road crosses the Seille south of Sablon. and on the hill west of Bévoye-la-Haute; and larger bodies at the southern outlet of Montigny and at At each of the Sablon. two latter places there are, according to the reports of the inhabitants, two companies of infantry.
- 2. The 1st Squadron will at once destroy the bridge over the Seille at Moulin-de-Cuvry. and will withdraw at 7.30 p.m. into alarm quarters in the southern part of Pouilly. During the night half a troop, under an officer, will occupy Magny, and half a troop under an officer will occupy West Marly, keeping touch with the enemy. The day positions are to be taken up again at 5 a.m. Patrols will go out from 4 a.m.

- 3. The Outpost Companies are to be in their night positions by 7 p.m. Nos. 1 and 2 companies will keep up communication during the night with the outposts east of the Wald von Crépy; Nos. 3 and 4 companies with the cavalry posts in Magny and West Marly. Reconnoitring patrols will go as far as the St. Peter brook. The night piquets and independent groups can be withdrawn at 5 a.m.
- 4. The Reserve will get under arms at 5 a.m.
- Examining Posts will be placed on the Pouilly-Metz road.
- 6. Hill 217'9 east of Pouilly and the north side of Pouilly are to be at once prepared for defence.

C., Lieut.-Colonel.

Dictated to the officer representing the reserve.

Copies sent by cyclists to the outpost companies and the squadron.

An examiner's object in requiring the position of the outposts to be shown on the map is to see your idea of the whole outpost system down to the smallest details. To show all the dispositions will require a great deal of time and reflection. The principal requirement is extreme clearness,

and there must be no ambiguity as to what is cavalry, what is infantry, which is the day position, and which is the night position. It is not a bad plan to show the day positions on a piece of tracing-paper gummed over the map, the night positions being drawn on the map itself. I will begin with the day positions of the outpost squadron.

All details as to the distribution of the squadron are arranged by the squadron leader, who must above all things see that the *roads* mentioned in No. 3 of the first orders are watched. Thus the distribution of the cavalry will have to conform to the network of roads, though this does not imply that the cavalry have to be placed *actually on* the roads, as is the case with the infantry at night.

A squadron on outpost duty forms one support (sometimes, though rarely, two), which posts a dismounted look-out sentry, and covers itself with piquets and independent N.C.O.'s groups, which in their turn cover themselves with look-out sentries, vedettes, N.C.O.'s groups (usually), and patrols.

The officer commanding the squadron has first to decide whether he will have one support or two. If the front to be watched is not excessive and the country open, as here, one support is sufficient. Two supports are better when one support would have difficulty in rendering prompt assistance to the piquets.

I would have one support, concealed from view behind the buildings of St. Thiébault. So placed, it is near the main road, and about in rear of the centre of the whole line of observation to be taken up by the squadron (Wald von Crépy to Marly, see No. 3 of first outpost orders), for communication with all parts of which there are several roads available. In good weather it is better not to place the support in the farm-yard, as it would be rather shut up there. In bad weather it would depend on the enemy's attitude whether it would be safe to put the horses under cover.

The squadron's rations may be cooked at the farm-house, including the rations of the piquets and detached posts. The saddles may be shifted and the bits removed of one-third at a time, while the horses are feeding and watering. If the support is in the open behind the farm-buildings, a single dismounted look-out sentry is sufficient for security, and can be placed either on the Marly road or at a window in the farm-house, or in a loft of one of the barns; wherever the best view is to be had. In very broken or wooded country, or if the support were in the farm buildings, it would have to secure itself with one or more dismounted double-sentries, to prevent any surprise.

If the squadron leader apprehends that the support if placed at St. Thiébault will be too much overlooked from the high ground about Bévoye-la-Basse, he may station it along with the left infantry support at the northern outlet of Pouilly. I prefer, however, the position at St. Thiébault.

The support covers itself in its own vicinity with independent N.C.O.'s groups, but it throws out piquets when detachments of some independence are required at some distance from their support. In the present instance security can be provided for from the Wald von Crépy to Haut Boutan by independent N.C.O.'s groups, but a piquet must be sent to East Marly. Should you, however, be of opinion that the support can render timely aid to East Marly, it will be sufficient to have an independent N.C.O.'s group there, instead of a piquet. You are free to do as you like; the support need not send out any piquets at all; nothing but independent N.C.O.'s groups.* Let me especially warn

^{*} This system of independent N.C.O.'s groups sent direct from supports, to act instead of, or alternate with, piquets, is recognized in the French and German armies; as also is the system of N.C.O.'s groups sent from piquets to act instead of, or alternate with, double sentries, or vedettes (the system being equally applicable to cavalry or infantry). The N.C.O.'s group found by a piquet generally consists of a sergeant and 6 men, 2 men being on sentry, the reliefs and sergeant

you against running away with the idea that each support must send out at least one piquet.

It is unnecessary to have an independent N.C.O.'s group on the east side of Haut Guenot, as the neighbouring outposts can keep Crépy sufficiently under observation from the north point of the Wald von Crépy. Our first independent group may therefore be either on hill 1947, or near Magny. In the former case there must be at least a vedette at the northern outlet of Magny for the better observation of the high road from Magny to Sablon than can be obtained from hill 1947, the view from which point is impeded by the houses and gardens of Magny.

I think it a better plan to advance the independent group to the northern outlet of Magny, where it can also conveniently carry out the duties of an examining post at the same time. Then either a vedette of 3 men may be furnished by the group and posted at the cross-roads about 200 yards east of the figures 1947 on map; or we may have a small independent group (1 N.C.O., 4 men) at the said cross-roads; or, finally, you may post here a strong independent group (8 to 10 men) with instructions to keep up communication with the neighbouring outposts by means of patrols, which otherwise would have to be done direct from the support.

resting under cover hard by. Such groups are suited for important and dangerous posts and for examining posts. The independent N.C.O.'s group is never furnished by a piquet (which, on the contrary, it replaces), but by a support, or reserve, or by a body of troops in cantonments (as in the case of the main guard quartered in Fleury; see last exercise). A line of independent N.C.O.'s groups is not, of course, so solid as a line of piquets, but it enables ground to be watched by a less number of men. As regards strength, the independent N.C.O.'s group usually only differs from the N.C.O.'s group in having men for patrolling as well as for a double sentry—the N.C.O.'s group having, as a rule, only enough men to furnish a double sentry post. The latter is almost the same as the "group" mentioned in I.D. 167, but in our group system there is only one N.C.O. between two or three groups. When an "independent N.C.O.'s group" is of special importance, an officer may be placed in command of it (see pp. 501 and 507).

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You see there are three different ways of posting the first independent group, each of which can be justified. My own preference in this case is for having strong independent N.C.O. groups at both the above-mentioned points.

In a vedette of 3 men, two dismount and conceal themselves behind the trees by the road-side, or perhaps one climbs a tree, if by so doing he can get a better view; the third man holds the horses, remaining under cover. The men can relieve each other in keeping a look-out, and the horses are more spared than is the case with a vedette of two men, who both remain mounted. In an independent group two men, either mounted or dismounted, keep a lookout, the remainder dismounting (and remaining under cover close at hand).

If you will now consider in what directions patrols must be sent from the independent N.C.O. groups, and for each direction detail 3 men, you can arrive at the strength of the groups. One vedette of 3 men and 2 patrols would require each group to consist of 1 N.C.O. and 9 men.

No special reliefs need be calculated for the vedettes, as two men remain dismounted, which rests their horses. If it be necessary to relieve the vedettes, their places can be taken by men who have been on patrol duty. If you have vedettes of 2 men, they remain mounted, and you must allow for a relief, to rest the horses. If you allow for a patrol in excess of what is necessary, there is not much harm done.

According to my arrangements, independent N.C.O. group No. 1 is at the cross-roads on the east side of hill 194.7; No. 2 at the northern outlet of Magny. No. 3 I should not place actually on Haut Boutan, but at the eastern side of hill 186 north-west of Haut Boutan, at the north end of the little copse, as from this point there is a better view of the Seille valley than from Haut Boutan itself. For this group 1 N.C.O. and 4 troopers will be sufficient, two of whom will

remain dismounted and watch the Seille valley. There is no use patrolling, as there is no means of crossing the Seille, and as far as the Seille the country is perfectly open.

At East Marly will be a piquet, No. 4, commanded by an officer, and consisting of a troop, because it is a considerable distance, a mile and a quarter, from the support, and therefore has an independent rôle, which had better be entrusted to a fairly strong body under an officer.

As regards the position of the piquet, it must be remembered that there are two lines of approach open to the enemy in this quarter, viz. the main road through St. Privat, and via Freskaty, Orly, and Augny. The piquet will naturally concentrate its attention principally on Metz. The best place for it is close to the bridge over the Seille. A cavalry piquet, however, must never be posted in a confined place. Neither is it advisable to place the piquet on the far bank, say at the outlet from West Marly of the road to the paper-mill. It will be less liable to be disturbed in East Marly, where also it will not be exposed to the danger of having its retreat cut off at the bridge, and can drive back, either by a charge or by the fire of dismounted men, an enemy who may attempt to cross the bridge.

For the immediate security of the piquet we have a dismounted look-out sentry on the bridge; while groups under N.C.O.'s observe the west bank. I consider it sufficient to have one N.C.O.'s group (1 N.C.O., 6 troopers) at West Marly churchyard, and another (also 6 troopers) on hill 1892, southwest of West Marly. These two groups can watch all the country between Grange-aux-Ormes, the paper-mill, and Augny, especially as it must be remembered that cavalry groups do not remain fixed at one spot. There is no need for a vedette between the two groups.

The reconnoitring patrols from the piquet will move (1) viâ Grange-aux-Ormes, and St. Privat,—(2) viâ Freskaty,—and

(3) via Orly,—to Sablon and Montigny in the first instance, and thereafter to Metz. At Sablon they will meet the patrols from independent N.C.O. group No. 1.

We thus see that so many men are required at East Marly that it is better to employ a troop here, commanded by an officer. At night, on the contrary, a few patrols will be sufficient.

Taking a troop at 12 files, i.e. 1 officer, 3 N.C.O.'s, 24 troopers, we find that the squadron in this case detaches to the front, to cover it, 1 officer, 5 to 6 N.C.O.'s, 40 to 50 troopers in all, which strength is sufficient to watch a frontage of 3¾ miles measured in a straight line from one end to the other.

The reconnoitring patrols from the piquet and independent N.C.O. groups go out, generally speaking, as far as the enemy's outposts. The order for any further reconnaissance is a matter for the officer commanding the squadron. officer sends out the various groups and the piquet (also the orderlies for the infantry supports) from wherever he may happen to be with his squadron when he receives the outpost orders; and will then at once ride round the whole position held by his squadron, and make any slight modifications he thinks advisable. He will also acquaint himself with the positions of the infantry piquets and supports behind him, and inform them of his own arrangements, which he will also report, by means of a sketch, accompanied by explanations, to the outpost commander. As soon as the squadron has received the second outpost orders, he will send an officer to Pouilly, to make the necessary arrangements in connection with the alarm quarters to be occupied by his squadron at night.

The outpost companies have meanwhile moved to the points which were approximately indicated in No. 4 of the first orders. Major T., in command of Nos. 1 and 2 com-

panies, will go on ahead, to select the most suitable place, the companies being marched up by the next senior officer. will place his two companies on the east side of hill 217'o. concealed behind the north-west angle of the four-cornered copse there.* The men pile arms, take off their valises, fall out, and commence cooking; a portion, however, remaining in readiness near their arms and accoutrements. As soon as the orderlies from the squadron report themselves, they may in turn slacken girths, water, and feed. Both men and horses are rationed by the companies. Major T. will now proceed to Haut Guenot, and view the positions occupied by the outpost cavalry in front, and before long receives in addition a notification of the positions occupied by it. Possibly he may doubt whether he is sufficiently secured against any surprise from Crépy, considering how little power of resistance the outpost cavalry has. In such case he may at once send out for day duty an independent N.C.O. group (1 N.C.O., o men) say to the north-east corner of Boiscarré, which will advance a double sentry towards Crépy, besides patrolling in that direction. A stronger body, such as a piquet, need not be sent out at this stage of the proceedings.† The support provides for its own immediate security by posting a sentry over the arms, who keeps a look-out from the corner of the wood towards Boiscarré and Haut Guenot.

An orderly must be sent to acquaint the outpost squadron and Major P., commanding Nos. 3 and 4 companies, of the

^{*} Note that the support at once takes up the position it will occupy during the night.—Trans.

[†] On arriving on his ground the officer commanding the troops to hold a section of the piquet line (2 companies) will endeavour first of all to gain sight of the outpost cavalry; next he determines whether he should push forward at once in the daytime, this or that piquet or independent N.C.O. group. He should, however, always bear in mind the importance of keeping his whole company fresh for its work, by giving them food and rest as quickly as possible, (i.e. at the end of a day's march). (F.O. I. 117.)

measures adopted by Major T. A sketch, accompanied by explanations, will also be sent by Major T. to the officer commanding the outposts, to show him the existing day arrangements made for Nos. I and 2 companies, and the dispositions proposed for night. The above indicated arrangements will hold good till 6.45 p.m.,—Nos. I and 2 companies constituting a solid support to the cavalry in front in case of the enemy attacking. A party of men under an officer will be told off to prepare for defence hill 2179 and the north border of the copse behind which the support is concealed.

Major P., commanding Nos. 3 and 4 companies, has mean-while gone on to Pouilly—the two companies being marched up under the next senior officer. Major P. places the companies in the northern part of the grounds of the castle of Pouilly. A sentry over the arms is placed at the northeast angle of the grounds, and no further arrangements for security are necessary by day, as the cavalry support is only 1200 yards straight in front of Pouilly. In the course of the afternoon the whole of the northern border of Pouilly will be placed in a state of defence. Notifications will be sent to the officer commanding the right section of the piquet line, and to the officer commanding the squadron, as well as a sketch and report to the officer commanding the outposts.

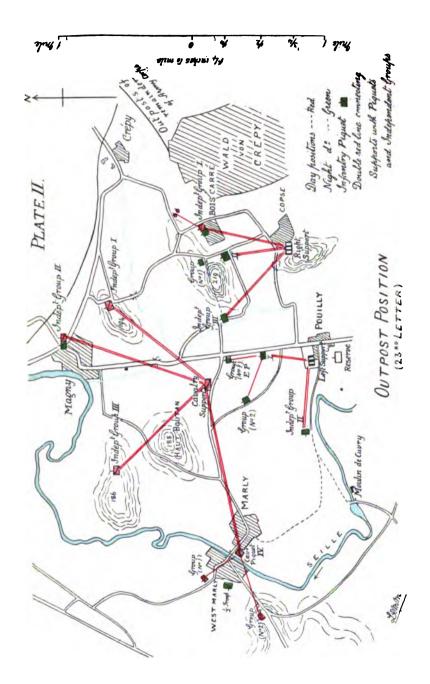
The reserve will be placed at the point mentioned in the orders, either by the officer commanding the outposts himself or by the senior officer present with the four companies. The arms will be piled, and valises taken off, and from a sanitary point of view the bivouac must not be situated on the low-lying meadows by the river.* The officer commanding the outposts will arrange that the four orderlies

^{*} Meadows, even though apparently dry, always harbour at night damp and mist. A night passed on unhealthy damp ground may cause more loss than an action. Hard ground and woods without undergrowth are as a rule the best sites for bivouacs. (F.O. I. 255.)

attached to the reserve in turn slacken girths, water, and feed. An officer will be appointed officer on bivouac duty, and will mount the colour guard, which, as already stated, will also furnish two double sentries, one on each entrance to the village, to prevent men going into the village.

The outpost companies must have finished taking up their night position by 7 p.m. Before describing this in detail I wish to impress upon you the following principles which will have to be observed in connection with it:—

- (1) All dispositions must conform to the network of roads. In each section of the piquet line every road leading towards the enemy must be held by a body whose strength must be in proportion to the importance of the road; *i.e.* either by a piquet (chaussées and otherwise important roads), an independent group under a N.C.O., or a double sentry. The ground between roads is for the most part watched by patrols.
- (2) No double sentry, to be relieved from a piquet, should be posted more than 440 yards from it. If the ground necessitates the distance being greater, the piquet must furnish a N.C.O.'s group (I N.C.O., 6 men) instead of a double sentry.
- (3) If such a N.C.O.'s group (posted, not in front of nor on same road as piquet, but on another parallel road, to one side of the piquet, and about abreast with it) be required to send out patrols, it must be replaced by an independent N.C.O.'s group furnished direct from the support, and consisting of I N.C.O., and 9 to 15 men.
- (4) Double sentry posts should not be more than 440 to 550 yards apart. If the distance has to be greater, one of the double sentry posts should be replaced by a N.C.O.'s group.
- (5) Especially dangerous or important points in the general line of observation, such as isolated farms, bridges, fords, and copses, should be held by N.C.O.'s groups. Similar points





outside the general line of observation, by independent N.C.O.'s groups.* These latter are frequently on the outer flanks of sections of the piquet line, for the protection of the flanks of the line of outposts, or for keeping up communication with neighbouring outposts.

(6) The piquets and independent N.C.O.'s groups should not be more than 880 to 1100 yards from the supports. They are numbered in each section of the outpost line from right to left, without distinction between piquet and group. (Cavalry piquets and independent N.C.O.'s groups are numbered from right to left of each squadron.) N.C.O. groups and double sentries (or vedettes) are numbered from right to left in the ground watched by each piquet, irrespective of whether they are sentries or groups.

(The above principles (except as regards numbering piquets, groups, and vedettes) do not apply to the cavalry, as this arm, owing to its mobility, has far greater freedom in all these circumstances.)

In the present instance the following modifications will be made in the distribution of the outpost companies at night:—

From the right section of the piquet line three roads lead in the direction of the enemy. (I) The track from Boiscarré, viâ 202 to Crépy, (2) the track along the east side of Haut Guenot to Magny, (3) the track along the Bouillon brook to the St. Peter bridge. The two first, although unimportant, must without doubt be guarded by Nos. I and 2 companies. As to the third, which runs along the very bank of the brook, there might be some doubt, but that the order expressly says "inclusive" of the Bouillon brook, so this road is within the right section of the piquet line.

[•] In this application the independent N.C.O.'s group is practically the equivalent of the detached post furnished by a piquet in our drill book; with the important difference that it proceeds direct from the support, instead of from a piquet, and is really a small piquet in itself, whether its position be in the piquet line, or, (as here), in advance of, or to one flank of, the general line of sentries.—Trans.

On the first road there was by day the independent N.C.O.'s group at the north-east corner of the Bois carré. This may stand fast at night, being now designated "Independent N.C.O.'s group No. I." It sends a patrol to Crépy, and keeps up communication with the neighbouring outposts at the north corner of the Wald von Crépy. It will therefore have to be reinforced by three men for a patrol, making its strength I N.C.O., 12 men.

The second road, along the east side of Haut Guenot, runs direct from the support towards the enemy, so will require rather more men than the first. Major T. here places a piquet, half a company under an officer, about 800 yards from the support, near the road, and concealed behind the shoulder of Haut Guenot. In case of attack the piquet can delay the enemy long enough by holding Haut Guenot.

This piquet, No. 2, provides for its immediate security by a sentry over the arms. On the track itself, where the by-road running over the top of Haut Guenot branches off, stands either a N.C.O. group or a double sentry. The former, which will then be designated N.C.O.'s group No. 1, is the best, as the distance to Independent N.C.O.'s group No. 1 on the right is about 450 yards, but the distance to the Bouillon brook about 900 yards. On the Bouillon brook itself, where a track from St. Thiébault and the main road crosses it, there might be a N.C.O.'s group sent out from piquet No. 2 (which would then be called N.C.O.'s group No. 2); but I prefer an independent N.C.O.'s group (termed "Independent N.C.O.'s group No. 3"), as such a group can patrol along the Bouillon brook to St. Peter bridge, and keep up communication with the left section of the piquet line. This independent group, having to furnish two patrols, will consist of twelve men; I say two patrols, because one should go in a north-east direction, towards the bridge over the St. Peter brook. (If this were a N.C.O.'s group from piquet No. 2, the patrol to go along the Bouillon brook would have to come from the piquet; thus it saves labour to have an independent N.C.O.'s group.)

The left support's attention will be principally occupied by the main road. The tracks, one of which runs into the St. Thiébault-Marly road, and the other leads from Pouilly along the north side of the vineyards bordering the Seille, are unimportant. There is no doubt there must be a piquet on the main road, 550 yards in front of the support, where a side road diverges to Le Tonneau. There must also be a N.C.O.'s group to act as an examining post on the main road; a suitable place for it is where the main road to Marly branches off, a quarter of a mile in front of the piquet. We take the position of the piquet and the examining post as the basis on which to found the other arrangements in this section of the piquet line.

From the main road to the Bouillon brook is about 550 yards. On the brook there is already independent N.C.O.'s group No. 3 of the right section of the piquet line; it will therefore be sufficient if piquet No. 1 of the left section of the piquet line sends a patrol northwards between the main road and the brook towards St. Peter bridge, and if a patrol keeps up lateral communication between this piquet and independent N.C.O.'s group No. 3 of the right section of piquet line on its right.

On the west of the main road Major P. must occupy the track leading to the Marly road. If he put a double sentry there, about abreast of the piquet, it would be rather too far from the piquet (600 yards); so it is better to place there a N.C.O. group (No. 2; for the examining post counts as No. 1, being a N.C.O. group), and advance it to the edge of the meadows.

The piquet provides for its immediate security by a sentry over the arms.

The patrols from the piquet go to the St. Peter brook, and via St. Thiébault to Haut Boutan, and along the St. Thiébault—Marly road, to a point about half a mile west of St. Thiébault.

Major P. has still to take measures for the security of his support, as far as to the bank of the Seille. Along the Seille itself there is only a path, which will be sufficiently observed if from time to time a patrol visits it. The track along the north border of the vineyards is too far from piquet No. I for the piquet to watch it, so Major P. will here post an independent N.C.O.'s group, No. 2, which can patrol along the Seille, and north of the vineyards towards Marly. It is all the same whereabouts on the road this group is, or how much west of Pouilly.*

The reserve remains as by day, but the men remain close to the arms and valises.

The officer commanding the *outpost squadron* withdraws his three independent N.C.O.'s groups and his piquet as soon as he sees that the outpost companies have finished taking up their night positions and have sent out their first reconnoitring patrols. At 7.30 p.m. the squadron retires, in accordance with the outpost orders, from St. Thiébault to Pouilly, where the necessary preparations have been made for the occupation of alarm quarters.

In conclusion, I will ask you to frame the advanced guard and outpost orders, and state how the whole of the outposts would be arranged supposing that the enemy, instead of being already in Metz and Sablon, were reported to be still at Diedenhofen, or somewhere between Diedenhofen and Metz. I will not discuss the matter in detail, but merely remark that the advanced guard orders would be much the same as in the last exercise, though the main guard could be more comfortably quartered. The

N.B.—No change is made in the positions of the supports at night.

first set of outpost orders might either direct the cavalry to occupy much the same line of observation as above described, or cause it to advance further. The patrols would in any case have to go further out, and at night the two half-troops under officers would have to be pushed out further in the direction of the enemy. By night, also, there would be no need whatever for such a compact line of infantry piquets and independent N. C. O.'s groups as above described. Four outpost companies might be pushed out from the reserve to the same places as above shown, but each support would only provide for its own security along the two main roads (the main road and the road from the right support over the east side of Haut Guenot). leaving all the country between these roads wholly unwatched. There would be no occasion for the left support to bivouac. but it could occupy alarm quarters on the north side of Pouilly. In fact, it would be quite justifiable if the reserve only sent out two companies and put them both into alarm quarters together in Pouilly. In such case, however, there would have to be enough cavalry attached to them to enable them to keep up communication with the neighbouring outposts, and at the same time watch the country between the main road and the Hospital Wald. The two companies would cover themselves with outlying guards by night, instead of piquets or independent N. C. O.'s groups. and it would be hardly necessary to send out infantry patrols, as the cavalry far in advance would provide for security, even at night. The reserve need not bivouac. The whole outpost position would therefore be very different to that above described.

TWENTY-THIRD EXERCISE.

(See General Map and Maps Metz and Gravelotte.)

A detachment operating in friendly country has crossed the Moselle at Metz on the 2nd December, 1896, after an exhausting march. As the head of the main body, at r p.m., reaches Maison-de-Planches* (on the road Metz-Maizières-bei-Metz)† a report is received that the enemy, who had been retiring in two columns on Maizières-bei-Metz and Semécourt, has halted small bodies of cavalry at Amelange, Semécourt, and Fèves, and is sending patrols towards Metz, while hostile infantry is holding Hauconcourt and Maizières-bei-Metz. A trustworthy inhabitant of the country at the same time reports that the enemy has received reinforcements from Diedenhofen.

On receiving these reports the officer commanding the detachment at once decides not to press the enemy further, but to occupy wide cantonments in the farm buildings at Devant-les-Ponts, east of the railway, and orders Colonel A. to take up a line of outposts, running approximately from the Moselle to Woippy, with the advanced guard, which consists of I battalion and I squadron.

After posting the outposts no fresh information is received concerning the enemy till the following morning.

State the arrangements made by Colonel A., with reasons for the same; show on the map the day and night positions of the outposts, including double sentries and vedettes, and state the strength of the various fractions of the outpost line.

^{*} Close to left margin of Metz map, 6} inches from south margin.

^{† 61} miles due north of Metz.

TWENTY-FOURTH LETTER

OUTPOST ORDERS

In this instance the whole advanced guard is detailed for outpost duty; outpost and advanced guard orders therefore are one and the same.* At the moment (I p.m.) when Colonel A. receives the order to take up an outpost position, the head of the main body of the detachment, which is on the march, is at Maison-de-Planches; the head of the main guard (6 companies, 2 S.A.A. carts, I tool cart, 2 mules = 310 yards + 20 % opening out = 372 yards) will be, allowing 800 yards distance between tail of main guard and head of main body, 372+800=1172 yards further on, i.e. at the southern outlet of Maison Neuve; and the head of the vanguard (2 companies = 75 yards + 20 % opening out = 90 yards) will be, allowing 400 yards distance between tail of vanguard and head of main guard, say 500 yards further. The squadron is far on ahead.

The last reports received concerning the enemy make it clear that he has halted and has put out outposts.

The ground immediately on each side of the road by which the advanced guard is marching being perfectly level, Colonel A. will not gain much by riding on ahead to look round. He will therefore have to issue his outpost orders at once, trusting to the map.

^{*} s.s., the orders that are issued are outpost orders, as the advanced guard commander is now himself the outpost commander.—Trans.

The country which the outposts have to watch can be divided into two regions, between which there is a marked difference,—on the east the almost perfectly level Moselle valley, almost totally destitute of cover, and therefore very easy to watch: and, west of a line joining Devant-les-Ponts and Semécourt, an extremely broken, wooded, and hilly tract. The former can be watched by comparatively few men; the latter requires careful observation, the more so as the enemy's cavalry extend westwards as far as Fèves, whence it is open to them to advance past the east side of the Wald von Woippy, or through Norroy-le-Veneur, or even through Saulny. Again, should the enemy purpose attacking our outposts with infantry in the night, he will obviously have a better prospect of success in the hilly and wooded region than on the bare flats nearer the river.

In view of the proximity of the enemy, and of his having received reinforcements at the termination of his march, the line of observation must be *compact*, though of course it will have to be more solid in its western portion than in the eastern. In the flat country the roads only need be occupied; in the hilly country more must be done.

Following on the map from south to north the course of the Metz-Maizières main road, Colonel A. will notice two groups of villages and farms; Maison Rouge, Maison Neuve, and Woippy to the south, and St. Remy, Bellevue, and Ladonchamps a mile and a half further north. The first group is continued to the Moselle by St. Eloy* and Thury; the second group by the Grandes and Petites Tapes, Franclonchamps, and La Maxe. The first point, therefore, about which Colonel A. must be clear in his own mind is which of these two lines he will hold in case of the enemy attacking, for it is only by defending villages or farms

^{*} Not to be confounded with another St. Eloy on the bank of the Moselle, a mile further south. — Trans.

that he will be able to check the enemy's advance in the flat country.

The last-mentioned line would entail a frontage, from the Moselle to the Woippy-Norroy-le-Veneur road, of about four miles, measured in a straight line; the first-mentioned line, on the contrary, has scarcely three miles frontage. this reason alone the position at Maison Rouge and Woippy is preferable. The other position, has, besides, two great disadvantages; firstly it would entail our having to observe a far larger arc of the more difficult country; and, secondly, the outpost cavalry would hardly be able to push out to the necessary distance in front of the outpost companies without first having to engage and drive in the enemy's cavalry. Suppose it succeeded in doing so, there would not be much gained after all, for the consequence would in all probability be that it would be continually harassed by the enemy's cavalry, which would naturally endeavour to regain possession of its original positions.

Colonel A. therefore decides to place his infantry in the nearer position (Woippy-Maison Rouge), and push out his outpost cavalry to the more distant one (Bellevue-Ladon-champs).

I have already indicated in general terms the position of the cavalry from the Moselle as far as Bellevue. From Bellevue westwards the position must extend as far as the Woippy-St. Privat road; that is, about as far as Saulny. You must bear in mind, however, that, while the outpost cavalry may be expected to do good service in the open ground east of the Wald von Woippy, its action would be much hampered among the woods. If the squadron were to occupy the whole tract from the Moselle to the Woippy-Saulny road, it would have great difficulty, owing to the nature of the country, in rendering ready assistance to the whole of this line from one support, and would be wholly unable to

guarantee prompt concentration for action wherever and Nor would it be much use to have whenever necessary. a second support near Woippy; as, for this support to lend assistance on all the roads within its sphere of action, it would, in view of the nature of the country, and in particular of the network of roads, have to be stationed right in the village of Woippy. But there will be infantry in Woippy as well, so this support would be side by side with infantry. According to the Field Service Regulations (I. 149) such procedure is admissible; it is, however, superfluous under the present circumstances. I would allot only the open country to the cavalry, and entrust the observation of the wooded country to infantry, to which, however, must be attached sufficient troopers for patrolling towards Norroy-le-Veneur and Saulny, even by day. It follows therefore that the infantry in Woippy will have to provide for their own security even by day.* It is unnecessary to carry the line of observation further west than the Woippy-St. Privat road, for although there is a possibility of bodies of hostile cavalry making a wide détour and attempting to advance on Woippy by the Amanweiler-Lorry road, the troops detailed to occupy Woippy will have to provide for their own security. There must be some limit to the doubling back the flanks of an outpost line.

In the level country the outpost infantry will defend as supporting points Thury, St. Eloy, and Maison Rouge; and, opposite the woods, the village of Woippy, although only part of the north side of Woippy is suited for defence, the north-west and west portion being commanded by ground close in front, and having but a limited field of fire. In

^{* &}quot;Outpost companies must establish connection with any outpost cavalry that may be in front of them. It depends upon the degree of security afforded by the cavalry whether this or that piquet or an independent N.C.O.'s group or two should be pushed forward at once in the daytime."—F.O. I. 117.

spite of this defect, however, Woippy must be defended, because of the roads converging there.

In accordance with the general rule,* the outpost companies may be posted along the above line, while the reserve will find a suitable position at Maison Neuve, whence there is good communication with every part of the line of resistance held by the outpost companies.

A hasty measurement with the compasses will show whether the whole position has sufficient depth.

Having thus generally decided the position of the outposts, Colonel A. will now consider the orders one by one. We will designate the troops at his disposal the II/Battalion and II/Squadron. The first two orders offer no difficulties, and would be as follows:—

- "I. The enemy, who has received reinforcements from Diedenhofen, has retreated in two columns on Maizières-bei-Metz and through Semécourt, and has occupied Hauconcourt and Maizières with infantry;—Amelange, Semécourt, and Fèves with small cavalry detachments. The main body of our detachment is going to occupy wide cantonments in the buildings of Devant-les-Ponts which are east of the railway.
- "2. The advanced guard will take up a line of outposts from the Moselle to Woippy." †

No. I of course gives the squadron no news, but it is necessary for the infantry, as it cannot be assumed that every officer in the advanced guard has been acquainted with the tenor of the reports received.

The squadron must be told the line of observation it is to occupy, but in the most general terms, so as to leave the officer commanding it the requisite freedom in regard to details; the more so as it must be assumed that he has already, in the course of reconnaissance, obtained a hasty

^{*} viz., that the Support line is usually the line of resistance. See p. 461.—Trans.

[†] The line of resistance in case of attack; held by the supports.

view of the country towards the front, and so knows how the land lies in that direction better than the officer commanding the outposts, who has only the map to guide him.

Of the roads to be watched by the squadron, the *main roads* to Maizières and Semécourt are of course the most important. The road along the Moselle bank, however, must not be left unguarded, nor that viâ Les Grandes Tapes to Amelange; whereas the railway, the old Roman road between it and Semécourt, and the unimportant road running direct from Woippy to Fèves, passing just west of the Bois de Juillières, can by day be kept under observation from the neighbouring main roads. How many troopers will have to be attached to the outpost companies cannot be decided until the position of the latter is fixed.

In the present case the cavalry should not be withdrawn for the night till the latest possible moment, so that the infantry may have some time for rest and cooking. The sun sets about 4 p.m. in December, so let the cavalry be withdrawn at 4.30; by this means the infantry, reaching their day positions about 1.30 p.m., and beginning to take up their night positions at 3.45 p.m., will have more than two hours' rest. It is true that this is not much, but it is enough for cooking; and, after all, the men will be somewhat refreshed. It is absolutely imperative that the infantry do not at once enter on their night positions, but that, in spite of the comparatively short time gained for rest, the cavalry first take up the duties of observation.

The twilight will give sufficient light for the infantry to see how the land lies.

In the month of December nothing short of the direct necessity should induce a commander to bivouac cavalry at night. There is no need for so doing here, for there is abundance of stabling in Woippy. It would be more convenient if the squadron could be quartered in Maison Neuve

with the reserve, but there is a scarcity of stabling there, so Woippy is preferable, in spite of the position being more exposed to attack. An infantry support will be in Woippy, as we shall see later on, so the squadron can go into alarm quarters, covered by the infantry, on the south side of the village. For additional security the outlets towards Lorry, Le Chêne, and Le Coupillon may be occupied by dismounted men and barricaded at suitable places.* These precautions will protect the outpost squadron against enterprises on the part of hostile cavalry, and it is extremely unlikely that the enemy's infantry will attempt wide out-flanking movements by night against the south side of Woippy, the more so as the enemy has hitherto been retreating, and there is nothing in the data to indicate the existence in him of any abnormally enterprising spirit; unless indeed you regard with suspicion the fact (reported by a trustworthy inhabitant of the country) of his having received reinforcements.

In this instance, as in the preceding exercise, care must be taken that touch of the enemy is not lost during the night. For this purpose it will suffice to have an independent group (I officer with 9 to 12 troopers) outside the infantry line, pushed out towards St. Remy or Bellevue, which can send out patrols along the two most important main roads towards Maizières and Semécourt respectively, as well as along the railway. It is about the same whether this group is in St. Remy or in Bellevue, though I prefer the former, as being on the high road to Diedenhofen, which is the more important. So long as touch of the enemy is

[•] Speaking of purely cavalry outposts, the Felddienst Ordnung says, "While the power of searching the country far to their front protects cavalry from surprise by infantry, the determined advance of an enemy's cavalry will be but slightly delayed by outposts using no other means of resistance than the charge. But even the simplest form of barricade (especially of several places in succession), when defended by carbine fire, will cause considerable delay to a strong body of cavalry. In constructing such obstacles a passage for retreat should not be forgotten."—F.O. I. 168.

maintained in this quarter ("information")—protection against surprise may be provided for a considerable distance out along the other roads by cavalry patrols sent out by the outpost companies, from the troopers attached to them.

Colonel A. has next to divide the line to be held by the outpost companies into sections of the piquet line. Here again his arrangements have to adapt themselves to the network of roads. Considering the time of year, it is highly desirable, and in the present instance compatible also with tactical considerations, to place all the outpost companies under shelter, if only in the uncomfortable form of alarm quarters.

One support must inevitably be in Maison Rouge—the two most important main roads in the whole position, and the railway as well, joining at this point. The position of this support will form the basis for further arrangements.

From Maison Rouge to the Moselle is about 21 miles as the crow flies, which, together with the two important main roads, is too much for one section of the piquet line held by the two companies at Maison Rouge. Another support must therefore be placed between Maison Rouge and the Moselle, either at Thury or St. Eloy. As a line of demarcation between the two sections of the piquet line Colonel A. will select the east border of the pasture land between St. Eloy and Maison Rouge. If he places the support at Thury, it will be about in the centre of this section of the piquet line, whereas at St. Eloy it would be towards the left flank of it: on the other hand there is the disadvantage that Thury is too far (14 miles) from the reserve at Maison Neuve, and therefore beyond the reach of ready assistance from that quarter. I therefore prefer St. Eloy as a position for the support, and would have a piquet at Thury, with orders to make an obstinate resistance. This should—the country being favourable for defence—check the enemy till the reserve can intervene. Should you have reversed the procedure and

placed a piquet at St. Eloy, I have no great objection to such arrangement.

From the east border of the pasture-land east of Maison Rouge to the wash-house on the road to Saulny is a little over a mile and a quarter, a frontage which, taken alone, might be held by two companies, but not in the present case, where four important roads have to be guarded,—besides which the country north of Woippy is so very difficult to watch. Two more outpost companies must, therefore, be sent to Woippy, to guard that village only; so there is no need to seek a special line of demarcation between this section of the piquet line and that held by the two companies at Maison Rouge. This support will naturally be placed at the junction of the two roads from Norroy-le-Veneur and Saulny.

In calculating the number of troopers that must be attached to the outpost companies, we have, as in the last exercise, to consider along what main roads the supports will have to send cavalry patrols during the night. The right support has only to send a patrol along the one road through La Maxe to Amelange; this takes three men, which, with two orderlies to be passed on to the piquet at Thury, and two for the support itself, makes a total of seven troopers. As, however, the officer commanding the outposts cannot foresee how many piquets the support will have, he had better attach to it I N.C.O. and 9 troopers.

The support at Maison Rouge has no cavalry patrols to send out by night, as there is a cavalry independent officer's group in front of it at St. Remy, communication with which can be kept up by means of infantry patrols. Four orderlies may be attached to this support, as it is clear that it will not have more than one piquet—the two great main roads being here so near each other that one piquet will be able to guard both. There would be nothing wrong in giving this support a cavalry patrol of two men for keeping up communication

with the officer's group at St. Remy. This would make a total of 6 troopers.

The support at Woippy will have to patrol even during the day along two main roads; besides this it cannot be foreseen how many piquets it may have to throw out; it is, therefore, advisable to attach 2 N.C.O.'s and 16 troopers to it, so that it can push out by day strong (cavalry) N.C.O.'s groups beyond its double sentries, while at night it will send cavalry patrols along the main roads only.

In this instance it may be left to officers commanding supports to decide how far towards the front infantry patrols must be sent out by the piquets; so the orders need not refer to this subject.

The examining posts should be placed on the most important roads, though it is not necessary to have one on each of these roads. It will be better if one such post can suffice for several main roads.

In the present case there must at any rate be an examining post on the main road to Maizières, which is the most important of all the roads; all persons coming by the Semécourt road can be dealt with by this post. I leave it to you whether you will have another examining post on the road from Amelange vià La Maxe; it is not an absolute necessity, for there is not likely to be any traffic on this road. There must, on the contrary, be an examining post on the main road to Norroy-le-Veneur, to which may be referred any persons coming by the main road from Saulny. The reserve, which goes into alarm quarters at Maison Neuve, will there cover itself with one or more double sentries.

If Colonel A. is apprehensive of an attack by way of Le Chêne or Le Coupillon, he may send out an independent N.C.O.'s group direct from the reserve, say to the western outlet of Le Coupillon.

The villages, farms, &c., to be held by the outpost

companies in case of attack, must be put in a state of defence. Nos. 1 and 2 companies have to hold, as an exceptional case, two farms, Thury and St. Eloy, to prevent the enemy moving direct on Devant-les-Ponts.

As it is expressly stated in the data that no fresh information concerning the enemy is received till the following morning, the fact of the absence of any fresh news about the enemy must be stated in the second set of orders, in order to make it clear to the outpost companies that the situation remains unchanged. The second set of orders must be promulgated early enough to give the outpost companies plenty of time to have finished taking up their night positions by the time specified in the orders.

There is nothing further in the orders that calls for explanation.

The orders are as follows:-

Maison Neuve. 2. XII. 96. I. 10 p.m.

I. OUTPOST ORDERS.

- I. The Enemy, who has received reinforcements from Diedenhofen, has retreated in two columns on Maizières-bei-Metz and through Semécourt, and has occupied Hauconcourt and Maizières with infantry;—Amelange, Semécourt and Fèves with small cavalry detachments. The main body of our detachment is about to occupy wide cantonments in the buildings of Devant-les-Ponts east of the railway.
- 2. The Advanced Guard will take up a line of outposts extending from the Moselle to Woippy.
- 3. The II/Squadron will keep touch of the enemy, and, on a line running from the Moselle through St. Remy to the Wald von Woippy exclusive, will watch the road along the Moselle bank, and the roads passing through Amelange, Maizières, and Semécourt. The officer commanding the

squadron will at once detail I N.C.O. and 9 troopers for Nos. 1 and 2 companies, 4 orderlies for Nos. 3 and 4 companies, 4 orderlies for the reserve, and 2 N.C.O.'s and 16 troopers for Nos. 5 and 6 companies.

4. Nos. 1 and 2 C^{oo} 11/Battation, commanded by Major B., will go into alarm quarters in St. Eloy, and hold No. 1 section of the piquet line, extending from the Moselle to the eastern border, inclusive, of the meadow northwest of St. Eloy.

Nos. 3 and 4 Coa II/Battalion, commanded by Major C., will go into alarm quarters in Maison Rouge, and hold No. 2 section of the piquet line, extending from the east border of the abovementioned meadow to Woippy, exclusive.

Nos. 5 and 6 Cos II/Battalion, commanded by Major D., will go into alarm quarters in Woippy, at the junction of the high roads coming from Norroy-le-Veneur and Saulny, and hold No. 3 section of the piquet line, extending from the east side

of Woippy, inclusive, to a point 550 yards south of the wash - house on the Saulny road.

- 5. The Reserve, consisting of Nos.
 7 and 8 C^{on} II/Battalion,
 will go into alarm quarters
 at Maison Neuve, and
 detach an independent
 N. C. O.'s group to the
 western outlet of Le Coupillon.
- In case of attack the outpost companies will hold Thury, St. Eloy, Maison Rouge, and Woippy.
- 7. Reports will reach me with the reserve.

L., Colonel.

Verbally to the II/Battalion. Copy sent to the O.C. II/Squad ron, by Lieut. and Adjt. N. Maison Neuve. 2. II. 96, 3 p.m.

II. OUTPOST ORDERS.

- Concerning the Enemy no further information has been received.
- 2. The II/Squadron will withdraw at 4.30 p.m. into alarm quarters in the southernmost part of Woippy, and make all necessary arrangements for its own security. One officer and 9 troopers will remain in occupation of St. Remy by night, and keep touch of the enemy. The squadron is to complete the re-occupation of its day positions by 8 a.m. Day patrols will be sent out at 7 a.m.
- 3. The Outpost companies are to be in their night positions by 4 p.m. The night piquets and independent groups can be withdrawn at 8.30 a.m.
- 4. The Reserve will get under arms at 8 a.m.
- Examining posts will be placed on the main roads to Maizières and Norroyle-Veneur.

Verbally to the Reserve.

Copies sent to the supports and to the squadron by cyclists.

A., Colonel.

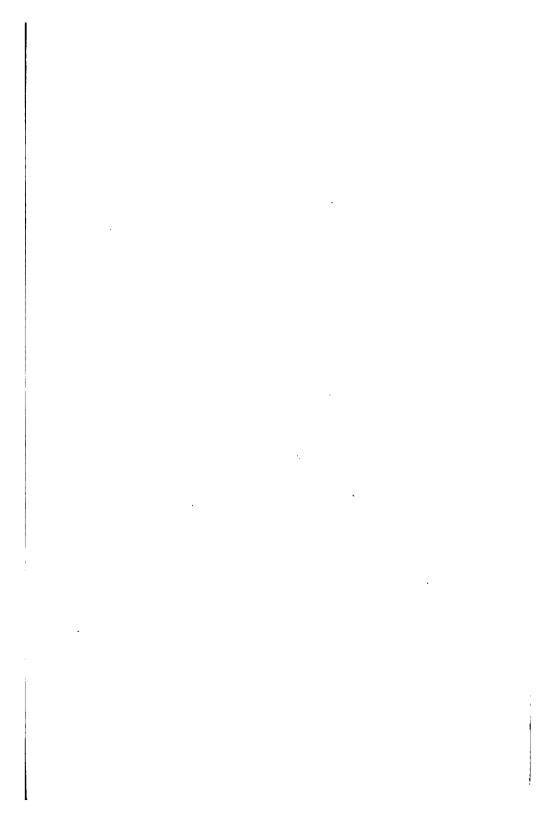
THE DAY POSITIONS.

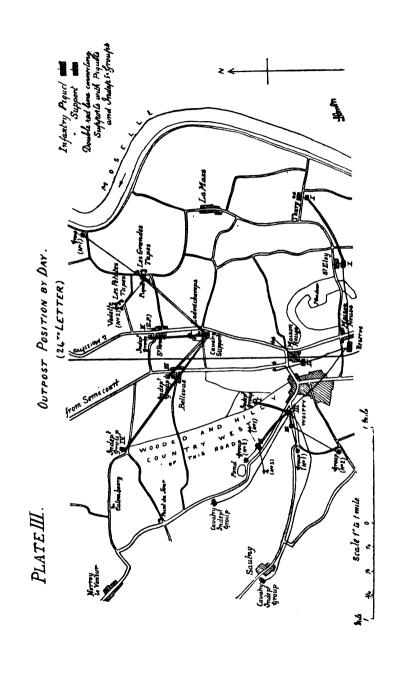
A suitable place for the cavalry support will be south of the park at Ladonchamps, which is situated on the most important road. From this position it can rapidly move either on Les Grandes Tapes, or through and beyond St. Remy and Bellevue, and is sufficiently out of sight. On account of the park just in front, a double sentry (dismounted) will be placed at the north border of the park, within shouting distance of the support.

The O.C. the squadron posts an independent N.C.O.'s group (I N.C.O., 9 men) at the north outlet of Bellevue, and a similar group at the north outlet of St. Remy, as both these places are near enough to Ladonchamps.* The group at St. Remy can serve as an examining post. Another independent N.C.O.'s group (I N.C.O., 12 troopers) will be placed at the road-fork 1600 yards north-west of Bellevue, where the roads from Calembourg and Point-du-Jour join, and keep a look-out in the direction of Norroy-le-Veneur. Les Grandes Tapes, being somewhat further from the support, can be occupied by a piquet, No. 1, consisting of a troop under an officer, which, however, should not go into the farm, as a cavalry piquet should never get into an enclosed place, but take up a position south of, and covered from view by the farm. The piquet for its immediate protection posts a dismounted look-out sentry, and throws out a N.C.O.'s group (1 N.C.O., 4 to 6 troopers) to the road-fork on the river bank (1200 yards due west of Olgy), and a vedette of 3 troopers to the north corner of Les Petites Tapes.

In the western part of the cavalry position, security will best be provided for by thorough *patrolling* along the roads,—an application of the important principle that on outpost

^{*} Piquets are only employed where detachments of some independence are needed at a considerable distance from their support.—Trans.





duty cavalry, unlike infantry, is, on account of its mobility, less tied down to one position, and can move about from time to time.

Colonel A. has finally to number the piquets and independent N.C.O.'s groups from right to left, through the squadron, without distinction between piquet and group. The N.C.O.'s groups and vedettes are numbered through the piquets in a similar way. Calculate how many men are employed at the front out of the whole squadron, and you will see how few are left for the support.

By the above arrangement of the cavalry, the infantry at St. Eloy and Maison Rouge are so protected that, speaking generally, piquets and groups may be dispensed with by day; only the 1st and 2nd Co.'s detaching a piquet consisting of half a company to Thury, which covers itself with a double sentry by day. The support as well must have at least one double sentry, as it is not stationed in the open.

Nos. 3 and 4 Cos. at Maison Rouge have a double sentry on each main road. It is no easy matter to decide on the arrangements for Nos. 5 and 6 Cos., which are not covered by the cavalry in the direction of Norroy-le-Veneur and Saulny. The wooded nature of the country makes observation difficult. even by day, and by night will greatly assist an enemy in approaching undiscovered. In such a case as this, better results can be obtained by zealous patrolling than by multiplying sentries, which would have but a limited range of vision. Piquets and groups should therefore be placed only on roads, while the country between the roads is searched by patrols. No. 3 support will therefore have an independent N.C.O.'s group, No. 1 (1 N.C.O., 12 men), at the road-fork 700 yards W.S.W. of St. Adèle, which will observe the country north of Woippy, and keep up communication with the double sentries of No. 2 support. There must also, beyond a doubt, be a

piquet on each main road.* That on the Norroy-le-Veneur road must be far enough advanced to have a sufficient field of fire, so must be placed on the spur running out south of the Wald von Woippy, so as to be able to bring fire to bear on the road where it leaves the wood, near the pond. This piquet will send forward a N.C.O.'s group (I N.C.O., 6 men) to the south-east edge of the pond as an examining post. East of the piquet, at the edge of the scattered copse, is a double sentry, No. I, keeping up connection with independent N.C.O.'s group No. I.

Piquet No. 3, with a sentry over the arms, is at the washhouse on the road to Saulny. It has a N.C.O.'s group, No. 1 (1 N.C.O., 6 men), on the main road where a cross-road branches off to Le Chêne, and another N.C.O.'s group, No. 2, of like strength, where the same cross-road strikes the Lorry-Woippy road. In front of these infantry groups and piquets there is a cavalry independent N.C.O.'s group (1 N.C.O., 6 troopers) at the brick-kiln south of Villers-bei-Plesnois, and another, more of the nature of a standing patrol, and therefore consisting of only 1 N.C.O. and 4 troopers, at the northern outlet of Saulny.†

All further details as to the dispositions of the squadron and the outpost companies are as detailed in the preceding letter.

Nos. 7 and 8 Cos., forming the reserve at Maison Neuve, have a double sentry at the north side of the village. The independent N.C.O.'s group; may be sent out at once to the west side of Le Coupillon. On arrival there, it will post a

^{• &}quot;Important roads and points are secured by piquets: independent N.C.O's groups are an auxiliary means of connection, and of securing the flanks of a section of the piquet line."—F.O. I. 116.

[†] The support in Woippy has 16 troopers attached to it, so that it can, even by day, push out strong cavalry N.C.O.'s groups in front of its piquets and double sentries, and at night send out cavalry patrols along the two main roads.—Trans.

[#] Mentioned in No. 5 of the first set of orders. See p. 506.—Trans.

double sentry at the point where the road to Saulny diverges from the Kriegs-strasse, and send patrols towards Saulny and even Plappeville. This group might consist of 1 N.C.O. and 12 men.

THE NIGHT POSITIONS.

The infantry piquet at Thury throws out a N.C.O.'s group, No. 1 (I N.C.O., 9 men), on the road to the river; it does not matter how far. Another N.C.O.'s group, No. 2 (I N.C.O., 6 men), is placed at the clump of trees on the cross-road, at about 450 yards north-east of Thury; and another N.C.O.'s group, No. 3 (I N.C.O., 6 men), at the southern of the two "Abbauen zu La Maxe." These groups are all on roads, and there is about 660 yards laterally between them; so the ground, being level and open, is sufficiently watched.

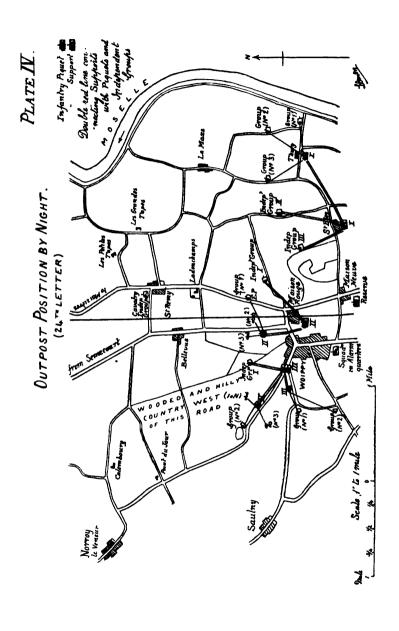
The support also throws out an independent N.C.O.'s group, No. 2 (1 N.C.O., 9 men), on the cross-road connecting St. Eloy and Francionchamps, as far as the culvert over the stream 800 yards north-east of St. Eloy. (A double sentry would never do, on account of the distance.) The distance from this group to the next N.C.O.'s group on the right is again about 660 yards. Another independent N.C.O.'s group, No. 3 (I N.C.O., 9 men), may be placed on the east border of the meadow already often referred to, for keeping up communication with Nos. 3 and 4 Its exact position will be at the point where the stream leaves the meadow. I do not, of course, regard this group as absolutely necessary, and should not consider it a mistake if you omitted to post it, as it is on no road, and the enemy is not likely to advance across country at night. In any case, Nos. 3 and 4 Cos. must detach from Maison Rouge an independent N.C.O.'s group. No. I (I N.C.O., 9 to 12 men), about 880 yards down the road to La Maxe, which will also observe the country due north of St. Eloy.

For the two great high roads and the railway, which are all so close together, a single piquet will be sufficient, placed on the Maizières road, which is the most important. In such case, however, the piquet would have to bivouac;* so it may be posted at St. Adèle, and have a N.C.O.'s group, No. 1 (1 N.C.O., 6 men), which will act as an examining post on the Maizières road. The examining post may be placed either at the bridge, 550 yards north of Maison Rouge, or further north; it is a matter of indifference. Anyhow, the main road is sufficiently secured, for, as we have seen, the cavalry independent N.C.O.'s group at St. Remy remains in occupation of that village during the night. (See night orders, No. 2.) Piquet No. 2, with a sentry over the arms, sends out a double sentry, No. 2, to the railway, and another double sentry, No. 3, down the main road to Semécourt, about 400 yards north of St. Adèle. These two sentry posts are certainly rather close together, but prudence forbids us to leave the observation of both these important avenues of approach to one double sentry post.

No. 3 support remains in its day position, and all dispositions in No. 3 section of the piquet line remain, as regards the infantry, the same by night as by day; but the cavalry independent groups will be withdrawn, and patrols will be sent instead towards Norroy-le-Veneur and Saulny.

Such is my idea of the night positions. Do not forget the cavalry at St. Remy, also the measures adopted by the squadron in Woippy for its own protection, which will consist merely of three dismounted N.C.O.'s groups at the outlets of the village facing Lorry, Le Chêne, and Le Coupillon respectively.

^{*} The time of year is December.



. .

Finally, I will ask you to frame outpost orders on the supposition that the detachment had arrived at Maison-de-Planches at 3 p.m. instead of at 1 p.m. Under such circumstances you would naturally not attempt any formal disposition of the cavalry, but merely give the officer commanding the squadron instructions to provide temporarily for observation and security until the infantry had taken up its positions. It would, as frequently must be the case in winter, be impossible to allow the infantry any time for rest before taking up the duties of observation and resistance.

TWENTY-FOURTH EXERCISE.

(See General Map, and maps Metz and Verny.)

General Idea.

An eastern force, operating in hostile country, has retired after severe fighting through the unfortified town of Metz, in the direction of Saarbrücken, pursued by a western force.

Special Idea for the West Detachment.

The advanced guard of the western force (4 battalions, 3 squadrons, 3 field batteries, 1 field company R.E. with pontoon troop, 1 bearer company) has debouched from the east side of Metz, and at 4 p.m. on the 1st April, 1891, the head of the vanguard has reached the public-house (krug) at the eastern outlet of Les Bordes. (Metz map.) The enemy, apparently in great disorder, has retired by Lauvallières, Laplanchette, and Colombey across the Vallières brook, but some of his infantry are holding the two former places and the high ground west of Coincy, as well as Coupillon (north of Lauvallières) and Aubigny, and are making preparations for defence. Gun epaulments are being made west of L'Amitié brewery and west of Coincy. Several cavalry patrols are in sight on the right bank of the brook.

According to reports made by trustworthy inhabitants of the country, two battalions and a battery have entered Montoy in great disorder, Coincy and Flanville are not occupied by the enemy, and a strong body of infantry, perhaps 10 or 12 battalions with several batteries, has retired on Kurzel. (General Map, 10 miles east of Metz.) The Vallières brook is swollen by heavy rain, and impassable by infantry. The bridge at Laplanchette is blown up, and the other bridges over the brook—from Coupillon to Aubigny—are barricaded.

At the hour above-mentioned (4 p.m.) the officer commanding the advanced guard receives the following order from the officer commanding the main body of the western force:—

"The main body is going into quarters in Metz. The advanced guard will occupy the villages east of the Seille and provide for the security of the main body on a line running approximately from Vautoux to the Wald von Borny. The main body urgently stands in need of rest to-morrow, but the advanced guard will actively continue the pursuit of the enemy."

Write out the orders issued by the officer commanding the advanced guard—

- (1) For the night, and show on the map all arrangements made by him to provide for observation and resistance, including the positions of piquets and groups, and the direction in which patrols are sent;
- (2) For the next day, on the assumption that no fresh information is received concerning the enemy.

TWENTY-FIFTH LETTER

OUTPOSTS ATTACK OF A RIVER LINE

THIS exercise well illustrates the fact that in connection with outposts, even more than in other tactical situations, it is impossible to lay down hard and fast rules, for in the present case it is quite out of the question to apply any fixed principles. In the last two exercises we had outposts in the customary form, but the present case will show the need of guarding against the use of any set form in respect of the distribution of outposts on the ground, or the distances between the several fractions of the outpost system. The space at one's disposal, the nature of the country, the general situation, the intentions of the commander, and the object in view in taking up the outpost line will in each individual case decide the measures to be adopted.

Towards the close of the twenty-third letter I mentioned that considerable modifications would have to be made in the arrangements there detailed if the enemy were further off. In the present instance the general situation, and, consequently, the object in view in taking up the outposts, requires arrangements wholly different to any yet described in the course of these letters.

What, in the present case, is the purpose to be served by the outposts which the advanced guard has to throw out? Is it likely that the enemy, already beaten and thrown into disorder, will attempt a night attack on the main body, or even on the advanced guard?

The bulk of the eastern force is already retreating on Kurzel, so the force left at the Vallières brook cannot be a large one, though, of course, we have no accurate information as to its strength.

It seems probable that the enemy will be only too glad to be left alone, so as to be able to give his troops in Montoy and at the Vallières brook some rest, and to restore order among them. With a view to checking the pursuit he is holding the line of the Vallières brook with such of his troops as are most fit for action. The fact that this rear guard is constructing entrenchments, and has blown up or barricaded the bridges, seems to imply that the enemy entertains no idea of attacking; he has, in fact, deprived himself of the power of doing so by rendering impassable the bridges over the swollen brook. Probably all he intends to do is to send out a few infantry patrols towards Metz, though purely in a defensive spirit, to give timely notice of any night attack. Your outposts have to prevent such patrols going too far, nothing more is necessary. The measures to be adopted, therefore, for our own protection may be of the most simple nature. A compact chain of piquets, &c., such as we had in the two preceding exercises, is unnecessary. In spite of the proximity of the enemy, it will suffice if on each of the two main roads a couple of companies be pushed out, which may find shelter in houses, and provide for their own security by posting a few guards.

Sebastopol and Belle Croix will answer this purpose. Let these two farms be occupied, and communication kept up between them by patrols, and it will be unnecessary to employ any more infantry; in fact it would be a mistake to do so.

We may also entirely dispense with a system of outpost

cavalry in front of the line held by infantry. Enough has been found out about the enemy to clear up the situation, and we are not likely to learn more by employing cavalry. Again, there is so little room between Sebastopol and Belle Croix on the one hand, and between these two farms and the Vallières brook on the other, that there is absolutely not space enough for outpost cavalry, such as we have treated of in the last two exercises. All that is wanted is some troopers attached to the infantry, with which touch of the enemy may be maintained.

It might be as well to have small bodies of cavalry placed on the flanks of the infantry line, which will endeavour by day, but more particularly by night, and at daybreak next morning, to work round the flanks of the enemy's position and find out all they can. This is in conformity with the principle which I have so often reiterated, that cavalry, if unable to make further progress straight to their front, must endeavour to work round an enemy's flanks. This course is the more advisable here as it is above all in pursuit that efforts should be made to continually worry the enemy's flanks.* We must only employ small bodies of cavalry, however, in this way, because the advanced guard, and therefore the cavalry also, has heavy work before it next day. If you were to employ whole squadrons for this purpose, the horses, already used up by the exertions of the past day, could not be depended upon for the morrow. On the other hand sufficient cavalry must be employed to drive in, if necessary, patrols or small bodies of the enemy. For these reasons I consider a troop on each flank sufficient, which I should place in Grigy and Vantoux.

From Grigy patrols must proceed along the main road to

[•] Speaking of rear guards, the *Felddienst Ordnung* says (I. 89): "Touch with the enemy must be maintained by the rear guard cavalry, particular attention being directed to attempts of the enemy to pass our flanks."

Ars-Laquenexy, and thence due north to Aubigny. From Vantoux along the valley road and Coupillon, or by way of Méy, to Nouilly.

A reserve for the outposts is unnecessary. Instead of it two companies in alarm quarters on the east side of Borny, and two on the east side of Les Bordes, will be sufficient to readily support the advanced companies should they, (though it is most unlikely,) be attacked by superior forces. Should any further support be necessary, it may be rendered by the infantry in Borny to the two companies at Sebastopol, and by the infantry in Les Bordes to the two companies in Belle Croix. This leads us to the conclusion that it would not be advisable to place all the advanced companies under one command, but let them be under the command of the officers commanding in Borny and Les Bordes respectively, to which officers the advanced troops of cavalry will likewise report direct. The officer commanding the advanced guard must, however, be careful to clearly indicate, in his orders, that lateral communication is to be kept up between the advanced troops, both infantry and cavalry, on each road.

In framing the advanced guard orders you should be guided by the model given in the twenty-first letter, but you will soon realize that it cannot be followed implicitly in the present case, and that you can only in part copy the headings there given. In fact it was my object in framing the general and special ideas for this exercise to warn you against a too literal application of my models for orders.

When the advanced guard is about to be dismissed to the various cantonments and outpost positions, the latest information concerning the enemy should be communicated to the troops, especially to those who will be nearest the front. Do not forget, as I advised you in the first letter, to give prominence to the good news that the enemy has been well beaten, and is in great disorder. On the other

hand, do not omit to mention that the enemy is constructing field entrenchments along the Vallières brook, in order that all ranks may clearly understand that a stubborn resistance is likely to be met with in that direction, and accordingly avoid the mistake of despising the enemy.

Taking into consideration the line which has been approximately fixed for the outposts by order of the officer commanding the main body (Vantoux to Wald von Borny), the following villages are available for quartering the advanced guard in,—Queuleu, Borny, Belle Tanche, Plantières, and Les Bordes.

I do not recommend the occupation of Oueuleu, as this would involve too great a dissemination of the advanced guard, and render a prompt concentration in case of need very difficult. There is, besides, room enough in the other villages for comfortably quartering the advanced guard. With regard to the distribution of the troops among the various villages, I must refer you to the advice given in the fourth letter. Should your distribution differ from mine, I shall not go out of my way to find fault, so long as you have allowed for the next day's operations. The mounted arms must, at any rate, be so provided for that the horses will find stabling; the artillery being, in addition, quartered in a place of security, and on no account in Borny. The orders below show how I propose to quarter the troops. here only observe that, in accordance with the principle that the quartering for the night should, in a sense, be the commencement of the next day's work, most importance must be attached to the Colombey road;—therefore keep to this road.

In framing the orders take care to enjoin the necessity of never for a moment losing touch of the enemy, and do not leave it to the discretion of the officers commanding in Borny, and Les Bordes respectively; for in a retreat, a defeated enemy often succeeds in stealing a march unobserved, profiting by the hours of darkness. In the present instance, certainly, the enemy's preparations for defence make a sudden retreat less likely, but in war one is never certain that the enemy may not do something unexpected; the advanced guard should therefore recognize that it is its duty to strain every nerve to keep touch of the enemy. Any neglect in this respect may lead to the most fatal results. The situation calls for the employment of small bodies of cavalry, commanded, if possible, by officers, pushed out in front of the general outpost line, but not tied to any particular places, and hanging on to every movement of the enemy.

The officer commanding the advanced guard will himself decide the positions of these parties, although by so doing he may encroach on the province of his subordinate commanders in Borny and Les Bordes. A few troopers may be attached to the companies at Sebastopol and Belle Croix for patrolling, and as orderlies, and no more cavalry will be wanted on the two main roads. The advanced guard commander may even mention in his orders what these patrols are to do, so as to convey to all concerned an idea of

the measures adopted. There is a further reason for his so

doing, viz. that the companies at Belle Croix and Sebastopol respectively will be taken from different battalions.

As explained in the twenty-second letter, it is sometimes advisable to notify to the troops, when dismissing them to their quarters, what is to be done in case of an alarm. If the orders say nothing to the contrary, each unit should provisionally assemble at its own alarm post. This will be the best arrangement in the present case. I do not consider it desirable to appoint an alarm rendezvous for the whole advanced guard, for, if the enemy attacks during the night, he must move by one or other of the two main roads, but by which we cannot foretell. It is out of the question to assemble the advanced guard on one of the two roads;

and there is no suitable place for assembling it between them. Under such circumstances the best thing the O.C. advanced guard can do is to direct the various units to await further orders at their several alarm posts.

The officer commanding the advanced guard will take up his own quarters in Plantières, on the main road, so as to be easily found by orderlies, &c. Being the senior officer there, he will appoint a staff officer to act as cantonment commandant. The senior officer in Les Bordes will perform the duties of cantonment commandant in that village without a special order being given on the subject.

It would be possible to notify to the troops, before dismissing them to quarters, where the several portions of the advanced guard are to parade next morning, so as to spare officers the necessity of attending again to receive orders in the evening. Though it would be desirable to do so, yet it must be remembered that it is only 4.10 p.m. when the advanced guard orders are issued, and that further information may come to hand in the course of the evening, which may totally alter the situation. The officer commanding the advanced guard must therefore await reports from his outposts before arriving at his final decision; and so another issue of orders late at night cannot be avoided. We have now run through the main points in connection with the advanced guard orders, which are as follows:—

East side of Les Bordes, 1. IV. 91. 4.10 p.m.

ADVANCED GUARD ORDERS.

- 1. The Enemy, who has been defeated, and is in disorder, has retreated across the Vallières brook, which is greatly swollen, and is fortifying Aubigny,-the high ground west of Coincy,-Laplanchette, Lauvallières, and Coupillon. The bridges are destroyed or barricaded. About three brigades of infantry with several batteries are falling back on Kurzel. Two battalions are reported at Montoy. Our main body is going into quarters in Metz.
- 2. The Advanced Guard will occupy wide cantonments as follows:—
 Borny:

I/Battalion, I/Squadron.

Les Bordes:

II/Battalion, II/ and III/ Squadrons.

Plantières, northern half: III/Battalion, 1st and 2nd Field Batteries.

Plantières, southern half:

IV/Battalion, 3rd Field Battery, Bearer Company.

Belle Tanche:

Field Co. R.E.; with pontoon troop.

3. From Borny a troop of cavalry will be sent out to the east outlet of Grigy, which will send patrols viâ Laquenexv to Aubigny. Two companies will be detached to Sebastopol. which will guard the Colombey road. Four troopers will be attached to these two companies. From Les Bordes two companies with 10 troopers will be advanced to Belle Croix, and will observe the roads to Laplanchette and Lauvallières. and a troop of cavalry will be sent to the east outlet of Vantoux, which will send patrols towards Coupillon. The above advanced troops will be careful to preserve lateral communication among themselves. On the road through Colombey and towards Laplanchette parties of cavalry commanded by officers will be sent out from Borny and Les Bordes direct, to keep touch of the enemy. At the eastern outlets of Borny and Les Bordes respectively, two companies will occupy alarm quarters.

- 4. In case of an attack on the part of the enemy, Borny and Belle Croix are to be held.
- 5. The Baggage will be brought up to the troops, with the exception of that of the troops at Sebastopol and Belle Croix.
- 6. Reports will reach me at the gas-works in Plantières, where officers will attend to receive orders at 10 p.m.—Lieut.-Col. R., II/Battalion, is appointed Cantonment Commandant in Plantières.

Verbally to assembled commanding officers.

Copies sent to the advanced squadrons by orderly N.C.O.'s.

A., Major-General

I will now detail, as they would have to be shown on the map, all the arrangements made by General A. to provide for observation and resistance. This will show you how the arrangements made by the advanced detachments are supplemented by the measures adopted by the troops in the various villages for their own security. I will begin with the right flank of the outposts.

The troop at Grigy acts as a piquet, and remains at the outlet from Grigy facing Ars-Laquenexy, covered by a dismounted look-out sentry. A N.C.O.'s group is pushed out to Grange-aux-Bois. This is, I admit, over a mile from the piquet, and it might possibly with advantage be nearer, say

at the S.W. angle of Grange-aux-Bois park. Patrols will go through Ars-Laquenexy towards Aubigny, and keep up communication with Borny.

The support at Sebastopol has a double sentry close to the farm. A company and a half are sheltered in the buildings. ready to turn out at a moment's notice, much the same as in alarm quarters. A piquet, strength half a company, stands on the main road to Colombey, where the cross-road from Belle Croix runs in, and has a sentry over the arms for its own immediate security, besides the following:-Double sentry No. 1 down the road to Grange-aux-Bois, N.C.O.'s group No. 2 at the Franz. Denkm. Patrols keep up communication with Belle Croix, and go to Grange-aux-Bois and Colombev. and towards the northern part of the Todten-Allee. Of the 4 troopers attached to these two companies, four serve as orderlies for the piquet, and two as orderlies for the support at Sebastopol. From the squadron quartered in Borny a section (6 troopers) under an officer is thrown out east of Colombey. which moves about as necessary, keeps constantly in touch with the enemy, and preserves connection with the infantry piquet in rear.

The support at Belle Croix has a double sentry for its immediate protection. A piquet, No. 1, strength half a company, stands at the road-fork just east of Belle Croix, with a sentry over the arms, and throws out the following: N.C.O.'s group No. 1 at the north end of Todten Allee, N.C.O.'s group No. 2 about 220 yards down the main road to Lauvallières, where a lane goes off towards Vantoux. Patrols go out from the piquet to Laplanchette and Lauvallières, and keep up communication with the piquet east of Sebastopol.—An independent N.C.O.'s group, No. 2, (12 men) is placed at the cross-roads about 800 yards north-east of Belle Croix, and sends out patrols towards Lauvallières and the Latour Mill, and keeps up communication with the

cavalry in Vantoux.—The ten troopers attached to these two companies are distributed as follows: two are orderlies for the piquet, two for the support, six form patrols, which from time to time go down the main road, towards Lauvallières, besides connecting with the section of cavalry (under an officer) in front of the infantry. This section (8 troopers) goes down the main road far enough towards Laplanchette to be able to watch towards Lauvallières and at the same time keep touch with the enemy. The troop of cavalry in Vantoux is posted at the east outlet of the village, and acts as a piquet, and therefore has a dismounted look-out sentry. It has a N.C.O.'s group in the Vallières valley, where the road to Méy branches off, and sends patrols towards Coupillon. It would also be desirable for patrols to go through Méy towards Nouilly, but on account of the bad state of the road it cannot be done at night.

In rear of this outpost position the remaining troops of the advanced guard quartered in the villages must provide for their own security by *outlying guards*. This measure is specially necessary in the case of Borny, which is nearest the enemy. Independent N.C.O.'s groups of infantry will occupy the outlets facing Grigy, Sebastopol, and Les Bordes, though they are not all of equal importance.

The group at the outlet facing Grigy should be commanded by an experienced and trustworthy N.C.O. It will have a double sentry on the road to Grigy, and another at the south-east angle of the village, and send two patrols, each of three men, towards the Wald von Borny and Grigy respectively. Its strength will therefore be 18 men.

The east outlet of the village is less important, on account of the proximity of Sebastopol. One N.C.O. and 6 men are sufficient here, as they have only to furnish a double sentry at the north-east angle of the village.

It is unnecessary to place a group or send patrols on the road to Colombey.

Similarly the N.C.O.'s group on the road to Les Bordes is of minor importance. It may be placed at the road-fork, where the road to Plantières branches off. It should throw out a double sentry up the road to Les Bordes, as far as the culvert east of the wash-house.

Nothing more need be done for the north side of the village, though a group might be placed about the middle of the north side, for which 6 men would be sufficient.

Les Bordes lies end on to the enemy, the long south side being sufficiently secured by the neighbouring troops in Borny, Belle Tanche, and Plantières, and the long north side by the proximity of the impassable Vallières brook. Only the east side therefore need be guarded. I would have a N.C.O. and 12 men at the public-house (Krug) at the east entrance, who furnish a double sentry on the road, and send patrols to Borny and Belle Croix; another N.C.O. and 12 men at the farm Ecrevisse, with a double sentry at Lorient, and patrols to Trou-de-Lièvre and Vallières.

In Belle Tanche are quartered the Field Company with the pontoon troop, which will require all the accommodation that the farm can offer, for the Field Company has 60 horses with 10 vehicles, and the pontoon troop 182 horses, with 16 pontoon wagons and 4 trestle wagons, besides 7 other vehicles.* The farm is sufficiently protected, as Borny is in front of it. It will be sufficient to have a double sentry at the south angle of the garden attached to the farm, and a corporal's guard in a central position in the farm.

Plantières falls into two districts; one adjoining the Metz-Borny road, the other the Metz-Grigy road. At the east end of the former district I would place a N.C.O. and 9 men, near the "Abdeckerei," where the road branches off

^{*} British organisation. - Trans.

to Les Bordes. This group will furnish a patrol to Borny. The other district is sufficiently secured on the east by Belle Tanche and Borny: on the south there must be a N.C.O. and 9 men at the road-fork at the south-east angle of the churchyard ("Ost.-Khf." on the map); who supply a double sentry at the cross-roads, and patrol towards Grigy.

The somewhat uninteresting subject of groups and sentries is thus disposed of. I have detailed all the measures adopted by the advanced guard for its security, to show you that the arrangements made for guarding the villages will amply suffice, in conjunction with the companies advanced to Sebastopol and Belle Croix, to protect the advanced guard from a sudden attack.

The afternoon passes quietly, and no further information is received concerning the enemy, who will therefore, it appears, be prepared next morning to dispute the passage of the Vallières brook, in the position which he has hastily fortified, (high ground west of Coincy,—Aubigny, Laplanchette, Lauvallières, and Coupillon). It is unlikely that he will fall back in the course of the morning, after the trouble he has taken in constructing field entrenchments, &c. On the contrary there is every indication that the object of the rear guard is to gain a day's rest for the main body that has fallen back on Kurzel, to attain which the rear guard is prepared to accept battle on the line of the Vallières brook. To attack this position is the task which now devolves on the advanced guard of the western force, which will have to act independently in continuing the pursuit of the enemy.

The special idea tells us that "the main body of the western force urgently stands in need of rest to-morrow," on which account it cannot continue the pursuit. The advanced guard cannot, therefore, look for any support,—

though but for this paragraph in the orders from headquarters, the data would give us reasonable grounds for counting on support from the main body. The reasons for this exceptional procedure on the part of the main body do not come within the scope of our argument.

The brook, greatly swollen, constitutes a formidable obstacle, which the western troops would have great difficulty in surmounting in the course of any attack made in the stereotyped form.* It is, unfortunately, impracticable to slip past the enemy's flanks, as to do so, whether on a northerly or a southerly line, would entail making too great a détour, with no certainty of success; though certainly it would be desirable to avoid attacking the position along the east bank of the brook. To move via Méy and Nouilly would mean crossing the deep valley at the latter place—an arduous undertaking,—for there is hardly any doubt but that the enemy would succeed in moving troops from Montov through L'Amitié in time to oppose our ascent from Nouilly to Noisseville. On the other hand, an attempt to turn the position by way of Ars-Laquenexy would likewise involve heavy losses and severe fighting, in the all too probable event of the enemy rapidly moving on to the ground lying south of his line of retreat on Kurzel. In neither case would the advanced guard be pressing the pursuit with the energy which the situation demands, seeing that it is the intention of the officer commanding the main body of the western force that the enemy's rear guard should be crushed; and in either case the advanced guard might have its own line of retreat imperilled, should it prove that the enemy's rear guard is stronger than is suspected. Although we have obtained ample information as to the enemy, there is need for caution, for reports which appear in the highest degree trustworthy may subsequently prove inaccurate or defective.

^{*} i.e. frontal demonstration combined with flank attack,—Trans.

The plan offering the surest prospects of success is to attack the enemy's position along the brook. This plan also promises the speediest results, as we shall not show the enemy the kindness of making a détour which will require a long time. In addition to this it is probable that the bridges are held only by small detachments, already disheartened by their recent defeat. I trust that you do not propose bridging the brook, with the aid of the pontoon troop, as such an undertaking would have but faint chance of success, especially as the bridge would, in all probability have to be made under the fire of the defender. Part of the pontoon troop may possibly be employed in throwing a bridge across the brook after the enemy has been driven from his position.

It is unlikely that the bridges will be held in any strength, because we have reliable information that the enemy's main body has already retreated eastwards; though, of course, it is impossible to say how far, but at any rate far enough to enable us to count on having only a rear guard to deal with next morning. Some clue as to the strength of this rear guard is afforded by the circumstance that there are only two battalions in Montoy during the night. Again, it is most unlikely that the whole line, from Coupillon to Aubigny, is held as in a regular defensive position, for it is about $2\frac{1}{2}$ miles long in a straight line, which would require something like an army corps to defend it properly.

As, however, the enemy is concerned in defending a considerable extent of an unfordable stream, which can be crossed only at certain points, it is reasonable to suppose that he will be guided by the principles ordinarily governing the defence of a river line of some extent. The main thing for him to do is to check, by means of small detachments posted at the most likely points of passage, our attempts to cross, until a reserve (which should be as strong as possible), posted at a suitable road-junction in rear of the

centre of the whole position, can intervene at the point threatened, and repulse the attacker by means of a vigorous counter-stroke.* In pursuance of such a plan, the detachments holding the various bridges usually consist of infantry only, while cavalry patrol along the river bank, and at the same time keep up connection between the several detachments.

Artillery is seldom attached to such detachments, but may be employed when certain points of passage are so exceptionally favourable to the attacker as to make it almost certain that he will attempt to cross there. The reserve, consisting of infantry and artillery, maintains close communication with the various detachments by means of relays, patrols, orderlies, cyclists, telephones, signalling, and telegraphing.

Let us now collate the information received concerning the enemy with the above principles of river defence which I have briefly run through. The bridges held by the enemy's infantry are spread over so great a frontage, that any outposts covering the troops in Montoy must necessarily be of a very sketchy nature. In fact everything indicates that it is the enemy's intention to force you either to attack or make a wide turning movement, unless indeed his object be merely to retire, after having induced you to deploy for an attack on the stream line. The detachment holding Coupillon is probably there for the purpose of blocking the road to Nouilly, for which purpose half a company would be sufficient.

The troops in Montoy may be considered the reserve of the whole position. There being two battalions there, it is probable that the rest of the brigade to which these two battalions belong is distributed along the Vallières brook.

^{*} I use the term counter-stroke, throughout this translation, to denote the grand counter-attack made by the General Reserve, towards the end of an action, by direct order of the G.O.C.—The term counter-attack refers to the action of cavalry or of section reserves of the first line of infantry in defence, which is less important, as they are on a far smaller scale, and have only a local effect.—
Trans.

Only one battery is reported in Montoy, but, as epaulments have been constructed at two different places, it is not impossible that there may be more artillery about; since, as you are aware, rear guards are, as a general rule, made as strong as possible in artillery. There can scarcely be more than three batteries, however, on the scene, as the inhabitants of the country reported that there were several batteries in the main body that retired on Kurzel. Of the enemy's cavalry all that is known is that it is actively patrolling along the brook. It will probably be employed next morning principally north of Coupillon and south of Aubigny, as its chief duty will be to discover any attempt on our part to work round the flanks.

We have seen, however, that the officer commanding the advanced guard cannot hope to pass round the flank of the enemy's position, neither can he attack it in the ordinary manner, on account of the heavy losses it would entail; he has now, therefore, to choose between two other methods of attack. One is to make a sudden attack with his whole force on one of the points of passage, in the hopes of driving in the detachment on the spot before the reserve from Montov can intervene. It is, to say the least, doubtful whether such an attack would not be patent to the enemy If he realises it betimes, we should from its inception. have to carry it out against his reserve, as it hurries on the scene, and should incur losses out of all proportion to the result obtained. The other plan offers more prospect of success, namely, to attempt to induce the enemy, by means of a feint (secondary crossing) vigorously carried out to bring his reserve into action, while we make the real attack at some other point. In such case the attacking force must be divided, and two separate attacks will have to be carried out; but the rôle of the feint is by no means of equal importance with that of the "secondary attack" referred to in our previous orders for attack.

Such a feint should take in the enemy, and make him believe that he has to do with the real attack; it should, therefore, be carried out as if it were intended to assault the point in question; otherwise the enemy will not be deceived, nor move his reserve to the point threatened. While the feint is being made, the troops for the main attack are being concentrated under cover as near as possible to the bridge to be assaulted; the main thing being to so engage the enemy's attention with the feint that he will not notice the true attack until the last moment. The feint must therefore in time precede the real attack, and in place be as far distant as possible from the point selected for the real attack.

In selecting the point for the main attack, the nature of the country on the enemy's side of the stream must be considered.

Suppose you succeed in capturing the bridge, the first troops to set foot on the other side of the stream should find a good defensive position where they can establish themselves, and hold their ground against the enemy's reserve, when it arrives on the scene. Granted the existence of such a position, however, if the enemy's reserve finds out the main attack soon enough, it may succeed in driving back again over the stream the first troops who cross, who will probably be in the minority. It is, therefore, a great advantage if our artillery can, from a position on the near bank, come into action against such a counter-stroke. In selecting a point for our main attack, therefore, two things have to be considered, (1) where can a sudden advance be made from a position concealed from view, (2) where is it possible to ensure a firm hold of the further bank?

The enemy would be most likely to believe in the reality of an attack on Laplanchette, because such attack would strike straight at his line of retreat. We know, however, that the bridge there is broken, so that the enemy can feel fairly secure against attack in this quarter. Laplanchette, therefore, is suitable neither for a feint nor for a main attack, but we may there occupy the enemy's attention by a demonstration in small force.

We have next to institute a comparison, subject to the above-mentioned requirements, between the other bridges, especially those at Lauvallières and Colombey. An attack by day on Lauvallières would be soon noticed by the enemy at L'Amitié, as soon as the attacker leaves Belle Croix. Lauvallières, therefore, will not do for the main attack.

The outlook is more favourable at Colombey. Troops can be concentrated under cover of the high ground at the Franz. Denkm., and will be sheltered by the park of Colombey while advancing on the bridge. A portion of the attacking force may rush the bridge 400 yards south of the main road by the ruined mill, and seize Aubigny, thus gaining the desired supporting point on the enemy's side of the stream. The ravine between the main road and Aubigny will lend cover to the advance of the troops who have crossed at Colombey, and the enemy's troops in Aubigny will thus be in danger of being isolated, and will be induced to promptly retire from the village, even should they have not been already driven from it by the frontal attack from the ruined mill. It is a great advantage that at Colombey there are two bridges close together, as this circumstance will enable us to rapidly pass a sufficient number of troops over the stream, and gain a firm hold of the other bank. (This is assuming that the bridge shown on the map by the ruined mill is still in existence.) Should the enemy's reserve advance through Coincy, our artillery fire can take effect on it from the high ground just west of Colombey. Everything, therefore, points to the suitability of Colombey for the main attack, and of Lauvallières for the feint.

It follows from what has been previously said that, if the feint is to deceive the enemy, it must not be made in broad daylight, for from L'Amitié brewery every man in the

attacking force could be counted as it leaves Belle Croix. The enemy would thus very soon see that he had only a small part of the advanced guard in front of him, and would want to know where the rest of it was. As the enemy is operating in a country hostile to him, he cannot be assumed to know that the main body is going to remain in Metz; on the contrary, he probably expects the whole of the western force to attack the line of the Vallières brook. The employment of a palpably small force to attack Lauvallières would therefore be certain to arouse his suspicions. Again, the less the enemy can find out concerning the strength of the feint, the more chance there is of his employing his reserve to repulse it. The darkness will here be our best ally. The feint must be made just before daybreak, the main attack being made later, and by daylight.

I am in this case opposed to making a night attack with the whole advanced guard, although such a plan may appear to offer certain advantages. I need not go into the advantages and disadvantages of night attacks, but I may remark that I am very far from being an enthusiastic advocate of night attacks; although, of course, I do not consider a night attack with well-disciplined troops an impossible operation. I should think that our experiences at Gravelotte are a sufficient warning in this respect.*

^{*} The author is referring to attacks made, not just before daybreak, but at 9 or 10 p.m. The German 2nd Corps (Pomeranians) arrived at Gravelotte at 7 p.m., and attacked the farm Moskau. Some of them crossed the bridge in the Mance valley, but were driven back by the murderous fire of the French. On the bridge they met other infantry advancing; this caused a jam and great confusion, as the bridge was under the fire of the French. A dense mass of German infantry collected near St. Hubert, while fresh troops still pressed upwards through the confused crowds of fugitives. The attack on this part of the French position proved fruitless, and the French remained in possession of Moskau and Le Point du Jour, and the great quarries south of the latter. This was chiefly due to the employment by the French of artificial cover between La Folie and the quarries.—Trans.

It is another matter, however, when, as in this instance, an engagement is commenced in darkness, the troops to deliver the main attack assembling before dawn, but waiting for daybreak to advance. The darkness covers the assembly of all the troops, and the opening attack made by a fraction of the whole force;—but the main attack itself does not begin till it is broad daylight.

It is of no consequence that there is a wide interval between the main attack and the feint, that the whole attacking force is spread over a frontage far greater than usually admissible, or that it will be difficult, if not impossible, for the commander to personally control his whole force. This is a case of two separate attacks, and it is a great advantage that there is a wide gap between them, as the case with which we are dealing is wholly exceptional, and cannot be gauged by any rules we have hitherto conformed to.

The officer commanding the advanced guard therefore arrives at the following decision:—Main attack through Colombey on Aubigny; and a Feint (to be made while it is still dark) on Lauvallières,—this feint to include a demonstration in small force against Laplanchette.

You are asked to describe the measures adopted next morning by the officer commanding the advanced guard, on the supposition that no fresh information is received concerning the enemy, but it must be borne in mind that, when framing the orders on the evening of the 1st April, the officer commanding is not to know that some change may not take place in the situation as regards the enemy in the course of the night, although it is not likely, considering the nature of the news at present to hand. He should, therefore, arrange overnight for the assembly of the troops at two separate points, and in such manner as to subserve his plans for attack (Sebastopol and the east end of Les Bordes will

answer the purpose), but defer issuing the orders for attack proper till the next morning.

The sun rises about 5 a.m., and the time of assembly must be so calculated that the troops for the feint and the demonstration shall be deployed for the attack on Lauvallières and Laplanchette respectively before that hour.

The distance to be marched being about two miles, the troops for the feint should be ready to move off at 4 a.m. The troops for the main attack will assemble at the same time, and proceed to the Französischen Denkmal, where they will wait, under cover, until the attack on Lauvallières is fully developed.

As two separate attacks have to be made, the form of the orders will have to be different to that of the orders given in preceding letters. The two portions into which the force will be divided may be designated "right and left columns." As both columns should work in concert, it is essential that each should know precisely what the other is going to do, so one set of orders should be given for both. It would not do to issue orders for advance, detailing a left flank guard;—partly because the march is so short, and partly because, there being no question of a guard on the flank, the expression "flank guard" might cause misunderstandings.

In arranging the composition of the columns, the great object is to make the enemy think that the feint is the main attack. It would be as well to send plenty of artillery in the direction of Lauvallières, for, as a rule, a quantity of artillery is generally associated with large bodies of infantry. Two batteries may, therefore, be attached to the left column. This leaves a battery for the main attack, which may be required to prepare the attack on Aubigny, or to come into action against the enemy's reserve.

The bulk of the infantry will be required for the main attack, and one battalion will do for the feint—six companies moving

on Lauvallières, and two on Laplanchette. The remaining three battalions, provided they succeed in rapidly crossing the stream, are sufficient to carry out the main attack;—even if the enemy's reserve, contrary to our hopes and expectations, should move towards Aubigny.

Several tasks will devolve on the cavalry. A great part of it may be employed dismounted against Coupillon, to occupy the attention of the enemy at that place. In the semi-darkness of daybreak the enemy will be unable to distinguish whether he has cavalry or infantry to deal with. Should the enemy after a time withdraw from Coupillon, the bulk of our cavalry had better be employed on this flank of the enemy; it will therefore be as well to attach two squadrons to the left column. The right column will require some cavalry too, for it is specially desirable, in the event of the main attack succeeding, to threaten the retreating enemy from the south, and that thus our cavalry pass round both his flanks. The squadron which has detached a troop to Grigy must undoubtedly be attached to the right column, so that it may be again united on the morrow.

I would so apportion the field company of engineers that one-third of it is with the left column, for the purpose of removing any obstructions on the road at Lauvallières, while the other two-thirds of the company do the same in the case of the two roads at Colombey. There is nothing for the pontoon troop to do at the commencement of the action, though there may be later on. It may therefore remain at Sebastopol until the result of the action is decided, and may form part of the right column as it assembles there. The bearer company may also be attached to the right column, in which there will probably be the greatest number of casualties.

The outposts will stand fast until the attack commences, and cover the assembly of the troops and the first deployment.

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The baggage should be so disposed as to be readily brought up in the event of the attack succeeding. It will naturally be collected on the main road to Kurzel, and, to remove all doubts, its order of march should be specified in the orders, as the regulations lay down that the order of march of the baggage should conform to that of the several units to which it belongs. There being here two separate columns, the orders must detail whether the baggage of the one or of the other is to lead the baggage column.

The officers to receive the orders for attack proper must have instructions to attend at such an hour as to admit of their rejoining their units in good time; 3.40 a.m. will do; and the place where they have to rendezvous should be in the centre of the place of assembly, *i.e.* at the outlet of Borny facing Les Bordes.

I need hardly say that when there are two different places of assembly the distribution of troops should be given in the assembly orders. The "distribution of troops" given below should be compared with the distribution of the troops among the various villages given in the first orders. (p. 522.)

The assembly orders are as follows:-

Plantières. 1. IV. 91. 10 p.m.

ADVANCED GUARD ORDERS.

DISTRIBUTION OF TROOPS.

- - 1st and 2nd Field Batteries.

 †rd Field Co. R.E.
- Right column: Colonel C.
 I/Battalion.
 III/Battalion.
 IV/Battalion.
 I/Squadron 1st Dragoons.
 3rd Field Battery.
 Field Co. R.E. (less ½rd), with pontoon troop.

Bearer Co

- No fresh information has been received concerning the enemy. Our main body will remain in Metz to-morrow.
- 2. The Advanced Guard will assemble to-morrowat 4 a.m. in two columns; the left column at the public house at the east outlet of Les Bordes, the right column just west of Sebastopol.
- 3. The Outposts will stand fast till further orders.
- 4. The Baggage, conducted by a section, under an officer, furnished by the 1st Squadron, will be collected at 7 a.m. to-morrow in column of route, with the head of the column at Sebastopol in the following order:—

 Baggage of the right column,—ditto of the left column.
- Officers commanding units will attend to receive orders at 3.40 a.m. at the outlet of Borny facing Les Bordes.

Dictated to officers representing the several units.

A., Major-General. In the orders for attack it is not advisable to tell the officer commanding the left column that he has only to make a feint; for the attack of the left column, to produce the desired effect, must be carried out with the utmost spirit. In the orders the word "feint" must not therefore be used. The orders must also make it clear that the left column must lose no time in commencing the attack. All details as to how the officer commanding the left column is to dispose his force should be left to his discretion. On the other hand it would be as well to expressly state in the orders that nothing more than a demonstration is to be made against Laplanchette, to prevent Colonel B. employing too many men in that quarter.

The cavalry with the left column has to keep the enemy's troops in Coupillon sufficiently occupied to prevent them rendering any assistance to those at Lauvallières.

It makes no difference whether Coupillon is taken at the first rush or not; if the enemy retires from Lauvallières he is bound to give up Coupillon at the same time, and so there is no occasion for the cavalry to incur heavy losses. This should be made clear in the orders. The cavalry must act dismounted, for the narrow valley of the brook and the country between Méy and Nouilly are not suitable for cavalry action. The cavalry must at the same time reconnoitre, although the nature of the country will only admit of the employment of small patrols.

The control of the right column must be completely in the hands of Colonel C., so that the officer commanding the whole force may be free to supervise both columns and be relieved of the arrangement of details. The orders must make it clear that the right column is not to attack until the action at Lauvallières has reached such a stage that there is some prospect of the enemy bringing up his reserve there. Meanwhile the right column should take up a position in

readiness, and be prepared to come into action at a moment's notice. The moment for commencing the main attack depends, however, on the result of the action at Lauvallières, and, as the latter is uncertain, I should, were I the advanced guard commander, go a step further, and reserve it to myself to order the main attack to commence. In any case the orders must clearly show the officer commanding the left column the manner in which the right column is to deliver its attack.

The outposts have to stand fast until the attacking troops have passed through their line, after which they will join in the attack.

As it is possible there may be severe fighting, the extra ammunition should be issued at the place of assembly, so that every man shall carry 150 rounds on his person. There will be sufficient time to do this.

I would not fix the position of the dressing station, as it will depend entirely on the issue of the action. Suppose the main attack has little difficulty in crossing the stream, but has heavy fighting, say between Aubigny and Coincy,—the dressing station should be established at Colombey; if, on the other hand, there are severe losses in crossing the stream, it would be better to have the dressing station at Sebastopol. The bearer company may therefore remain provisionally at Sebastopol; so placed, it can, if required, be brought up to the left column as well.

The pontoon troop may also remain at Sebastopol until the result of the action on the Vallières brook is decided, for at present it is uncertain where it may be required later on—whether, for instance, at Laplanchette, or elsewhere. The pontoon troop will require the assistance of the field company in making a bridge.*

^{*} In the British organisation for war a pontoon troop is attached to the corps engineers of each army corps, and is provided with sixteen pontoons with wagons, and four wagons packed with materiel for trestle bridging. Besides the pontoons, &c., the troop carries the necessary tools for making bridges out of improvised

The position of the officer commanding the advanced guard must be so chosen as to enable him to watch the progress of both attacks as far as possible. The Tannen Wäldchen, north of Colombey, is a good place, being about half-way between the two columns, and easy to find.

The orders for attack are as follows:-

stores, or for repairing permanent bridges which have been broken in the course of a campaign.

It consists of 214 of all ranks, and carries manufactured materiel to bridge 120 yards. Length occupied on road 470 (without opening out).

Each field company carries pontoons to bridge fifteen yards.—Trans.

Belle Croix. 2. IV. 91. 3.40 a.m.

ADVANCED GUARD ORDERS.

- No fresh information has been received concerning the enemy.
- 2. The Advanced Guard will attack the enemy on the Vallières brook.
- 3. The Left Column will at once attack Lauvallières, and occupy the enemy's attention at Laplanchette. The cavalry with this column will dismount men to attack Coupillon (who are not to incur heavy losses), and will reconnoitre viâ Méy to Nouilly.
- 4. The Right Column will at once occupy a position in readiness west of the "Französischen Denkmal." On receiving an order from me to attack; it will advance, via the park at Colombey and the ruined mill south of Colombey, against the heights west of Coincy, and on Aubigny. Patrols will reconnoitre through Ars-Laquenexy.
- 5. The Outposts will join their respective columns.

- The extra ammunition will be at once issued to the infantry. The bearer company and the pontoon troop will await further orders at Sebastopol.
- Reports will reach me at Tannen Wäldchen north of Colombey.

Verbally to the assembled commanding officers.

A., Major-General.

You should now, by a slight effort of imagination, try and realise the effect this attack will produce on the mind of the officer commanding the enemy's troops in Montoy. His troops are already exhausted by the recent fighting, and their retreat. On their arrival at the Vallières brook they were occupied till evening in constructing field entrenchments, barricading bridges, &c., and a considerable number have had to be on outpost duty during the night as well. these circumstances will operate unfavourably on the already impaired moral of the enemy's troops, as their commander is only too well aware. Suddenly, at the first streak of daylight, hostile infantry in superior numbers make a determined assault on Lauvallières and Laplanchette, and, if the wind is that way, the sound of firing at Coupillon may also be heard. The musketry fire is most intense at Lauvallières. on which point also a concentrated artillery fire is being directed by batteries in position on the high ground by Belle Croix. It is impossible, in the semi-darkness, to judge of the enemy's strength, but it appears likely that at any moment Lauvallières may be captured. At Colombey and Aubigny all is quiet. Would not the officer commanding the rear guard of the eastern force at once employ all his

artillery to reply to ours at Belle Croix, alarm his infantry in Montoy, and hurry them up to support the defenders of Lauvallières? I fancy he would make strenuous efforts to drive back again over the stream our leading troops, should they have effected a crossing at Lauvallières.

You see it is very probable that the officer commanding the enemy's rear guard will be induced to act as I have described. But even if he does not, his attention will, at any rate, be occupied with the fighting at Lauvallières and Laplanchette, and consequently there is a good chance of a sudden attack on Aubigny and Coincy being successful before the enemy's reserve can reach the latter place. We shall gain a decided point even if the enemy employ only a portion of his reserve and his artillery to support Lauvallières, as that will weaken any support which he may bring up to the defenders of the high ground west of Coincy, and thus make matters easier for the main attack.

IN CONCLUSION

BEFORE concluding this series of letters I wish to impress upon you that you can set yourselves other exercises on the basis of those we have worked through together, and thus get further practice in framing such orders as you do not feel yourselves sure about. Below I give a number of such exercises, and I advise you to use the $\frac{1}{100.000}$ map exclusively in working them out, though in any difficulty you can, in the case of most of them, refer to the $\frac{1}{25.000}$ maps.

FIRST EXERCISE.

- (a) Write out the orders for attack, on the assumption that the enemy is found awaiting attack in a position on the heights of Mercy-by-Metz. You may make your own data as to the details of his position.
- (b) Frame orders for occupying a position in readiness on the heights of Mercy-by-Metz, assuming that the enemy is still some distance off.
- (c) The enemy being about to attack you (make your own data as to all details), issue orders for taking up a defensive position near Mercy-by-Metz.
- (d) Frame orders for a retreat on Liéhon, on the assumption that the enemy has abandoned the idea of attacking your position in (c).

SECOND EXERCISE.

- (a) Show by means of a rough sketch the distribution of the troops in the close cantonments in Colligny; marking all guards and groups.
- (b) State the orders issued by the officer commanding the independent cavalry.

- (c) State the orders issued by the officer commanding the advanced guard.
- (d) Frame orders for the occupation of a position in readiness by the flanking detachment at the "Französischen Denkmal," making your own data for the enemy's advance.

THIRD EXERCISE.

- (a) Outpost orders for the night 1/2 August, bearing in mind that there are only four companies on outposts, so that you will have to deviate from the model for outpost orders.
- (b) Sketch showing how the troops are quartered in St. Barbe, marking the guards and groups.
 - (c) Orders issued by the officer commanding the right flank guard.

FOURTH EXERCISE.

- (a) Orders issued by the officer commanding the advanced guard, reinforced by the two batteries, for taking up a position in readiness near Belle Croix.
- (b) Orders for the advanced guard to take up a defensive position from the above position in readiness; assuming any data you like in respect of the enemy's advance.

FIFTH EXERCISE.

- (a) Sketch showing the disposition of the force for the night 1/2 August.
- (b) Orders for the left flank guard (1) for the march, (2) for the occupation of Féy.
- (c) Show on the map the disposition of the force some little time after starting.
- (d) Orders sent by the officer commanding the detachment to the left flank guard, after the convoy has arrived in a place of safety, making your own data as to the enemy's advance.

SIXTH EXERCISE.

- (a) Detachment orders issued by Colonel B., in Maizières.
- (b) ,, ,, ,, for an attack on the heights of St. Quentin; making your own data.

(c) Orders issued by the officer commanding the advanced guard, on receiving the orders in (b).

SEVENTH EXERCISE.

- (a) By means of a rough sketch show the distribution of the troops in the close cantonments in Pontoy, marking all guards and groups.
- (b) Give the outpost orders for the outposts covering the troops in Pontoy on the night 1/2 July.

EIGHTH EXERCISE.

- (a) Orders issued by the officer commanding the right flank guard.
- (b) Show accurately on the map the manner in which the cavalry is employed.

NINTH EXERCISE.

- (a) Mark on the map the outposts placed by the rear guard of the western force on the night 4/5 August.
 - (b) Orders issued by the officer commanding the rear guard.
- (c) Orders for occupying one of the positions referred to in the tenth letter as being suitable for delaying the enemy's advance, making your own data.
- (d) Criticise the positions suitable for defence between Gravelotte and Hannonville-au-Passage.

TENTH EXERCISE.

- (a) Orders issued by the officer commanding the detachment, detailing outposts for the night 2/3 February.
 - (b) Outpost orders.
- (c) Orders issued by the officer commanding the rear guard on 3rd February.
- (d) Orders for taking up a position to cover the withdrawal of the rear guard (outposts).
- (e) State how you propose to occupy Augny for the purpose of offering a brief resistance to the enemy.

ELEVENTH EXERCISE.

- (a) Show by a sketch the distribution of the troops in the close cantonments in St. Julien, marking the position of all guards and groups.
- (δ) Show on the map the outposts, both by day and night, covering the troops in St. Julien.

TWELFTH EXERCISE.

Orders for occupying a position near Charly, on the assumption that the enemy retires from Charly to Antilly, and other hostile troops advance from Méchy on Charly.

THIRTEENTH EXERCISE.

Show on the map the outposts covering Colonel A.'s force on the night of the 2/3 March; and write out the outpost orders.

FOURTEENTH EXERCISE.

- (a) Orders issued by Colonel A. for an attack, starting from Fleury, on the heights north of Pournoy-la-Grasse, on the assumption that more precise reports have established the fact that the enemy is holding them in less force than was at first supposed.
- (b) Orders for the attack on the position Fleury—Brick-kiln, from the point of view of the enemy (strength to be assumed by you) advancing through Pournoy-la-Grasse.

FIFTEENTH EXERCISE.

- (a) Show, by means of a hand-sketch, the whole of the outposts placed across both roads.
- (b) Orders issued by the O.C. IV/K.R. Rifles, in pursuance of the instructions received by him.
- (c) Criticise the village of Gravelotte in respect of its suitability or otherwise for defence against an enemy approaching from the west. State how you propose to defend the village with 2 battalions, 1 squadron, and 1 field battery.

NINETEENTH EXERCISE.

The enemy in St. Privat evacuates the village just as the assault is about to be delivered, and falls back on St. Marie-aux-Chênes, while other hostile troops reinforce those holding Montois-la-Montagne. State the action taken by General A.

TWENTIETH EXERCISE.

- (a) Show on the map the distribution of the advanced guard at the moment the first report is received from the cavalry.
- (b) Write out the orders which you would issue for the occupation and defence of a position in front of Amanweiler, supposing the enemy makes his main attack viâ Chantrenne.
- (c) The enemy does not advance, but remains in occupation of Vernéville. General A.'s advanced guard is reinforced by two battalions and a battery, and is ordered to gain possession of Vernéville. Criticise the situation from General A.'s point of view.
- (d) As officer commanding the enemy's left flanking detachment, criticise your situation, and state how you would proceed.

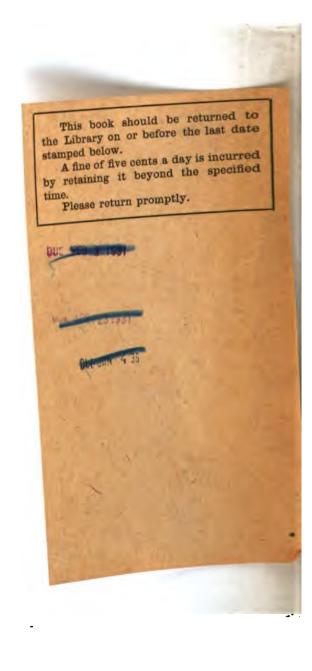
TWENTY-FOURTH EXERCISE.

What orders would the O.C. advanced guard issue, on receiving a report next morning, at the place of assembly, to the effect that the enemy is beginning to retreat on Kurzel?

I venture to hope that if you have thoroughly studied these letters, you have at any rate laid a foundation for your further tactical education. For more advanced study I advise you to begin with some of Von Gizycki's easier exercises (referred to at the commencement of my first letter), and some of the tactical problems set at recent examinations; after which I most strongly recommend you to carefully work through Verdy du Vernois' unsurpassed Studies. Should my letters have prepared you for comprehending those Studies, they will have attained their object.

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