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Contributors

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THE STRATEGICAL AND TACTICAL EMPLOYMENT OF THE MEDICAL SERVICE, AS CARRIED OUT IN AN ARMY CORPS;

WITH A SERIES OF PROBLEMS.

BY

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WITH 4 MAPS AND 6 SPECIAL SUPPLEMENTS.

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INTRODUCTION.

A TRANSLATION of Ritter von Hoen's volume, *Der operative und taktische Sanitätsdienst im Rahmen des Korps*, published in 1907 by Josef Šafář, Vienna, has been made in order to meet a demand for instruction in the subject of staff work as applied to the medical services in the field. The author, who is an officer of the General Staff in the War Office of the Austro-Hungarian Army, is also a lecturer at the Army Medical College in Vienna, and there his experience in training medical officers in army organization, field work, and methods of utilizing the general medical resources in an area of operations, enables him to write authoritatively on the strategical and tactical employment of medical units. It has been his custom to take his class into the field for a week at a time in order to study on the area of some battlefield the actual work required to bring the various medical units to the spot where contact with the enemy takes place, and to employ them in front of the enemy to the best advantage.

It cannot be too clearly recognized that in modern war the object of the medical organization is to bring the wounded as rapidly as possible and with the least degree of interruption and confusion to the line of railway, and thence to the general hospitals. This is best for the wounded themselves, as well as for the fighting force, and the expression "strategical and tactical employment of the medical service," which is not only the title given to the volume by its author, but is also the heading of one of the subjects of examination of medical officers of the Austro-Hungarian Army for promotion to field rank, is used to signify those processes by which the medical units are moved into their places as an integral part of an army in the field, and distributed over an area of operations for carrying on the above mentioned function. It will be found that a study of Part I, and more especially of the problems in Part II, carries the reader very completely over the ground from the period of strategical concentration to the final issue of a decisive battle.

The question may be asked how a work of this kind, that is wholly taken up with an army medical organization differing in many essential points from the British, will help to instruct officers of the Royal Army Medical Corps and others. It will do so because it will encourage thought on a subject, which, in consequence of training by means of staff tours, is attaining greater importance every day, and because it presents a wider view of the duties and responsibilities which must fall on all those who have to decide upon measures for the care of sick and wounded than can be obtained by a training which is confined to first aid and ambulance drill only. The principles, which underlie the whole of the work of bringing large

numbers of sick and wounded as rapidly as possible and with a minimum of interruption and confusion to the general hospitals, are clearly indicated in these pages, and they hold good for every army, no matter what the organization of its medical units may be. There is, indeed, much to be gained by studying the subject from the Austrian point of view, and over a geographical area which has been the scene of so many military operations in the past. For many years field medical organization and field medical work have been more closely studied and taught in Austria than in any other country, and the mere effort of applying the principles to the British organization and to staff tours over areas in the United Kingdom instead of in Moravia and Silesia will in itself stimulate thought and help in a great measure to train the mind to appreciate the kind of staff work which is required in connection with the sick and wounded during the operations of war.

Footnotes explanatory of the Austro-Hungarian medical organization are given throughout Part I, but a general knowledge of the organization is necessary before either Part I or Part II can be studied with advantage. The following account of the organization is consequently given in order to supplement them.

An Austrian army in the field is composed of two or more army corps, formed usually of three divisions, each division being composed of two brigades, and each brigade of two regiments of three or four battalions. A single battalion rifle regiment may be added to one or more of the divisions. One of the three divisions is a Landwehr division, that is to say, a division of the national army of Austria or of Hungary, as distinct from the imperial army of the dual monarchy. Each division has divisional troops, consisting of divisional artillery, ammunition columns, bakery, transport squadron, and a divisional medical unit; and each army corps has corps troops consisting of corps artillery, pioneers, bridging, telegraph and field post-office sections, transport columns, supply columns and corps bakery column. When an army corps is acting independently additional corps troops are added from army troops, and include field hospitals and other medical units such as clearing hospitals and advanced depôts of medical stores. An Austro-Hungarian army corps acting independently consequently represents an army of three divisions in the British organization, and the director of medical and sanitary services of a British army would have the same responsibilities as are set forth in Chapter I of Part I for the principal medical officer of the Austro-Hungarian army corps, while the administrative medical officer of a British division would be in the same position as the principal medical officer of an Austro-Hungarian division, whose staff work is indicated in Chapter II of Part I.

As regards the medical units, the difference between the British and Austro-Hungarian organization is very considerable. The regimental medical service in Austria is more extensive than the British, and performs all the stretcher-bearer work in an action, that is to say, its regimental stretcher-bearers do the work of our regimental and field ambulance stretcher-bearers. There are sixteen stretcher-bearers under a non-commissioned officer in each battalion. They are specially trained and employed solely in medical duties in peace, performing duty, for example, in the regimental sick

room and in the military hospitals of the smaller garrisons to which no detachment of the specially enlisted army medical corps is attached.

In battle the whole of the regimental medical personnel, including these stretcher-bearers, are withdrawn from the battalion and formed into what becomes practically a bearer company for work with each fighting group, under the senior regimental medical officer of the group. This regimental bearer company, if one may call it so, forms one or more aid-posts or minor dressing stations at selected places behind the fighting groups. The battalions and regiments have, however, no medical carts, and all the medical and surgical equipment is carried in knapsacks and pouches by men called dressings orderlies (*Bandagenträger*), two of whom are on the establishment of each battalion. They have been introduced for the express purpose of avoiding the addition of a medical cart to the transport of the battalions. To compensate for this small provision of medical equipment for the aid-posts formed by the regimental medical service, nine wagons, called aid-post wagons, filled with medical and surgical material, &c., constitute a section of each divisional medical unit, the divisional medical unit being the equivalent of the British field ambulance. As will be noticed in studying the problems and the book generally, some of these aid-post wagons are distributed to the fighting groups and detachments according to the military situation, to enable the regimental medical service to open aid-posts for groups instead of for individual battalions, while the remainder are retained with the divisional medical unit for any special situation that may arise, such as the need of providing medical equipment for detachments sent in pursuit after a victory or on other special duties.

Behind this regimental medical service comes the line of assistance provided by the divisional medical unit, and this requires careful study in order to grasp the meaning of the theory and problems in Ritter v. Hoen's book.

The divisional medical unit is the equivalent of the three field ambulances with each division of the British army. It is mobilized with its own transport, as a complete unit for each division, but it is composed of several sections, each having its own special function, and being capable of division into two identical subsections for the purpose of providing brigades, or large groups detached for independent work, with the equivalent of a field ambulance.

The aid-post wagons form the first or most advanced section. Then come the section for lightly wounded, the dressing station section, the ambulance section, an ambulance wagon echelon of 11 wagons, a section of reserve of medical and surgical stores, and an attached ambulance wagon column of the Teutonic Order of Knighthood consisting of 4 ambulance wagons, (which would normally be employed with the ambulance wagon echelon), and a fourgon of medical and surgical equipment, (which would be used either as an aid-post wagon, or as an addition to the section of reserve material). In practice, when an action is about to commence, the aid-post wagons and the lightly wounded section would be employed in parts of the field separated from the rest of the unit, the former further forward and the latter further back, while the other sections would be established probably in a village or other suitable locality

at some intermediate spot within easy reach of an aid-post, and with good or fair road communication between it and them. The dressing station section is intended to carry on the work of receiving the wounded as they come in, classifying them into their different categories, applying dressings and performing urgent operations, and then passing them on to the ambulance section. The ambulance section feeds and takes care of the wounded until they are evacuated or taken over by field hospitals or other units, and has to provide temporarily until this stage for the care of the dying and men unfit for transport. The dressing station and ambulance section always open alongside of one another, and together perform the function of the tent division of the British field ambulance. The ambulance wagon section works between the regimental aid-posts and the dressing station, while the section with reserve material remains packed until required for replacing expenditure. The work of the divisional medical unit is thus clearly defined, and its various functions are provided for by a definite organization, the details of which need not be gone into more closely here.* It will be sufficient to note that each section of the unit represents one of the functions that has to be performed by the field ambulance of the British organization, and the method of employing the sections of the divisional medical unit in different military situations, as indicated in Parts I and II of this book, suggests many useful ideas for the strategical and tactical employment of the divisions, subdivisions and sections of the British field ambulance.

A point upon which Ritter v. Hoen lays considerable stress is the necessity of opening the lightly wounded section early, but of leaving the dressing and ambulance sections to be opened later when the area of casualties is more defined. He also makes a special point of not dividing the divisional medical unit into subsections to follow brigades or groups that will be fighting over a common area. The principles enunciated by him on these points are worthy of study, and might be tested at staff rides and manœuvres.

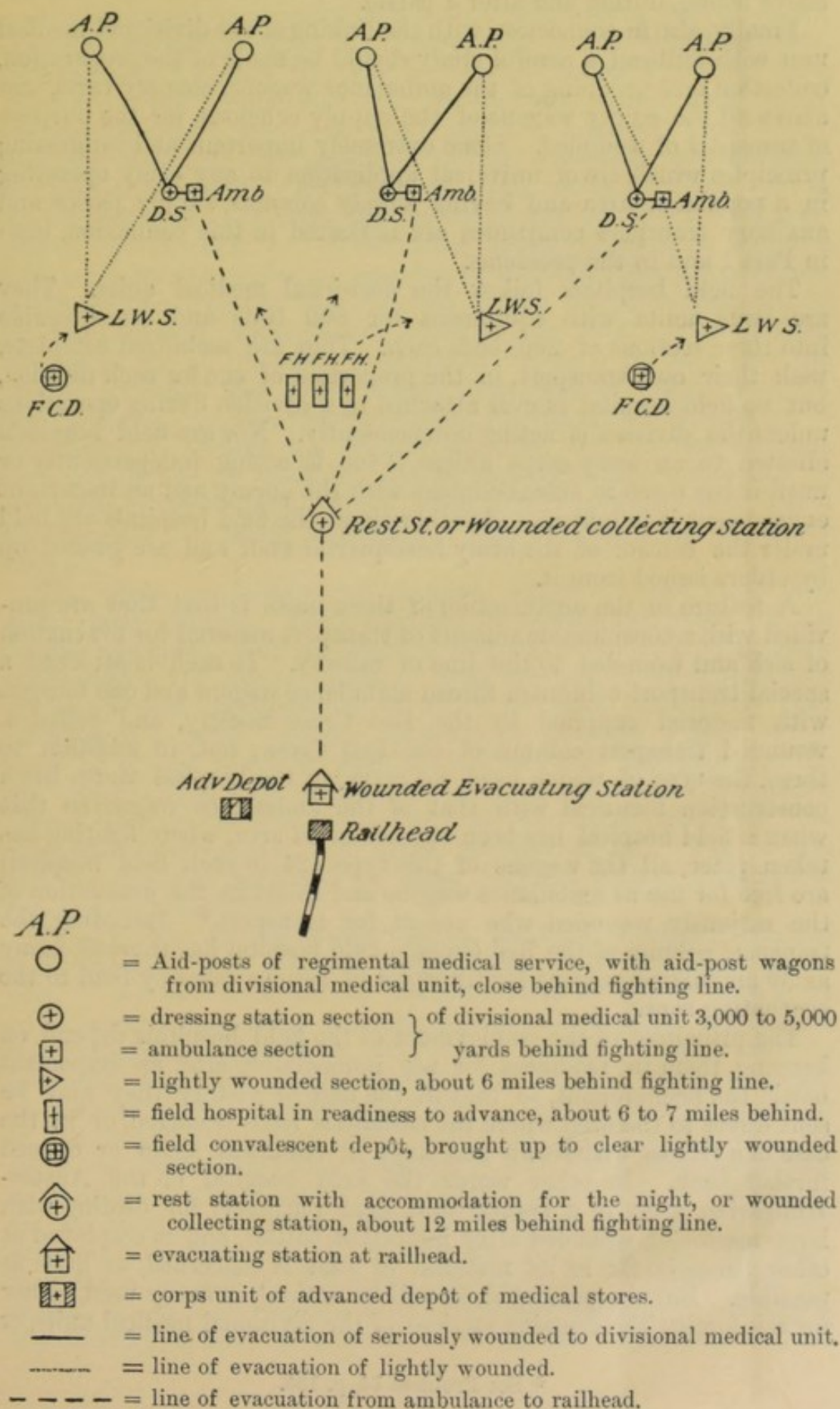
In connexion with the work of the divisional medical unit and for the purpose of forming links between it and the lines of communication, during marches and in the earlier stages of an important battle, rest stations, collecting stations and evacuating stations are improvised by means of local resources, and much will be learnt on this point from the study of Parts I and II; especially the importance of considering the resources of a locality before selecting it as the spot for establishing one of these stations. The invariable necessity of establishing these various stations either by improvisation or otherwise between the ambulance and the line of railway should be noticed.

The following diagram will help to explain these points:—

* Full details are given in the Handbook of the Medical Services of Foreign Armies, Part III, Austria-Hungary, (*in the press*).

Position of Medical units during fighting

(in an Army Corps of 3 divisions.)



A special point is made of the formation of companies of men, temporarily unfit to march at the critical moment on account of such trivial complaints as sore-feet, over-fatigue and so on, into "convalescent companies" for employment in such stations as the above before, during and after a battle.

Finally, also in connection with the linking of the divisional medical unit with railhead, a careful study should be made of the preparation, collection and grouping of the ambulance wagons, country carts, and above all the empty wagons of the supply echelons, for the purpose of transport of wounded. Some extremely important and interesting principles which are of universal application to any army operating in a populated area and having supply columns, supply parks and auxiliary transport companies are indicated in this connexion, both in Part I and in the problems.

The field hospitals follow the divisional medical units. They are large units with equipment for 600 beds and are divisible into three sections of 200 beds each. They are mobilized complete, with their own transport, in the proportion of one for each division, but no field hospital is ever attached to a division during operations unless the division is acting independently. Nor are field hospitals allotted to an army corps unless it too is acting independently or until it has come in actual contact with the enemy and an important engagement is imminent. At other times the field hospitals are held under the control of the army headquarter staff and are pushed up by orders issued from it.

A feature in the organization of these units is that they are provided with a considerable amount of transport material for evacuation of sick and wounded to the line of railway. To each is attached a special transport column of fifteen ambulance wagons and one fourgon with material supplied by the Red Cross Society, and called a wounded transport column of the Red Cross; but, in addition to these, the type of wagon used for carrying the hospital stores has a construction identical with that of the ambulance wagon, so that when a field hospital has been opened on an area, where fighting has taken place, all the wagons of this type (24 in each field hospital) are free for use as ambulance wagons and to aid in the evacuation of the seriously wounded who are fit for transport.* Including the transport column of the Red Cross, a field hospital has thus as many as 39 ambulance wagons for transport of serious cases by road to the evacuating zone.

The principles of the employment of the field hospitals depend on keeping them in readiness for use immediately after an important battle has been fought, so that in the case of victory they may be sent direct to the area where the casualties have occurred, or in the case of a retreat withdrawn and kept in readiness again or opened further back. In other words the field hospital of the Austro-Hungarian army is a special unit kept purposely for dealing with large masses of wounded after important battles, and is employed at other times, so far as its material at least is concerned, as little as possible. But the personnel, as will be noticed, is freely used, either for reinforcing the dressing stations of the divisional medical units, or

* See Problem 14, p. 135.

for making preliminary arrangements for establishing collecting and evacuating stations in an area further back; the transport column of the Red Cross comes into use in connexion with evacuation to these stations from the dressing stations.

Working in close contact with the field hospitals are mobile units, called field convalescent depôts. Each of these units is identical, as regards personnel and equipment, with a section of a field hospital, and they also are mobilized in the proportion of one to each division. Like the field hospitals, the field convalescent depôts are army units under the army headquarter staff, but they are pushed up to army corps and divisions more constantly and are employed more freely than the field hospitals, especially during strategical concentration and periods of inactivity and marches. The reason of this is that at the beginning of a campaign the number of men going sick from over-fatigue, foot-soreness, &c., is estimated to be considerable, and the field convalescent depôts are established for their reception and care in the neighbourhood of the divisions during the short period they are unfit, so as to avoid sending them too far back. After battles, the special use of the field convalescent depôts is to take over the slightly wounded and convalescents from field or other hospitals. For the former purpose they are pushed up and opened in advance of field hospitals, because the slightly wounded are the first to come back and the lightly wounded station can commence evacuation to convalescent depôts even while fighting is still going on and before the issue of the battle is decided. This is shown in the above diagram.

Next there are mobile rest stations, which are also units held under army control. Their function is to establish posts for the feeding and care during the night of sick and wounded coming down in convoys to the line of railway. They are pushed up to take over the improvised arrangements, to which reference has already been made, after a battle. In the Austrian organization a rest station must be opened wherever there is a mid-day halt and wherever the sick and wounded must be accommodated for the night. Two classes of rest station are thus recognized, one for refreshments and the other for refreshments and night accommodation. The mobile rest stations are mobilized for these purposes in the proportion of two to each army corps.

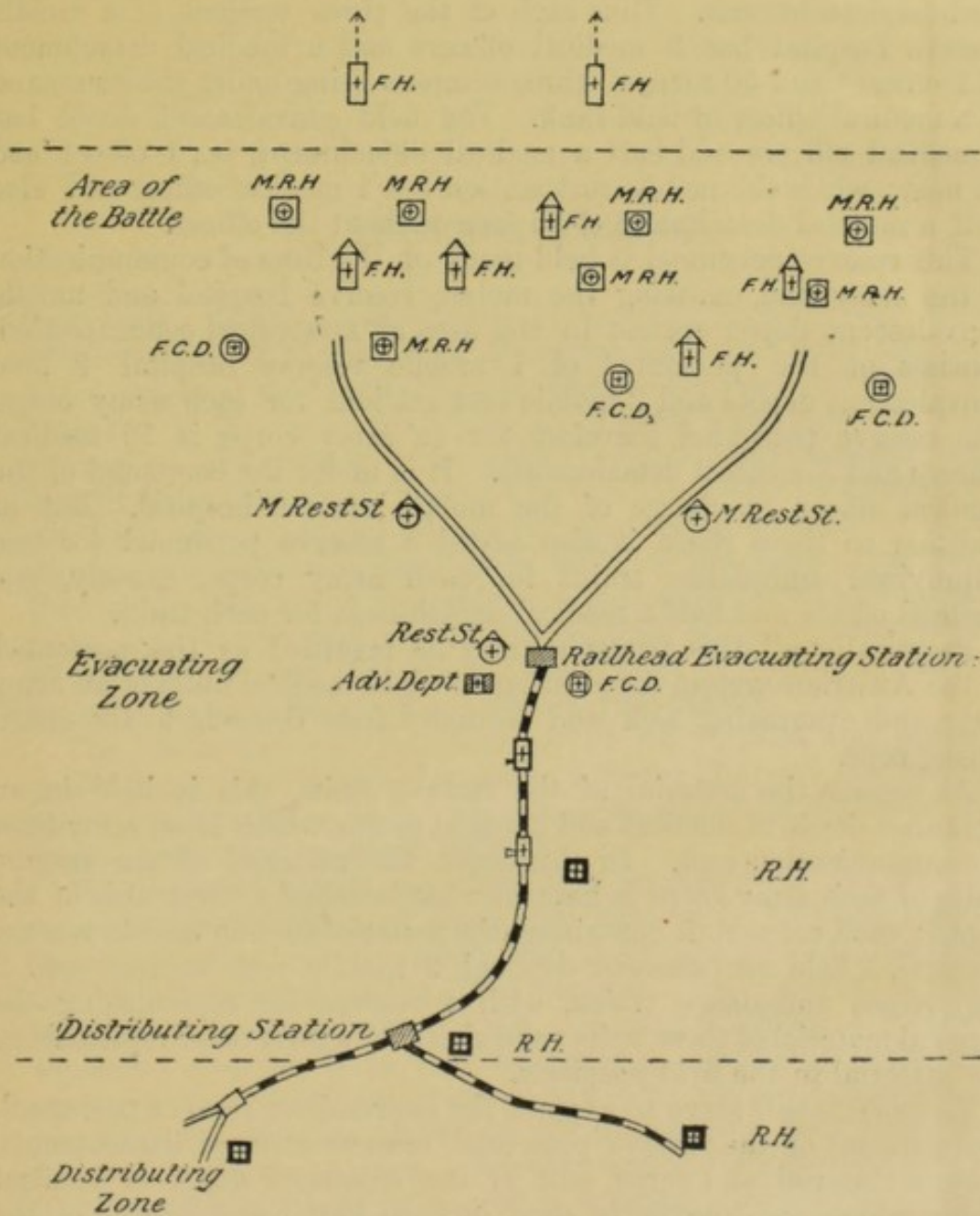
Finally, there are the mobile reserve hospitals, which are identical in organization with the field hospitals, but mobilize without transport. They are mobilized in the proportion of two to each army corps, and are held under the army headquarter staff on the lines of communication. As will be observed in studying Part I and the problems, the mobile reserve hospitals are the chief units concerned in clearing the field hospitals, and are, in fact, the clearing hospitals of the Austro-Hungarian army. The manner in which they are employed strategically and tactically is instructive and interesting. In strategical concentration, for example, one of the two mobilized for an army corps is established in the concentration area of each army corps in order to avoid opening the field hospitals. The other is ready to follow up the army corps in case of conflict with the enemy, and to carry out the relief of the field hospitals in the area of the fighting as soon as possible after the issue has been decided.









The whole of the clearing hospital work, however, is not done by the mobile reserve hospital alone, but may be said to be grouped round the mobile reserve hospitals, the field convalescent depôts and the mobile rest stations. When it is remembered what the functions of a clearing hospital are, these three units represent in an admirable manner the functions which the clearing hospital of the British organization would have to perform by itself; thus, the convalescent depôt represents the section of our clearing hospital which would have charge of the slight cases until they recovered, those cases, that is to say, whom it is undesirable and unnecessary to send so far back as to the general hospitals. The mobile rest stations are the detachments that a clearing hospital would have to throw out in advance to maintain touch with the field ambulances when the evacuation of wounded by road to a railway involves one or more marches; and the mobile reserve hospital itself represents the main body of the clearing hospital, which has to take over the more serious cases, classify them, prepare them for evacuation to the distributing zone, and permanently treat those that are unfit for further transport.

A study, therefore, of the method of employing these three units, as indicated in this volume, is of much value in enabling the reader to realize the functions of a clearing hospital, and to adapt its existing organization to what is required of it.

The following diagram shows the position of these units on the days immediately after a battle.

Position of Medical units on the days after a victory.



-  = field hospital cleared and ready to advance.
-  = mobile reserve hospital section.
-  = mobile rest station.
-  = reserve hospital (i.e., garrison hospital or local hospital in home territory or evacuating zone).
-  = field hospital section waiting to be cleared.
-  = field convalescent depôt.
-  = hospital train.
-  = improvised ambulance train.

The personnel and material of these three units are called reserve personnel and reserve material, and it will be noticed how freely the personnel is sent on and utilized in advance of the material. Until

the material of these reserve units arrives on the scene, the reserve personnel depends on the material of the field units and on local resources. The reserve personnel consists of medical officers and medical detachments. Thus each of the three sections of a mobile reserve hospital has 3 medical officers and a medical detachment of 1 officer* and 50 men, all three sections being under the command of a medical officer of field rank. The field convalescent depôt has 2 medical officers and half a medical detachment, *i.e.*, 1 officer and 25 men; while the mobile rest station has 1 medical officer and also half a medical detachment of 25 men without the officer.

This reserve personnel is held ready on the lines of communication of the army, and, omitting the mobile reserve hospital and mobile convalescent depôt opened in the area of strategical concentration, consists of the personnel of 1 mobile reserve hospital 2 field convalescent depôts and 2 mobile rest stations for each army corps. The reserve personnel, therefore, for an army corps is 16 medical officers and 5 medical detachments. It is under the command of the medical officer in charge of the mobile reserve hospital. But in addition to these there is also added a reserve personnel for two improvized ambulance trains for each army corps, namely, one medical officer and half a medical detachment for each train.

Practically all this personnel may be regarded as the personnel of the Austrian system for clearing the field medical units of an army corps and evacuating sick and wounded from the field to the distributing zone.

As regards the material of the reserve units, this is held in an advanced depôt of medical and surgical stores, which is an army lines of communication unit. In this depôt the material of the reserve units of each army corps is kept in what is called a corps unit of the depôt; each corps unit containing the material for one mobile reserve hospital, 2 field convalescent depôts,† 2 mobile rest stations and 2 improvized ambulance trains, with a reserve for replenishing the surgical material of these units; and also with a reserve for replenishing the material in the field hospitals.

These facts will serve to explain the expressions, reserve personnel, commandant of the reserve personnel, reserve medical detachments, reserve material, and corps unit of the advanced depôt of medical stores, which are frequently used in both Part I and Part II of the volume.

For permission to publish this translation, the translator is much indebted to the kindness and courtesy of the author and of Mr. Josef Šafář, the publisher. He desires to acknowledge the personal assistance received from both, and also the valuable help given him by Stabsarzt Dr. Steiner and Stabsarzt Dr. Reder, of the Austro-Hungarian army.

April, 1909.

W. G. M.

* This officer is not a medical officer.

† The second mobile reserve hospital and the third field convalescent depôt are in the area of strategical concentration, and do not mobilize with the advanced depot of medical stores.

AUTHOR'S PREFACE.

THE hopes which I entertained in publishing four years ago my "Introduction to the Study of Problems connected with the Tactical Employment of the Medical Service"* have been realised to the fullest extent. It has been gratifying to observe that year by year the strategical and tactical employment of the army medical service, usually called for short "medical tactics," is gradually becoming less alarming as a subject of study; that army medical officers are showing an increasing familiarity with its problems; that they are thoroughly instructing themselves in the organization and machinery of an army in the field and in the meaning of the various operations of war; and, finally, that their former want of technical knowledge in using maps and scales has entirely disappeared.

The "Introduction," therefore, served its purpose, and provided a useful basis upon which a wider and deeper study of medical tactics might be founded. It is only when we have the alphabet at our fingers' ends that we begin to read.

My experience tells me that it is necessary to put a finishing touch to the education of those who have gone through the Introductory Course by compiling for their use a short summary of the points bearing on medical tactics. The subject is regarded amongst military men as a kind of abstruse science, a seven-sealed mystery, whereas it is only the general elementary principles of military operations that present any difficulties—difficulties which considerable experience permits me to say have been cleared away by the Introductory Course. Medical tactics in themselves are exceedingly simple, for their sphere of operations is limited and restricted to a very small number of possible contingencies. If we know the special application of the elementary principles to each individual case, we are at least half-way towards finding a useful solution of any problem that may be presented by it.

The first part of the present volume details the points which every directing or administrative army medical officer, from the principal medical officer of an army downwards, must always have before him under all possible contingencies. It does not include a consideration of the medical service with a cavalry division, or for campaigns in mountainous districts, as the points requiring consideration in connexion with them are fundamentally simpler, and the principles laid down herein are equally applicable to them. Besides, further details may be found in the volume "*Sanitätsdienst*

* "Vorschule zur Lösung Sanitätstaktischer Aufgaben." (Josef Šafář, Vienna). It contains in three parts 38 lectures on army organization, march formations, etc., map reading, staff tours, war games and numerous other exercises.

im Kriege" (Army Medical Service in War), by Kusmanek and Hoen, a book which is still up-to-date.*

The work of a principal medical officer on the headquarter staff of an army or at the headquarters of its lines of communication has not been introduced into the book, because it resembles that of a principal medical officer of an army corps which is acting independently, and is characterized more by the extent of the duties entailed than by the difficulty of the decisions which have to be made, for in the case of an army principal medical officer there is usually plenty of time for consideration, and a number of other officers are present whom he may consult. The Introductory Course and Kusmanek and Hoen's "*Sanitätsdienst im Kriege*" contain full directions on this point.

The present work, in fact, does not introduce any new matter so far as the principles laid down in the Introductory Course are concerned. It does, however, contain a short recapitulation which may serve to supplement what has already been published. A few corrections will also be found which are rendered necessary by the publication of the new Field Medical Regulations, the general principles of which have already been considered in the Introductory Course. Certain points which have only been mentioned cursorily in the Introductory Course, or have been altered in the new Regulations, are also detailed.

Amongst these points may be mentioned the following:—

- (a) The addition of 9 aid-post wagons to the divisional medical unit† of each infantry division, and the organization of its station for slightly wounded, its dressing station, ambulance and reserve of medical and surgical stores sections into two identical sub-sections each.
- (b) The addition of 8 field hospital stores wagons, loaded with reserve supplies of medical and surgical material, to each section of a field hospital.
- (c) The permission to take 2 medical officers from field hospital sections held in reserve to reinforce the personnel of the dressing stations.
- (d) The establishing of 400, instead of 300, as the average number of sick to be carried by an improvised ambulance train of 25 cars.

Further, a few less important alterations in connexion with army organization have been made as follows:—

1. Instead of a mixed dépôt for equipment and surgical material and a separate dépôt for drugs there are now a medical and surgical store dépôt and a separate equipment dépôt.

* The only change that has taken place is that the mixed equipment for mountain warfare has been abandoned.

† The "divisional medical unit" of the Austrian organization is the only medical unit assigned to a division at all times. It performs the function of the British Field Ambulance, but is divisible into sections for supplementing aid-posts, for forming dressing stations, for temporary care of wounded (*ambulanzen*), for receiving and looking after lightly wounded, for replenishing medical and surgical stores, and for transport of wounded. There is one, "divisional medical unit" with each division. Each section of a divisional medical unit is also divisible into two identical subsections. (W. G. M.)

2. The daily ration, together with a reserve ration, is, with the exception of bread, tinned soup and tobacco, carried on the supply wagon ; formerly only meat was so carried.
3. Field bakeries are discontinued, and, instead, each infantry division is provided with a divisional bakery of 10 portable field ovens, forming a column 1,093 yards long, and each army corps with a corps bakery of 5 ovens, with a daily supply of flour for the whole corps, forming a column 1 mile 1,520 yards long. For this reason the length of column of an entire infantry division is increased to about 12 miles, though that of an army corps remains unchanged.
4. To every transport company, except those belonging to infantry divisions, a medical officer accompanied by a mounted orderly carrying dressings is allotted, just as in the case of the army corps transport park.
5. To each company of infantry, squadron and battery one medical assistant is appointed, and the non-commissioned officer of stretcher-bearers is abolished. All bridging sections are similarly provided with medical assistance.
6. The army medical trains (*Eisenbahn-Sanitätszüge*) are now called hospital trains (*Spitalszüge*), the former term being used in a general sense to designate both the hospital trains and the improvised ambulance trains.
7. For the light field railways horse draught has been replaced by locomotives, the trains travelling at a speed of 3 to 6 miles an hour, and each being made up of 10 double cars capable of carrying 2 patients lying down and 3 sitting up as a maximum.
8. The military staff at embarkation stations is no longer called a line of communication staff but embarking station staff, so as to correspond with the railway station staff.

The experiences of the last war have also had to be taken into account. Infantry fire is now effective at a distance of 2,000 yards, and can inflict severe losses, fixing a limit to the advance, at 1,000 yards; nor is effective artillery fire at a distance of 6,500 yards improbable, while at 4,300 yards it makes the movement of bodies of men in close formation in the open impossible. It was found that the fighting line became more and more extended and split up in order to utilize suitable cover, leaving considerable spaces between the fighting groups. The battles lasted for very long periods, the losing side being able to retire only under cover of darkness.

In addition the close study, both theoretical and practical, of medical tactics during recent years has elicited many new ideas with regard to battles and medical preparations for them. The results of this study are embodied in this volume, and especial attention is devoted to taking full advantage of local resources, which is, of course, a matter of the highest importance when war is carried on in a richly populated area.

Finally, this guide should enable those officers who have been through the Introductory Course to acquire greater power of judgment and decision, and to avoid the error of losing themselves in too much detail. Much that is a subject for special study in the Introductory Course does not find individual expression in practice.

By habit it becomes a matter of course, and is used unconsciously in forming decisions, just as an accomplished swimmer, once he has acquired mastery of the art, forgets the separate movements which he learned with so much difficulty.

This volume, however, is not only for the use of medical officers, but also for all officers who have a final say in the orders issued for medical arrangements. It is quite possible that the majority of officers are somewhat ignorant of the working of the Army Medical Service, or at least little understand the progress which, thanks to the persistent efforts of a few, has been made in that branch of military knowledge during recent years. This frequently leads, in time of peace, to friction between medical officers, their commanding officers, and technical and departmental officers,* deprives those who, in the various garrisons, are concerned with the instruction of army medical officers, and officers of the medical corps,† of the possibility of directing their studies in the right path, and prevents any uniformity in laying down principles. In time of war such a state of affairs will have its revenge, and it would be a matter for great regret if all the trouble that has been taken in the general interests of the army should be rendered futile because the officer with whom decisions rest should, on account of ignorance of medical tactical matters, be antagonistic to the well-intentioned suggestions of his medical adviser.

In order to explain the theoretical principles, together with the methods of working them out, a few divisional and army corps problems have in compliance with many requests been included in Part II.

* It has been somewhat difficult to translate the word "*Hilfsorgan*" of the original. It represents staff officers who deal with technical services, such as engineer, artillery, military law, and so on. The medical service itself is one of these technical services. (W. G. M.)

† The subordinate ranks of the medical corps are directly under the command of combatant officers who themselves are under the command of the medical officers in charge of the garrison [hospitals, where the medical corps is serving. (W. G. M.)

PART I.

THEORY OF THE STRATEGICAL AND
TACTICAL EMPLOYMENT OF THE
MEDICAL SERVICE.

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MEDICAL SERVICE.

CHAPTER I.

POINTS TO BE CONSIDERED AND MEASURES TO BE TAKEN BY THE PRINCIPAL MEDICAL OFFICER OF AN ARMY CORPS.

Appreciation of the Military Situation.

Army Corps acting independently or in combination.

The ruling factor in this case is whether the army headquarter staff is controlling the evacuation of the sick or not. When the army corps is acting independently, it is frequently the duty of the principal medical officer to concern himself with the evacuation of the sick and wounded even as far as the distributing zone, as well as with the equipment and establishment of the evacuating station.

Periods of inactivity.

The importance of this case depends upon the fact that one can limit at will the number of sick and wounded that should be evacuated. A halt of one or two days is not reckoned as a state of inactivity, although it makes the work of evacuation easier.

Marches.

A division while advancing must be relieved of its sick, if possible, daily, or in any case every third day. On occasions it must also be relieved of those men who are unable to march in the ranks and who overburden the transport columns.*

Retreats and flank marches.

These make the evacuation of all sick, with the exception of such as are unable to be moved, compulsory. In forward marches, when the conditions are unfavourable for evacuation, accommodation for those who are seriously ill or who are likely to recover soon may be arranged for on the line of march.

Movement in one or more columns.

In the latter case the most suitable road must be selected as the main line of march, and on this the sick must be collected, and, as a rule, the field medical units moved.

* In Austria-Hungary men unable to march in the ranks are made to march with the transport columns, so that their packs may be carried or they themselves get a lift occasionally.

When detachments of considerable size, such as brigades and divisions, act independently.

The ruling factor here is the probability of these detached groups having to fight in a totally different area from that of the main body. This is important because of the necessity for giving the officer commanding the troops direct instructions to enable him to arrange independently for the evacuation of his sick, and also because of the necessity of providing the detached body either with sections of a field hospital or with a complete field hospital, as well as with detachments of the reserve personnel, equipment for reserve units, hospital trains and improvised ambulance trains, hospital boats and improvised hospital boats.

When fighting is not anticipated, possible within a short time, expected, or immediately imminent.

These considerations influence not only the accommodation for the sick in the area of operations but also the distribution of the medical resources which must be to hand without fail on a day of battle, so that a proper disposal of them can be made. The rule is to have everything prepared beforehand for the earliest possible date on which fighting may occur.

If an engagement is immediately imminent, the measures to be taken beforehand, in the case of a *planned battle*, are to reconnoitre in detail the area over which it will take place, noting whether the troops are to take up a defensive position, or, at any rate, are ready drawn up on a wide front and, further, whether the enemy is fortifying his positions or not. The distribution of the medical units is considerably easier in the case of a planned battle, as they can be ordered at once to their respective positions. In the case of an *encounter battle*, the place of contact is indefinite and depends upon the time at which the opposing forces advance, and upon the intentions as yet unknown of the commanders.

The different conditions of defence, attack, defence of isolated detachments, counter-attack or formation of temporary reserves.

These conditions influence the distribution of the medical resources, more especially the transport material necessary for evacuation and the selection of a place for establishing the collecting station for wounded.* The approval of the headquarter staff must be obtained before sections of the divisional medical units can be assigned to each fighting group.

* The "collecting station for wounded" in the Austrian nomenclature does not quite represent what in the British organization would be a clearing or evacuating hospital. It is, as a rule, established at a suitable point between the field army and the line of railway, whereas the evacuating station would be on the line of railway. When, however, the latter is near the fighting groups, the collecting and evacuating stations would be amalgamated. See p. 31 *et seq.*

Conditions affecting the evacuation of sick and wounded.

The place to which the sick and wounded are to be evacuated and at which the army corps ceases to concern itself with them must be determined. The points to be noted are:—the number of beds available there, the extent to which further evacuation is possible, whether the line of evacuation is open, whether unlimited numbers may be evacuated or whether there is a limit to the number and whether the line is interrupted in places only or entirely blocked; also the means by which evacuation takes place, whether by railway, waterway, field railway or road. In the last case the length of the journey and the arrangements that must be made for it must be determined, an estimate being formed as to whether the means of evacuation, both as regards the amount of transport available and the suitability of the material for carrying sick and wounded, permit evacuation of unlimited or of limited numbers only, or, further, how far the numbers evacuated should be voluntarily limited. Voluntary limitation of evacuation of sick and wounded especially applies to the case of transport by road and field railway, as seriously wounded should not be exposed to such form of evacuation unless the circumstances are very urgent. Nor is evacuation suitable for lightly wounded who are likely to recover soon, since such cases need not be sent further back than their condition demands. If sent too far back they may find some difficulty in rejoining their units after recovery.

The principal medical officer of the army corps must invariably keep himself informed with regard to the military situation as outlined above and with regard to the conditions affecting evacuation. Information on both points must be known before he proceeds to consider the medical tactical problems relating to them.

The points for consideration under the following headings are arranged so as to correspond with the different military situations.

A. Periods of inactivity.

When the Troops are Billeted for several days in the same area.

1. *Care of the sick.*

The number of sick transferred from their units during periods of inactivity should be limited, always taking into consideration, however, the possibility of engagements with the enemy and also the extent of the local resources. For the purpose of receiving sick a collecting station* for the sick of the whole army corps might be

* A collecting station for sick, like a collecting station for wounded, would be interpolated between the railway and the field army, unless it became amalgamated with the evacuating station. See pp. 28, 29.

opened, where those likely to be fit for duty after a short period of rest would be retained until they recovered. In establishing a collecting station of this kind the material should be obtained from local resources, and the station should be arranged, if possible, both as a hospital, and also as a convalescent depot.* Personnel should be obtained from the field hospital attached to the army corps, or from a divisional medical unit, if one happens to be quartered at a place suitable for the establishment of the collecting station. In addition, all available civil surgeons and sick attendants in the locality must be utilized. Should there be civil hospitals suitable for the reception of the sick of the army corps, or should it be possible to improvise hospitals similar in character to them, or, as for example, in the area of strategical concentration, should a mobile reserve hospital and a field convalescent dépôt be available, it is advisable to send sick from the divisions to these institutions, for continuous treatment, and to evacuate gradually from them to the evacuating or distributing station,† fixed by the headquarter staff of the lines of communication, those who are totally unfit for further service, or who are likely to recover only after prolonged treatment. In this way the collecting station for sick becomes more or less of the nature of an evacuating station or clearing hospital. The transfer of the sick to it must be organized as in peace, and must be carried out in course of the afternoon, if possible. When more than one establishment is opened as a collecting station, as, for example, when a mobile reserve hospital‡ and a field convalescent dépôt are used for the purpose, the sick will be sent from the divisions to one of them only, namely, to the mobile reserve hospital, as its commanding officer is senior to the officer commanding the field convalescent dépôt and must be entrusted with the duty of classifying and distributing the sick. An exception to this rule will, of course, be made when the two establishments are widely separated; in this case the divisions will evacuate to the one which is nearest.

A point that must be noted is that mobile reserve hospitals should open one section only to begin with, and that any expansion of their accommodation must be effected by means of local resources. Three hundred beds should always be reckoned upon, even when local circumstances are not very favourable. It is, of course, understood that the whole personnel available will be put on duty.

* The convalescent dépôt is common to most continental armies, and is for the purpose of treating trivial cases of illness, likely to recover within a short time, as well as convalescents.

† The distributing station is usually a medical unit placed at the base of the lines of communication or in some centre in the home territory to which the sick and wounded are sent by rail from the collecting or evacuating station at the head of the line, and from which they are distributed to the permanent hospitals for treatment. It is the "*point de repartition*" of the French organization. (See p. 75. Handbook of the Medical Services of Foreign Armies. Part I, France.) When the area of strategical concentration is in the home territory, the evacuating station becomes practically the distributing station.

‡ Mobile reserve hospitals have the same organization as field hospitals, but are without transport, and are held on the lines of communication ready to be pushed up, as required, to set field hospitals free. During strategical concentration, one mobile reserve hospital and one convalescent dépôt are opened in the area of concentration of each army corps, in order to keep the field hospitals empty and free to move at any moment.

Special points that have to be considered in connexion with the arrangements for the evacuation of the sick are the establishment of rest stations,* either for supplying refreshments or for accommodating during the night the sick coming from distant divisions, and the utilization of the wounded transport column of the Red Cross.†

2. *Preparations for future events.*

During periods of inactivity the medical and surgical equipment should be replenished as far as possible from local resources. The subordinate personnel should be exercised in the working of the medical service during an engagement and instructed in the principles of first aid on the battlefield.

Arrangements should also be made for sudden movements, in anticipation of an alarm; the medical units should be exercised in rapidly preparing to march, and plans should be made for the care or evacuation of any sick who remain behind.

B. Marches.

1. *Arrangements for care of the sick.*

The principal medical officer of an army corps has to consider not only the sick who have been transferred to hospitals, but also men who are unable to march in the ranks. The number of the latter, especially in the earlier stages of a war, is apt to be so great as to overburden the transport columns, to which they are attached according to the regulations,‡ and so cause a breakdown. In any case, it is necessary, when the troops advance, to leave detachments for military police duties in the larger villages and towns on the main line of march and on the route of the supply columns and parks, until such time as line of communication troops can take over these duties. The men unfit to march in the ranks are quite fit for such light duties, which can be performed in camp shoes and without knapsacks. Consequently the men unfit to march with their units will be collected together from the whole army corps and formed into detachments under the command of officers and non-commissioned officers, who are themselves suffering from trivial complaints rendering them unfit for duty. These detachments will thus form a "convalescent company," which will be employed in the light duties mentioned above. The men who recover while performing such duty will return to their units as escorts of the transport that is sent up to the corps.

The men of the "convalescent company" may also be usefully employed as sentries and as sick attendants in improvised medical establishments.

The principal medical officer of the army corps will prepare a scheme of the medical arrangements previous to each general

* See footnote p. 29, and Introduction.

† To each field hospital in the Austro-Hungarian army a wounded transport column of 15 ambulance wagons, provided by the Red Cross Society, is attached.

‡ See footnote, p. 23.

advance of the troops, in order to indicate generally how the sick may be evacuated and the divisions relieved of the men unfit to march in the ranks. If there is a line of railway or navigable waterway along the line of march no special arrangements are required, except for sick convoys that are unable to reach the railway or waterway in one day. Rest stations with refreshments would be improvized, and, in special cases, those at the entraining stations should be provided with accommodation for the night. The "convalescent company" would take the necessary steps for arranging the details of these rest stations.

Should the evacuation of the sick be by road, where the conditions during an advance are naturally always more unfavourable, it is recommended that the numbers evacuated should be limited, and only those sent back whose condition is not likely to be materially affected by transport, and who, in addition, need a prolonged period of treatment and will possibly be invalided subsequently as unfit for further service.

For this purpose "collecting stations for sick"* must be established on the line of march in towns or larger villages where there are ample local resources. When the army corps forms part of an army this will be arranged by the army headquarter staff.

It should be a principle to obtain the material chiefly from local resources. As many of the sick attendants as possible should also be obtained locally. It is only in places where there are few resources that field convalescent depôts,† sections of mobile reserve hospitals,‡ or, as a last resource, sections of field hospitals,§ should be utilized.

It is essential that a small number of military personnel should be attached to such a collecting station, and an army medical officer appointed commandant. When the reserve personnel|| is available it should be drawn upon for this purpose, otherwise personnel from the field hospitals or from regiments must be employed. The men of the "convalescent company" should also be detailed as sick attendants, and for this purpose it is the duty of the principal medical officer to apply for the assembly of the "convalescent company" at the required localities, and to make his medical arrangements conform with the military orders relating to them.

* See footnote, p. 25.

† Field convalescent depôts are units mobilized, in the proportion of one to each field hospital, for the purpose of taking over the lighter cases and convalescents. They are kept with the mobile reserve hospitals on the lines of communication until required.

‡ Mobile reserve hospitals in the proportion of two for each army corps are kept under the control of the army headquarter staff. They are used as a reserve personnel for the purpose of supplementing or relieving the field hospitals, and are organized similarly to the field hospitals, namely, in three sections of 200 beds each. They are utilized mainly as clearing hospitals.

§ Field hospitals, mobilized in the proportion of one for each division, are under the control of the army headquarter staff, and only assigned to army corps when a corps is acting independently. A field hospital is composed of three sections of 200 beds each. The field hospitals would not be opened to carry on the function of collecting stations for sick, because they have a definite place assigned to them in column of march and must be prepared to move with the column, and be ready to work whenever contact with the enemy is established.

|| See Introduction, pp. 15, 16.

Collecting stations for the sick are established for three purposes, namely :

- (1) The treatment until recovery of those who are likely to recover soon, that is to say, to answer the purpose of a field convalescent dépôt.
- (2) The more prolonged and continuous treatment and care of those who are seriously ill, and for whom transport by road over long distances is prohibitive, that is to say, the function of a hospital.
- (3) The feeding and accommodating during the night of the sick who have to be evacuated, or who are passing down in sick convoys, that is to say, the functions of a rest station with accommodation for the night.*

The collecting station for sick is thus arranged similarly to an evacuating station or clearing hospital, the functions of which to a certain extent overlap those of a collecting station.

The probable number of sick and the period covered, the resources of the locality and its importance in the immediate future, must be taken into consideration in determining whether the collecting station should be arranged with these three separate functions sharply defined, or whether it would be sufficient to improvise it so as to resemble a field convalescent dépôt only.

The preparations that must be made in advance for improvising a collecting station will be carried out in the first instance by the division which is billeted in the selected locality and subsequently by the principal medical officer of the army corps. Negotiations will be entered into with the local civil and police authorities regarding the selection of the articles required, specification of the necessary equipment, supplementary food supplies, etc.

It will be sufficient to establish a collecting station every second or third march, forming in the intervals rest stations for sick with accommodation for the night, should the line of evacuation be the same as the line of advance.

For the purpose of evacuating the sick to the various collecting stations the divisions should take advantage of the return journeys of the empty supply wagons.

Should the general officer commanding the army corps detail the arrangements of the advance for several days, that is to say, when interference on the part of the enemy is not anticipated, the principal medical officer of the corps will draw up plans for the evacuation of sick during the whole period. Otherwise he must limit himself to preparing the general plan of medical arrangements, which will not be published, but, within his own sphere of duties, he will give the necessary orders in connexion with it daily.

2. Medical arrangements for a detached body of troops.

It is only when a division or a brigade has assigned to it a task which takes it to a locality in the area of operations where it must act independently, and where it is widely separated from

* Rest stations are organized units in the Austrian Army; mobile rest stations being field units under the control of the army headquarter staff. They are of two kinds, namely, rest stations with refreshments only, and rest stations with accommodation for the night.

the main body, that a portion of the medical equipment and personnel belonging to the army corps such as a field hospital, reserve personnel, rest station, field convalescent depôt, mobile reserve hospital; and, possibly, material for evacuation by railway and waterway, should be allotted to it. In such cases the distribution of medical equipment and personnel must be carried out with the utmost impartiality. When it is possible, the army corps headquarter staff should keep reserve medical units in readiness for such duties so that they can at once be pushed forward in case of emergency.

To distribute sections of field hospitals to divisions marching in close combination with other divisions, even although the divisions march as separate columns, would be a mistake. The most important function of the field hospital is to open on the field of battle after the troops have been victorious, or, in the case of an engagement that is indecisive and prolonged, to establish itself at a spot approximately a day's march distant from the battlefield. In order to effect this, the army corps headquarter staff is in the best position to determine the situation, and on that account should hold the field hospitals as long as possible at its own disposal.

3. *Preparations for fighting that is expected to take place within a definite period.*

If fighting is anticipated within a definite period, the field hospital or hospitals should be distributed in the column of march in such a way that they can be easily advanced on the evening before the battle to a point some twelve miles from the head of the column. The reserve medical units must be made mobile by providing vehicles for their transport, should no line of rail or waterway be available for the purpose along the line of march. They should be placed in the column of march in a position that would bring them on the evening before the engagement to a point not more than 25 or 30 miles from the head of the column.

C. The eve of an Engagement.

1. *Arrangements for Evacuation of Wounded during the Fighting.*

The most important point to be considered on the eve of an engagement is the preparations that must be made for evacuating wounded while fighting is going on. Endeavours must always be made to evacuate the wounded for four reasons:—

- (1) In the event of an unfavourable issue the wounded must be saved from capture.
- (2) In the event of victory the area of operations should at least be cleared of the wounded who can be evacuated, and the medical personnel devoted entirely to the care of those who are still left upon the field, frequently in great numbers and under very bad conditions.
- (3) The majority of the wounded who can be evacuated during an engagement are men who are fit for transport,

seeing that the very seriously wounded are rarely capable of being sent back during the unfavourable conditions of a battle; and, as the wounded come in in comparatively small numbers at a time, the medical officers will not be tired out, and will be capable of treating them carefully and getting them fit for transport.

- (4) Wounded readily disregard the discomfort of transport in view of their desire to get away from an area where they are exposed to the dangers and vicissitudes of battle.

(a) Collecting Station for Wounded.

*(i) On a line of railway or waterway leading to the battlefield.**

The first point to determine is where the wounded shall be sent on the day of the battle. If a railway line or navigable waterway runs to within at least 14 to 18 miles of the battlefield, a place which must be assigned as a collecting station for the wounded will be selected at the nearest station on it.

It is to be noticed that the railway line should be utilized as far forward as possible, right up to the zone of the artillery fire if the situation permits, since every shortening of the transport by road saves the wounded from suffering and facilitates their evacuation. The trains should be halted on the open line, if necessary, in order to convey wounded to the collecting station.

In an encounter battle, and in the case of attack in a planned battle, the definite selection of a collecting station for wounded is not always possible beforehand, and it is only at the last moment, when the army corps deploys for battle, and when it has been ascertained that the railway has not been damaged by the enemy that its position can be fixed upon.

On account of this tendency to bring the place of entraining the wounded as near the fighting troops as possible, it is often necessary, during vicissitudes of the fighting, to withdraw the wounded collecting station to a point further back. The officer in charge of a collecting station must therefore always be prepared to effect this, and it is all the more easily carried out because of the means of conveyance which are at hand.

The collecting station for wounded must be organized in conformity with the nature of its duties. In the first place the wounded, as they arrive, must be classified, so that only those who require prolonged treatment and special care are received into the hospital trains, which should proceed direct to the home territory without further classification of the wounded. The same rules apply often to those improvised ambulance trains, which are more elaborately equipped with material from the corps unit of the advanced dépôt of medical stores.† Finally, there is no object in evacuating the lightly wounded

* The collecting station for wounded is established in this case for the purpose of entraining the wounded with a view to further evacuation. It thus becomes amalgamated with an evacuating station. See footnote, p. 24.

† The advanced dépôt of medical stores is mobilized under the control of the army headquarter staff. It is composed of as many units as there are army corps in the army; and the expression "corps unit" is used to indicate the unit of this advanced dépôt which belongs to the army corps in question.

who are likely to recover soon. They can be received into suitable buildings at the collecting station for wounded, or, in the case of the troops being victorious, they can be sent direct to a field convalescent dépôt. Should a retreat be necessary, the evacuation of such cases presents no great difficulties, as they can be carried sitting up.

After the wounded have been classified, they should be entrained, and for this purpose a number of bearers is required, especially where improvised ambulance trains are used. The duties of entraining are carried out in the case of a hospital train by the establishment of that unit. The wounded must remain in the train until the train is completely filled, an operation which may take several hours. During this time medical care and also refreshment are required for the wounded. In the case of the hospital trains the means for this are at hand, but in the case of the improvised trains complete arrangements must be made, especially as a long period of time is likely to elapse after the train has started, before a refreshment station is reached.

It is also by no means exceptional to find that the wounded, as they come in, require re-adjustment of their dressings and further attention, and that the condition of some may have become so much worse that they can no longer be considered fit for transport.

Consequently, the following personnel must be placed on duty at a collecting station for wounded :—

- (1) A medical officer, fully empowered to take such initiative as he thinks fit, to supervise the classification of the patients, and to act at the same time as commandant of the station. He should be of major's or captain's rank and should be assisted by a subaltern medical officer and a considerable number of stretcher-bearers.
- (2) Two medical officers with a small personnel for duty in the bandaging and operating room, as well as to make preparations for the care of wounded who are unfit for transport.
- (3) A medical officer with a small supervising personnel to take charge of the slightly wounded who will be placed in special buildings, when they are not required to assist in the care of other wounded.
- (4) A section for the preparation of food and refreshments.
- (5) Sick attendants for the improvised ambulance trains, some of them being employed on convoy duty with the trains that are ready to start, should these not be already supplied with personnel.

In the two last sections of work, women may advantageously be employed.

Of course, one must be content at times with a smaller number of medical officers, although, on the other hand, a larger number would cause no embarrassment and is even desirable.

The preparation of improvised ambulance trains is also a duty that has often to be carried out at the collecting station for wounded.

As far as possible, the hospital equipment and food supplies should

The "corps unit" contains the material for the mobile reserve hospitals, field convalescent dépôts, mobile rest stations of the corps, as well as material for improvising ambulance trains, etc.

be obtained locally, and the medical and surgical material chiefly from the field hospital and the corps unit of the advanced dépôt of medical stores. It will often be possible, however, to bring the lightly wounded station* of one or more divisions to the wounded collecting station and amalgamate the two, especially when the wounded can be entrained close to the battlefield. Under these circumstances the question of providing medical equipment is very simple.†

As regards personnel, every effort must be made on the day of an engagement to bring all available personnel up to aid in the care of the wounded, and the tendency generally should be to bring all the medical personnel up towards the fighting line, and to leave as few medical officers as possible waiting for hours, or possibly the whole day, doing nothing. For this purpose all the reserve personnel,‡ not otherwise engaged, will be attached to the collecting station for wounded, and the officer commanding the reserve personnel will be the most suitable person to appoint as its commandant. As a second line of assistance the medical officers of the units likely to be found in the neighbourhood, such as the bridging section, the corps transport park, the transport company, the escort of the field supply dépôt, should be brought in for duty. Should these not be available, the officer commanding a field hospital will be given the command, and medical officers from the field hospitals as well as the personnel of the lightly wounded station will be attached to the collecting station for wounded.

Further, the men unfit for duty in the ranks on the day in question and all available civil inhabitants will be appointed to do duty in the collecting station for wounded. It often happens that the field hospitals can advantageously be brought up to the neighbourhood of the place selected for a collecting station, and in this case the whole of the personnel, as well as the personnel of the transport that is parked there, will be utilized for the purpose of a collecting station for wounded during the period in which they are kept waiting to advance.

As a rule the crowding of too many railway trains into the collecting station for wounded must be avoided, for the platforms are seldom sufficiently commodious for the purpose, and inconvenience only will be caused by doing so. The trains had better be kept at suitable intervals on the line at the stations further back, and only one hospital train and one improvised ambulance train should be kept ready at the collecting station for wounded itself. The commandant should have power, however, in co-operation with the railway authorities, to have fresh trains brought up as soon as the loading of these two trains is nearly completed. Fortunately, during days of fighting the evacuation of wounded generally takes precedence, and the railway line could perhaps be used for no other purpose except to bring up

* See Introduction, p. 9. The lightly wounded station is a section of a divisional medical unit.

† Presumably because the lightly wounded section of a divisional medical unit has its own transport and equipment, which would be available for use at the collecting station for wounded if amalgamated with it.

‡ The personnel of the mobile reserve hospitals, etc. See Introduction, p. 15. The officer commanding the reserve personnel would be the medical officer who is commandant of the mobile reserve hospital.

ammunition, because, so long as the issue of the battle is in doubt, it does not appear advisable to bring up other material for the army.

If the army corps is acting independently, it would usually be the duty of the principal medical officer to prepare the improvised ambulance trains and provide them with personnel.

He must not omit to make provision for abundant lighting of the collecting station for wounded and its approaches.

The commandant of the wounded collecting station must be instructed to send back to the battlefield the vehicles that arrive there with wounded after they have been unloaded and have had a sufficient period of rest, in order that they may be employed again.

(ii) *On a line of evacuation by road.*

If the nearest railway station cannot be reached in one day's journey, preparations must be made for taking care of the wounded during the night. Should the conditions during the battle be favourable for evacuating the wounded, and should it be possible under these conditions to send back a very large number (which is what one must always wish and hope for), it will be found that, by making use of all the transport material, as many as 2,000 wounded in an army corps can be in process of evacuation on the day of the battle. When, however, circumstances are unfavourable, and, it may happen, when thousands are left unattended to on the field, and are likely, under the best conditions, to undergo great hardships, the care of the wounded must be limited to what is absolutely necessary only. The seriously wounded may remain in the wagons and the most that can be done is to shelter them during inclement weather by bringing the wagons into sheds. In any case some large village with considerable resources, or two or three smaller villages, must be sought for, as the spots for establishing a collecting station for wounded.

The distance of the wounded collecting station from the battlefield is determined by the fact that the transport wagons must be able to reach it in one day. The conditions during an encounter battle are more unfavourable, for then it is necessary to remain further back in order not to get into the possible area of subsequent fighting, as well as to spare the horses, whose power might be used up during the advance.

In all circumstances the collecting station for wounded must be situated at a spot behind the ground which will be taken up for a last stand in the event of defeat.

The ideal distance of a collecting station for wounded from the most advanced fighting line is about 12 miles. As regards equipment, material and personnel, all that is required for the establishment of a wounded collecting station on a line of railway is required here; only it must be remembered that in the case of evacuation by road there is greater need of medical officers and equipment than in evacuation by railway. The material of a mobile rest station should, if possible, be sent to wherever the collecting station for wounded is formed.

The officer commanding the collecting station must always endeavour to classify the wounded immediately on their arrival and to give them accommodation according to the category to

which they belong, namely, those likely to recover soon, those unfit for transport, or less suitable for transport, and, finally, those fit for transport and evacuation. Should the engagement end in victory, only the last category will be sent back on the day following the battle; the remainder stay where they are, and, if the resources of the locality do not permit of improvised accommodation being provided, the wounded likely to recover soon will be taken over by a field convalescent dépôt and those unfit for transport by a section of a mobile reserve hospital. Empty wagons will then be used on the battlefield for evacuating the wounded, and for this purpose requisitioned wagons and not the wagons of the supply echelons will be used, for the latter will be required again for the service of supply. The greater the distance from the nearest evacuating station,* the smaller must be the number evacuated in the case of a victory. In the case of retreat, on the other hand, every one must be moved back who is not absolutely unfit for transport.

It is necessary at these wounded collecting stations also to provide for abundant lighting, in consideration of the fact that wounded will be brought in during the night.

(b) Preparation of vehicles for evacuation from the battlefield.

Every effort must be made to bring up for purposes of evacuation on the day of the battle everything that is suitable for the transport of wounded to the rear during the progress of the fighting. A great number of wagons is necessary; and, when the length of the journey, as is frequently the case, is considerable, wounded who are capable of walking should be permitted to use the wagons for the purpose of relieving themselves of their equipment and of getting short lifts from time to time.

There should therefore be a stringent order that each combatant unit must requisition every available country cart in its billeting area on the day before the battle. Equally, the quartermaster-general's department must arrange for all wagons of the supply echelons, which are empty on the evening before the battle, being utilized for the transport of sick and wounded. It is impossible that the arrangements for feeding our troops would suffer any sensible interruption by one echelon thus losing one day in bringing up supplies. The army corps headquarter staff has also at its disposal the sick and wounded transport columns of the Red Cross,† which are attached to the field hospitals.

The transport material available for wounded is thus distributed over a large area, and should be prepared for transport of wounded by the individual units during the night. Enough straw and hay at least should readily be obtained by each unit or detachment within the area which it occupies for the small number of wagons in the

* The expression "evacuating station" is used only for the station where sick and wounded are entrained. When the "wounded collecting station," therefore, is on a line of evacuation by road, there would be, in addition, an "evacuating station" on the line of railway.

† See footnote, p. 27.

area. On the day of the battle, the wagons will then be assembled in readiness for use according to one of three different methods:—

- (i) The army corps headquarter staff may keep at its own disposal the whole of the wagons, in one or more places. This is only to be recommended in exceptional cases, as, for example, when the troops before a battle have to pass some obstacle which it is important for them to clear as quickly as possible.*
- (ii) All the wagons may be left with the divisions, including the ambulance wagons of the wounded transport columns of the Red Cross which may be assigned to divisions. Under these conditions the army corps headquarter staff is deprived of the power of distributing the vehicles according to the actual conditions of the fighting. In one division, for example, where there are few wounded, or where the unfavourable nature of the ground prevents any of the wounded being sent back, the wagons would remain unused, while in another division, probably at the same moment, possible evacuation of wounded would be restricted on account of want of transport material.

Besides, the distribution of a large number of wagons with civilian drivers amongst the divisions is very embarrassing and is liable to have serious consequences during the vicissitudes of fighting. A distribution of all the wagons to the divisions should therefore be made only on rare occasions, as, for example, during defensive operations and especially when there is a railway line right up to the battlefield—conditions under which the wagons can make several journeys in one day and are thus sufficient for the work of evacuation to the railway even when the demand for transport is very great.

The transport vehicles may also be advantageously left with a division when it is obliged to fight at such a distance from its army corps that it would be impossible to arrange for the sending of wagons to it at the proper moment.

- (iii) A combination of these two methods may be adopted. Thus from 20 to 40 wagons may be left with each division, in order to undertake the preliminary work of evacuation, while, for the subsequent work, an army corps reserve of wagons may be formed of the remainder of the wagons and kept in readiness in such a way that wagons can be supplied from it as required.†

It should be the rule to assemble these wagons separately from those that are to remain with the divisions.

The spot selected for keeping this army corps reserve of wagons in readiness should be six to seven miles behind the fighting line during the battle. If possible, it should be at a place where several roads meet, so that it will be easy to send the wagons forward to all parts

* This evidently refers to the crossing of bridges or the passage through narrow defiles and similar obstacles.

† This principle of forming a reserve of wagons on the day of a battle for evacuating wounded should be noted. It is an important feature in the problems.

of the field. As regards the time at which they should assemble, the most important point to attend to is that the fighting columns should first be allowed to pass. The roads leading to the rear must also be taken into consideration, especially with regard to bringing up the wounded transport columns of the Red Cross, which are generally quartered far back. It is also unnecessary to assemble these wagons very early in the morning, because their services would scarcely be required until towards midday.

During an advance to an encounter battle the army corps reserve of wagons should, as a rule, follow the central column on the best line of communication, and should be about nine to twelve miles from the head of the column, so that the army corps headquarter staff has time to make the necessary disposition of troops, whenever contact with the enemy is effected, without interference from the wagon column.

The most suitable locality to select as the point of assembly is a spot to which the vehicles can come from all the billeting areas as directly as possible and without having to go too far back. Care must be taken, however, to select a spot that is not too far in advance, so as to avoid confusion should a battle occur immediately on contact of the two opposing forces. In many cases it is advisable to assemble the wagons at first in the different groups and then to collect them together and send them forward during the course of the morning when the situation is beginning to develop.*

(c) *Reinforcing the dressing stations.*

The medical personnel of regimental units remain as a matter of course with their units during the engagement. The dressing stations, therefore, at this stage are limited as regards the medical personnel to their own small number of medical officers† and to the medical officer attached to the divisional ammunition park. In the interests of the evacuation of wounded, the dressing stations that have been opened should be reinforced by medical officers from the field hospitals that are kept waiting further back. According to the medical regulations, the two dismounted subaltern medical officers of each section of a field hospital may be so employed.‡ This can be done in two different ways; (1) they may be directly attached to the divisional medical unit on the morning of the battle—a method which is recommended during defensive operations, where the place selected for opening the dressing station is already known and where one can reckon on its being possible to continue work there during

* The author's meaning here is to the effect that the wagons, having been collected and prepared by the various combatant units within their billeting areas, will be assembled in divisional groups before proceeding to the spot selected as the assembly point of a corps wagon reserve.

† Only two medical officers are assigned to the dressing station section of a divisional medical unit; consequently much stress is laid in the Austrian organization on the reinforcing of dressing stations and other sections of the divisional medical unit by medical officers of field hospitals, temporarily held in reserve, and by other personnel.

‡ There are three medical officers to each section, one, mounted, being the commandant of the section. The two subaltern medical officers referred to here are conveyed in a carriage for personnel, which forms part of the transport of the section. See problem No. 5.

the fighting; or (2) they may be kept ready in reserve at the disposal of the principal medical officer of the army corps—a method which is advisable during an advance. One reason for this is that the medical officers would, as a rule, have to start very early in the morning in order to be sure of reaching the medical unit before it started, and under these circumstances the time allowed them for sleep would be curtailed at a time when the most fatiguing duties are awaiting them; another reason is that it is very uncertain whether the conditions of fighting will necessitate the establishment of a dressing station in every division during a battle, so that, in these circumstances, the medical officers who would be attached to it might remain unemployed.

During an advance, therefore, the place selected for the medical officers to be held ready in reserve should be at the head of the army corps reserve of wagons, or in any other easily found spot. The time should be so calculated that they should not have to start too early, their rate of movement being estimated at about five miles per hour.

(d) *Medical arrangements for detached groups.*

As a rule the army corps headquarter staff will leave the distribution of the subsections of the divisional medical unit to the divisional headquarter staff, and will not be concerned with attaching aid-post and ambulance wagons to small detachments that are employed in independent action, since this must, of course, be part of the duty of the division itself.

It is otherwise, however, when a whole infantry brigade is detached for a time and made to act independently of its division, whether for the purpose of forming a reserve to the army corps or for reinforcing another division with the object of forming a strong fighting group.

In this case it is not advisable to leave to the divisional headquarter staff the decision as to whether they shall attach subsections of their medical unit to the brigade or not, although action of this kind should be taken when, after careful consideration, it appears desirable. As a rule it is sufficient to attach to a detached group of this nature one subsection of a dressing station, one subsection of an ambulance, and one subsection of a medical and surgical reserve.* It is better not to divide the lightly wounded station into its subsections on account of its small establishment, especially as there is not likely to be any necessity for opening a lightly wounded station for such a fighting group. It should be left to the divisional headquarter staff to supply the detached group with aid-post and ambulance wagons, since the number of such vehicles that can be spared from the division depends mainly upon local circumstances.

As regards the employment of a lightly wounded station on the same spot as a collecting station for wounded on the line of rail, see previous remarks.

* See Introduction and footnote, p. 18, for explanation of these subsections. They all form part of the divisional medical unit.

2. *Care of wounded on the battlefield after a victory.*

As a general principle, all the available medical resources of the army corps should be pushed up to the battlefield after a victory, in order to relieve as early as possible the suffering of the wounded who have not as yet been aided, and to ensure their being taken charge of and treated. On account of the limited provision of medical resources, rendered necessary by military and financial considerations, it is obligatory to save them, as far as possible, for this moment of greatest need, and to exhaust all available auxiliary resources for the ordinary sick before the field hospitals are brought into use. Endeavour should also be made, as far as possible, to keep the field convalescent depôts and mobile reserve hospitals cleared for use on the battlefield.

Field hospitals should be kept ready in such a manner as to enable them to reach the battlefield a few hours after the issue has been decided; in other words, they should be kept seven to nine miles behind the fighting line.

In the case of a planned battle the place for holding the field hospitals ready should be behind the centre and at a spot where roads meet, from which fairly good communication can be maintained with all parts of the field, and which is easily found. Care must be taken to guard against selecting a place too far forward in the direction of the enemy, which in the event of a retreat may become an important position and where no risk of blocking the passage of troops should be run.

This consideration will often make it compulsory to keep the field hospitals further back than has been recommended above.

The time for assembling the field hospitals at the selected spot is to be calculated so as to avoid too early a start. They will not be wanted till late in the day.

If the condition is that of an advance for an encounter battle, the considerations which have already been mentioned with regard to the army corps reserve of wagons are applicable. In any case the position where field hospitals are kept ready must be in rear of this reserve.

The assignment of sections of field hospitals to divisions acting in close combination with one another is, under all circumstances, to be avoided. They would not be employed during the battle and only add unnecessary responsibility to the general officer in command of a division. Should the issue of the battle be favourable, the army corps headquarter staff can very quickly form a correct appreciation of the situation, and all that would have to be done then would be to despatch a field message ordering all the field hospitals to advance. Besides it is only after fighting has ceased that it is possible to gain any detailed knowledge of the way in which the wounded are distributed over the field, and so to be in a position to distribute the field hospitals in the most advantageous manner.

The material of the mobile reserve hospitals and field convalescent depôts, should they be placed at the disposal of an army corps, which only happens when the army corps is acting independently, must be

on the spot on the day following the battle.* If a railway line or waterway open for traffic leads to the battlefield or near it, it is easy to bring these units into position. The material is loaded upon some railway trucks under the supervision of the reserve personnel in one or other of the larger railway stations, the distance from the field being, of course, a matter of importance. On receipt of a telegraphic message they can be attached to the next train sent forward, and brought up to the head of the line. The material can then be loaded on the empty equipment wagons of the field hospitals that have already been opened and so brought forward from the line of railway.

In the case, however, of the material having to be carried by road over a long distance, the condition of affairs is different. If the rail head is not more than 24 miles distant from the battlefield, the material may remain there loaded on the trucks, so that in the case of a retreat it can be at once sent back. But, at the same time, the necessary number of country carts must be kept ready at the railway station so that the material may be loaded upon them at once and sent forward whenever required.

In the case of a greater distance by road from the field, the material must be loaded on the country carts and the teams kept ready. In this case the column should be kept about 18 to 24 miles distant from the battlefield, at a spot which is in telegraphic communication with the army corps headquarter staff.

3. Transfer of Sick on the day of Battle.

When there are thousands of wounded to be considered, the daily sick are not of so much importance, and the requirements for their transfer easily conform with the arrangements made for the disposal of the wounded. They would, therefore, be sent as a rule to the improvised collecting station for wounded. Usually the troops march off very early on the day of the battle, so that an accurate classification of the sick cannot be reckoned on being made in the divisional medical units. This will be carried out afterwards at the collecting station for wounded, where a "convalescent company" for attendance on the sick will be formed from amongst those suffering from trivial illness and also from amongst those who have been sent back from their units on the day itself as unfit to march in the ranks. In this way those who are not sufficiently fit to take part in the fighting can at least be made of some use to the army corps at large.

Should there happen to be wounded with the divisions, as would be the case, for example, if a cavalry combat had already taken place, they too will also be sent back with the sick. In the case of severely wounded, the ambulance wagons of the Red Cross† will be employed as far as possible for their evacuation, especially when the wounded are being temporarily treated in an area over which a

* These units are normally held in reserve by the army lines of communication headquarter staff.

† This refers to the column of 15 ambulance wagons provided by the Red Cross Society and attached to each field hospital.

battle is likely to be fought, for even the very severest cases must then be evacuated without exception.

Those who are to be evacuated down the line must be sent as a rule still further back during the course of the day. They will be loaded into railway trains or boats that are kept waiting at the railway or river stations, and they will proceed to the medical units further back as soon as the trains or boats are filled.

Plan of medical arrangements.

As may be seen from the foregoing, many important medical tactical orders must be issued by the headquarter staff of the army corps on the day before a battle. The responsibility of any omission that may subsequently lead to trouble must rest with the principal medical officer of the corps. He cannot depend upon the co-operation of other members of the headquarter staff so far as the medical arrangements are concerned, as each one of them will have quite enough to do in his own special sphere of work.

The necessary orders affect not merely the action of the general staff, such as the distribution of the field hospitals, or of the quartermaster-general's department, such as the utilization of empty wagons of the supply echelons, but they have considerable influence upon the whole military situation. Consequently the decision as to which is the most advantageous spot to select for a collecting station for wounded and for holding the medical units in readiness can rest only with the officer upon whom the whole responsibility for directing the operations lies. His requirements in other directions will often conflict with what may appear to be the best way of handling the medical units in the various situations that arise.

It is therefore recommended that the principal medical officer of the corps should have a plan of medical arrangements prepared as concisely as possible, in accordance with his own opinion as to the best method of keeping his resources in readiness. Such a representation of the medical plan of operations is of much value to the general officer commanding the corps and to the chief of the general staff, both of whom are directly interested in knowing that the best possible arrangements for the wounded are being made when a battle is imminent. The scheme will then form the basis of any final decision that is arrived at with regard to the medical tactical requirements, so far as they are consistent with military considerations.

The plan of medical arrangements, based upon the points that have to be considered, will be drawn up in some such detail as the following:—

- (1) "Wounded will be evacuated from the battlefield to a wounded collecting station at (name of place). The preparation of improvised means for receiving there 1,500–2,000 wounded will be carried out by commanding personnel with material." (Possibly add the following. "The officer commanding the wounded collecting station is to consider the possibility of advancing (or retiring) the place for entraining the wounded to The wagons that

come in with wounded are to be sent back to the corps reserve of wagons at")

- (2) All the country carts that can be requisitioned and the empty supply wagons are to be prepared by individual units for the purpose of evacuating wounded. [The distribution of wagons to divisions, the place (or places) and time for assembling (or keeping ready to advance) the corps reserve of wagons should be noted.]
- (3) The place where ambulance trains or hospital boats are to be kept ready, the preparation of improvised hospital trains or boats, and the appointment to them of personnel will also be included.
 "The bringing up of other trains to, according to requirements, will be carried out on the responsibility of the commandant of the wounded collecting station in co-operation with the director of railways."
- (4) "Two medical officers from each field hospital section will hold themselves at the disposal of the principal medical officer of the corps at . . . o'clock in ;"
 or " medical officers of field hospital No. . . are to be at the disposal of infantry division in . . . at . . . o'clock."
- (5) " infantry division is to hand over to the army corps reserve (or to brigade), a dressing station subsection, an ambulance subsection and a medical and surgical reserve subsection of its divisional medical unit."
- (6) The time and the place for keeping the field hospitals ready to advance, as also the material of the reserve medical units, together with the arrangements for loading the material on to wagons will be noted.
- (7) "All sick and men temporarily unfit will be transferred to Wounded already with the divisional medical unit will be evacuated."

D. Work of the Principal Medical Officer of an Army Corps on the Battlefield.

1. During the fighting.

The principal medical officer on the staff of the general officer commanding an army corps must keep note of the place and time of opening the lightly wounded and dressing stations. He receives information regarding this from the messages that are sent back by the principal medical officers of divisions. These messages should include from time to time reports as to the number of casualties and the number of wounded evacuated. In accordance with the information received the principal medical officer of the army corps will either recommend, or himself arrange, for the reinforcement of the dressing stations by those medical officers from the field hospitals who are waiting for the purpose, and for sending detachments of the army corps reserve of wagons to the places where they may be required.

He must, on his part, send back information regarding the situation to the principal medical officer of the army, when the army corps is not acting alone, so that the latter may obtain a general view of the movement of evacuation and the number of casualties that are occurring.

2. *After a victory.*

As soon as it becomes evident that the enemy is retreating, orders must be sent to the field hospitals to advance, and also to the reserve medical units that are placed at the disposal of the army corps. The orders can be sent by telegram, or by motor cyclist, or ordinary cyclist.

The remaining wagons of the corps reserve of wagons will be split up into groups, the divisions will be informed as to the boundaries of the areas, (as defined by easily recognized features), which they have to cover in searching for wounded, and at the same time asked to send information without delay regarding the places where the dressing stations are again established, together with a detailed estimate of the number of wounded.

The arrangements for the distribution of the field hospitals will be made on the information thus received, although it will be at the best somewhat unreliable. There is plenty of time for making these arrangements, since several hours must elapse before the field hospital column can reach the battlefield. The column as it arrives will be received by the principal medical officer of the army corps, who will be in a position to distribute field hospital sections to divisional areas in accordance with the calculations he has made of the wounded in them. The principal medical officers of divisions will be informed of this distribution in order that they may prepare the localities, which have been selected as suitable for establishing the field hospitals.

It is only by a distribution of work in this manner that satisfactory results can be obtained, for the principal medical officer of the corps cannot, as a rule, arrange the places for establishing field hospitals himself, especially when all the sections of the field hospitals are sent up, for he would then have to attend to the preparation of nine different places.*

3. *On the day following a battle.*

By the morning of the day following a battle, the principal medical officer of an army corps should have obtained a fairly complete idea of the conditions that obtain within the divisional areas and at the collecting station for wounded by means of messages, personal inspection and the reports of his staff officer. Amongst other things he ought to be acquainted with the following points:—

- (1) As regards the divisional areas, in which the officers commanding field hospitals have taken over charge after the troops have advanced:—the places where sections of field hospitals have been opened; the places where wounded are

* Field hospitals are mobilized in the proportion of one to each division. Thus an army corps of three divisions would have three field hospitals or nine field hospital sections.

still lying collected together, such as lightly wounded stations not yet closed and places where seriously wounded have been left with the personnel of the aid-posts as attendants*; the approximate number of wounded; the progress that has been made in searching the ground in the areas assigned to the divisions; and the number and distribution of the vehicles still available for the transport of wounded.

- (2) As regards the collecting station for wounded:—the number of wounded that are classified for further evacuation; the number of those requiring hospital accommodation who cannot be evacuated; the number of the lightly wounded; the number of vehicles that are available for transport.

These data give the material for deciding the manner of employing the reserve medical units which may be expected to arrive during the course of the day, for estimating the medical situation after they have arrived, and for carrying on the evacuation of wounded with the vehicles that are still available. This is a task that falls to the principal medical officer of the army corps, as the director of a technical service,† even when his corps is acting as part of an army and not independently. The principal medical officer of the army arranges the distribution of the reserve medical units‡ according to the reports received from the principal medical officer of the corps, and leaves it to the principal medical officer of the corps to arrange for their being opened.

For this purpose, the latter forms groups according to the nature of the lines of communication, and the distance of the nearest station or railway station where there is accommodation for the night. These will not necessarily correspond with the areas previously occupied by divisions. The principal medical officer will note the number of wounded as compared with the number of field hospital beds (300 per section§) that are at his disposal in each area. There will be almost invariably an excess, the total of which in all the areas must be compared with the sum of the number of beds available in the mobile reserve field hospitals that are coming up and of the number of wounded who are to be evacuated on the same

* The aid-posts are the most advanced lines of medical aid, and, as a rule, are worked by the regimental medical service. The remark here refers to those wounded whom it would be inadvisable to move, and who would be taken care of as near as possible to the spot where they fell.

† The Austrian expression is "*Gruppenleiter*," which indicates something more than directing a technical service. For example, the expression is used to indicate the commander of a fighting group composed of units of different arms of the service; in this sense the principal medical officer of an army corps becomes the commandant of a group, composed of elements not only from the medical units but also from other sources. He practically takes over the direction of affairs on the field over which his corps has fought successfully, and from which it has since advanced.

‡ The reserve medical units are the mobile reserve hospitals, the field convalescent depôts and mobile rest stations, which are held ready to advance under the orders of the principal medical officer of the army, to which the army corps belongs. Under his orders, they would be distributed at the proper time to the army corps.

§ The normal number is 200 per section, but apparently allowance is made for expansion from local resources.

day. If this sum is greater than the excess, one or more of the sections of the field hospitals can be set free.

By means of this general calculation those sections of field hospitals which can be set free most readily are selected, and to each of them a section of a mobile reserve hospital is sent up.*

It is generally advisable to establish a section of a mobile reserve hospital in each area at some place which is easily reached by all medical units established in the area. Its functions will be to remain for a prolonged period on the battlefield and to take over the wounded who are not fit for transport.

In accordance with the orders issued as to how many lightly wounded are to be sent to the field convalescent depôts and how many are to be evacuated by means of the available vehicles, each group must do the best it can with the available resources.

This rough estimate of the number of wounded to be evacuated and of the lightly wounded can without difficulty be got ready, within certain limits, on the day after a battle, since by that time the classification of wounded will be sufficiently advanced.

It is the duty of the principal medical officer of the army corps to consolidate the lists, and to prepare the necessary orders. The material to enable him to do so consists of a definite statement of the number of wounded who are to be evacuated from each field hospital section, of the number to be transferred to the field convalescent depôt, and of the number who are unfit for transport and who are to be brought for prolonged treatment into the section of the mobile reserve hospital. The last class of wounded will be transferred by means of the field hospital medical and surgical stores wagons† and by stretcher bearers.

It is only when these preliminary arrangements have been made for regulating the work on the battlefield and when the arrangements for setting free some of the field hospital sections are satisfactorily assured that the principal medical officer of the army corps may hand over the direction of affairs to the senior of the medical officers in charge of field hospitals and rejoin the headquarter staff of his army corps.

* A field hospital is set free by a mobile reserve hospital coming up and taking over its patients. In this sense the mobile reserve hospital of the Austrian army performs one of the functions of the clearing hospital of the British army, of the clearing hospital and clearing hospital detachment of the German army and of the reserve personnel of the Japanese army.

† These wagons ("*Feldspitals-Packwagen*") are constructed exactly like ambulance wagons. When the stores are unloaded on the opening of a field hospital or of any other medical unit equipped with this type of wagon, the wagons are used as ambulance wagons for the transport of serious cases lying down. See Introduction, p. 12. The use of stretchers and hand carriage for the same purpose should also be noted.

CHAPTER II.

POINTS TO BE CONSIDERED AND MEASURES TO BE TAKEN BY THE PRINCIPAL MEDICAL OFFICER OF A DIVISION.

N.B.—Under this heading only a division that is working in combination with other divisions is considered. In the case of a division acting independently the responsibilities of its principal medical officer are similar to those of the principal medical officer of an army corps.

Appreciation of the Military Situation.

The ruling factors in this connexion are whether the division is operating independently or in combination; whether the troops are advancing or in a state of inactivity; the number of columns, protective troops and detachments on special duties; whether an important engagement is for the time being unlikely or expected within a definite time or immediately; and whether skirmishes on the part of the protective troops are anticipated.

Transfer of Sick.

1. *During periods of inactivity; when the troops are stationary in billets.*

The ambulance section* of the divisional medical unit should be opened, as a regular principle, as a local hospital, with material drawn, if possible, from local resources and with its personnel formed of the whole of the divisional medical unit.† The transfer of sick will be carried out just as sick are transferred to garrison hospitals in peace. The ambulance wagons will remove the sick from the various units during the course of the afternoon, making several journeys for the purpose. The local hospital will evacuate to the

* See footnote, p. 18. The "ambulance" is the section of the divisional medical unit which corresponds most with the "tent division" of the British field ambulance.

† The expression here translated "local hospital" is *Marodenhaus*. It is the term used for the class of military hospital established in small garrisons in time of peace. In this case it takes the place of a garrison hospital to which men reporting sick would be sent and where slighter cases of sickness would be treated till recovery. The "*Feldmarodenhaus*," "Field Convalescent Depot" to which frequent allusion is made in these pages, is a definite field unit, which acts not only as a sick room for slighter cases of sickness and wounds but as a convalescent depot for the reception of convalescent patients from field and other hospitals before they rejoin their units. The use of the term "*Marodenhaus*" in this instance does not refer to this special unit, but more to a function of the divisional medical unit during periods of inactivity.

collecting station for sick of the army corps only those sick who require prolonged hospital treatment, who are likely to be unfit to return to duty for some time, or who are totally unfit for further duty in the field.

2. *During marches.*

Under the directions of the general officer commanding the army corps the transfer of sick from their units will take place, as a rule, daily. They will be collected, as a general principle, at the divisional medical unit, which must be quartered where the transfer of men from all units will be in the direction of the general line of evacuation. In this way opposing streams of traffic will be avoided. A place should be selected on the shortest and most natural line of evacuation from the area where the division is billeted.

Should the line of evacuation be unexpectedly changed after the division has left its billets, arrangements must be made in the morning to leave a medical officer with subordinate personnel at the place selected for assembling the sick, in order to classify them and supervise their being sent back in convoys. The same arrangements will be made when it is possible to utilize two* railway stations, and thus spare the sick long journeys by road.

The time at which the sick should be assembled depends upon three factors: first, the hour of arrival at the railway or river station, and the nature of the road to it; secondly, the time of the advance of the divisional medical unit, for the sick should reach it, in order to be classified, one hour, or at least half an hour, earlier; thirdly, the distance of the various units from the place at which the sick are to assemble. If this involves a very early start in the morning, the sick should be transferred to the divisional medical unit in the evening and kept there overnight. The orders must, of course, be issued early enough to enable units to carry this out.

The supplement to the operation orders issued by the general officer commanding the division under the heading "Medical Orders" will be confined to a short statement of when and where the sick are to go. The preparation of the necessary vehicles, such as requisitioned wagons or empty supply wagons, will be made by the units who are transferring sick. In the case of empty supply wagons special mention of their being used may be made in orders, in order to avoid friction, with the concurrence of the Chief Intendance Officer. Any change in the position of the evacuating station for sick† is to be published in orders.

In a special paragraph for the divisional medical unit instructions will be given as to the disposal of the sick who have to be evacuated. It is understood, of course, that the divisional medical unit will employ the wagons, which bring the sick from the different combatant

* This apparently means railway stations where the sick may be entrained in the divisional area and detrained in the locality where field or other hospitals are established.

† The term "evacuating station" is used here as a general expression to indicate the medical unit or establishment, to which the sick and wounded are sent for evacuation down the line of railway. In this case it is the divisional medical unit.

units, for further transport of the sick, and will also prepare vehicles for the transport of those sick who have already come in. In long journeys by road arrangements will also be made for the eventual use of the empty wagons of the supply echelons.

If the general officer commanding the army corps requires that the men unfit to march in the ranks should also be evacuated, this will also be included in the orders. Otherwise they will, on the written recommendation of the medical officer, remain with the transport column.

Disposal of the Divisional Medical Unit during Marches and on the Eve of a Battle.

Ambulance wagons for the reception of men who fall out are to be distributed on each march to those columns which are not followed by the divisional medical unit, so far as the circumstances of the march permit. Ambulance wagons will also accompany flank columns, flank guards, and, in the case of a retreat, the rearguard of the main body. On an average there should be one ambulance wagon for each battalion, and with it a detachment of men of the medical corps, consisting of at least one non-commissioned officer and four men. When there are more than one wagon about two men to each wagon should be allotted.

If the protective troops are likely to engage in skirmishes, each fighting group that is composed of two or more companies should have an aid-post wagon.* Aid-post wagons should also be allotted to the advanced guard, flank guards, and rearguard in case of retreat, as also to the outpost reserves or strongly held support positions.

If an important engagement is impending, two aid-post wagons should be allotted to the advanced guard of the main column when artillery is attached to it, in order that one may act as an aid-post for the artillery. Flank columns should receive at least one aid-post wagon each, if the line of march permits, and two or three when they are composed of several battalions.

In order to provide aid-post wagons to detachments separated from the main body, and to the fighting groups that may be subsequently formed from them, it is recommended that several aid-post wagons should be distributed throughout the main body in the proportion of one behind each infantry regiment. Unless this is done it is extremely doubtful if an aid-post wagon would find the detached battalion to which it might be allotted, as it would be marching several miles behind and would set out in charge of one driver of the transport corps only to find the battalion.

The method by which the divisional medical unit is divided into sections and subsections must be considered very carefully. The chief advantage of having a dressing station that can be divided into two subsections consists in the possibility of establishing one subsection outside the zone of artillery fire, during the fighting, for the purpose of evacuating wounded from the field; and of keeping a

* The divisional medical unit has nine wagons loaded with material for forming advanced aid-posts in charge of regimental medical personnel. These wagons are called "aid-post wagons" (*Hilfsplatzwagen*). See Introduction and Author's Preface, p. 18.

second subsection ready to push forward, in the case of victory, into the middle of the area where the casualties have occurred. Both are important duties, and they cannot be performed by the same subsection in one day.

On this account the divisional medical unit must not be divided into its subsections to follow different columns, if, for example, the division is being pushed forward to a common area of combat in two strong columns. The detachment of a subsection is only permissible when one brigade is entrusted with an entirely independent task and is going to take part in an engagement in a totally different direction to the other.

The orders for the position of the divisional medical unit in column of march are to be prepared by the divisional principal medical officer before the preparation of the tactical portion of the operation orders by the General Staff, since they belong to the tactical portion and not to the part headed "Medical Orders," which the principal medical officer sends in as a supplement to the operation orders. In the majority of cases this will be anticipated by the General Staff, and orders issued, for example, as follows:—

"Advanced guard; G.O.C. 1st Bde., Infantry Regiment No. 1.
Two batteries. Half Squadron. Two aid-post wagons."

Distribution of Country Carts allotted for the Transport of Wounded.

On the day before a battle all the available country carts in the area occupied by the division will be requisitioned by individual units. If permission has been received to use the empty supply wagons, they will also be prepared during the night by the units in the same manner as the requisitioned country carts. This method of distributing the work enables it to be carried out more easily, and also gives facilities for preparing the vehicles for the transport of sick according to expert methods of improvisation.* Further, one must remember that it is easier to collect the material for preparing the vehicles throughout the area as a whole than in one single place, such as would be the case if they were collected together at the divisional medical unit and prepared there. This, of course, does not apply to the case of the vehicles that are attached to the divisional medical unit itself, or when the movement of the troops would be interfered with by vehicles being sent to the divisional medical unit from the villages where the troops have been quartered.

On the following morning the vehicles must be assembled. If an advance is to take place, the place of assembly should be some locality to which the vehicles can go direct without having to travel too far back from the villages where the units have been billeted. In the case of defensive operations the place where the vehicles would be drawn up in readiness for use would also be the place of assembly.

If the division has to hand over wagons to form the corps reserve of wagons, these wagons will, as a rule, be detached at the place of

* As there is an organized medical service with each regiment, the preparation of vehicles by experts for the transport of sick and wounded can be readily carried out in the area occupied by the combatant units.

assembly, but circumstances may occur in which, for instance, the wagons of a brigade or group allotted to join the corps reserve of wagons will be ordered to assemble separately from the others at some point on the way to the place where the reserve of wagons is to be formed.

If a complete echelon of supply wagons is available, there is this advantage, that the vehicles can be kept under the supervision and control of a military transport cadre. The requisitioned wagons will then be added to the supply echelon, and the wagons of the requisitioning unit will thus be reinforced without difficulty.

In this case the wagons will march in rear of the divisional ammunition park during the advance. The time of assembly will be determined accordingly, but with a considerable interval, because the empty vehicles can follow at a trot, and by leaving a considerable interval they avoid interfering with the advance of the troops.

Should only country carts be available, they should be directly attached to the divisional medical unit in column of march, and a mounted non-commissioned officer of the transport corps and several privates of the medical corps should be detailed from the unit to look after them, for it can be readily understood that civilian drivers obtained by requisition will seize any opportunity of escaping, and are especially apt to run away when they first hear artillery fire ahead of them. A small addition of this kind to the number of vehicles with the divisional medical unit will not interfere with the movements of the divisional ammunition park that is following behind, whereas a complete echelon of supply wagons, together with requisitioned carts, might lead to serious delay.*

The General Staff will, as a rule, issue in operation orders the orders relative to the distribution of vehicles, on the proposal of the principal medical officer of the division, since in arranging for the assembly of the vehicles and their position in column of march circumstances may arise which must be taken into military consideration, and might possibly necessitate the vehicles being placed still further back in the column.

The order on the subject may, however, also appear under the heading "Medical Orders," and would consequently be drafted by the principal medical officer after his proposals had been approved.

In any case it should be the rule for the principal medical officer of the division, whenever he has been told that the troops are going to advance to the attack, and immediately after he has made himself acquainted with the formation of the column of march, to get ready his proposals for the distribution of the divisional medical unit and the vehicles. On account of the simplicity of the points that have to be considered, and that should, so to speak, lead to decisions being made automatically, he should find no difficulty in submitting his draft of the order promptly.

* The normal position of the divisional medical unit in column of march is in front of the ammunition park. Consequently when the wagons specially prepared for transport of sick and wounded are placed in the column behind the ammunition park they are separated from the medical unit.

The Work of the Principal Medical Officer of a Division on the Battlefield.

1. *Position of the medical units during defensive operations.*

In defensive operations the medical equipment and personnel should, as a rule, be kept ready in the place where they would work during the fighting. The area behind the fortified positions usually offers good cover, and thus the medical service would be able to work there under favourable conditions.

The aid-posts will be distributed as far as possible close behind the fighting line of individual groups, each group being provided with an aid-post wagon, and, if removal of wounded by wheeled carriage be possible, also with an ambulance wagon.* The latter will be drawn up at the halting point for wagons.†

The divisional medical unit remains with the vehicles that are allotted for purposes of evacuation at the place where its dressing station section is established, which in this case is frequently close to the fighting line. The place selected should have good resources, a supply of water being, of course, an essential condition. No. 1 subsection of the dressing station and of the ambulance will be got ready first. The dressing station will be reinforced by a few regimental medical officers. The ambulance wagons and aid-post wagons not yet distributed will also be kept at the dressing station. One of the former will always be sent forward whenever a similar wagon returns with wounded from the regimental aid-posts, so that a constant exchange of wagons is maintained.

The lightly wounded section of the divisional medical unit will be placed further back, five to six miles behind the fighting line. Lightly wounded who are able to walk are always willing to go considerable distances to the rear so long as fighting is going on, and in the event of the fighting taking an unfavourable turn it is advisable to have them well back on the line of retreat. The best places for establishing lightly wounded stations are places which are surrounded by their own grounds, and which are easily found, such as country houses, farmhouses, factories, etc., provided they are not on the line of evacuation.‡ The localities at which the dressing station and lightly wounded station have been established will be made known to the fighting units.

2. *The Attack.*

(a) *The issue of orders for battle.*

If the division is to become engaged in serious fighting, the indication of which will be the issue of orders for battle by the

* *i.e.*, from the divisional medical unit.

† The halting point for wagons is technically the point to which the ambulance wagons of the divisional medical unit are sent, when the dressing station has been opened. It is the point to which wheeled carriages can be brought nearest to the aid-posts.

‡ This principle of keeping lightly wounded off the line by which seriously wounded are being evacuated should be noted. The reason, of course, is that otherwise they would only be in the way and use up the resources for the evacuation and care of serious cases.

general officer commanding the division, the issue of medical orders will also be necessary.

In the first instance each fighting group must have one aid-post wagon assigned to it, and a fighting group of the strength of a brigade must have two. This can readily be done, when it is considered that the aid-post wagons are distributed throughout the main column. Here it may be noted that it is advisable that the divisional reserve should also be provided with an aid-post wagon, since it is often suddenly employed as a fighting group, and it would then be too late to provide it with medical equipment.

Next, orders must be issued for the immediate establishment of the lightly wounded station. One reason for this is that the desirability of opening it at some distance from the fighting line makes it necessary to fix its position early in order to prevent its being brought too far forward and then having to be moved back. Another reason is that wounded begin to fall very early in the fighting, and the majority of those who are capable of walking will certainly seek some way back in order to get to the rear. The lightly wounded station, therefore, will be required early in the day, and besides it will be possible to inform all the troops at the time of issuing the orders for battle where the lightly wounded are to be sent. Should the division, however, be already deployed, it would be very difficult to inform them of this.

Finally, the divisional medical unit must be told where it is to hold itself in readiness. The spot selected must be outside the zone of fire and in a place which can be easily reached from all possible areas of fighting. The correct distance in accordance with the range of modern artillery fire is from five to six miles from the enemy's fighting line. The officer commanding will be instructed to report himself to divisional headquarters when the divisional medical unit has taken up its position. He will be accompanied by one officer and a non-commissioned officer. The object of his being summoned to headquarters will be to enable him to obtain a general idea of the conditions of the battle, and to get information as to the ground, so that later on he may be in a position to adopt the most suitable measures for removing the wounded.

The country carts that have been prepared for conveyance of wounded will be attached to the divisional medical unit.

Concurrently with the preparation by the General Staff of the tactical portion of the battle orders, the principal medical officer of the division will, after his proposals have been approved, draft the medical orders. These will contain the following:—

- (1) For all to whom copies of the orders are issued: "the lightly wounded station is established at"
- (2) For the general officer commanding the main body, orders such as the following:—"The aid-post wagons that have been placed immediately behind infantry regiments in column of march will remain with the regiments. An aid-post wagon from the divisional medical unit will be attached to the rear regiment (divisional reserve)."
- (3) "The divisional medical unit will hold itself in readiness at together with the vehicles prepared for transport of wounded. The lightly wounded section will open at

. . . . The officer commanding the unit will report himself in person to the divisional headquarter staff on completion of the execution of this order."

(b) *The work of a principal medical officer of a division up to the time when the issue of the battle is decided.*

The attention of the principal medical officer of a division must be directed to determining whether aid-posts have been established with the fighting groups and whether removal of wounded from them to the rear is possible.

If this is the case the opening of No. 1 subsection of the dressing station, together with the ambulance, must be expedited.

The place selected should be behind the centre of the aid-posts, if possible, and should be where there are facilities for further evacuation. A locality with good permanent buildings is best. Its distance from the fighting line will depend upon the extent of cover, but in any case the spot selected must be beyond the range of artillery fire, and it will frequently be necessary to go further back than the distance mentioned in the regulations, namely, 3,000 to 5,000 paces.

The officer commanding the divisional medical unit, who will be at divisional headquarters at the time, will receive orders for opening the dressing station section, and will already have been informed, in conversation with the principal medical officer, of the routes by which the ambulance wagons will be sent forward for removal of the wounded and where the halting place for the wagons will be.* He will also have been told of the place where the wounded collecting station of the army corps is to be established, and will be empowered to evacuate wounded thither direct, on the vehicles that are at his disposal. He should, however, at once report the departure of the first convoy of wounded sent back.

On receipt of the order, the officer commanding the divisional medical unit will send back to the unit the officer† accompanying him, together with one of the two mounted orderlies assigned to him at this stage, with instructions to bring it to the place where it is to be opened. He himself will ride direct to this place, accompanied by the non-commissioned officer and the second mounted orderly, in order to examine the spot and make the necessary preparations for opening the unit immediately on its arrival.

The principal medical officer of the division will see that the opening of the dressing station section of the divisional medical unit is intimated to the fighting groups in the form of a postscript to any field message that is being sent to them. But in any case it is the duty of the ambulance wagons sent forward to get into touch with the regimental aid-posts.

* As there are no stretcher-bearers with the Austrian divisional medical unit, much importance is attached to the sending of ambulance wagons up to the vicinity of the aid-posts. All the stretcher-bearer work is carried out by the regimental stretcher-bearers, who cover the ground as far back as the aid-posts.

† This officer (*Sanitätsoffizier*) is not a medical officer, but an officer similar to the captain of orderlies of the old Army Hospital Corps of the British army. See footnote p. 20.

From this time onward constant communication must be maintained between the principal medical officer of the division and the divisional medical unit, to enable the former to be kept fully informed as to the influx of wounded and evacuation of those who are fit for transport. The two mounted orderlies assigned to the divisional medical unit and the two assigned to the principal medical officer of the division will be employed for this purpose.

Further, the principal medical officer should attach to the messages, which the headquarter staff send back hourly regarding the situation and on the occurrence of important events, short notes for the principal medical officer of the army corps, as, for example, the time and place of opening of the lightly wounded section and the dressing station section, the commencement of the work of evacuation, the departure of fresh convoys of wounded from the division, the number of wounded that are coming into the dressing station, and estimates of the number of casualties that are taking place in the fighting line.

The principal medical officer of the division will not, as a rule, interfere with the work of the medical service with the fighting units. It is difficult for him, on account of the distance, to judge of this work, and the enemy's fire will in most cases prevent his obtaining a comprehensive view of the situation. Cases may, however, occur in which he may act in this connexion, as, for instance, when it is necessary to push up reserves to the assistance of the regimental aid-posts.

(c) Orders after the issue of the battle has been decided.

Should the issue of the battle appear unfavourable, the principal medical officer of the division should propose to the headquarter staff the closing of the dressing station and the lightly wounded station, immediately they appear to be in danger. But at this juncture independent action on his part is not advisable, as a decision made too hurriedly might have serious consequences. The headquarter staff will give the necessary instructions as to the line behind which the divisional medical unit is to be withdrawn. The principal medical officer must not concern himself with the withdrawal of the aid-posts, as that is the duty of officers commanding the fighting groups and of the officers in charge of the aid-posts.

When the engagement results in victory, the divisional principal medical officer will be called upon to act much more freely in the matter of disposing of the medical resources, all the more so because the headquarter staff will then be fully occupied with issuing orders for taking full advantage of the result of the battle and will therefore hand over the arrangements for the wounded more or less entirely to the responsible medical officer. Fortunately, battles are not decided so suddenly as to prevent the principal medical officer having plenty of time to prepare the necessary orders.

These orders will deal with the following points:—

- (1) The pushing forward and opening of the second subsection of the dressing station, together with the ambulance subsection, if possible in the centre of the area where the greatest number of casualties has taken place, and providing them with ample medical personnel.

- (2) The searching of the battlefield for wounded.
- (3) The allotment of medical equipment and personnel to the pursuing troops, who will probably have to fight minor engagements.

With regard to the first point, a suitable village can rarely be found exactly in the middle of the area where the casualties have occurred, for such a locality will usually suffer severely during the fighting and probably be on fire. The divisional principal medical officer would therefore content himself with selecting some undamaged place as near the area of casualties as possible. With regard to this point it should be noted that low-lying places are preferable to those on high ground on account of the greater ease with which wounded can be brought to them. Besides high ground frequently suffers from scarcity of water.

The fact that the selected spot may often not be in the middle of the area of casualties may sometimes lead to its being inadvisable to concentrate the medical work at one point. For example, an aid-post in some distant part of the battlefield, especially if it is established in or near a village, would be allowed to remain there in order to act as a centre of medical work for that part of the field, and thus lessen the distance over which the wounded have to be carried. In order to provide such an aid-post with equipment to enable it to carry on the functions of a dressing station, the *fourgon* of the Teutonic Order* or a reserve aid-post wagon should be sent up to it.

Frequently, a regimental aid-post will be found already established at the place selected for the dressing station, and in that case its personnel will remain there as a reinforcement of the dressing station. It is understood, of course, that when No. 2 subsection of the dressing station section is sent forward, not only its personnel, who would up till then have been working with No. 1 subsection, but also the medical officer of the divisional (or army corps) ammunition park and the medical officers from the field hospitals, who were attached for duty to No. 1 subsection,† will go on with it.

The new dressing station will be still further reinforced by the search parties that are detached to search for wounded over the area of the battlefield.

As regards the second point, the majority of the wounded, after fighting has ceased, will be found scattered all over the field or collected in small groups, some not yet attended to, and some with the first field dressing applied. Many will also have crept under cover.

A thorough examination of the area should therefore be commenced without delay. For this purpose the stretcher-bearers, accompanied by non-combatants, will go over the ground in line in extended order, under the guidance of the regimental medical

* The order of knighthood known as the Teutonic Order (*Deutsch Ritter Orden*) provides a *fourgon*, loaded with medical and surgical stores, and four ambulance wagons for each divisional medical unit. The *fourgon* is intended to act as a supplementary-aid post wagon and the ambulance wagons as transport from any such aid-post that may be established. As a rule, however, they would be grouped with the ambulance wagons of the divisional medical unit and used as required.

† See (c) p. 37.

officers and assistants.* Ambulance wagons and the country carts, which are still available, will follow the personnel, and as soon as a wagon is loaded up it will proceed to the dressing station accompanied by those wounded who are capable of walking. The best method of searching the battlefield is for the line to swing round the radius of a semi-circle, with the dressing station as the centre.

It is the duty of the principal medical officer of the division to arrange this. Search parties will be formed by him, according to the positions occupied by the combatant units and their medical personnel at the moment, and each party will be provided with vehicles and given a definite segment of the circle to work in, the area being defined by easily recognisable natural features.

As regards the third point, a small personnel with an aid-post wagon, taken, if possible, ready loaded from the wagons held in reserve or replenished by material taken from other wagons, will be sent with the troops engaged in pursuit.

The simplest way to carry out the second and third points is to take complete units, as, for instance, the whole personnel of an infantry battalion or of a regiment of artillery, for the work of each area or group.

The distribution of work will consequently be laid down in orders, somewhat as follows :—

“Subsection 2 of the dressing station section of the divisional medical unit will be established at A, assisted by the aid-post of Infantry Regt. No. 1, already established there.

The aid-post of Infantry Regt. No. 4 will remain at B, and will be reinforced by the *fourgon* of the Teutonic Order.

The battlefield will be searched as follows :—

North of the cart-road C—D, by Infantry Regt. No. 4, the wounded to be brought in to the aid-post at B. Four ambulance wagons and one-fourth of the country carts will be given to the search party.

For bringing in wounded to the dressing station at A :—

No. 2 Infantry Regt., with four ambulance wagons and one-fourth of the country carts, will search the area between the cart-road C—D and the main road.

Divisional Artillery, Regt. No. 1, with three ambulance wagons and one-fourth of the country carts, will search the area between the main road and the edge of the forest as far as the church to the south of A.

No. 3 Infantry Regt., with four ambulance wagons, and one-fourth of the country carts, will search the area south of the above line.

No. 1 Infantry Regt. will send all its stretcher-bearers and one battalion of other personnel, with four ambulance wagons and one-fourth of the country carts, to the area west of A, as far as the enemy's position.

* The regimental medical assistants (*Sanitätsgelilfe*, see Author's preface 5, on p. 19), are non-commissioned officers of the regiment, who are trained as medical assistants in the proportion of one for each company of infantry or similar unit. They are replacing the non-commissioned officers of stretcher-bearers.

The following will accompany the troops in pursuit:—

The medical personnel of the rifle battalion with one aid-post wagon from B, to follow the north wing.

The medical personnel of one battalion of No. 2 Infantry Regt., with one aid-post wagon from the reserve, to follow the centre.

The medical personnel of one battalion of No. 3 Infantry Regt., with the aid-post wagon attached to the regiment, to follow the south wing.

All other aid-post wagons, with the exception of the second wagon at B, will return to A after the regimental aid-posts have been closed."

Several copies of these orders, made on a duplicator, will be sent as quickly as possible to the divisional medical unit, to the officers commanding the fighting groups and to their senior medical officers. The principal medical officer of the division above all will make personal efforts to set in motion the machinery for searching the battlefield.

Subsequently he will utilize the sections of the field hospitals that are attached to the division by the headquarter staff of the army corps in such a manner that the two subsections of the dressing station section, together with the ambulance section of the divisional medical unit, will be set free first and will be ready to advance the following morning.

CHAPTER III.

THE TACTICAL WORK OF THE OFFICER IN COMMAND OF A DIVISIONAL MEDICAL UNIT.

During Marches.

The officer commanding the divisional medical unit is responsible for bringing his unit and its detachments, appointed to accompany detached columns and protective troops, into the column of march at the proper time. The Introductory Course* gives the necessary information for calculating times.

For the purpose of evacuating sick from the divisional medical unit, those vehicles will be employed, as a rule, which brought the sick from the regimental units. The same vehicles, too, will usually have sufficient transport accommodation for evacuating the sick that are already in the local hospital established by the unit.† Subsequently any further transport that is required must be obtained by requisitioning country carts or by preparing the empty supply wagons which happen to be at the place where the troops are billeted. The ambulance wagons must be employed only when the distances are very short.

If it can be avoided, personnel of the divisional medical unit must not be used to accompany the convoys. For this purpose, local inhabitants should be employed under the supervision of non-commissioned officers who are suffering from slight illness.

The evacuation post or establishment to which the sick are being sent, as well as the railway or embarkation authorities and the station where the convoy will be rationed, will be informed as early as possible of the number in each convoy. Further, the divisional headquarter staff will be informed of the number that has been evacuated and also where and under the care of whom those who are unfit for transport are being left.

In each place where troops are billeted a suitable building is to be prepared as a sick-room,‡ and the necessary sick attendants are to be put on duty in it. During long periods of halt a local hospital will be opened under instructions from the headquarter staff of the division.

* See Author's preface.

† See footnote p. 46.

‡ The distinction between "sick room" (*Marodenzimmer*) and "local hospital" (*Marodenhaus*) is mainly one of size and importance. The former term is used in peace to express the sick room where trivial cases are treated regimentally, and is a regimental institution. The latter term is used for a garrison institution of a similar character, as explained in footnote p. 46. In peace there is one *Marodenzimmer* for each battalion.

During fighting.

As soon as orders are received for the divisional medical unit to prepare for action and to open its lightly wounded section, the officer commanding will entrust the former duty to the senior officer of orderlies,* who will order the vehicles to proceed to a suitable spot off the road. He will himself give the orders for the despatch of the lightly wounded section, and if the place selected for it is not too far away he will also superintend the preliminary measures for its establishment. Having done this, he will report himself at divisional headquarters. (See previous chapter.)

In establishing a lightly wounded station it is essential that a suitable room should be got ready as a bandaging room, also that arrangements should be made for cooking, and, if possible, that there should be some well-equipped rooms for wounded whose condition is likely to prove serious. For other wounded it would be sufficient to mark off some spot in the shade, if the weather is good; it is desirable to collect straw for them to lie on. Shelter can be provided for wounded by making use of their *tentes abri*. As a rule, two sentries will be sufficient for maintaining order. A place for parking the vehicles should be selected, although no special guard over them is necessary. Care must be taken to see that the distinguishing flags are placed where they can be seen from a distance. Many of the lightly wounded may eventually be employed as sick attendants, cooks and for requisitioning purposes, under the direction of officers.

When the officer commanding the divisional medical unit receives the order to open No. I subsection of the dressing station section, he proceeds to the place selected for its establishment, while the officer of orderlies* who accompanied him rides back to the unit, forms it up and brings it, with the country carts prepared for transport of wounded, to the place where the dressing station is to be opened.

While awaiting the arrival of the unit, the officer commanding will employ his time in getting material ready for establishing the dressing station, and will take the following steps:—

- (i) Select a place outside the village on the side furthest from the enemy for parking the transport material.
- (ii) Select a house with a large well-lighted, smooth floored room, as an operating room for the surgical work of the dressing station.
- (iii) Look for some courtyard, close at hand, which is, if possible, surrounded by fire-proof buildings, and which is easily entered, for use of the ambulance section. There should be a strongly built building, such as a church, for those who are unfit to be moved and for the dying, who, in the case of retreat, must necessarily be left behind, and ought if possible to be protected from possible injury during the fighting.
- (iv) Make arrangements for a kitchen in the vicinity.

* See footnote p. 53.

- (v) Select a reception station at a spot which the wounded must pass on their way back from the battlefield. There should be ample space, and in fine weather it should be in the open air under the shade of trees; otherwise a large open shed or similar building should be selected.
- (vi) Select a place on the side nearest the front, as the place where the aid-post wagons and ambulance wagons in reserve are to be drawn up, and from which they can be directed to go forward.

These are the lines upon which the divisional medical unit will be opened on its arrival at the spot selected. One of the field hospital stores wagons will go to the dressing station section and another to the ambulance section, while the others remain where the transport material is parked.* The whole of the personnel then commences work.

In the meantime the officer commanding the divisional medical unit directs the ambulance wagons, with the wagon orderlies, to the place where they are to be drawn up, and instructs the officer of orderlies, who has charge of the wagons, as to the direction in which wagon parties are to be sent to the front. A portion of the vehicles will be kept behind as a reserve, and one of them will always be sent to the front in the direction from which a loaded wagon is returning, so that a constant exchange of wagons is maintained.

As the number of wounded that come into the dressing station at one time is always small, the personnel will be able to work very comfortably and thoroughly in No. 1 subsection of the dressing station and will be able to get ready for further transport those wounded who are likely to be fit for removal.

As soon as 50 or 100 wounded, capable of being moved, have been collected in the ambulance section, the work of evacuation will begin. Should the line of evacuation pass the lightly wounded station, the lightly wounded, who are there, will be attached to the convoy, so that they may place their packs and accoutrements on the vehicles. Should it, however, be on a different line, 15 or 20 of the lightly wounded will be formed into a single convoy, and a wagon will be allotted to them, more especially if the distance they have to march is considerable. The wagons so employed will afterwards be collected in groups and return to the dressing station.

Convoys of wounded will be accompanied by an escort, but as few as possible of the men of the divisional medical unit will be employed for this purpose.

If a retreat has been ordered, then all the wounded who can find room in the vehicles of the divisional medical unit, and all those capable of walking, must retire with the unit. The remaining wounded will be left behind with a small detachment of the ambulance section and some medical and surgical equipment. The transport material of the unit will retire in a body.

Weapons which cannot be taken along with it must be destroyed.

In the case of a victory, No. 2 subsection of the dressing station

* The field hospital stores wagon is merely the name given to a particular type of wagon. Some of them form part of the transport material of a divisional medical unit. See footnote p. 45.

will advance at once upon receipt of orders, and will take with it all the medical officers that have been attached to the unit. Ambulance wagons that have been distributed over the field and those country carts, which are still available, eventually also the aid-post wagons, are to be allotted, in accordance with the instructions issued, to the several parties ordered to search the battlefield for wounded.

The officer commanding the divisional medical unit will then gallop on ahead in order to make a reconnaissance of the new place selected for opening the dressing station.

The medical work that is to be carried out at this second dressing station must be done rapidly. Only protective dressings are to be applied and the wounded treated no more than is absolutely necessary. Attention is to be directed mainly to getting all the wounded under shelter, to making them as comfortable as possible lying down, and to providing them with food and medical comforts. All the surgical work that may be required will be carried out in the field hospital.

CHAPTER IV.

MEDICAL SERVICE WITH REGIMENTAL UNITS.

In Billets.

In each place in which troops are billeted, the senior medical officer will, as a rule, prepare only one sick room,* and a medical officer with the necessary subordinate personnel from one of the battalions will be appointed for duty in it. The medical officer will see the men reporting sick and must always remain in the neighbourhood of the sick-room.

The sick will be seen by units, in the afternoon, and, if possible, after they have finished their dinners and by daylight. Each battalion medical officer will examine the sick of his own battalion and bring only those whose condition is serious before the senior medical officer of the regiment. With the latter rests the decision as to the cases who are to be excused from duty and allowed to march with the transport column†, and those who are to be admitted into the sick-room and evacuated.

In all circumstances the sick will be seen a second time before the troops advance.

Country carts will be requisitioned for sending the sick back, and will be suitably prepared for the purpose. If empty supply wagons are available, the arrangements are thereby materially facilitated. Should a man be too ill for transport, so that he cannot be transferred immediately to the divisional medical unit, (although one should always endeavour to do this on account of the greater facilities there for looking after sick who are not fit for further evacuation), he must be handed over to the local civil authorities and a message in writing sent with the convoy of sick going to the divisional medical unit, stating amongst other details the man's name and in whose charge he has been left.

Empty supply wagons and requisitioned country carts must be prepared by the medical officers of battalions before the troops advance to battle.‡ They are to assemble in the morning, and those that are not required for the evacuation of sick are to proceed, in rear of the regiment, to the main line of march and left there, with directions to await the arrival of the divisional ammunition park or the divisional medical unit, as the case may be,§ and then to proceed to the place

* The word "*Marodenzimmer*" is here used, and has exactly the same significance as "regimental sick room" in time of peace. See footnote p. 58.

† See p. 23, and footnote.

‡ See footnote, p. 49.

§ See p. 50, and footnote.

laid down in orders for the assembly of the wagons. If they have to be sent there direct, the choice of route and the hour at which they start are to be arranged in such a manner that they will not cross the line of march of the troops.

During Marches.

Each regimental or battalion medical officer is to satisfy himself that any detachment of the divisional medical unit which has been ordered to march in rear of his unit is in its place and remains there during the march. If such a detachment should come up too late, someone is to be left behind whose duty it will be to bring it up to its position.

The senior medical officer of a regiment rides, as a rule, in rear of his regiment, and only when the regiment forms an independent column or is employed in protective duties will he ride on the staff of the officer commanding the column, advanced guard, or rear guard, as the case may be, as senior medical officer of the column.

During Fighting.

As soon as a unit becomes engaged the senior medical officer of each fighting group will join the officer commanding the group.* As a rule, the officer commanding a unit will have his time so much occupied in other directions while fighting is going on that he will only be able to give very cursory attention to the medical service, and will leave the direction of such matters to the senior medical officer.

The main point to attend to is the necessity of bringing the regimental medical personnel, as soon as possible, to the area where the greatest number of casualties is taking place.

In defensive operations this presents no difficulty as a rule. There will usually be time to acquire knowledge of the lie of the ground, and to select a suitable place for opening a regimental aid-post. The ideal requirements of such a post are:—

- (1) Proximity to the defence line of fire, and favourable conditions† for bringing in the wounded.
- (2) Good cover for transferring the wounded, after they have been attended to, to the dressing station. The whole journey, or at least the greater part of it, should be possible for wheeled transport.‡
- (3) Ample space for carrying on work under good cover, with resources such as buildings and wells on the spot, or where such articles as tables, benches, straw, basins for holding water, etc., can be readily obtained.

* Several battalions may form a "fighting group" and, as there are one or more medical officers with each battalion, the senior would join the officer commanding the group when fighting commences.

† *e.g.*, good cover.

‡ This point brings out the use of wheeled transport instead of hand carriage for bringing wounded from regiments to dressing stations in the Austrian organization and the absence of stretcher-bearers from the divisional medical unit.

Taking into consideration the fact that the wounded come in one by one and that there is abundant material available, there should be no difficulty in carrying out the requirements of the regulations at such regimental aid-posts and in attending to all the wounded except the few that would be left for the dressing station section of the divisional medical unit to take over.

The stretcher-bearers, assisted by the bandsmen, will take off their packs, etc., and will be distributed behind the fighting line under the direction of one half of the medical assistants of the regiment.* All the medical officers, the remainder of the medical assistants, the bandsmen and the dressing orderlies form the personnel for duty at the aid-post. They will be grouped in sections, as laid down in the regulations, as, for example, a section for reception of wounded, a section for lightly wounded, and a section for seriously wounded. The work of attending to the lightly wounded will proceed more rapidly if it is arranged to dress several wounded at a time, *i.e.*, by having several places for applying dressings working simultaneously.†

Preparations must be made beforehand for the temporary care and shelter of the wounded after dressings have been applied. If there is sufficient accommodation, not only should the lightly and severely wounded be kept in separate sections, but there should also be a separate section for the dying.

Finally, a kitchen with necessary personnel must be set going.

Concise orders are required for assignment of accommodation to the different sections and should include appointment of officers with the necessary assistants to take charge of each, in order that the work may be carried out as rapidly, regularly and continuously as possible.

Essentially more difficult to deal with are the conditions that arise during an attack.

The senior medical officer of a group must then make a rapid survey of the ground, whenever the troops deploy, in order to arrive at some decision on the following points:—

- (1) Whether the medical equipment and personnel are to follow the fighting line—a useless course to adopt if the ground offers very little cover, as then not only would the personnel be unable to help anyone, but they themselves also would suffer casualties, which could not be replaced. In such a case the personnel should be assembled under cover, awaiting the development of the action and occupying themselves by attending to men wounded by artillery fire, who might be in the vicinity.
- (2) When an advance is possible, what direction offers the best cover, and, further, what are the probabilities of being able to bring the medical equipment and personnel to the place where the greatest number of casualties has occurred.

* Each regiment of 4 battalions has 64 stretcher bearers and 16 medical assistants (non-commissioned officers). There are also with a 4-battalion regiment 7 medical officers and 8 dressing orderlies or men, whose duty it is to carry the field medical companions.

† Each of these dressing places would consist of a medical assistant with an orderly to help, dressing material, and, if possible, a table and chair. One medical officer could supervise the work of four or five such dressing places and attend to the more difficult cases himself. (Author's footnote.)

If the fighting group is a strong one, the medical personnel can be divided into two sections and two different lines of advance can be decided upon.

The medical officers, dressing orderlies and bandsmen will be assembled in accordance with the decisions on these points and sent forward; and the aid-post wagon will follow the fighting group as far as it can.

The distribution of the medical assistants and stretcher-bearers will depend upon circumstances.

In broken ground, which offers a considerable amount of cover, the stretcher bearers, under direction of half of the medical assistants, will remain with their battalions. They will be instructed to get the wounded, if possible, to the most advanced point to which the rest of the medical equipment and personnel can be brought. In this case they must be instructed to assemble eventually in some locality which is easily found.

In other cases it is better to concentrate the whole of the personnel for medical services and let the stretcher-bearers, during the advance, only bring in such wounded as they are able to reach under cover.

It is often advantageous to combine both the above methods of distribution of the medical personnel, by letting the stretcher-bearers remain with their units while they are in the zone of artillery fire, and massing them together when they come into the zone of infantry fire. Under artillery fire commanding officers can supervise the work of stretcher squads, but under infantry fire their attention is otherwise occupied and it is scarcely to be expected that stretcher bearers would do useful work if they are widely distributed and out of touch with a co-ordinating and directing centre.

The medical equipment and personnel must be brought through the zone of artillery fire as quickly as possible. The wounded who are brought in will receive only an emergency dressing and will be left under cover in groups under the supervision of bandsmen. It is often a good arrangement to leave a medical officer, with a dressing orderly and a medical assistant, where several wounded have been collected together, so that the wounded are attended to in what might be called a "first aid oasis," or else to send forward such a detachment after the final attack. The artillery aid-post will in many cases serve for wounded of infantry who may have fallen at the commencement of the advance.

Should circumstances be favourable, it may be possible to bring the medical equipment and personnel up to the area where their unit is under fire, when the advance has been checked, and when, according to time and intensity of fire, a great mass of wounded is to be expected.

It is entirely a matter of chance, however, if good cover is found along the route by which the wounded go back to the place where the medical equipment and personnel are halted. If there is good cover, the aid-post will be established there. It will often be found, however, that the space is very much restricted, and that the work of the medical officers will be materially hindered when, in order to keep under cover, it is necessary for them to stoop or to kneel down. It must then be considered how far cover can be obtained artificially by means of entrenchments, etc.

It often happens that the medical material and personnel are well protected by cover but that the wounded either cannot reach the spot at all or only in very small numbers. In this case the wounded who manage to come in will be attended to in the best manner possible without unpacking the whole of the medical equipment, and complete succour of wounded will be postponed until firing ceases or until the progress of the attack leaves the neighbourhood free from effective fire. The aid-post must then be established without further delay either on the place where the medical personnel have halted, or, if possible, in the centre of the area where the casualties have occurred up to that time, and the bringing in of the wounded immediately commenced.

In any case it is advantageous to have the medical and surgical equipment close up, for the further back it is kept awaiting the issue of the battle, the longer the moment will be postponed at which the eagerly awaited aid is brought to the wounded.

In the case of the retreat of a fighting group, the senior medical officer will use his own judgment, and his personnel will make the same use of cover in retiring as in advancing. As regards closing an aid-post, the necessary points are noted in the regulations.

In the regulations will also be found the points to be attended to in moving the aid-post forward, as is likely to be necessary when the attack progresses, and a new area for the medical work is taken up.

When there is victory all along the line, the divisional headquarter staff, (see Chapter II.), comes up and takes over the direction of affairs. In conformity with the orders, which he will receive, the senior medical officer of a regimental unit will then issue instructions regarding the personnel and material that are to be allotted to the troops engaged in pursuit, or told off to search the area assigned to his unit, after the work at the aid-post has been completed.

PART II.



PROBLEMS.

PART II

BOOK II

PROBLEM No. 1.

(Special Map 1 : 50,000. Zone 7, Kol. XIX. Teschen, Mistek and Jablunkau.)

General Idea.

The first army corps advancing from the East reaches the neighbourhood of Teschen on 1st July.

The first division of infantry on the left flank is to take up the following quarters between 11 a.m. and 3 p.m.:—

Divisional headquarters; H.Q. 1st infantry brigade; infantry regiment No. 1 (three battalions) and staff; one squadron and staff of No. 1 regiment of Uhlans; 1st and 2nd batteries of No. 1 regiment of divisional artillery; No. 1 divisional medical unit, and No. 1 divisional bakery column; in Trzynietz.

No. 2 infantry regiment (four battalions); No. 2 squadron of No. 1 Uhlan regiment; in Nd. Lischna.

No. 1 rifle battalion, in Koikowitz.

No. 1 divisional ammunition park, and No. 1 supply echelon, in Ob. Lischna.

H.Q. 2nd infantry brigade; No. 3 infantry regiment (three battalions); No. 3 squadron of No. 1 Uhlan regiment; in Lischbitz.

No. 4 infantry regiment (four battalions); 2nd and 3rd batteries of No. 1 regiment of divisional artillery; in Wendrin.

First and second line transport as well as the supply echelon to remain with their units.

Special Idea.

On the arrival of the division in Trzynietz about noon, the principal medical officer of the first division is informed as follows by the chief of the general staff:—

“According to the orders received from the army corps head-quarter staff, suspension of arms has been agreed upon with the enemy till midday on July 10th.

The division will remain during that period in the area assigned to it for billets, but it is authorised to occupy also Bistrzitz, Grudek and Konskau. Accordingly, further orders are to be issued to the following effect:—

No. 1 infantry regiment and staff and No. 1 squadron of No. 1 Uhlan regiment to go to Konskau.

The staff and two battalions of No. 2 infantry regiment to go to Trzynietz.

No. 3 infantry regiment and 3rd squadron of No. 1 Uhlan regiment to Bistrzitz and Grudek.

The staff and two battalions of No. 4 infantry regiment and No. 3 battery of No. 1 regiment of divisional artillery to Lischwitz.

The troops will draw their supplies themselves from 3rd July onwards from the billeting magazine in Teschen.

Medical orders have been issued by army corps headquarter staff to the effect that from 3rd July onwards the sick will be sent daily, during the afternoon, to the collecting station for sick in the infantry barracks at Teschen.

The railway line Jablunkau—Trzynietz—Teschen is not open for traffic."

Points to be worked out by the P.M.O. 1st Division.

Point 1. Proposals for inclusion in the order altering the arrangements for billeting.

Point 2. P.M.O's supplement to the billeting orders, to be issued by 7 p.m.

Time allowed—2 hours.

Method of working out the above.

Point 1.

Konskau is suggested as the place for billeting the divisional medical unit, and, in arranging the billets, consideration must be given to the establishment of a local hospital for 100 sick, for which purpose Schloss Konskau is suggested.

Point 2.

Headquarters 1st Division.

Supplement to Billeting Orders.

Divisional Headquarters, Trzynietz, 1st July, 7 p.m.

MEDICAL ORDERS. Sick will be sent to the collecting station for sick in the infantry barracks at Teschen, through the local hospital in Konskau.

Ambulance wagons will take over the sick in Bistrzitz, Lischbitz, Trzynietz, Nd. and Ob. Lischna, and Koikowitz, daily, during the afternoon.

Addendum for the Divisional Medical Unit.

The divisional medical unit will prepare a local hospital for 100 sick.*

For bringing in the sick, two journeys daily will be made as follows:—

1. 4 ambulance wagons for sick from Bistrzitz and Lischbitz.

2. 3 ambulance wagons for sick from Koikowitz, Ob. and Nd. Lischna, and Trzynietz.

The sick will be sent during the afternoon to the sick collecting station at Teschen, in ambulance wagons, daily from the 3rd July onwards.

Fair copy made.

Examined.

Submitted for issue with Orders. 1st July. 6.30 p.m.

(Signed)
P.M.O., 1st Div.

* NOTE.—The calculation is made on the assumption that the number of sick sent back daily during a period of inactivity will not amount to more than 3 per 1,000.

PROBLEM No. 2.

(Same Map as for Problem No. 1.)

General Idea.

As in Problem 1.

Special Idea.

At 5 p.m. the principal medical officer of the division received the following information:—

“The enemy’s cavalry patrols have to-day been discovered at Friedeck. The army corps will advance to-morrow morning, and the division will make good the area Woikowitz, Dobratitz, Ellgoth, Hnojnik and Nd. Toschonowitz.

The main column will advance along the main road from Lischbitz to Woikowitz in the following formation:—

Advanced guard: No. 3 infantry regiment, 1 battery, $\frac{3}{4}$ squadron, to pass WH. Duszyniec at 6.45 a.m.

Main body: $2\frac{1}{4}$ squadrons, No. 1 infantry regiment, 3 batteries, No. 2 infantry regiment, No. 1 rifle battalion, 1st line transport grouped, 2nd line transport grouped, 1 supply echelon, divisional

ammunition park, divisional medical unit, divisional bakery and the infantry supply column.

The head of the column will pass the junction of the roads N.W. of Niebory at 8 a.m.

Left column : No. 4 infantry regiment, $\frac{1}{4}$ squadron, to march behind the advanced guard as far as the road that branches off the main road 1 km. west of Duszyniec, and then proceed to Ellgoth by way of Rakowitz and Smilowitz.

With the exception of skirmishes on the part of the protective troops there will be no chance of conflict with the enemy.

The sick will be sent to the sick collecting station at Teschen (infantry barracks), for which purpose the wagons of the supply echelon that are returning there to be re-filled to-morrow may be used.

Traffic on the railway line is suspended.

At Teschen a convalescent company will be formed under the command of Lieut. N., 6th Infantry Regiment."

Points to be worked out by the P.M.O. 1st Division.

Point 1. Proposals for inclusion in the tactical portion of the march orders.

Point 2. P.M.O.'s supplement to march orders to be issued at 7 p.m.

Time allowed— $1\frac{1}{2}$ hours.

Method of working out the above.

Point 1. An aid-post wagon is to be allotted to the advanced guard. A detachment of medical personnel, consisting of 1 non-commissioned officer and 8 privates, with 1 aid-post wagon and 4 ambulance wagons, will be attached to the left column.

Point 2. The time for the assembly of the sick depends upon the time when the divisional medical unit moves off. Before it does so a column of 8 battalions, 3 batteries, grouped 1st and 2nd line transport, supply echelon and the divisional ammunition park—roughly 13,000 paces long, equal to 2 hrs. 10 mins.—has to move off.

The divisional medical unit should, therefore, be timed to reach the junction of the roads 2 hrs. and 10 mins. after 8 a.m., that is to say at 10.10 a.m. It can reach the spot by way of the road through Konskau, (a distance of 4 miles), in 1 hour and 40 mins. It should move off therefore about 8.30 a.m.

The sick will be assembled up till 7.30 a.m., and this is possible without making them start too early, (the maximum distance to the assembly point being 3 miles).

Consequently, the supplement to the order will be as follows:—

(It will take the general form of the order given in

Point 2 of Problem 1, except that the heading will be "Supplement to March Orders.")

Text :

"All the men reporting sick and men unfit to remain with their units will be sent back in the empty supply wagons to the collecting station for sick in the infantry barracks at Teschen. They will assemble at the divisional medical unit in Trzynietz up to 7.30 a.m. The men unfit to march in the ranks will be formed into a 'convalescent company' at Teschen under the command of Lieut. N. of No. 6 Infantry Regiment."

PROBLEM No. 3.

(Same Map as for Problems 1 and 2.)

General Idea.

As in Problem 1.

Special Idea.

The principal medical officer of the 1st division is informed at 5 p.m. as follows:

"A hostile cavalry brigade has reached Friedeck to-day, and a strong force of infantry is expected there to-morrow. It is understood that a division of the enemy is assembling in the Waagtal.

The army corps will advance to the line Woikowitz-Nd. Domaslowitz.

The 1st division has been ordered to send the 2nd Infantry Brigade, two batteries of artillery, and one squadron towards the Jablunka Pass, where, under the general officer commanding the 2nd Brigade, this force must be prepared to meet a possible offensive movement on the part of the enemy from the Waagtal.

The main body of the division will advance in the morning along the main road to Hnojnik, and then, by way of Ellgoth, to the area Rakowitz—Dobratitz. The advanced guard will consist of one battalion, and the head of the main body will pass the junction of the roads N.W. of Trzynietz at 6 a.m. The divisional medical unit will join the column direct. Serious fighting is not expected.

The sick will be evacuated by the improvised ambulance train leaving Teschen central station at 7.30 a.m. The empty wagons of the supply echelon at Teschen will be available for transport.

The Jablunka Pass force has been told to send its sick to the rest station with accommodation for the night, improvised at Teschen in the station hotel. Traffic on the railway line Jablunkau—Teschen is suspended."

Points to be worked out by the P.M.O. 1st Division.

Point 1. Proposals for inclusion in the tactical portion of march orders.

Point 2. P.M.O's. supplement to march orders to be ready for issue at 7 p.m.

Time allowed— $1\frac{1}{2}$ hours.

Method of working out the above.

Point 1. A subsection of the lightly wounded station section, of the dressing station section, of the ambulance section, and of the medical and surgical reserve section of the divisional medical unit, together with four aid-post wagons and seven ambulance wagons, should be attached to the 2nd Infantry Brigade. An aid-post wagon should be allotted to the advanced guard of the 1st Infantry Brigade.

Point 2. The time for the assembly of the sick depends upon the departure of the train. From Trzynietz to the railway station the distance is about five miles, that is to say two hours' journey by road. The sick ought to arrive at the railway station at latest by 7 a.m., preferably somewhat earlier. The sick must therefore be sent away from the divisional medical unit before 5 a.m., and accordingly should arrive there at 4 a.m. for classification previous to being sent off.

Taking into consideration the time of year and the comparative proximity of the troops, the idea of assembling the sick in the evening, with its many disadvantages may be abandoned.

Accordingly, the supplement to march orders will be as follows:—

(The form will be as in Point 2 of Problem 1, but headed "Supplement to March Orders.")

"The sick will be evacuated by the improvised ambulance train leaving the central station at Teschen at 7.30 a.m. They will assemble at the divisional medical unit in Trzynietz up till 4 a.m. Empty wagons of the supply echelon are to be used for transport to Teschen."

Addendum for the 2nd Infantry Brigade.

Until further orders sick will be sent back to the rest station with accommodation for the night improvised at the railway station hotel, Teschen."

PROBLEM No. 4.

(Same Map as for Problems 1, 2 and 3.)

General Idea.

The same as in Problem 1, with this difference—that the area where the division is billeted will be protected by a strong line of outposts consisting of 2 battalions of No. 3 infantry regiment, 3 batteries of artillery, $\frac{1}{4}$ squadron of cavalry with 1 aid-post wagon. The outpost reserve will be at MH. Niebory.

Special Idea.

The principal medical officer of the division is informed at 3 p.m. as follows:—

“A strong force of the enemy has arrived in the vicinity of Friedeck, Brusowitz, Dobrau, Skalitz.

In accordance with preliminary march orders from the head-quarter staff of the army corps, the division will advance at an early hour to-morrow morning to attack the enemy. All available vehicles will be requisitioned, and, along with the wagons of the supply echelon that would be returning empty to day, will be got ready for transport of wounded.”

At 7 p.m. the divisional principal medical officer is informed that the division will advance to-morrow in the following order:—

“Column under the general officer commanding the 2nd Brigade: 2nd Infantry Brigade, 1 battery, and 1 squadron, by way of Niebory, Rakowitz, Smilowitz towards Dobratitz.

The head of the column will cross the Tyrre bridge at 4 a.m.

Main column under the general officer commanding the division: 1st Infantry Brigade, 3 batteries, 2 squadrons, the divisional medical unit, and the divisional ammunition park, by Konskau along the main road to Woikowitz.

The head of the column will reach the junction of the roads N.W. of Niebory at 5 a.m.

Right Column: Rifle battalion No. 1 and $\frac{1}{4}$ squadron; must have passed the bridge over the Olsa at 3.30 a.m., marching by northern outskirts of Konskau, Roppitz, Trzytiesch, and Nd. Toschonowitz.

The 1st line transport will assemble at 6 a.m. in the fields near MH. Trzynietz. The 2nd line transport will assemble up till 6.30 a.m. E. of Trzynietz, according to instructions received from the commandant of the divisional transport.

The transport columns will stand fast.

The army corps orders contain the following under the heading ‘medical orders’:—

‘The wounded will be evacuated from the area of fighting to the wounded collecting station in the railway station at Teschen, where all the sick and men unfit to march in the ranks will also be sent.

The 1st infantry division will retain 35 of the country carts equipped by its units for the transport of wounded. The remaining carts will join the corps reserve of wagons, which will assemble up till 9 a.m. in the area between the road Teschen—Friedeck and Ob. Zukau.’”

Points to be worked out by the P.M.O. 1st Division.

Point 1. P.M.O's. supplement to the preliminary march orders to be issued between 3 and 4 p.m.

Point 2. Proposals for inclusion in the tactical portion of march orders.

Point 3. P.M.O's. supplement to the march orders, to be issued at 9 p.m.

Time allowed—2 hours.

Method of working out the above.

Point 1. Taking into consideration the early start, it is recommended that the sick should be assembled during the evening. The supplementary orders would therefore be as follows:—

Headquarters, 1st Infantry Division.

Supplement to Preliminary March Orders.

Divisional Headquarters, Trzynietz, 1st July, 3.30 p.m.

MEDICAL ORDERS. The sick that have to be evacuated will be sent to the divisional medical unit in Trzynietz during the afternoon. The divisional medical unit is responsible for arranging accommodation for them.

All available country carts will be requisitioned, and, along with to-day's empty supply wagons, will be got ready for transport of wounded.

Fair copy made.

Examined.

Despatched,

1-7, 3.30 p.m.

(Signed)

P.M.O. 1st Division.

Point 2.

1. A medical detachment consisting of two aid-post wagons, 6 ambulance wagons, 1 non-commissioned officer and 12 men of the medical corps, in addition to the aid-post wagon belonging to the outposts, is to be attached to the column under the general officer commanding the 2nd Brigade.

An aid-post wagon is to be attached to the van guard battalion of the main column, and one will follow in rear of the leading battalion and another in rear of the leading regiment of the main body.*

2. All country carts and empty supply wagons, with the exception of those that are required for the evacuation of sick to Teschen, are to be assembled at 6.30 a.m. at the junction of the roads N.W. of Niebory. The commandant of the transport will take 35 wagons to the main column, and send the rest by way of Trzytiesch to Ob. Zukau, where they must arrive not later than 8.45 a.m., to be placed at the disposal of the commandant of the army corps reserve of wagons.

Point 3. The wording of the second proposal can be accepted, after approval, as it stands, so that it need not be re-written for the supplement to march orders.

The supplement will consequently only refer to the orders for the evacuation of the sick that have already been sent to the divisional medical unit and for the transfer of the men unfit to march in the ranks and those who report sick during the night. The supplement will therefore be as follows:—

Headquarter Staff, 1st Infantry Division.

Supplement to march orders.

Divisional Headquarters, Trzynietz, 1st July, 9 p.m.

MEDICAL ORDERS. All men who report sick during the night and men unfit to march in the ranks are to be sent with the 1st line transport to the place where the latter assembles. The officer in charge of the 1st line transport will arrange for their conveyance to the railway station at Teschen in conjunction with the sick already waiting evacuation in the medical unit at Trzynietz.

Addendum for the divisional medical unit.

Two empty country carts are to be left behind as a reserve for the transport of sick.

Dictated during the preparation of orders. 1st July, 8 p.m.

(Signed)
P.M.O. 1st Division.

* It is not necessary to divide the divisional medical unit sections into sub-sections, as both brigades will be engaged in the same area. No vehicle will be allotted to No. 1 rifle battalion, as its line of march will be constantly crossing and re-crossing the area.

The placing of the aid-post wagons in the column of the general officer commanding the 2nd Brigade is a matter for the senior medical officer of the column to arrange. He will attach to the vanguard the wagon that has already been with the outposts.

PROBLEM No. 5.

(Map 1 : 200,000, 36°, 50°. Troppau.)

Scheme.

The 3rd Army Corps, forming part of the First Army advancing from the East, reached the following position on 15th June :

Headquarters at Karwin.

The 7th Infantry Division at Deutschleuten, Polnischleuten and Dittmannsdorf, with headquarters at Deutschleuten.

The 8th Infantry Division at Poremba, Orlau, Lazy, Karwin and Dombrau, with headquarters at Orlau.

The 9th Landwehr Division at Altstadt, Freistadt, Darkau and Roy, with headquarters at Freistadt.

Only the 1st line transport and the supply echelon with supplies for issue are with the divisions.

The army corps transport column is in the area of N. Katschitz, Schimoradz, N.W. of Skotschau, Zaborz, and Schwarzwasser, with the commandant of the column and field hospital No. 7, which has been attached to the army corps at N. Katschitz.

The most advanced line of protective troops is on the Reichwaldau ridge, by way of Skrzeczon and as far as Willmersdorf on the Olsa.

The enemy's outposts have been located on the Oder, facing this position.

Army headquarters are at Teschen.

The railway lines in the area of operations of the army corps are open for traffic.

At 3.30 p.m. the army corps headquarter staff issued a preliminary order for an advance next day, ordering all available country carts to be requisitioned, and both these and the empty supply wagons to be prepared for transport of wounded.

At 6.30 p.m. the principal medical officer of the corps is informed as follows :—

"The army will attack at daybreak to-morrow. The area between the lake at Hruschau and the Olsa is assigned to the 3rd army corps with the 7th and 8th Infantry Divisions. The 9th Landwehr Division of the corps will form the army reserve ; the head of its column is to reach the area S. of Orlau at 5 a.m. and to concentrate there.

At 3 a.m. the army corps will occupy the following positions behind the line of outposts in open formation :

The 8th Infantry Division, less the 16th Infantry Brigade, from the railway at Reichwaldau up to and including the hill marked 241 on the map ;

The 7th Infantry Division along with the corps artillery in touch with the right of the 8th division as far as the Olsa ;

The 16th Infantry Brigade W. of Polnischleuten as an army corps reserve.

The 1st line transport assembles E. of the Olsa.

The medical orders of the commander-in-chief of the army are to the following effect:—

“Evacuation of wounded from the battlefield: 3rd and 4th army corps to railway halt Dittmannsdorf; 2nd and 3rd army corps to Orlau. Arrangements for the evacuating stations to be made by the 3rd army corps. In each place 1 hospital train and 1 improvised ambulance train will be ready at 6 a.m. Any further train that may be required will be requisitioned for from the director of railways at Teschen.

The commandant and 6 medical officers of field hospital No. 8 arrive by the improvised ambulance train that is being brought up to Orlau, and will then be at the disposal of the 3rd army corps.”

Points to be worked out by the P.M.O. 3rd Army Corps.

Point 1. Medical appreciation of the situation.

Point 2. Plan of medical arrangements for the battle in the form in which it will be placed before the general officer commanding the army corps.

Point 3. P.M.O's. supplement to the operation orders for 16th June, to be issued at 8 p.m., and special orders.

Time allowed—4½ hours.

Method of working out the above.

Point 1.

Appreciation of the military situation.

Army corps acting in army combination. A battle directly imminent. Planned attack. Battlefield on the Oder, on both sides of Oderberg. The 16th Brigade as corps reserve. The 9th Landwehr Division as army reserve with independent duties assigned to it.

Conditions affecting evacuation of sick and wounded.

Evacuation from Dittmannsdorf and Orlau is uninterrupted, and, in consideration of the permission to requisition as many railway trains as may be wanted, unlimited. The maximum distance to these places is 8 km. (5 miles) along good roads. Dittmannsdorf is specially suitable for evacuation from the 7th Division, and Orlau for evacuation from the 8th.

Evacuation of wounded during the battle.

(a) Collecting station for wounded.

Dittmannsdorf and Orlau are suitable localities. Preparations for establishing the collecting stations to be carried out by the divisions billeted there. The lightly wounded sections of their medical units may also advantageously be opened there.

In Dittmannsdorf the commandant of No. 7 field hospital will take charge of the evacuation arrangements. He will be able to reach Dittmannsdorf, accompanied by 2 junior medical officers, at 6 a.m. by starting from N. Katschitz before 5 a.m., the distance being 12 km. (9 miles).

The commandant of No. 8 field hospital will take over charge of the work at Orlau, two of his junior medical officers being left with him.

The men of the 7th Division unfit to march with their units will be employed at Dittmannsdorf, those of the two other divisions at Orlau. In both places the local inhabitants will also be employed.

The officers in charge of each collecting station for wounded will be responsible for the requisitioning of further transport material and personnel.

(b) *Preparation of vehicles.*

The vehicles may be left with their divisions, in view of the fact that the entraining station is in the vicinity and the divisions are already in position for attack. Only the vehicles of the 16th Infantry Brigade, which is not yet in fighting formation, and No. 7 wounded transport column of the Red Cross, may be regarded as forming a corps wagon reserve.

In order to avoid crossing the lines of movement, the spot where the vehicles are held in readiness must be near the battlefield. If the nature of the country is taken into consideration, this is of less moment than it appears. The junction of the roads S.W. of Dombrau is recommended as the spot to select. It is near all parts of the fighting area and easily reached from it, while it is also a good position in case of retreat, which would not be the case were Polnischleuten, which is behind the centre, selected.

Vehicles that bring in wounded are to be sent back from the railway stations direct to the dressing stations, and not, as is customary, to the wagon reserve of the corps.

Taking into consideration the time of the advance of the 9th Landwehr Division, the vehicles will assemble at 8 a.m., at which time also No. 7 wounded transport column of the Red Cross will have arrived (distance 11 km.). All vehicles of the 9th Landwehr Division must be left with the division, in view of the fact that it is operating independently.

The officers in charge of the wounded collecting stations must be instructed to send back to the dressing stations, after they have been unloaded, all the vehicles that come in with wounded.

(c) *Reinforcing the dressing stations.*

Four medical officers from No. 7 field hospital and four from No. 8 field hospital will be placed at the disposal of

the dressing stations. Those from No. 8 will arrive by railway and without further means of transport. They must therefore be taken on by the personnel wagon of the medical officers of No. 7 field hospital. The medical officers will assemble at the corps wagon reserve and hold themselves in readiness there by 8 a.m., those of No. 8 field hospital proceeding there on foot (distance 1.5 km.).

(d) *Medical equipment and personnel for the detached group.*

In view of the fact that the area of battle is small and that there is little likelihood of the small army corps reserve being employed outside it, the allotment to it of subsections of No. 8 divisional medical unit need not be contemplated. The reserve will, of course, be supplied with aid-post wagons, but ambulance wagons may be omitted.

Care of the wounded on the battlefield after a victory.

No. 7 field hospital will be available. A section of the hospital need not be detached to proceed with the 9th Landwehr Division since this would only add to the transport of the division, and the army headquarter staff would take into consideration the area, in which it will be placed, in distributing the army reserve of field hospitals.

The field hospital will be kept ready to advance at the cross roads E. of Freistadt, about 14 km. ($8\frac{1}{2}$ miles) from the battlefield and behind the line of the Olsa. Time of assembly 8 a.m. If necessary, it can remain at the place where it is parked, at N. Katschitz.

Evacuation of Sick.

All sick and men of the 7th Infantry Division unfit to be in the ranks will go to Dittmannsdorf, and those of the two other divisions to Orlau, the 9th Landwehr Division taking them there with it. The army corps transport column will not send its sick back.

Point 2.

Plan of medical arrangements for 16th June.

1. Wounded will be evacuated from the fighting area to Dittmannsdorf in the case of the 7th Infantry Division, to Orlau in the case of 8th Infantry Division. The above divisions will make the preliminary arrangements for establishing the entraining stations at these places. The officer in charge of No. 7 field hospital will command the station in Dittmannsdorf. He will arrive there at 6 a.m. The officer in charge of No. 8 field hospital will command the station at Orlau. The remaining personnel will be composed of 2 medical officers from each of the field

hospitals, the personnel of the lightly wounded section of the divisional medical units, the "convalescent company" of the divisions, and local inhabitants.

Empty vehicles are to be sent back to the dressing stations. Requisition for further ambulance trains will be made by the officers commanding the wounded collecting stations.

2. Army corps reserve of wagons: The vehicles of the 16th Inf. Brigade, and No. 7 wounded transport column of the Red Cross will assemble at 8 a.m. at the junction of the roads S.W. of Dombrau. All other vehicles will remain with their divisions.

3. Four medical officers from No. 7 field hospital and 4 from No. 8 field hospital will be assembled at 8 a.m. with the corps reserve of wagons and will have with them the personnel wagon of the former hospital for their mutual use.

4. Field hospital No. 7 will assemble at 8 a.m. E. of Freistadt.

5. All sick and unfit of the 7th Infantry Division will go to Dittmannsdorf, of the other two divisions to Orlau.

Point 3.

The above medical arrangements are to be taken as approved, with this alteration that No. 7 field hospital will remain where it is parked. The supplement to operation orders is consequently drafted as follows:—

Headquarter Staff 3rd Army Corps.

Supplement to operation orders for 16th June.

H-Q. Staff 7th Infantry Division	Deutschleuten	1
" " 8th Infantry Division	Orlau	2
" " 9th Landwehr Division	Freistadt	3
O.C. corps transport	N. Katschitz	4

Army corps headquarters, Karwin, 15th June, 7.30 p.m.

1, 2,*

MEDICAL Evacuation of wounded from battlefield will be to
ORDERS. the

* These numbers refer to the table above and indicate to which of the staffs the information is sent, or by which the order is to be executed.

1

Railway halt, Dittmannsdorf,

2

Railway station, Orlau,

1, 2,

where arrangements for preparing wounded collecting stations are to be taken in hand at once. The command is taken over at 6 a.m. by the commandant of

1

No. 7 field hospital;

2

No. 8 field hospital;

1, 2,

Personnel and material will be the lightly wounded section of the divisional medical units, 2 medical officers from each of the field hospitals, the convalescent company, local inhabitants.

The officers commanding the lightly wounded sections are to instruct the officers commanding the field hospitals in the general situation, and to inform them that in addition to the two ambulance trains, ready at 6 a.m., they may requisition other trains direct from the director of field railways at Teschen, and also that vehicles arriving with wounded must be sent back, after being unloaded, to the dressing stations.

2

The officer commanding the field hospital is further to be instructed to arrange that 4 of his medical officers are to assemble at 8 a.m. at the junction of the roads S.W. of Dombrau and place themselves at the disposal of the general officer commanding the army corps. They will have at their disposal the personnel wagon of No. 7 field hospital.

The vehicles of the 16th Infantry Brigade, prepared for transport of wounded, will also be held in readiness there from 8 a.m. onwards under the command of the officer in charge of No. 7 wounded transport column of the Red Cross. The rest of the vehicles remain at the disposal of the general officer commanding the division.

1, 3

The vehicles prepared for transport of wounded remain at the disposal of the general officer commanding the division.

1-3

All sick and unfit will be sent to the wounded collecting station ;

3

(railway station Orlau).

4.

The sick will remain with the transport.

The officer commanding No. 7 field hospital, with 2 medical officers, will arrive at the railway halt at Dittmannsdorf at 6 a.m. to take over charge of the wounded collecting station there. Further instructions will be obtained through the lightly wounded section of No. 7 infantry division medical unit remaining there.

Four medical officers and the wounded transport column of the Red Cross will assemble at the junction of the roads, S.W. of Dombrau, at 8 a.m. The personnel wagon of the former will also be at the disposal of 4 medical officers of No. 8 field hospital, who arrive at the same time. The officer commanding the wounded transport column of the Red Cross will take command of the corps wagon reserve, (vehicles of the 16th Infantry Brigade).

The field hospital will remain where it is parked, ready to advance.

Dictated at the issue of orders.

15.6. 7.30 p.m.

(Signed)
Staff Officer to P.M.O.

NOTE.—The above order is initialled in the margin as follows ; “ 7.30 p.m.
P.M.O. 3rd Army Corps.”

PROBLEM No. 6.

(Same Maps as for Problems 1-4 and 5, and Supplements 1 and 2.)

General Military Situation.

Krakau is surrounded by the enemy. The main army is advancing from Upper Hungary to its relief. The 2nd Army Corps that is concentrated in Moravia and Silesia forms an independent group, and

has been ordered to advance by way of Teschen, drive back the enemy's forces that are believed to be marching against that town, and co-operate in the relief of the fortress.

In consequence of previous operations the railway lines in the area of operations have been interrupted in many places, so that for the time being railway connexion in a south-westerly direction is open only from Neutitschein, where the distributing station for the sick of the army corps will be established.

Scheme.

The area reached by the 2nd Army Corps on 31st August, where it will stay the night, is shown on Supplement 1.

The Chief of the General Staff gives the principal medical officer of the army corps the following information at 4 p.m.:—

“Our cavalry division victoriously engaged a strong body of the enemy's cavalry this morning. About 120 wounded had to be accommodated in Schloss Toschonowitz, and have already been taken over by the 13th Landwehr Division.

According to information just received, the 4th Infantry Division from Troppau will not reach the area where it will be billeted until towards the evening. In consequence of the great heat and length of the march many men have already fallen out.

The 25th Infantry Division that is advancing from the Waagtal to join the 2nd Army Corps sends information that its advanced troops have occupied the Jablunka Pass without opposition.

Two infantry divisions of the enemy have taken up their quarters to-day at noon in the neighbourhood of Teschen. Their advanced posts are on the hills W. of the Olsa.

The general officer commanding the army corps has decided, with respect to the engagement that is expected to take place in the morning, first of all to occupy with the 13th Landwehr Division the hills at Toschonowitz as a defensive position, defence works being constructed during the night, to move the 4th Infantry Division to the neighbourhood of Pitrau about 7 a.m., and then to attack with both divisions in order to facilitate the deploying of the 25th Infantry Division, which has been ordered to advance on Teschen from the Jablunka Pass.

The 3rd Cavalry Division is to push forward by way of Trzytiesch against Teschen, to delay the advance of the enemy against the position held by the 13th Landwehr Division.

(The approximate position of the troops at 7 a.m. is shown on the tracing, Supplement 2.)

According to a telegram received from the War Office the following will arrive by rail at Neutitschein on 1st September, and be placed at the disposal of the general officer commanding the army corps:—

At 5 a.m. 14 medical officers and 4 reserve medical detachments.

At 10 a.m. material for 1 mobile reserve hospital, 1 field convalescent depôt and 1 mobile rest station, as well as a reserve of material.

If necessary, the means of evacuation daily from Neutitschein can be immediately increased by 4 hospital trains and 10 improvised ambulance trains of 25 cars each. Direct communication as to require-

ments will be maintained with the director of railways, who has already received instructions with reference to the matter.

The plan of medical arrangements, based upon this information, is to be placed before the general officer commanding the army corps by 6 p.m. In it he will be informed—

- (a) Of the arrangements for the evacuation of wounded during the battle.
- (b) Of the places where the medical units will be drawn up.
- (c) Of the arrangements for the evacuation of the sick and wounded in the early morning.

In connexion with this, consideration must be given to the fact that should the engagement go against us on the line of the Ostrawitza, and consequently on the hills W. of that river, renewed efforts will be made and a strong resistance will be offered.

The supply wagons may be used for medical purposes."

Points to be worked out by the P.M.O. of the 2nd Army Corps.

Point 1. Medical appreciation of the situation.

Point 2. Plan of medical arrangements to be placed before the general officer commanding the army corps.

Point 3. P.M.O.'s supplement for the operation orders for 1st September, to be issued at 7.30 p.m.

Point 4. Position in column of march of the divisional medical unit of the 4th Infantry Division during the advance on 1st September. Details of the fighting groups are shown on the tracing, Supplement 2. Time allowed—6 hours.

Method of working out the above.

Point 1.

Appreciation of the military situation.

The army corps is acting independently. An engagement is imminent, and the first measures to take are to prepare for the defence of the area around Toschonowitz, later on for an attack against Teschen, and, if the troops are driven back, for fighting also in the area right up to the Ostrawitza.

The 25th Infantry Division is operating in combination at a distant part of the field. Its medical arrangements are independent.

Conditions affecting evacuation.

Evacuation will be to the sick distributing station at Neutitschein, where there are 880 hospital and convalescent dépôt beds vacant. Evacuation is free from interruption, is equal in round numbers to 2,600 daily, and is, therefore, unlimited so far as the army corps is concerned.

Transport to Neutitschein is by road. The distance is 30 km. (18 miles) in the case of the 4th Division and 38 km. (23 miles) in the case of the 13th Landwehr

Division from the positions reached by them. From the area of fighting the distance is over 40 km. (25 miles), and accordingly shelter overnight at some intermediate spot will be necessary.

In the case of victory, consideration must be given to limiting the numbers evacuated, seeing that transport is by road, and that previously there was no evacuating station for sick. (Freiberg, Friedek and Mistek are to be utilised, and an evacuating station is to be established at Teschen.)*

Evacuation of wounded during the battle.

(a) *The wounded collecting station.*

The main line of evacuation from the battlefield to Neutitschein is the high road leading to that town through Friedek, Mistek and Freiberg. Along this route, only Friedek and Mistek (12 km.), and Freiberg (29 km. from the battlefield), can be considered for purposes of improvising medical posts, etc. The remaining places offer very few resources, the best being Richaltitz (23 km.).

Friedek and Mistek are situated in the valley of the Ostrawitza, which may become the scene of conflict. They must not, therefore, be chosen for the establishment of a wounded collecting station. There remain, therefore, only Freiberg and possibly Richaltitz. Against the former is the distance, especially as the attack may advance to Teschen. Against the latter is the smallness of its resources.

In any case evacuation to Freiberg is possible, at least from the area where fighting is anticipated at the commencement, especially if arrangements can be made for giving the wounded during the journey a prolonged period of rest and refreshment. Should the attack make such progress that there is no anxiety regarding retirement upon the Ostrawitza, Mistek can always be utilised in the second phase of the battle.

Arrangements for improvising the wounded collecting station can be carried out in Freiberg in No. 2 field hospital that is quartered there, while at the same time No. 1 field hospital at Mistek can make arrangements for the utilisation of that place. At Freiberg arrangements will be made for 1,200 to 1,500 wounded out of the evacuation resources that are there available. Abundant personnel is to be found there, especially from amongst the medical officers and men of the transport corps, who remain in the place, the convalescent company that is to be formed on the morning of 1st September, and the reserve personnel that is to arrive at Neutitschein

* The preparation of an evacuating station for sick at an intermediate spot need not be considered during strategical concentration, especially if offensive operations are likely to occur in a more advanced position.

at 1 a.m. With the exception of a reserve medical detachment kept back for disposal as required, all this reserve personnel is available, and Neutitschein is amply supplied with improvised ambulance trains already prepared by the War Office. If the members of the reserve personnel go on immediately to Freiberg (distance 10 km.), they can arrive there by 8 a.m., the medical officers even earlier if they go on in the wagons that would no doubt be leaving Neutitschein for Freiberg. It is advisable for the officer commanding No. 2 field hospital to remain in Freiberg until he has handed over the improvised wounded collecting station to the officer commanding the reserve personnel.

Local inhabitants are to be employed here, and also in Mistek, as auxiliary personnel.

Material will be obtained in Freiberg; surgical dressings and medicines which are indispensable for replenishing expenditure may be left behind by the field hospital, on the understanding that by 10 a.m. the material of the mobile rest station will have come up.

Subsequent transfer of a portion of the reserve personnel to Mistek can, in case of necessity, be ordered by telegram.

(b) *Preparation of vehicles.*

All the country carts that can be requisitioned, and the empty supply wagons, (2 infantry and 1 cavalry supply echelon and 1 echelon of the corps supply column), are to be prepared for the transport of wounded. As regards the place where they and the two wounded transport columns of the Red Cross are to be kept in readiness, the fact that the 13th Landwehr Division will be burdened with the wounded of the cavalry who may fall in the impending conflict, must be taken into consideration, and whom it will be absolutely necessary to evacuate. Amongst these wounded a certain number will require the greatest possible care, and regard must also be had to the probability of the division having to fight at first in a defensive position, a condition of affairs that is favourable to continuous evacuation of wounded. All its vehicles should therefore be left with the Landwehr Division, and it should in addition be reinforced by the nearest wounded transport column of the Red Cross.

The 4th Infantry Division advances under conditions of great uncertainty, since the other division may possibly, in consequence of an attack in the early morning, be driven back before the 4th Division comes up. On the other hand, the attack may be launched against the 4th Division itself, and in such an event one cannot depend upon commencing evacuation of wounded at once. At first, therefore, this division requires only a few vehicles; if it were given more it would only be embarrassed. Twenty wagons will be sufficient, and the

remainder, so long as they are not required for the evacuation of the large number of sick that is anticipated, will remain behind as a corps wagon reserve.

The 3rd Cavalry Division would also be embarrassed if too many vehicles were left with it, and 10 wagons would be sufficient for it.

As a place of assembly for the army corps wagon reserve an area east of the Ostrawitza should be considered, so as to prevent blocking the bridges in case of a retreat. At the same time the selection of this area will necessitate a useless return journey of the vehicles of the 3rd Cavalry Division, and a place somewhat nearer should therefore be selected for them, for example, west of Dobrau. The assembly should take place early, in order not to hinder any possible retreat on the part of the 13th Landwehr Division. The time of assembly should be up to 4 a.m., in consideration of the time of assembly of the cavalry, as the vehicles must be sent off previous to this.

The vehicles of the 4th Infantry Division will be kept ready at Mistek, from which place roads lead to the anticipated area of combat of both divisions. It would be best to bring them up to the main road leading from Paskau to Mistek along the banks of the Ostrawitza, and they should accordingly be held in readiness at the junction of the roads at Swiadnow.

The time of their assembly depends upon the time when the main body of the 4th Division is clear of Paskau, which will probably be about 7.30 a.m. The distance to the place of assembly is 6 km.; the time, therefore, would be 8.30 a.m.*

No. 2 wounded transport column of the Red Cross should assemble at the western entrance to Mistek, the distance thither being 15 km., or, for empty wagons, a 2 hours' journey. The column should accordingly be there at 7.30 a.m.

(c) *Reinforcing the dressing stations.*

Since the 13th Landwehr Division will possibly require its dressing station very early, the 6 medical officers of No. 1 field hospital, (which is nearest), should be attached

* The head of the main column is at Brusowitz at 7 a.m. (see Supplement Tracing 2). From Paskau thither is about 7 km., therefore the head of the column starts at 5.15 a.m. Length of the column is as follows:—

9 battalions	...	...	...	...	5,400	paces
8 batteries	...	...	...	...	3,200	"
Divisional Medical unit	...	...	...	...	800	"
Divisional Ammunition Park	...	...	...	...	2,000	"
$\frac{1}{2}$ Corps Ammunition Park	...	...	...	...	2,000	"

Total ... 13,400 "

which equals a period of $2\frac{1}{2}$ hours. In addition it must be noted that with this abnormally strong corps artillery the corps ammunition park should also be taken as correspondingly strong, that is to say 4,000 paces.

to it. For this purpose they should be directed to go to Woikowitz, and ought to arrive there, in view of the special circumstances, by 5 a.m., the journey being about one hour's duration.

Six medical officers of No. 2 field hospital will be held in reserve by the general officer commanding the army corps at the junction of the roads at Friedek, from which point they can easily reach the division operating to the north. The distance to the place where they are to assemble is 16 km.; the time therefore is 8 a.m.

Care of the wounded on the battlefield in case of victory.

The units immediately available for this purpose are the two field hospitals, and they ought to be kept in readiness west of the Ostrawitza. The assembling of these hospitals in the valley itself, where the corps reserve of wagons is already waiting, is not advisable. In spite of the fact that it involves a backward movement of No. 1 field hospital, which is always undesirable, it is better to keep the two hospitals behind the nearest hills, in other words at Lothrinkowitz, where they can arrive, No. 1 at 6.30 a.m. (three-quarters of an hour's march), and No. 2 at 8 a.m. (2 hours' 50 mins.' march). They can very well undertake the duty of providing refreshments to the wounded who are passing through and who temporarily halt there. The local resources, which are abundant, should be made use of for this purpose.

In addition, the material of one mobile reserve hospital and one convalescent dépôt arrive at Neutitschein at 10 a.m., and the possibility of establishing them on the area where the fighting has taken place should be considered.

For this purpose it is necessary to get ready certain vehicles, 50 or 60 for these two medical units and 10 to 15 for the mobile rest station. About 70 wagons must therefore be obtained from the general officer commanding the army corps, of which 15 must be ready at the railway station by 10 a.m. and the remainder in the early hours of the afternoon, namely, about 3 o'clock.* The material remains on the railway trucks in which it arrived, but every preparation should be made for rapidly unloading it.

Evacuation of sick.

The sick of the 13th Landwehr Division and of the 3rd Cavalry Division must, of necessity, remain over-

* The postponement of the hour to the afternoon gives the army corps headquarter staff time to collect a greater number of vehicles and there should be no hesitation in the matter because the vehicles will not be required, at earliest, until late in the afternoon, and there will be ample time for the medical units to advance far enough along the road the same day to enable them to establish themselves on the area of fighting on the following day.

night at Freiberg. Those of the 4th Division would be able to reach Neutitschein after a fairly long journey, but against this is the fact that the classification of the patients cannot be carried out as rigidly as is desirable when the troops start early and the number of sick and men unfit to march is expected to be considerable. The classification should therefore be done at an intermediate station, such as the wounded collecting station. All sick, and of course too the men who are unfit to march in the ranks, should therefore be sent to Freiberg.* The army corps transport column would send its sick to Neutitschein.

The wounded that are lying in Toschonowitz must also be sent to Freiberg, and, further, precautions should be taken to clear Schloss Toschonowitz before the earliest possible attack can take place—shortly, therefore, before daybreak. The ambulance wagons of the division must be employed chiefly for the conveyance of the seriously wounded, the wounded being taken over from them by the wagons of No. 1 wounded transport column of the Red Cross that is to be sent on in advance. This column ought therefore to arrive at Woikowitz, the place which would probably be selected as a dressing station in the case of defensive operations, by 5 a.m.

Point 2.

Plan of medical arrangements.

1. The wounded will be evacuated from the battlefield to a wounded collecting station at Freiberg where No. 2 field hospital will prepare for the reception of 1,200 to 1,500 wounded. They will proceed thither by way of a rest station improvised at Lothrinkowitz, where they will receive refreshment. The personnel of the collecting station will consist of 14 medical officers, 3 detachments of the reserve personnel, medical officers and men of the transport corps waiting there, the convalescent company, and the inhabitants of the locality. The material will be drawn from the mobile rest station. The officer commanding the reserve personnel will be in command; until he arrives, the officer commanding No. 2 field hospital will have charge.

Preparations will be made by No. 1 field hospital for utilising Mistek to its fullest extent as a wounded collecting station.

* It is of course left to the discretion of the officer commanding the wounded collecting station to evacuate to the distributing station for sick any sick that are fit for evacuation, after they have had refreshment and sufficient rest.

2. All the country carts that can be obtained and the empty supply wagons are to be prepared by the combatant units for the transport of wounded. The 13th Landwehr Division will retain all its vehicles, and No. 1 wounded transport column of the Red Cross, which is due to arrive at Woikowitz at 5 a.m., will also be at its disposal.

The 3rd Cavalry Division will retain 10, and the 4th Infantry Division 20 of their wagons. The remaining wagons will form the corps wagon reserve, and will assemble as follows :—Wagons of the 3rd Cavalry Division W. of Dobrau at 4 a.m., those of the 4th Infantry Division at 8.30 a.m. at the junction of the roads at Swiadnow, No. 2 wounded transport column of the Red Cross at 7.30 a.m. at the W. entrance to Mistek.

3. Six medical officers of No. 1 field hospital will arrive at Woikowitz at 5 a.m. and will be placed at the disposal of the 13th Landwehr Division; 6 medical officers of No. 2 field hospital will reach the junction of the roads at Friedek at 8 a.m. and be at the disposal of the general officer commanding the army corps.

4. Nos. 1 and 2 field hospitals will assemble at Lothrinkowitz, the former at 6.30 a.m. and the latter at 8 a.m.; they will improvise a rest and refreshment station.

The commandant of the corps transport column will requisition 70 vehicles for the transport of the mobile rest station, field convalescent depôt and mobile reserve hospital. Fifteen of them will be ready at the railway station, Neutitschein, at 10 a.m., and the remainder at 3 p.m. The material will remain on the railway trucks, but the station commandant will make arrangements for rapidly unloading it when required.

5. All the sick of the divisions and the men unfit to march are to be sent to Freiberg, those of the corps transport column to Neutitschein. Schloss Toschonowitz must be cleared of its wounded by daybreak.

Point 3.

It is assumed that the general officer commanding the army corps has approved of these arrangements, with this exception, that the whole of the corps wagon reserve will assemble W. of Friedeck, where the wagons of the 3rd Cavalry Division are to arrive at 5 a.m.

The principal medical officer of the corps, or his staff officer, will then prepare the following orders, No. 1 field hospital (which is quartered outside the area of the corps transport column) receiving a special copy.

*Headquarter Staff 2nd Army Corps.***Supplement to Operation Orders for 1st September.**

H.-Q. 13th Lw. Division	Woikowitz	1
H.-Q. 3rd Inf. Division	...	...	Paskau	2
H.-Q. 4th Cav. Division	...	...	Dobratitz	3
Commandant Corps Transport	...	...	Freiberg	4
No. 1 Field Hospital ...	...	...	Mistek	5
Ry. Station Staff Officer	...	...	Neutitschein	6

Army Corps Headquarters, Dobruu, 31st August, 7.30 p.m.

1—6.

MEDICAL Evacuation of wounded from the area of fighting will
ORDERS. be through an improvised rest and refreshment station
 in Lothrinkowitz to the wounded collecting station at
 Freiberg.

1—3.

All sick and men unfit to march in the ranks,

1.

the wounded also

1—3.

will be sent early in the morning to Freiberg.

1.

The wounded must be cleared by daybreak from Schloss Toschonowitz. The seriously wounded will be sent in the divisional ambulance wagons as far as Woikowitz; from there to Freiberg they will be conveyed in the wagons of No. 1 wounded transport column of the Red Cross, which arrives at Woikowitz at 5 a.m. with 6 medical officers of No. 1 field hospital to be placed at the disposal of the general officer commanding the division.

1—3.

All country carts that can be obtained and the empty supply wagons are to be prepared for transport of wounded, and there will remain

2

20 wagons,

3

10 wagons,

1—3.

at the disposal of the general officers commanding divisions.

2, 3.

The remainder of the wagons, when no longer required for the evacuation of sick, will assemble and form a corps wagon reserve

2

at 8.30 a.m.

3

at 5 a.m.

2, 3.

W. of Mistek.

4

Sick will be evacuated to Neutitschein.

No. 2 field hospital is to make preparations for the reception and care of 1,200 to 1,500 wounded at Freiberg. Personnel: the reserve personnel arriving there at 8 a.m. medical officers and men of the transport corps during time of waiting, the convalescent company that is to be formed early in the morning, and the local inhabitants. During the course of the day the material of a mobile rest station will arrive at Freiberg. The commandant of No. 2 field hospital will remain there until he hands over the station to the commandant of the reserve personnel. The latter is to make himself acquainted with the general situation, and to pay special attention to the possible contingency of having to send personnel to the wounded collecting station that may be prepared at Mistek.

No. 2 field hospital is to remain in readiness at 8 a.m. at Lothrinkowitz, and its wounded transport column of the Red Cross at 7.30 a.m. W. of Mistek. Six of its medical officers are to be at the disposal of the general officer commanding the army corps at 8 a.m. at the junction of the roads in Friedek.

For transport of the medical and surgical equipment 70 vehicles are to be requisitioned, and to be at the railway station, Neutitschein, 15 of them at 10 a.m., and the remainder at 3 p.m.

5.

Preparations are to be made at Mistek for rapidly improvising, if required, a wounded collecting station there. Six medical officers and the wounded transport column of the Red Cross will proceed to Woikowitz, arriving at 5 a.m. and be at the disposal of the general officer commanding the 13th Landwehr Division.

The field hospital will remain at Lothrinkowitz from 6.30 a.m. onwards and by means of local resources will improvise a rest and refreshment station there for convoys of wounded passing through.

6.

The commandant of the reserve personnel, immediately upon arrival, is to be directed to proceed with all his medical officers and 3 reserve medical detachments to take over forthwith the wounded collecting station at Freiberg. He will take over from the commandant of No. 2 field hospital the station that has already been improvised, and will be informed as to the general situation.*

Of the medical and surgical equipment arriving at 10 a.m., that belonging to the mobile rest station is to be sent forward immediately to Freiberg, on the vehicles sent for the purpose to the railway station by the commandant of the transport column. The remaining material will remain on the trucks under the charge of a reserve medical detachment, but all arrangements are to be made for rapidly unloading it on to the vehicles which the commandant of the corps transport column is to have waiting at the railway station by 3 p.m.

Dictated at issue of orders. 31.8. 7.30 p.m.

(Signed).....

Staff Officer to P.M.O.

NOTE.—The order is initialled in the margin as follows: "7.30 p.m. . . . P.M.O. 2nd Army Corps."

* This information must never be omitted in the case of a commandant who is being posted up in an entirely new situation, in order that he may be able to carry out the orders with precision. When the information cannot be given in this way it must be transmitted as a written instruction.

Point 4.

For the left flank guard.—1 aid-post wagon, 1 ambulance wagon, 1 non-commissioned officer and 4 men of the medical corps.

For the right column.—2 aid-post wagons, 4 ambulance wagons, 8 non-commissioned officers and 2 men of the medical corps.

For the main column.—2 aid-post wagons in rear of the van guard reserve, 1 behind the 4/8 battalion and 1 behind 81st infantry regiment. 20 country carts, conducted by a detachment of the transport company, to follow the corps ammunition park.

PROBLEM No. 7.

(Maps, 1 : 200,000. 35° 50' Olmütz, 36° 50' Troppau, and Supplement 3.)

Scheme.

The 1st Army Corps is marching along the line of railway, on the left wing of the first army, in the area S.E. of Neisse. The 1st Cavalry Brigade is placed under the command of the army corps commander.

The area of concentration of the corps is shown on Supplement 3. The billeting parties arrive at noon on 1st May at Neisse. The order of arrival in the concentration area is as follows :—

1st Infantry Division from 6th to 8th May.

2nd " " " 9th to 11th " .

$\frac{1}{2}$ 3rd Landwehr Division on 12th May.

1st Cavalry Brigade from 7th to 10th May.

Corps Transport Column on 13th and 14th May.

The army corps headquarter staff arrives at Neustadt at 11 a.m. on 9th May.

Medical arrangements.—The distributing station for sick of the 1st Army is at Neisse, and will be ready to receive sick and wounded from 12th May onwards.

Material and personnel for one mobile reserve hospital and one field convalescent dépôt will arrive on 7th May by a train which reaches Neisse at 6 a.m., Polnischwette at 7.15 a.m., Schnellenwalde at 7.30 a.m., Neustadt at 8 a.m., Hotzenplotz-D. Basselwitz at 8.40 a.m., and Glogau at 9 a.m. They will be at the disposal of the 1st Army Corps during the period of concentration.

For purposes of evacuating sick, two ordinary passenger trains may be utilised daily, as follows :—

			No. 1	No. 3
Depart	O. Glogau	... ..	7 a.m.	4 p.m.
"	Hotzenplotz-D. Basselwitz		7.15 "	4.15 "
"	Neustadt	... ..	8 "	5 "
"	Schnellenwalde	... ..	8.15 "	5.15 "
"	Polnischwette	... ..	8.30 "	5.30 "
Arrive	Neisse	... ..	9 "	6 "

Improvised ambulance trains will not be prepared in the meantime.

Points to be worked out by the P.M.O. 1st Army Corps.

Point 1. Conditions affecting the medical arrangements in the concentration area.

Point 2. P.M.O.'s supplement to billeting orders, which the staff officer of the billeting party prepares at noon on 5th May.

Time allowed—2½ hours.

Method of working out the above.

Point 1.

Military Situation.

The army corps is acting in combination. There is a period of inactivity until about the middle of May.

Conditions affecting evacuation.

Evacuation is stopped until 12th May at earliest. For the reception of the sick a mobile reserve hospital and a field convalescent dépôt with accommodation for 1,500 beds will be at the disposal of the corps, and this should be sufficient for all requirements.*

Care of the sick while the troops are in billets.

As one cannot depend in the meantime upon any further evacuation, Neustadt, which lies in a central position, is recommended as the collecting station for the corps on account of its position on the line of communication and its resources. Its situation on the line of rail facilitates evacuation at a later period. Suitable places will be prepared for two sections of the mobile reserve hospital, but only one section will be opened in the meantime. The field convalescent dépôt that is placed under the command of the commandant of the mobile reserve hospital may be established outside the town, for example in the sugar factory if it appears suitable.

* During the time the troops are billeted not more than 2 per 1,000 are expected to go sick daily; consequently up to the 8th May about 40, to the 12th about 285, and to the 15th about 650, will have come in.

The medical units will then be unloaded at Neustadt and be ready to receive sick on 8th May.

Since the divisions will establish local hospitals, the duty of making preparations for them in advance will fall upon the principal medical officer of the corps, who will be with the billeting party. Suitable places for this purpose are:—

2nd Infantry Division at the civil hospital, Neustadt.

1st " " " southern extremity of Ludwigsdorf.

3rd " " " at Leuber.

More definite details can be arranged after the places have been inspected.

Sick rooms for the 1st Cavalry Brigade will be in O. Glogau; for the corps transport column in Buchelsdorf, and No. 1 field hospital will be billeted in the same place.

Special preparations are not necessary for the short transport by road to Neustadt. The 1st Cavalry Brigade will use, for evacuation of its sick, the ordinary passenger train, No. 3, that runs in the afternoon.

Special precautions.

The occupation of Schlogwitz and Polnische Olbersdorf is forbidden, and guards will be placed over them to prevent troops entering. The use of water from the streams flowing through both places is prohibited, and troops must not, therefore, be exercised in the neighbourhood.

Preparations for future events.

Since the medical units that are opened will stand fast, there is no necessity for rapidly evacuating the local hospitals in the case of an alarm. The principal medical officer of the corps will satisfy himself by inspection that the medical and surgical equipment is complete. He will draw up a programme of training in technical matters and in medical tactics.

Point 2.

In completing a reconnaissance on the morning of 5th May, the principal medical officer, or his staff officer, will prepare a supplement as follows for issue with "routine orders" that will be in force until the arrival of army corps headquarter staff on 9th May.

*Headquarter Staff 1st Army Corps.***Supplement to Billeting Orders.**

Headquarters 1st Infantry Division	Ziegenhals	1
" 2nd " "	Neustadt	2
" 1st Cavalry Brigade	O. Glogau	3
Railway Station Staff	Neustadt	4
Mobile Railway Station Staff	O. Glogau	5
" " " "	Hotzenplotz D. B.	6
" " " "	Schnellenwalde	7
" " " "	Polnischwette	8

Neustadt, 5th May, 10 a.m.

1-8

MEDICAL ORDERS. From 8th May onwards, the sick will be evacuated to the mobile reserve hospital at Neustadt Public School, 12, Kirchengasse. The sick will arrive there during the afternoon.

3

For this purpose the ordinary passenger train, No. 3, will be used.

4

The mobile reserve hospital and field convalescent depôt that arrive at 8 a.m. on 7th May are to be unloaded at Neustadt, and the director of railways is to be informed when this is done.

1

Arrangements have already been made for supplying material for the opening of a field convalescent depôt at 2 Feldgasse, Ziegenhals.

2

The civil hospital will be available for use as a local hospital.

1-3

Schlogwitz and Polnische Olbersdorf will be out of bounds, and the use of water from the streams running through these villages is strictly forbidden on account of the risk of typhoid infection.

Fair copy.
Examined.
Despatched.

5th May. 10 a.m.

(Signed)
Staff Officer to P.M.O.

NOTE.—The principal medical officer of the army corps communicates personally to the commandant of the mobile reserve hospital directions regarding the establishment of both units and for placing the field convalescent dépôt under his command. He will also arrange for the provision of transport to convey the equipment to the place where the units are established, out of the reserve of wagons belonging to the corps, and he will further arrange for the transport of the sick of the cavalry brigade daily from the railway station in an ambulance wagon of the 2nd Infantry Division.

The south part of Ludwigsdorf has not been found suitable for the establishment of a local hospital.

NOTE.—The order is initialled in the margin "May 5. 10 a.m. . . . P.M.O. 1st Army Corps."

PROBLEM No. 8.

(Same Maps as for Problem No. 7.)

Scheme.

Continuation of Problem 7.

On the forenoon of 12th May, the principal medical officer of the army corps receives the following information:—

"The 1st Army will advance towards Olmütz on the 15th.

The 1st Army Corps and the 1st Cavalry Brigade, attached to it, have the independent task assigned to them of protecting Silesia against the approach of the enemy's forces which are assembling on the N.W. of Hungary, to the S. of the Jablunka Pass.

For this purpose the corps will advance in the first instance into the area, Mähren-Ostrau, on the Oder, as follows:

	1st Cavalry Brigade.	1st Division.	2nd Division.	3rd Division.	Head of Transport Column.
May 14th	Bauerwitz	Würbenthal	Olbersdorf	Leobschutz	D. Basselwitz.
„ 15th	Troppau	Freudenthal	Jägerndorf	Halt	Halt.
„ 16th	Hultschin ...	Leitersdorf	Troppau	Katscher	Militisch.
„ 17th	Halt	Halt	Halt	Halt	Tscheidt.
„ 18th	M. Ostrau	Wigstadtl	Hrabin	Pyschez	Ratibor.
„ 19th	?	Wagstadt ...	M. Ostrau	Oderberg	Neudörfel.

The 6th Landwehr Brigade (6 battalions and 2 squadrons) from Ratibor will join the 3rd Landwehr Division at Oderberg.

On the 18th, the 1st Landsturm Brigade will arrive at Troppau to garrison the place, and will be under the command of the general officer commanding 1st Army Corps.

It is anticipated that the advance as far as the Oder will be completed without conflict with the enemy, small skirmishes with the frontier guards excepted.

According to trustworthy information, traffic on the railways in Austrian territory has been interrupted.

In accordance with the directions of the army lines of communication headquarter staff, the 1st Army is to be based upon Ratibor, where a distributing station for sick will be established on the evening of the 16th. (Fixed reserve hospital of 800 beds, a convalescent depôt of 400 beds, and a fixed rest station with accommodation for the night of 400 beds.) Distribution of sick will commence on the morning of the 19th. On the railway line Neustadt—Ratibor, an ordinary passenger train will run daily, leaving Neustadt at noon, Hotzenplotz-D. Basselwitz at 12.45, Leobschutz at 1.30, Bauerwitz at 2.10, G. Peterwitz at 2.35, arriving at Ratibor at 3.10 p.m. During the period 16th to 18th May, 10 cars for sick will be attached to the train, one-half with lying down accommodation.

As it is operating independently the corps will be reinforced by the following medical units:—

No. 2 field hospital, to be ready for the advance at Neustadt on 15th May, at 4 p.m.

No. 3 field hospital, to be ready for the advance at Neustadt, on 16th May, at 4 p.m.

1 corps unit of the advanced depôt of medical and surgical stores on 19th May at 6 p.m. at Ratibor.

3 medical officers and 1 reserve medical detachment with No. 1 field hospital at Neustadt on 14th May at noon. The main body of the reserve personnel (16 medical officers and 4 reserve medical detachments) on 18th May at Ratibor at 10 a.m."

During the time the troops have been in billets not more than 1·5 per thousand have had, up to the present, to be sent daily to the field convalescent depôt and the mobile reserve hospital (1 section).

Number of sick on the evening of 11th May—

In the field convalescent depôt, 50.

„ „ mobile reserve hospital, 120.

In accordance with the instructions of the army lines of communication headquarter staff, the evacuation of sick from the medical units established in the concentration area will be commenced on 16th May.

Points to be worked out by the P.M.O. 1st Army Corps.

Point 1. Points for the principal medical officer of the corps to consider in connexion with the advance.

Point 2. Plan of the medical arrangements for the period up till 19th May, showing the proposals which the principal medical officer will submit to the general officer commanding the army corps on the evening of 12th May, giving general details of how the sick will be evacuated during the advance and the position of the medical units on the evening of the 19th.

Time allowed— $3\frac{1}{2}$ hours.

Method of working out the above.

Point 1.

The Military Situation.

Corps acting independently. Advance in several columns. Severe engagements not likely to occur before 19th May.

Conditions affecting Evacuation.

Sick will be sent to the medical units opened at Neustadt. About 250 sick—and on the evacuation of the local hospital several more—would have to be transferred on the 12th, 13th, and 14th up to the time of the advance. Their evacuation should always be possible as the number of the beds that are then free is 200 or 300; but in consideration of the fact that the sick will have to be conveyed over the mountains, it should be commenced early in the case of the 1st and 2nd Divisions.

Subsequently evacuation will be to Ratibor, where the means for receiving patients are abundant, where evacuation can begin early, and where it can be carried on to an unlimited extent and without interruption. Thither, from the 16th onwards, that is to say from the time when Ratibor is ready to receive patients, railway transport will be utilised. The trains can be reckoned upon to carry at least 160 sick daily, and, subsequently, even more if the ordinary passenger trains are used. This number corresponds with a sick rate of three per thousand daily, as is likely to be the extent of sickness during the advance, so that ample arrangements are thus made.

The railway, however, runs along the line of march of the 3rd Landwehr Division and corps transport column only; consequently the sick of the other commands

will have to get to Ratibor in one or two marches by road. Evacuation, therefore, from these commands will be limited, and it is advisable for them to improvise arrangements for the care of those likely to recover soon and for the sick who are not fit to travel by road.

Care of Sick.

On account of the favourable situation and abundant resources of both places, Jägerndorf and Troppau are obviously suitable places for improvising collecting stations, which will serve the purpose of limiting the numbers to be evacuated. The sick that have to be evacuated from Jägerndorf can easily be sent to the railway station at Leobschütz, and on account of the convenient time at which the train starts it is unnecessary to provide there more than a rest station with refreshments. To Ratibor from Troppau is a somewhat long march. It is not worth while, however, for the sake of a few extra kilometres, to consider using the railway line, but it is advisable to improvise a rest station with refreshments at Zauditz in order to make the journey easier.

A glance at the map will show that Troppau is of greater importance than Jägerndorf, although their resources are similar. For providing personnel, the reserve personnel will be principally employed, namely, 1 medical officer with half a reserve medical detachment in Jägerndorf, 2 medical officers and half a reserve medical detachment in Troppau. At both places convalescent companies will be formed from the 1st and 2nd Divisions, and, in addition, local inhabitants will be requisitioned for auxiliary help. On the arrival of the Landsturm brigade, the charge of these improvised collecting stations will be taken over by it.

Jägerndorf and Troppau will be prepared as collecting stations for sick on the 15th or 16th by the 2nd Division. The reserve personnel which is at Neustadt on the afternoon of the 14th by making forced marches will be able to take them over on the 16th or 17th.

The details of evacuation from the 1st and 2nd Infantry Divisions will be in accordance with the movements of the supply wagons returning for re-filling.

The 3rd Landwehr Division, which arrives at Leobschütz on the 14th and remains there till the morning of the 16th, will be able to send the sick who are being retained back to Ratibor by rail on the 16th. Subsequently its sick will be evacuated by road. This division will have to improvise a rest station with refreshments for sick at Leobschütz and afterwards at Zauditz, for which purpose convalescent companies will be left at both places.

The 1st Cavalry Brigade leaves its sick at Troppau, where they will be taken over by the 2nd Division. Subsequently it will send its sick to the nearest division.

The corps transport column evacuates by rail to Neustadt up till the evening of the 16th, and then partly by rail and partly by road to Ratibor.

Position of the Medical Units on 19th May.

The three field hospitals allotted to the corps can move either along the line of march of the corps transport column, on the flank of the left wing, or on the line of march of the 2nd Division, that is to say, behind the centre column of the corps. The first line of march appears to be the best on this occasion. By it they reach the area south of Ratibor, which is the area to which the corps will subsequently go. The movement up to 19th May is a flanking movement, in order to enable the corps to reach its new position by way of Ratibor. The field hospitals must reach the area at Neudorf on the 19th at the head of the transport column. That this is possible is evident from the marches of the 3rd field hospital that is furthest back and ready to move from Neustadt at 4 p.m. on the 16th. This hospital has to cover a distance of 70 km. in three days by way of Katscher, and this is a perfectly normal rate of marching.

The corps unit of the advanced dépôt of medical and surgical stores along with the reserve personnel will be at Ratibor on the 19th, and is therefore in its correct place. On the supposition that the railway line from Ratibor to Oderberg is interrupted, arrangements must be made for getting ready 100 country carts by the morning of the 20th for its transport.

Point 2.

Medical Arrangements for the Advance.

For the evacuation of sick of the 1st and 2nd Infantry Divisions collecting stations for sick will be improvised at Jägerndorf, to be ready on the 16th May, and at Troppau, to be ready on 17th May. The personnel will be composed of the reserve personnel (namely, 1 medical officer in Jägerndorf and 2 in Troppau, with half a reserve medical detachment at each of these places), and also of convalescent companies and local inhabitants. Details of evacuation will be made to conform with the movements of the empty supply wagons. Further evacuation from Jägerndorf will be to the railway station at Leobschütz, where the 3rd Landwehr Division will improvise a rest and refreshment station by means of a convalescent company. From Troppau evacuation will be direct to Ratibor, with a midday halt at Zauditz, where a convalescent company of the 3rd Landwehr Division will make arrangements for a rest station.

This division will evacuate its sick to Ratibor up to the morning of the 16th by rail from Leobschütz, and afterwards by road direct.

The 1st Cavalry Brigade will leave its sick in Troppau, and subsequently send them to the nearest infantry division.

The corps transport column will send its sick at first to Neustadt, and then partly by rail and partly by road direct to Ratibor.

The medical units will be assembled on the 19th as follows :

The field hospitals at the head of the corps transport column.

The reserve units at Ratibor, 100 vehicles being given to them at the proper time.

PROBLEM No. 9.

(Same Maps as for Problems 7 and 8 and Supplement 4.)

Scheme.

Continuation of Problem 8.

Headquarters of the 1st Army Corps, marching with the 2nd Division, remains on 18th May at Troppau.

Here the principal medical officer of the corps receives the following information during the forenoon :

"To-morrow the corps will take up the billeting areas shown in Supplement 4, and will remain in them one or two days, awaiting the result of the reconnaissance in the direction of the Jablunka mountains.

In accordance with a telegram from the director of railways at Ratibor, the railway line will be interrupted probably for three days on account of a collision that has occurred between Ratibor and Schichowitz, and therefore the work of distributing the sick cannot be commenced."

During the advance, up to the present, the daily average of men going sick has increased to four per thousand, and the number of men unfit to march to five per thousand.

Points to be worked out.

Point 1. Short medical appreciation of the situation.

Point 2. Supplement of the principal medical officer of the corps to the billeting orders for 19th May.

Point 3. Supplement of the principal medical officer of the 1st Infantry Division to the orders that are to be drawn up and issued on 19th May at 6 p.m., following the issue of medical orders of the general officer commanding the army corps in which the billeting of the divisional medical unit is to be carried out at the discretion of the divisional authorities.

Time allowed—3 hours.

Method of working out the above.

Point 1.

The postponement of the time fixed for the commencement of the evacuation of sick from the distributing station and the unfavourable health of the troops are an unexpected complication. The evacuation of sick from Ratibor is, in consequence of this complication, interrupted until the 21st or even later, a state of affairs which will become very serious should hostilities commence in the meantime. On the evening of the 18th there are 450 hospital beds and 190 convalescent beds vacant in Ratibor. Although for temporary emergencies one can reckon on another 400 beds in the rest station or in subsequently improvised establishments, the situation is nevertheless hazardous since, according to present experience, about 240 sick or even more should come in on the mornings both of the 19th and of the 20th, so that if these are evacuated to Ratibor the normal accommodation there will be almost entirely filled up.

This fact must, therefore, be against commencing to evacuate the sick of all divisions to Ratibor direct, which at first sight appears the simplest thing to do, from the position reached on the 19th. It would be far better to use to the fullest extent the resources of Troppau, to let the 1st and 2nd Infantry Divisions evacuate thither as much as possible, (the movement of the empty supply wagons making such an arrangement suitable), and to reduce the evacuation from Troppau to Ratibor to a minimum. The town affords every possible opportunity for the care of sick, so that only those need be evacuated who will remain unfit for duty for a long time. Besides, this evacuation should only be undertaken when evacuation from the distributing station is commenced.

The personnel in Jägerndorf can also be brought to Troppau. The sick who are remaining there, for the most part men who are likely to recover shortly, may be handed over to the Landsturm battalion. The personnel can be usefully employed in Troppau, and, besides, they are nearer at hand should any future engagements require the employment of all the medical resources for the care of wounded, whose wants would then be considered before those of the sick.

The postponement of the time of arrival of the corps unit of the advanced dépôt of medical and surgical stores is of little importance in view of the improbability of any fighting taking place before the 20th. But information to the effect that the railway from Ratibor to Oderberg has been interrupted would make it necessary to have 100 country carts ready by midday of the 21st at Ratibor. It will be the duty of the commandant of the corps transport column to obtain these.

Point 2.

After fully weighing these points, the principal medical officer of the corps, or his staff officer, prepares the following supplement to orders :

*Headquarter Staff. 1st Army Corps.***Supplement to Billeting Orders for 19th May.**

Headquarter Staff 1st Infantry Division	Wigstadt	1
" " 2nd " "	Hrabin	2
" " 3rd " "	Pyschcz	3
" " 1st Cavalry Brigade	Mähr.-Ostrau	4
Officer commanding corps transport column	Ratibor	5
" " Landsturm Brigade	Troppau	6
Railway Staff Officer	Jägerndorf	7

*Army Corps Headquarters, Troppau, 18th May, 2 p.m.***MEDICAL
ORDERS.**

1-7

Sick will be evacuated to

1, 2, 4, 6

Troppau,

3, 5

Ratibor,

7

Jägerndorf.

2, 4

In the case of the 1st Cavalry Brigade through the 2nd Infantry Division.

5

For transport of material, 100 vehicles are to be obtained and be ready at the railway station, Ratibor, by noon on the 21st.

6, 7

The Landsturm battalion in Jägerndorf will take over the improvised convalescent dépôt there. The reserve

personnel at that place will arrive in Troppau to-morrow. Evacuation to Ratibor will be discontinued until further orders.

6

The brigade headquarter staff will make arrangements for the duty in the civil hospital and in the improvised convalescent dépôt (in the Teachers' Training Institute) being carried out as far as is required only by the Landsturm and the local inhabitants.

Fair copy.
Examined,
Despatched.

18th May. 1.45 pm.

(Signed)
Staff Officer to P.M.O.

NOTE.—Initialled in margin "18th May, 2 p.m., P.M.O. 2nd Army Corps."

NOTE.—The men unfit to march will not be evacuated since there is time for them to recover if they are taken with the troops into their new billets.

NOTE.—The principal medical officer of the corps, who is in Troppau, has personally estimated that accommodation for 200 sick requiring hospital treatment and 500-600 light cases is available. Besides this, offers have been made for the reception of 300 sick and wounded in private houses. The senior medical officer of the Landsturm Brigade will receive detailed instructions verbally.

Point 3.

Headquarter Staff, 1st Infantry Division.

Supplement to Operation Orders for 20th May.

Divisional Headquarters, Wagstadt, 19th May, 4 p.m.

MEDICAL Sick will be transferred to Troppau, the empty supply
ORDERS. wagons being used for the purpose.

Sick requiring evacuation will reach the divisional medical unit at U. Neuhof by 9 a.m. and will be sent on from there, after they have received a midday meal, so as to reach Troppau by 6 p.m.

Fair copy.
Examined.
Issued with orders.

19th May. 4 p.m.

(Signed)
P.M.O. 1st Division.

NOTE.—No local hospital need be opened during this halt which may only last a day. The collection of sick and their evacuation will be carried on just as during marches, only somewhat more elaborate arrangements will be made for their comfort on the day of halt.

The selection of Wagstadt as the place for billeting the medical unit would also be a suitable arrangement.

PROBLEM No. 10.

(Map 1: 200,000, 36° 50' Troppau.)

Scheme.

Continuation of Problem 9.

At 2 p.m., on 20th May the chief of the general staff informs the principal medical officer of the army corps as follows:—

"The enemy's forces are advancing over the Carpathian Mountains. Their vanguard came into conflict with detachments of our 1st Cavalry Brigade near Jablunkau.

The general officer commanding the army corps has decided to advance with his main body to Teschen, and attack the columns as they debouch from the Jablunka Pass. The 1st Infantry Division will endeavour to keep in check the columns that are pushing forward by way of Friedland and Frankstadt against Neutitschein. With this object in view the army corps will advance to-morrow as follows:—

The 3rd Landwehr Division and the field artillery regiment of the corps artillery in two columns by way of Freistadt and Orlau to Teschen and the area E. of that place.

The 2nd Infantry Division and the howitzer regiment by way of Schumburg to the area W. of Teschen.

Both divisions will take with them only the bridging section, the 1st line transport, and one supply echelon.

The remaining transport will assemble in the area Hultschin—Haatsch, and form No. 1 transport echelon of the corps.

The 1st Infantry Division will march to Freiberg and send one detachment to Neutitschein and another to Friedek, leaving all the transport that can be dispensed with on this side of the Oder.

The corps transport column stands fast.

Serious fighting is expected to take place from the 22nd onwards.

The railway from Ratibor to the north will be open for traffic at noon on the 22nd. Men are at work repairing the line up to Oderberg, but one cannot depend upon this section being open for traffic.

Orders will be issued at 6 p.m."

Points to be worked out.

Point 1. Short medical appreciation of the situation.

Point 2. Proposals relative to the medical units, to be considered by the general staff in preparing operation orders.

Point 3. Principal medical officer's supplement to march orders.

Time allowed—3 hours.

Method of working out the above.

Point 1.

The Military Situation.

Fighting expected immediately. 1st Infantry Division acting independently.

Conditions affecting Evacuation.

Evacuation from Ratibor open and unlimited from the 22nd onwards. Transport thither by road, a distance of 55 km. through Oderberg from the area round Teschen; of 55 km. from Mähr.-Ostrau from the area around Freiberg; and of 70 km. through Troppau. Earliest date for arrival of wounded at Ratibor, the 23rd. As the 1st Infantry Division in case of retreat would probably move to a position behind the line of the Oder, it is advisable to direct the evacuation from it to proceed by way of Troppau. The preparations made will also allow of many sick being kept under continuous treatment and so limiting, as is desirable, the numbers to be evacuated.

Medical arrangements for the 1st Infantry Division.

As the 1st Infantry Division is operating independently a field hospital must be attached to it. No. 1 field hospital can reach Brosdorf from Neudörfel, a distance of 30 km., in one ordinary march, and would thus come under the command of the general officer commanding the division on the evening of the 21st.*

In order to make its line of evacuation more efficient it is advisable to attach to it a reserve personnel, and the simplest way to do this is to allot to it the detachment in Troppau, which is handing over its duties in the evening to the Landsturm, and which would be able to reach Wagstadt and be at the disposal of the general officer commanding the division at midday on the 21st. Wagstadt is the spot that will probably be selected for improvising a rest station for the 1st Division.

The reserve of medical and surgical stores would remain in the meantime at Ratibor, ready to advance.

Evacuation of sick on the morning of 21st May.

As a general principle, just as in the previous arrangements, it appears better in the case of the 2nd Infantry Division to send the sick to Ratibor, in view of the change that has taken place in the conditions affecting evacuation. As this is a 30 km. march from Mähr.-Ostrau, and there must in addition be a considerable distance between the units and the place for assembling the sick, the sick should only go as far as an improvised rest station at Oderberg on the 21st.

* In view of the military situation it would be directed to proceed west of the Oder.

Preparations for future Evacuation of Sick and Wounded and for Care of Wounded with the Main Body.

Evacuation to Ratibor will be by way of Oderberg, and, in consequence of the distance, accommodation for the night is necessary at the latter place. Preparations for this will be made by the 3rd Landwehr Division. The men of that division and also of the 2nd Infantry Division unfit to march will be sent to Oderberg early on the 21st for duty in the rest station there. A mobile rest station must be brought up and established there in view of the importance of a permanent place with accommodation for the night. It should be there by midday if possible.

In view of the anticipated fighting, Nos. 2 and 3 field hospitals must not remain with the corps transport column, but must be brought nearer to the two divisions. The cross roads at Orlau, about 20 km. from Teschen, would be a suitable spot. Freistadt also may be considered, as it is somewhat nearer Teschen and on the second line of communication with Oderberg.

In order to have the reserve personnel available for care of wounded on the day of the battle, it must be brought up nearer the fighting line, leaving behind only the reserve detachment in charge of the material. It will be sufficient if the personnel arrives at Oderberg on the 21st, and the reinforcement of the 1st Infantry Division can also readily be effected from there. The second mobile rest station can be brought up with it, with a view subsequently to completing the arrangements on the line of evacuation.

Point 2.

No. 1 field hospital will march to Brosdorf on the 21st and come under the command of the general officer commanding the 1st Infantry Division there.

Nos. 2 and 3 field hospitals will be detached from the corps transport column and arrive at Orlau on the 21st.

Only one reserve medical detachment will remain at Ratibor in charge of the medical and surgical equipment, which will be loaded upon transport wagons.

The main body of the reserve medical personnel will reach Oderberg at midday with the two mobile rest stations. One of these rest stations will be established in buildings arranged beforehand by the 3rd Landwehr Division. The detachment of reserve personnel at Troppau will hand over to the 1st Landsturm Brigade and proceed on the 21st to Wagstadt, where it will come under the command of the 1st Infantry Division.

The distributing station at Ratibor will make preparations for evacuation, in anticipation of the large number of wounded that may be expected from the 23rd onwards.

Point 3.

Assuming that these proposals will be included in the orders of the general staff, the principal medical officer, or his staff officer, will prepare the following supplement for operation orders.

*Headquarter Staff, 1st Army Corps.***Supplement to Operation Orders for 21st May.**

Hd.-Qtrs.	1st Cavalry Brigade	...	Teschen	...	1
"	1st Infantry Division	...	Wagstadt	...	2
"	2nd " "	...	Mähr.-Ostrau	...	3
"	3rd Landwehr Division	...	Oderberg	...	4
"	1st Landsturm Brigade	...	Troppau	...	5
"	Corps Transport Column	...	Neudörfel	...	6

Army Corps Headquarters, Hultschin, 20th May, 5 p.m.

1

MEDICAL ORDERS. If the situation permits, sick and wounded will be treated in Teschen up till the time of arrival of the corps, otherwise they will be sent to Oderberg.

2

Evacuation of sick and wounded to Troppau is to be carried on independently.

4

Sick will be evacuated to Ratibor.

3, 4

The 2nd Infantry Division will send its sick and men unfit to march to the rest station improvised at Oderberg by the 3rd Landwehr Division.

4

Buildings capable of accommodating about 500 sick and wounded will be prepared and temporarily equipped at Oderberg. A mobile rest station will arrive and establish itself there on the 21st at noon. The convalescent company that will be formed earlier in the morning and local inhabitants will be employed for general duty there.

The 1st Infantry Division will continue to send its sick and wounded to Troppau. Sick may be evacuated to Ratibor.

Fair copy.

Examined.

Despatched.

Issued with operation orders. 5th May. 5 p.m.

(Signed)
Staff Officer to P.M.O.

NOTE.—Initialled in margin 20.5, 5 p.m., . . . P.M.O. 1st Army Corps.

PROBLEM No. II.

(Same Maps as for Problems 7, 8, and 9; also special maps 1:50,000, Zone 6, Kol. XIX. Freistadt—Teschen, and Zone 7, Kol. XIX. Teschen, Mistek, Jablunkau; also Supplements 5 and 6.)

Scheme.

Continuation of Problem 10.

On 21st May the 1st Army Corps is in the position shown on the sketch map. (Supplement 5.)

In the forenoon, the 1st Cavalry Brigade successfully encountered the enemy at Lischbitz, but was obliged to retire early in the afternoon in consequence of the enemy's infantry fire. Its wounded, (40 serious and 20 slight cases), arrived at Teschen at 3 p.m., and were admitted temporarily to the military hospital of 200 beds that had been improvised there for emergent cases.

The principal medical officer of the army corps was informed at 5 p.m. as follows:—

“The general officer commanding the army corps intends to attack the enemy's forces, debouching from the valley of the Olsa, who are apparently the main body, early to-morrow morning. For this purpose the corps will be ready to advance at 4 a.m. in the order shown on the tracing (Supplement 6). The general intention is to attack along the west bank of the Olsa with the column under the command of the general officer commanding 2nd Division, supported by the artillery fire of the column under the general officer commanding 3rd Division, which stands fast.

To-day's empty supply wagons will be available for transport of wounded.

The director of railways at Ratibor states that from the evening of the 22nd onwards ambulance trains capable of evacuating about 1600–2000 wounded can be run to the distributing zone from Ratibor

within 24 hours. From the early morning of the 23rd, railway traffic will be resumed along the line from Oderberg to Ratibor, and the departure of four hospital trains going direct to the distributing zone, and two 25-car improvised ambulance trains running regularly between Oderberg and Ratibor and back can be depended upon within the next 48 hours.

The resumption of traffic within a reasonable time on the lines running south and east from Oderberg cannot be depended upon. You will place before the general officer commanding the army corps by 7 p.m. a plan of medical arrangements for to-morrow's fighting."

Points to be worked out.

- Point 1.* Medical appreciation of the situation.
 - Point 2.* Plan of medical arrangements.
 - Point 3.* Position of the medical units with the 3rd Landwehr Division at 4 a.m. on 22nd May.
 - Point 4.* Position of the medical units with the column under command of the general officer commanding 2nd Division at 4 a.m. on 22nd May.
- Time allowed—4½ hours.

Method of working out the above.

Point 1.

The Military Situation.

Fighting immediately imminent. Planned battle. One group in a defensive position, one division, reinforced with a brigade of the 3rd Landwehr Division, attacking.

Conditions affecting evacuation.

Evacuation to Ratibor is open and unlimited, so that distribution of sick can be commenced on the 22nd. Both 25-car ambulance trains run at least twice daily from the early morning of the 23rd onwards from the railway terminus at Oderberg to Ratibor. In these there is a normal accommodation for 800, so that, in consideration of the short journey, there is no necessity for using the trains to a greater extent. In addition, four ambulance trains will be ready immediately, so that the general railway arrangements will suffice for the anticipated pressure of wounded.

From the area of fighting south of Teschen to Oderberg the distance is about 50 km., in other words two days' march by road; consequently a midway station with accommodation for the night is necessary. The wounded will begin to come into Oderberg from the battlefield on the 23rd, and by that date the railway trains will have begun to run.

*Evacuation of Wounded during the Battle.**(a) Collecting Station for Wounded.*

Two main lines lead from the battlefield to Oderberg, one by way of Teschen and Freistadt, and the other from the area Toschonowitz—O. Zukau by way of Schumbarg and Mähr.-Ostrau or Suchau—Orlau. According to the situation Freistadt, Schumbarg or Suchau would therefore be considered as possible localities for wounded collecting stations. Freistadt offers the greatest facilities in way of resources, and, besides, roads for wheeled vehicles lead to it from all parts of the battlefield, so that evacuation to it from each fighting group can be carried out with ease, while the line of evacuation to Schumbarg—Suchau from the defensive position of the column under the general officer commanding the 3rd Division, in the event of a flanking movement failing is just behind the front of the positions. The route to Schumbarg or Suchau is also longer and more difficult than that through the valley of the Olsa by way of Freistadt on account of its many twists and turns and of the hilly nature of the ground.

Unless therefore two wounded collecting stations are established, which would be a very good solution of the difficulty, Freistadt must be chosen as the locality for establishing the wounded collecting station.*

Preliminary arrangements must be made by No. 3 field hospital to accommodate 1,500 wounded, a number which corresponds with the means of evacuation. Its commandant will take over the command of the station.

A detachment of the reserve personnel may also be brought up to Oderberg. The commandant of the reserve personnel is himself required at Oderberg for classification of the wounded for conveyance in the hospital trains or improvised ambulance trains, and two medical officers and half a detachment of the reserve personnel must be handed over to the improvised ambulance trains. In consideration of the small provision of convalescent beds at Ratibor, it is recommended that those who are likely to recover soon should not be brought there, but that a convalescent dépôt should be improvised at Oderberg and provided with two medical officers and half a detachment of the reserve personnel. If, therefore, one reckons upon two medical officers and half a detachment of the reserve personnel being employed as assistants to the commandant at the railway station, and one medical officer and half a detachment of the reserve personnel in the

* The resources of Teschen may suggest the selection of that place as a collecting station, but against this are its nearness to the possible area of fighting, the danger that would threaten the wounded should the issue of the battle be unfavourable, and its distance from Oderberg.

rest station already established there, there are still available eight medical officers and one reserve personnel detachment, who ought to arrive at Freistadt with the mobile rest station at 11 a.m. on the 22nd, (distance 18 km.).

Here too one may make use of the medical officer of the transport squadron of the bridging section and the personnel of the bridging section, while they are waiting there, the convalescent company that is to be formed on the 22nd, and the local inhabitants.

(b) *Preparation of Vehicles.*

All available country carts and the empty supply wagons are to be prepared for the transport of wounded.

In the column under the command of the general officer commanding the 3rd Division who is holding a defensive position, the work of evacuation can go on during the fighting, and on this account and because of the necessity of providing the group in Ustron with vehicles for carrying on evacuation of wounded from the cavalry, a larger number of vehicles will be allotted to this division. On the other hand the column under the general officer commanding the 2nd Division and the 1st Cavalry Brigade must not be hampered with a large number of vehicles.

The assembly point for the corps reserve of wagons cannot be selected at this stage, without directing vehicles to go back. The vehicles of the 1st Cavalry Brigade and of the 2nd Infantry Division could with advantage be placed on the main road from Teschen to Dobrau, behind the centre of the column under the general officer commanding the 2nd Division on the best line of evacuation from it (O. Zukau, Stanislowitz, Steinau), that is to say, by the WH. north of O. Zukau. On the other hand, the vehicles of the 3rd Landwehr Division, which are to join the corps reserve of wagons, must be assembled north of Teschen, whence they can easily reach the area over which both columns are fighting. Both these assembly points are also suitable for bringing up Nos. 2 and 3 wounded transport columns of the Red Cross.

A detachment of the latter will be attached to the 3rd Landwehr Division in order to facilitate the evacuation of such wounded of the cavalry and of the division itself who may require special care during transport.

According to this calculation, the 3rd Landwehr Division would hand over twenty vehicles to the corps reserve of wagons north of Teschen, while it would retain ten wagons of No. 3 wounded transport column of the Red Cross. Ten vehicles would be left with the 1st Cavalry Brigade and twenty-five with the 2nd Infantry Division.

The time of assembly of the vehicles of the 3rd Landwehr Division is 4 a.m., and of those of the western

column, taking into consideration the wagons of the 1st Cavalry Brigade, 5 a.m. No. 2 wounded transport column of the Red Cross would be able to reach the north of O. Zukau, a distance of 18 km., by 7.30 a.m. Ten ambulance wagons of No. 3 transport column of the Red Cross are to arrive at the military hospital at Teschen, (13 km.), at 7 a.m., to be at the disposal of the 3rd Landwehr Division, while the remaining five ambulance wagons of the column will remain north of Teschen with the corps reserve of wagons.

(c) *Reinforcing the dressing stations.*

Taking into consideration the distance at which the field hospitals are kept, it will be well to send forward six medical officers from each of them, to be at the disposal of the principal medical officer of the army corps. A suitable place for them to assemble at is the junction of the roads at the west corner of Teschen, where the medical officers belonging to No. 3 field hospital should arrive at 7.30 a.m., (a distance of 14 km.), and those belonging to No. 2 field hospital at 8.30 a.m., (a distance of 20 km.).

(d) *Medical arrangements for detached groups.*

A brigade of the 3rd Landwehr Division is with the column under the general officer commanding 3rd Division. As this division is fighting in a defensive position, it will be able to work with one dressing station only, while the attacking column, on account of its greater strength and wider front, requires more ample provision. The 1st Cavalry Brigade will also lend its medical personnel and equipment to this column. It is, therefore, recommended that a dressing station subsection, an ambulance subsection and a subsection of the reserve of medical and surgical material should be handed over to the 6th Landwehr Brigade.*

Care of the wounded after victory.

The following are available for this purpose: Nos. 2 and 3 field hospitals, 1 mobile reserve hospital and 2 field convalescent depôts.

The former should be brought further forward, No. 2 to O. Tierlitzko, (cross roads about 10 km. behind the fighting line at the first place of assembly), by 10 a.m. (distance 12 km.); No. 3 to Pogwisdau, (12 km. behind the fighting line), by 8 a.m. (distance 6 km.).

The material of reserve medical units already loaded on wagons is to be held in readiness, by midday on the 22nd, E.

* Medical provision for the fighting group in Ustron is the concern of the general officer commanding the division.

of Oderberg.* At present it is not necessary to bring it further forward, but some of the units can easily be sent from there to the area over which the 1st Infantry Division will probably fight.

Reserve material for replenishing expenditure can be brought to Oderberg later on by rail.

Evacuation of sick on the morning of the 22nd.

All the sick and men unfit to march with their units will go to the wounded collecting station at Freistadt, where a convalescent company will be formed. The 3rd Landwehr Division will also evacuate thither from the military hospital in Teschen those wounded who are capable of transport.

Point 2.

Plan of medical arrangements.

1. The wounded will be evacuated from the battle-field to the wounded collecting station at Freistadt, to which place also all the sick, the men unfit to remain in the ranks, and the wounded capable of transport who are lying in Teschen will be sent early in the morning. The arrangements for this collecting station will be made by No. 3 field hospital, the commandant of which will take over charge. The personnel will consist of the following: 8 medical officers, 1 reserve medical detachment, (which should arrive in Freistadt from Oderberg at 11 a.m. with a mobile rest station), the medical officer of the transport squadron of the bridging section, the men of the bridging section during the time they are kept waiting, the convalescent company that is to be formed, and the local inhabitants.

2. The commandant of the reserve personnel remains in Oderberg to direct the entraining, together with 7 medical officers and 2 reserve medical detachments, by means of whom he is to arrange for the duties being carried on at the railway station, in the 2 ambulance trains, in the mobile rest station and in the convalescent depôt that is to be improvised in or near Oderberg.

3. All the country carts that can be obtained and the empty supply wagons will be prepared for the transport of wounded. 25 of the wagons will be left with No. 2 Infantry Division and 10 with No. 1 Cavalry Brigade. The others will assemble at 5 a.m. as a corps reserve of wagons at the WH. north of O. Zukau, where also No. 2 wounded transport column of the Red Cross is to arrive at 7.30 a.m.

The 3rd Landwehr Division retains 10 wagons of No. 3 wounded transport column of the Red Cross, which arrives

* There is no advantage in waiting till railway communication is re-opened. The reserve medical units would then only arrive at Oderberg on the 23rd but the vehicles for their further transport must be brought there in any case.

at the military hospital at Teschen at 7 a.m. 20 vehicles of the units of the division that are quartered in Teschen will assemble from 4 a.m. onwards as a corps reserve of wagons at the N. entrance of Teschen, at which place the remaining 5 wagons of No. 3 wounded transport column of the Red Cross will also join the wagon reserve by 7 a.m.

4. Six medical officers from each of the 2 field hospitals will remain at the disposal of the principal medical officer of the army corps at the junction of the roads W. of Teschen, those from No. 2 field hospital at 8.30 a.m., and those from No. 3 at 7.30 a.m.

5. The 3rd Landwehr Division is to hand over to the 6th Landwehr Infantry Brigade one subsection of the dressing station, of the ambulance, and of the reserve of medical and surgical stores sections of its divisional medical unit.

6. No. 2 field hospital will assemble at 10 a.m. at O. Tierlitzko; No. 3 at 8 a.m. at Pogwisdau. The material for the mobile reserve hospital and the two field convalescent depôts will arrive at Oderberg on country carts at midday. The reserve equipment will come by rail on the 23rd.

Point 3.

The lightly wounded section of the 3rd Landwehr divisional medical unit will be at Teschen, the dressing station at Punzau near the church, and along with it the wagons required for evacuation.

1 aid-post wagon and 2 ambulance wagons, 1 lance-corporal and 6 men will be attached to the corps artillery.

1 aid-post wagon and 3 ambulance wagons, 1 non-commissioned officer and 8 men will be attached to the divisional artillery.

1 aid-post wagon, 1 ambulance wagon, 1 non-commissioned officer and 4 men will be attached to the battalion on the left wing.

1 aid-post wagon will be attached to the reserve troops.

The medical officers of the army corps and divisional ammunition park and one surgeon from the fighting line will be attached to the dressing station.

1 aid-post wagon, 2 ambulance wagons, 1 non-commissioned officer and 4 men, all the vehicles that can be obtained at Ustron, and the empty supply wagons belonging to the column, will be allotted to the fighting group at Ustron.

3 aid-post wagons, 4 ambulance wagons, 1 subsection of the dressing station, of the ambulance and of the reserve of medical and surgical material sections, will be allotted to the 6th Landwehr Infantry Brigade.

Point 4.

The lightly wounded section of the divisional medical unit will assemble at the W.H. N. of O. Zukau ; and the divisional medical unit, with 25 country carts, on the road between O. Zukau and the main road.

1 aid-post wagon will be attached to the artillery and to Nos. 5, 6 and 7 infantry regiments, and 1 aid-post wagon, and 2 ambulance wagons, with 1 lance-corporal and 6 men, to No. 2 rifle battalion.

The 6th Landwehr Brigade will have 1 aid-post wagon with each regiment, and the divisional medical unit subsections will be in readiness with 1 aid-post wagon at Schibitz.

PROBLEM No. 12.

(Map 1: 50,000, Zone 7, Kol. XIX, Teschen, Mistek and Jablunkau, and Supplement No. 6.)

Scheme.*Continuation of Problem 11.*

From 5 a.m. onwards the enemy commences artillery fire against the position of the column under the general officer commanding the 3rd Division from the ridge south of the Lischnitz stream. At the same time the enemy's forces are observed deploying on the east bank of the Nieboruwka stream, from the Olsa right up to Rakowetz.

The general officer commanding the army corps issued an order to the column under the general officer commanding the 2nd Division to attack, and at 5.30 a.m. this column commenced to advance, the left wing of the 6th Landwehr Brigade advancing along the Olsa, the right wing of No. 5 infantry regiment towards the fork of the main road, the left wing of the 4th Infantry Brigade in the same direction, and No. 6 infantry regiment (the reserve of the division) in rear of the right wing of the 4th Infantry Brigade, with No. 2 rifle battalion, in the direction of Gutty by way of Smilowitz.

The column succeeded, about 9 a.m., in compelling the enemy, who appeared to be much weaker in numbers, to retire. The enemy, however, took up a new position behind the Bistritz stream after receiving considerable reinforcements. The infantry of the column took up a position on the ridge between the two streams, the divisional artillery advancing to the vicinity of the fork of the main road. Continuous firing was then carried on without either side advancing.

At noon the divisional reserve, together with No. 5 rifle battalion, attacked the enemy's left wing from the area Rakowetz-Gutty, in the direction of Oldrzychowitz. At 2 p.m. this attack was arrested after a successful advance to a point 800 paces from Oldrzychowitz.

At 2.30 p.m. detachments of the enemy were observed retreating in the direction of the main road leading to the Jablunka Pass.

At 3.30 p.m. the infantry, which was continuing the attack, met with little opposition,

The pursuit, which had advanced by 5 p.m. to the line Wendrin-Lischbitz was arrested at 6 p.m. by a rear guard action. The enemy then disappeared rapidly. Messages were received from the cavalry stating that the enemy was making a hasty retreat by way of Jablunkau, and the pursuit ceased when the advanced detachments reached Bistritz. The 2nd Infantry Division was quartered in the area Bistritz-Wendrin, and the 3rd Landwehr Division in Trzynietz and Nd. Lischna.

A great number of casualties occurred during the day's fighting, and the enemy left many wounded behind.

To be worked out.

A sketch on broad lines of the work of the medical units with the fighting column under the general officer commanding the 2nd division, from 4 a.m. till 6 p.m., giving times.

Time allowed—2 hours.

Method of working out the above.

Phase 1. An attack up till 9 a.m., during which the regimental medical personnel could accompany the attacking forces most of the way under cover of the deep ravines made by the streams. First aid would have been given with considerable ease, and it would have been possible to send the wounded back to the lower reaches of the Roppiczanka stream. About 7 a.m. the officer commanding the column ordered the dressing station of the 6th Landwehr Brigade to be opened at the railway station of Roppitz.*

Phase 2. Continuous fighting on the ridges between the Nieboruwka and the Bistritza streams up to 2.30 p.m. The ravines made by the Nieboruwka were favourable to the bringing up of medical assistance and rendered possible the evacuation of wounded to the valley of the Olsa and to the dressing station. The medical personnel of fighting units would consequently endeavour to reach the Nieboruwka; a portion would, however, remain in the area over which the first attack had taken place and would be occupied in bringing in and attending to the wounded there. The divisional medical unit of No. 2 Infantry Division, together with the vehicles, would be ordered at 9 a.m. to proceed to the reaches of the Roppiczanka south of Trzytiesch.†

Eight medical officers from the field hospitals and

* The dressing station ought to be opened by 8.30 a.m.

† The new position will be taken up about 10.30 a.m.

detachments of the corps reserve of wagons would be attached to the dressing station at Roppitz railway station on the demand of the principal medical officer of the division.

In the attack by the divisional reserve on the right wing, the ravine near Gutty and also the ravines of the Bistritza stream and the ravine west of Oldrzychowitz were convenient for carrying on medical work. In the first of these ravines it would be possible to employ wheeled transport, and the two ambulance wagons, attached to No. 2 rifle battalion, would consequently be used.

Phase 3. Retreat of the enemy from 3.30 p.m. onwards. Signs of this had already been observed by 2.30 p.m., and permitted orders for the pursuit being drafted.

The medical orders of the officer commanding the group were issued about 3.30 p.m. to the following effect:—

A subsection of the dressing station section to be opened at Niebory farm,* and reinforced by the 8 medical officers from the field hospitals and the medical officer of the divisional ammunition park from the dressing station at Roppitz.

The following medical personnel and material will follow up the troops in pursuit:—

(a) The medical personnel of 2 battalions of the 6th Landwehr Infantry Brigade with 1 aid-post wagon.

(b) The medical personnel from 1 battalion each of the 5th, 7th and 8th infantry regiments, with 1 aid-post wagon to assemble immediately at the WH. at Duszyniec.

(c) The medical personnel from 1 battalion of the 6th infantry regiment with 1 aid-post wagon.

Searching the battlefield.

(a) The area between the Olsa, the Bistritza and the main road will be searched by the 6th Landwehr Brigade with its 4 ambulance wagons and the country carts that can be spared from the dressing station at Roppitz.

(b) The area between the two main roads and the railway will be searched by 2 battalions of No. 8 infantry regiment with 4 ambulance wagons and 4 country carts.

(c) The area south of the two main roads up to the line drawn through the roadside inn (WH.), 3,500 paces west of Niebory farm (MH.), the church east of Rakowitz, WH. Duszyniec, etc., will be searched as follows:—

1. The north section as far as the Nieboruwka by 1 battalion No. 8 infantry regiment with 2 ambulance wagons and 3 country carts.
2. Between this area and the Bistritza by 2 battalions No. 5 infantry regiment and the divisional

* The medical unit of the division arrives at the farm before 5 p.m.

artillery with 3 ambulance wagons and 4 country carts.

3. As far as the main road and from thence through the forest to the north (Wielkilas) by 3 battalions of No. 7 infantry regiment with 2 ambulance wagons and 3 carts.

All the above groups will bring the wounded in to Niebory farm,* where the medical officers will immediately proceed when the work of searching the field is finished.

(d) The area Guty-Oldrzichowitz, will be searched by 2 battalions of No. 6 infantry regiment and No. 2 rifle battalion with the field column of the Teutonic Order and 6 country carts. The wounded will be collected to the aid-post opened at Oldrzichowitz.†

Phase 4. Rear guard action up till 6 p.m. During this period the 2nd subsection of the dressing station with 4 field hospital medical officers will be sent forward to the roadside inn (WH.) west of Wendrin. The medical personnel to be attached to the troops in pursuit will form up there, after searching the battlefield, at the dressing station which will be opened at the aid-post already carrying on work in the inn.‡

PROBLEM No. 13.

(Maps 1 : 200,000, 35° 50' Olmutz, 36° 50' Troppau, and special maps 1 : 50,000, Zone 6, Kol. XIX, Freistadt-Teschen, Zone 7, Kol. XIX, Teschen Mistek and Jablunkau. Also Supplements 5 and 6.)

Scheme.

Continuation of Problem 10.

On 21st May the 1st Army Corps reached the position that it was ordered to occupy, as shown on Supplement 5.

At 5 p.m. the following information was given to the principal medical officer of the corps:—

“The general officer commanding the army corps intends to engage the forces of the enemy, which are debouching from the Olsa valley, early to-morrow morning.

* Four medical officers of the divisional medical unit, one of the divisional ammunition park and eight medical officers from the field hospitals will be on duty at the dressing station.

† The *fourgon* of the Teutonic Order's field column will reinforce the aid-post.

‡ The 2nd subsection of the dressing station will be opened about 8.15 p.m.

For this purpose the army corps will be ready to advance at 4 a.m., as shown on the tracing, Supplement 6. The general intention is to hold the heights on the east bank of the Olsa with the column under the general officer commanding 3rd Division, and to attack along the west bank with the column under the general officer commanding 2nd Division.

To-day's empty supply wagons will be available for the transport of wounded.

The 1st Infantry Division also may possibly take part in the fighting to-morrow.

The director of railways at Ratibor has sent a message to say that this evening traffic will be resumed on the line Ratibor—Oderberg—Teschen, and Oderberg—Zauchtl, and that during the course of the day 650 sick will be sent from Ratibor to the distributing zone. In Ratibor there are already 110 hospital and 220 convalescent beds occupied. The following rolling stock is available for medical purposes at 5 a.m. on the 22nd :—

2	hospital trains at Oderberg and 2 at Ratibor	
1	25-car improvised ambulance train at Teschen	} Personnel and equipment not yet provided.
1	" " " " " " Zauchtl	
2	" " " " " " Oderberg	
2	" " " " " " Ratibor	

You are required to submit to the general officer commanding the corps at 6.30 p.m. the plan of the medical arrangements for to-morrow's fighting."

Points to be worked out by the P.M.O. 1st Army Corps.

Point 1. Consideration of the changes in the medical situation as compared with the situation in the scheme of Problem 11.

Point 2. Plan of medical arrangements.

Point 3. P.M.O.'s supplement to operation orders for 22nd May, and orders to the officer commanding the reserve medical personnel.

The orders to the field hospitals and to the director of railways and the corresponding instructions to the 1st Infantry Division will be prepared by the general staff.

Time allowed—5 hours.

Method of working out the above.

Point 1.

Conditions affecting evacuation.

In Ratibor there are 690 hospital beds, 180 convalescent beds, and 400 rest station beds. Evacuation to the distributing zone is uninterrupted; evacuation to Ratibor is also uninterrupted and unlimited. The railway line is open to Ratibor, both by the line from Teschen, a distance of about 10 km. from the area where the corps will be engaged, and by the line from Zauchtl, which passes about 10 km. distant from the area occupied by the 1st Infantry Division.

The means of evacuation by rail consist of six 25-car

improvised ambulance trains, which can make two return journeys within 24 hours. 2,400 sick can consequently be evacuated to Ratibor in these trains. Further, four hospital trains carrying about 600 sick and wounded can go direct to the distributing zone. The capacity of the improvised ambulance trains is greatly in excess of the number of beds ready to receive sick and wounded at Ratibor, consequently two of these trains will be more fully equipped with material from the corps unit of the advanced depôt of medical and surgical stores, and will be used to convey the sick direct to the distributing zone.

Evacuation of wounded during the battle.

(a) *The wounded collecting station.*

The collecting station for wounded will be the terminus station at Teschen. For the 1st Infantry Division the collecting station will be determined according to the military situation.

The collecting station will be prepared by the 3rd Landwehr Division which will also assist in the preparation of the lightly wounded station. Additional personnel will be obtained by employing the reserve personnel after it has been relieved of convoy duty, its commanding officer taking over the direction of the evacuation duties in Teschen, and also by employing the convalescent company and local inhabitants.

As the Ustron column must evacuate, if possible, by way of Skotschau and Freistadt, it is advisable to make preparations for entraining the wounded at the railway siding at Darkau. This will be done by No. 3 field hospital. The medical officer of the transport squadron of the bridging section will take charge there, and be assisted by local inhabitants. He will requisition for transport by telegram to the director of the evacuation arrangements at Teschen, so that the latter may reserve the necessary lying-down accommodation in the next trains.

(b) *Preparation and equipment of railway trains.*

The following must be ready, without fail, on the morning of the 22nd:—

At Teschen and with the 1st Infantry Division, one hospital train and one improvised ambulance train. The material that is not required for these trains is to be kept at Oderberg and Ratibor, in order that fresh trains may be got ready and sent forward as required, either to Teschen or to the 1st Infantry Division.

One improvised train of 25 cars is, as a matter of fact, present in Teschen and another in Zauchtl. The one at Teschen would be prepared during the night by the 3rd Landwehr Division; the preparation of the one at

Zauchtl would be left to the 1st Infantry Division, at whose disposal it will be placed. One of the hospital trains, that is kept at Oderberg, must be sent at 5 a.m. to Teschen, and the other to the 1st Infantry Division. With this latter will be sent the personnel for the improvised ambulance train and a small reinforcement of the reserve personnel for the 1st Infantry Division, namely, two medical officers and half a reserve medical detachment. It will be the duty of the 1st Infantry Division to direct them to the station where they should go, (the maximum journey by rail is 40 km., or two hours).

An improvised ambulance train would be prepared at Oderberg during the night by the reserve personnel, and it would be advisable to use it for bringing up the main body of the reserve personnel, and also the personnel for the improvised train at Teschen. The capacity of the railway station at Teschen permits of three trains being kept there. The train should arrive in Teschen at 6.30 a.m. if possible.

The second improvised ambulance train in Oderberg will also be prepared during the night, and one medical officer and a quarter reserve medical detachment will be allotted to it. It remains there as a reserve.

The two hospital trains at Ratibor will be brought up to Oderberg, arriving there about 8 a.m. The two improvised ambulance trains will be prepared by the reserve medical detachment that is at Ratibor, out of material from the corps unit of the advanced depot of medical stores. These trains will remain at Ratibor. They will not receive their personnel until they proceed to Oderberg. Upon their arrival there, the mobile rest station, that was opened in Oderberg, will be packed up during the morning and brought to the railway station, where also the second mobile rest station is to be kept ready to advance. The personnel of the first rest station will be reinforced by one medical officer, and will act as convoy personnel for the trains that were previously waiting at Ratibor.

The reserve personnel, namely 16 medical officers and 4 reserve medical detachments, will thus be distributed as follows:—

2 medical officers and $\frac{1}{2}$ detachment with the 1st Division.

2 medical officers and $\frac{1}{2}$ detachment for the improvised ambulance trains from Ratibor.

1 medical officer and $\frac{1}{4}$ detachment for the improvised ambulance train at Oderberg.

1 detachment with the material of reserve medical units.

The following reserve personnel is available, therefore, for duty of Teschen: 10 medical officers, and $1\frac{3}{4}$ detachments, of whom 2 medical officers and $\frac{1}{2}$ detachment will be available for the improvised train that is

remaining at Teschen and for the train proceeding there in the morning.

(c) *Preparation of vehicles.*

All its wagons will be left with the 3rd Landwehr Division; 40 with the 2nd Infantry Division, and 10 with the Cavalry Brigade. The remaining wagons and those belonging to No. 2 wounded transport column of the Red Cross will assemble as a corps wagon reserve at O. Zukau by 5 a.m. and 7.30 a.m. respectively. No. 3 wounded transport column of the Red Cross will arrive at Teschen railway station at 7 a.m. It will be employed in conveying the wounded to the railway station from the military hospital and will afterwards form a corps wagon reserve.

(d) *Reinforcement of the dressing stations.*

To be carried out as in Problem 11.

(e) *Medical provision for detached groups.*

To be carried out as in Problem 11.

Care of the wounded after victory.

The field hospitals will be employed as in Problem 11. The material of the reserve medical units will remain loaded on trucks at the railway station in Ratibor, in charge of a reserve medical detachment.

Evacuation of sick on the morning of the 22nd.

All sick and men unfit to remain with their units will be sent to the wounded collecting station at Teschen. The vehicles employed for this purpose will form, with No. 3 wounded transport column of the Red Cross, a corps reserve of wagons near the railway station at the junction of the roads West of Teschen.

Point 2.

Plan of medical arrangements.

1. Wounded will be evacuated from the area of fighting to the Teschen railway station, where also all men sick and unfit to remain with their units are to be sent. The 3rd Landwehr Division will make the necessary preparations; the lightly wounded section of its divisional medical unit will be available for the purpose. The officer in command of the reserve personnel will direct the evacuation arrangements; he will be assisted by 8 medical officers, 1½ reserve medical detachment (arriving about 6.30 a.m.), a company of convalescents and local inhabitants.

No. 3 field hospital will make preparations for the entraining of the wounded from the Ustron column at the railway siding at Darkau. These duties will be in charge of the medical officer of the transport squadron of the bridging section assisted by local inhabitants.

2. The following units will arrive to-morrow:—

At Teschen, 1 hospital train and 1 improvised ambulance train, from Oderberg, about 6.30 a.m.

At Oderberg the hospital trains from Ratibor, about 8 a.m.

The 25-car improvised ambulance train at Zauchtl, as well as a hospital train at Oderberg, with 2 medical officers and $\frac{1}{2}$ reserve medical detachment, will be placed at the disposal of the 1st Infantry Division. The division, in case of need, may send requisitions direct to the director of railways for additional railway transport for evacuation of wounded. Similar authority is given to the officer directing evacuation at Teschen.

The improvised ambulance train at Teschen is to be prepared by the 3rd Landwehr Division; those at Oderberg and Ratibor by the reserve personnel, the latter with material obtained from the corps unit of the dépôt of medical stores. Each train will receive, for convoy purposes, 1 medical officer and $\frac{1}{4}$ reserve medical detachment.

3. All available country carts and the empty supply wagons are to be prepared for the transport of wounded. The 3rd Landwehr Division will retain all its vehicles, the 2nd Infantry Division 40, and the 1st Cavalry Brigade 10. The remaining vehicles will assemble, as a corps wagon reserve, at 5 a.m. at the WH. north of O. Zukau, where also No. 2 wounded transport column of the Red Cross will arrive at 7.30 a.m.

No. 3 wounded transport column of the Red Cross will assemble at Teschen railway station at 7 a.m., and will be employed by the officer in charge of evacuation for the conveyance of wounded from the military hospital to the railway station. It will afterwards form a corps wagon reserve and assemble at the junction of roads west of Teschen. All vehicles used for bringing sick and wounded to the railway station will be added to this reserve.

4. Six medical officers from No. 2 and six from No. 3 field hospital will be at the disposal of the principal medical officer of the corps at the junction of the roads west of Teschen, the former arriving there at 8.30 a.m. and the latter at 7.30.

5. The 3rd Landwehr Division will attach to the 6th Landwehr Brigade 1 subsection of the dressing station section, of the ambulance section and of the medical and surgical reserve section of its divisional medical unit.

6. No. 2 field hospital will be held in readiness by

10 a.m. at O. Tierlitzko, and No. 3 by 8 a.m. at Pogwisdau.

The mobile rest station with accommodation for the night at Oderberg will be closed, and the material of both mobile rest stations will be held at the railway station ready to advance. The rest of the material of the corps unit of the dépôt of medical stores will remain loaded on trucks under charge of a reserve medical detachment at Ratibor.

Point 3.

Should the medical arrangements be approved and the general staff subsequently draw up the orders for the field hospitals, for the director of railways, for the preparation of the trains at Ratibor, for holding the reserve medical material in readiness, and prepare the necessary instructions for No. 1 Infantry Division, the only thing left for the principal medical officer to do is to prepare the supplement to the operation orders for 22nd May, to draft the telegrams which must be sent to the officer commanding the reserve personnel, and to write out the instructions which must be handed to him on his arrival at Teschen. These will be as follows:—

1st Army Corps, Headquarter Staff.

Supplement to Operation Orders for 22nd May.

H.-Q. Staff	2nd Infantry Division.	O. Zukau,	1.
"	"	3rd Landwehr Division.	Teschen, 2.
"	"	1st Cavalry Brigade.	Dobrau, 3.

Army Corps Headquarters, Teschen, 21st May, 7 p.m.

1-3.

**MEDICAL
ORDERS.**

Wounded will be evacuated from the area of fighting to Teschen railway station, where all sick and men unfit to remain with their units are to be sent.

2.

The wounded collecting station will be prepared, in consultation with the local authorities, by the 3rd Landwehr Division, who will also get ready the goods train at the station for purposes of transport of wounded. Care must be taken to have ample accommodation ready for receiving lightly wounded. Local inhabitants are to be requisitioned for duty at the railway station.

The officer commanding the reserve personnel, who will arrive at 6.30 a.m. will direct the evacuation and the

lightly wounded section of the divisional medical unit is to be placed at its disposal. The company of convalescents that is to be formed early in the morning will be employed in the wounded collecting station.

The memorandum of instructions enclosed is to be given by the commandant of the lightly wounded station to the officer directing the evacuation immediately after the latter's arrival.

Preparations are to be made at the railway siding at Darkau for entraining the wounded of the Ustron column.

1-3.

All available country carts and the empty supply wagons are to be prepared for the transport of wounded

2

The divisional wagons will remain at the disposal of the division.

1.

Forty wagons,

3.

Ten wagons

1, 3.

will remain with the divisions during the fighting. The remaining wagons will assemble as a corps wagon reserve at 5 a.m. at the WH. north of O. Zukau.

1-3.

The wagons employed for the conveyance of sick and wounded to the railway station will be kept there as a corps wagon reserve.

Fair copy made.

Examined.

Despatched.

Dictated at time of issue. 21st May. 7 p.m.

(Signed)
P.M.O. 1st Army Corps.

In the margin.

"(Instructions to be enclosed for 2.)"

1st Army Corps, Headquarter Staff.

Telegram to the commandant, reserve personnel, Oderberg.

Army Corps Headquarters, Teschen, 21st May. 7.15 p.m.

Fighting is expected south of Teschen and at Freiberg.

21.5 Prepare two improvised ambulance trains at Oderberg.
7.15 p.m. Proceed at 5 a.m. to-morrow with 10 medical officers and
P.M.O. 1 $\frac{3}{4}$ reserve medical detachment on the improvised
1st Army ambulance train proceeding to Teschen, and take over
Corps. duty at the railway station there. Instructions will be
handed to you in Teschen.

No. . . Hand over 2 medical officers and $\frac{1}{2}$ reserve medical
G.S. detachment to the hospital train placed at the disposal of
the 1st division at Freiberg.

Close the mobile rest stations and have the material
of both ready at the railway station at Oderberg.

Form three detachments each consisting of 1 medical
officer and a quarter reserve medical detachment, to be
ready from 9 a.m. onwards at the railway station at
Oderberg, 1 for the second improvised ambulance train at
Oderberg, and one for each of the two which are
temporarily at Ratibor equipped from the material of the
corps unit of the advanced depôt of medical stores.

Fair copy made.

Examined and despatched.

21st May. 6.30.

(Signed)

Staff Officer to P.M.O.

1st Army Corps, Headquarter Staff. Principal Medical Officer.

Instructions to the commandant of the reserve personnel at Teschen.

(To be enclosed in the orders for the 3rd Landwehr Division).

You are commandant of the wounded collecting
station and director of evacuation. You have under
you the lightly wounded section of the 3rd Land-
wehr divisional medical unit, 8 medical officers
and 1 $\frac{1}{4}$ detachment of the reserve medical
personnel, also the convalescent company that is
to be formed at the railway station and a contin-
gent of the local inhabitants. The commandant
of the lightly wounded station will give you
information regarding the arrangements that have
already been made and regarding the military
situation.

21.5 7.15 p.m.
P.M.O. 1st Army
Corps.

No. 62. P.M.O.

In addition to the hospital trains, the improvised ambulance trains, that have been prepared with material from the corps unit of the advanced depôt of medical stores, may be sent direct to the distributing zone, and, for this purpose, a strict classification of the wounded must be made.

Men likely to recover soon will not be evacuated so long as no order has been issued to withdraw the entraining station to a point on the line further back.

The two improvised ambulance trains that will arrive at Teschen in the morning must be provided with one medical officer and a quarter reserve medical detachment each. If more trains are required, application will be made direct to the director of railways at Ratibor.

Arrangements have been made at the railway siding, Darkau, for entraining wounded from a flank column. The commandant there, Oberarzt A., has been instructed to communicate with you by telegram should he require transport, to enable you to reserve places in the next train that stops at Darkau.

In the military hospital at Teschen there are 40 severely and 20 lightly wounded. They will be conveyed to the railway station by No. 3 wounded transport column of the Red Cross, which will arrive there at 7 a.m. The column is subsequently to assemble at the junction of the roads west of Teschen. All vehicles arriving with sick and wounded are also to be sent there to form a corps wagon reserve.

Fair copy made.
Examined.
Despatched.

21st May. 7 p.m.

(Signed)
Staff Officer to P.M.O.

PROBLEM No. 14.

(Maps—1: 50,000, Zone 6, Kol. XIX, Freistadt—Teschen, and Zone 7, Kol. XIX, Teschen, Mistek and Jablunkau.)

Scheme.

Continuation of Problems 12 and 13.

On the night of 22nd–23rd May the medical situation on the battlefield south of Teschen is as follows:—

Field Hospital Sections opened.	Place.	Approximate No. in Hospital.
1/III	Punzau	350
2/III	O. Lischna	390
3/III	Roppitz	280
1/II	Niebory	550
2/II	Oldrzychowitz	680
3/II	Wendrin	470

During the day the following were evacuated from Teschen :

To the distributing zone in three hospital trains about 450.

To the distributing zone in one 25-car improvised ambulance train ... about 200.

To Ratibor in three 25-car improvised ambulance trains ... 600.

The remaining trains were required by the 1st Infantry Division.

900 lightly wounded remain in Teschen under improvised arrangements.

230 wounded are in the lightly wounded section of the 2nd Infantry divisional medical unit in O. Zukau.

The following medical units are available in Teschen at 3 a.m. on 23rd May :—

Material of 2 sections of a mobile reserve hospital, 1 field convalescent depôt, 1 mobile rest station, $\frac{1}{2}$ reserve equipment, 12 medical officers and $2\frac{1}{2}$ reserve medical detachments. (1 section, mobile reserve hospital, 1 field convalescent depôt, 1 rest station, 4 medical officers and $1\frac{3}{4}$ reserve medical detachments are with the 1st Division, and 3 medical officers and $\frac{3}{4}$ reserve medical detachment are on convoy duty with improvised ambulance trains.)

From the 23rd onwards, the following are available daily for evacuation of sick and wounded from Teschen :

At 1 p.m. one hospital train.

At 5 p.m. one 25-car improvised ambulance train.

75 country carts are permanently available for transport by road.

Points to be worked out by the P.M.O. 1st Army Corps.

Measures to be taken by the P.M.O. on the forenoon of 23rd May for the care of the sick and wounded on the battlefield.

Time allowed—3 hours.

Method of working out the above.

General estimate of the conditions.

In the 6 field hospital sections (1,800 beds) there are about 2,720 wounded, that is to say, 920 more than the normal accommodation. On the other hand, there are the 600 beds in the 2 sections of the mobile reserve hospital,

and about 350 patients have been evacuated on the 23rd, so that it is possible to provide for the excess of wounded over the normal accommodation. The field convalescent depôt will be completely occupied by the 1,130 lightly wounded at Teschen and O. Zukau.

The transport available for evacuation permits of one field hospital section being afterwards cleared daily.

Formation of groups.

Three distinct groups can be formed according to their lines of communication with Teschen.

1. Oldrzychowitz, Niebory and Roppitz, 900 beds, with 1,510 wounded. Excess of wounded over beds, therefore, is 610, most of them severely wounded after the fighting at Roppitz* and unfit for transport. The officer commanding No. 2 field hospital is in charge of this group.

2. O. Lischna and Wendrin, 600 beds, 860 wounded : excess 260. Officer commanding No. 3 field hospital is in charge.

3. Punzau, with an excess of 50 wounded.

Groups 1 and 2 must consequently each receive a section of the mobile reserve hospital. Efforts must be made to evacuate all who can possibly be moved from Group 1 on the 23rd, but only 50 from Punzau.

Selection of places for opening the sections of the mobile reserve hospitals.

It is to be noticed that in Group 1 the field hospital section opened at Oldrzychowitz is some distance from a good line of communication, so that the majority of the wounded requiring special care cannot for the present be evacuated. It is not advisable that a mobile reserve hospital section should be appointed to take them over, because Oldrzychowitz has insufficient local resources for two sections. It is better, therefore, to evacuate on the 23rd those who are capable of transport partly to the line of railway and partly to vacant accommodation in the other field hospital sections.

The section of the mobile reserve hospital might perhaps be established near section 1/II field hospital at Niebory for the reception of the number in excess there, but this course is not advisable on account of the insufficient resources of the locality.

Roppitz also having insufficient resources, Schibitz seems the only suitable place for establishing the mobile reserve hospital section. Severely wounded can be sent there along good roads on ambulance wagons or on stretchers.

* The dressing station at Roppitz was working from 8.30 a.m. and wounded were coming in till about 3 p.m. It was able to send all the wounded, capable of transport, to the neighbouring wounded collecting station.

The above note holds good for Punzau also.

When this has been accomplished the following will remain in Group 1:—In Oldrzychowitz, chiefly severely wounded; in Niebory, wounded suitable for transport; in Roppitz and Schibitz, chiefly severely wounded. Section 1/II field hospital can then be cleared, and later on section 3/III, by evacuating those capable of transport and by transferring the remainder to Schibitz.

In Group 2, Trzynietz has the largest amount of resources and is therefore specially suitable as a place for opening a mobile reserve hospital section. The means of communication for bringing men unfit for transport there are good, so that field hospital sections 2/III and 3/II can be immediately cleared for an advance.

Distribution of vehicles.

The following vehicles are available for transport of wounded:—

- 75 country carts;
- 30 ambulance wagons;
- 48 field hospital stores wagons.

The following transport must be supplied from these on the 23rd:—

Transport to convey the 2 mobile reserve hospital sections to the places selected; that is to say, 15 country carts for each section, performing 2 journeys of 7 km. each during the day.

Transport for conveying the material of the convalescent dépôt from the railway station to the town, and afterwards for conveying the lightly wounded from O. Zukau, each wagon taking 20 men. For this purpose 5 wagons, making several journeys, would be sufficient.

Transport for the evacuation of 380 wounded from Oldrzychowitz, of which 200 will be taken to the improvised ambulance train, 100 to the hospital train, (a distance of 13 km.), 60 to Schibitz (10 km.) and 20 to Roppitz.

Transport for the transfer of 250 severely wounded from Niebory to Schibitz, a distance of 6 km. Of these, 190 will be conveyed to their destination on the field hospital stores wagons of section 1 of No. 2 field hospital and of section 3 of No. 3 field hospital, in 3 journeys. Section 1 of No. 3 wounded transport column of the Red Cross will suffice for the remaining 60.

Transport for 170 severely wounded from Wendrin and of 90 from O. Lischna to Trzynietz (a distance of 5 km.) The 16 field hospital stores wagons of the group will be sufficient for the purpose by making several journeys during the day.*

Transport for 50 wounded from Punzau to the hospital train, (a distance of 6 km.). For this purpose the field

* Calculating four lying down and none sitting up in each field hospital stores wagon.

hospital stores wagons at Punzau will be sufficient, making 2 journeys.

For the bulk of the work, namely, transport from Oldrzychowitz, the following wagons are accordingly available :—

25 ambulance wagons ;

8 field hospital stores wagons of the field hospital section ;

40 country carts ;

also the 30 wagons which had been allotted for the transport of the mobile reserve hospital sections, although for the first day it is as well for the sections while in process of opening to retain a certain number of wagons for the conveyance of articles requisitioned locally.

With this transport material the evacuation of the wounded can easily be carried out. By noon 100 severely wounded and 40 sitting up can be taken to the railway station on the 25 ambulance wagons, and by 4 p.m. 160 can be taken lying down, in 2 journeys, in the 40 country carts. The 8 field hospital stores wagons would be employed for the transport of 60 wounded to Schibitz and of 20 to Roppitz.

Preparations at Teschen.

Leaving out of consideration the personnel assisting in the work of the 2 mobile reserve hospital sections, the commandant of the reserve personnel, to whom the principal medical officer of the army corps will hand over the command of all the medical units, has at his disposal only 2 medical officers and half the reserve medical detachment for duty at Teschen, where not only about 1,100 lightly wounded have to be taken care of, but arrangements have to be made for evacuating sick and wounded daily. This work would only be possible by employing all the convalescents and wounded fit for light duty and all the civil surgeons and local inhabitants available. He will have to consider how to arrange accommodation for the wounded, and also for the sick who will probably be sent back from the army corps in the immediate future, in two or three large buildings equipped partly with material obtained locally, partly with material from the field convalescent depôt, and subsequently from the mobile rest stations.

At the railway station it would be sufficient to improve a rest station with refreshments and temporary accommodation for about 100 sick, who will arrive for evacuation by the improvised ambulance train early in the morning. The officer commanding the reserve personnel will make a strict classification of wounded before distributing them to the hospital train and the improvised ambulance train.

Instructions to be sent by the principal medical officer of the army corps at 5 a.m. to the officers commanding the two field hospitals, to the officer commanding the reserve personnel and to the officer commanding section 1 of No. 3 field hospital.

Information regarding the distribution of wounded in groups.

The distribution of vehicles to each group.

The duty of each group with regard to carrying out the removal of the wounded on the 23rd.

Special instructions to the officer commanding the reserve personnel regarding:—

The preparations to be made at Teschen, and bringing in the lightly wounded from O. Zukau.

The object of evacuation on the 24th, 25th and 26th May, to clear daily one of the field hospital sections 2/III, 1/II and 3/II.



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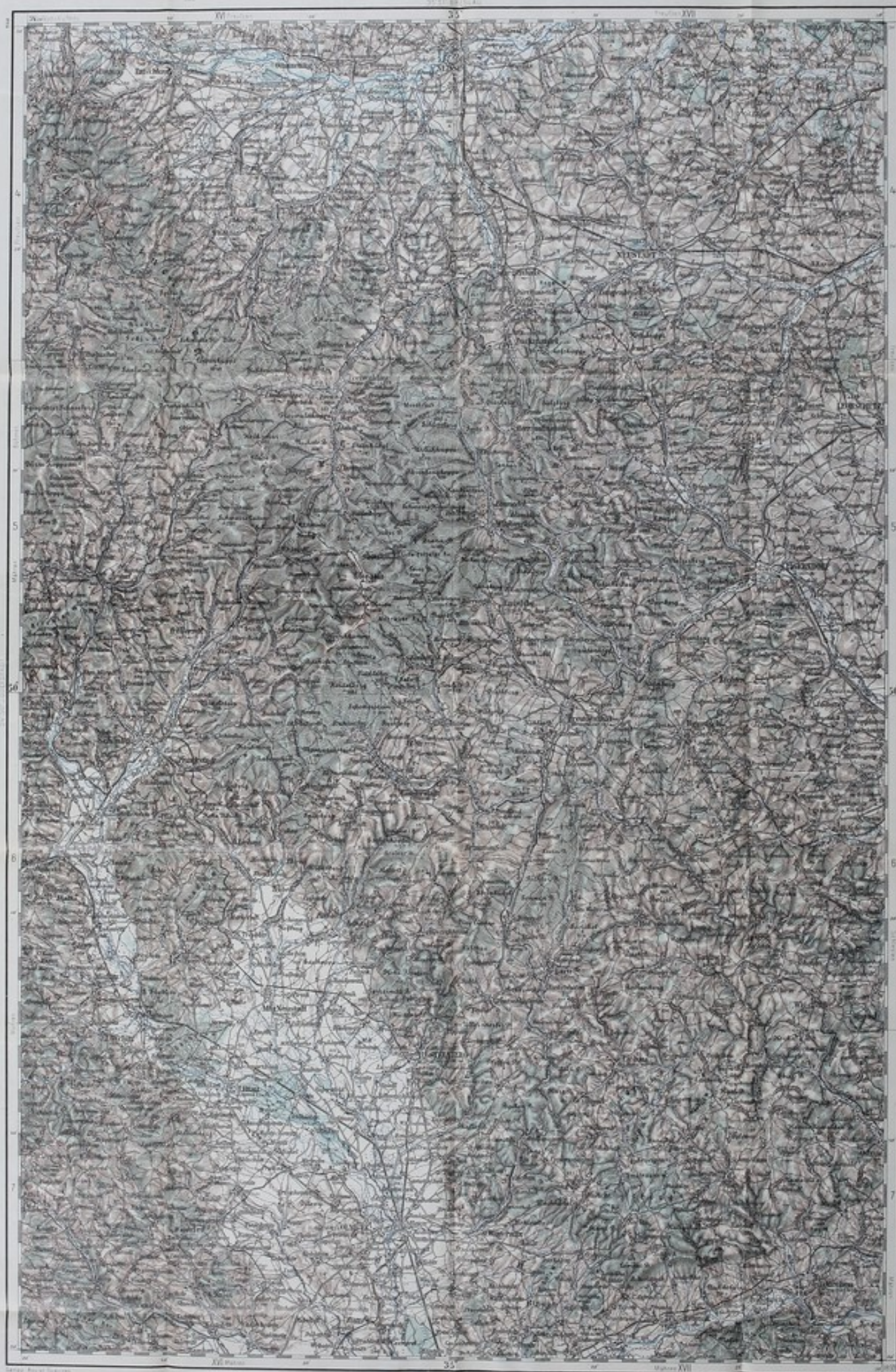
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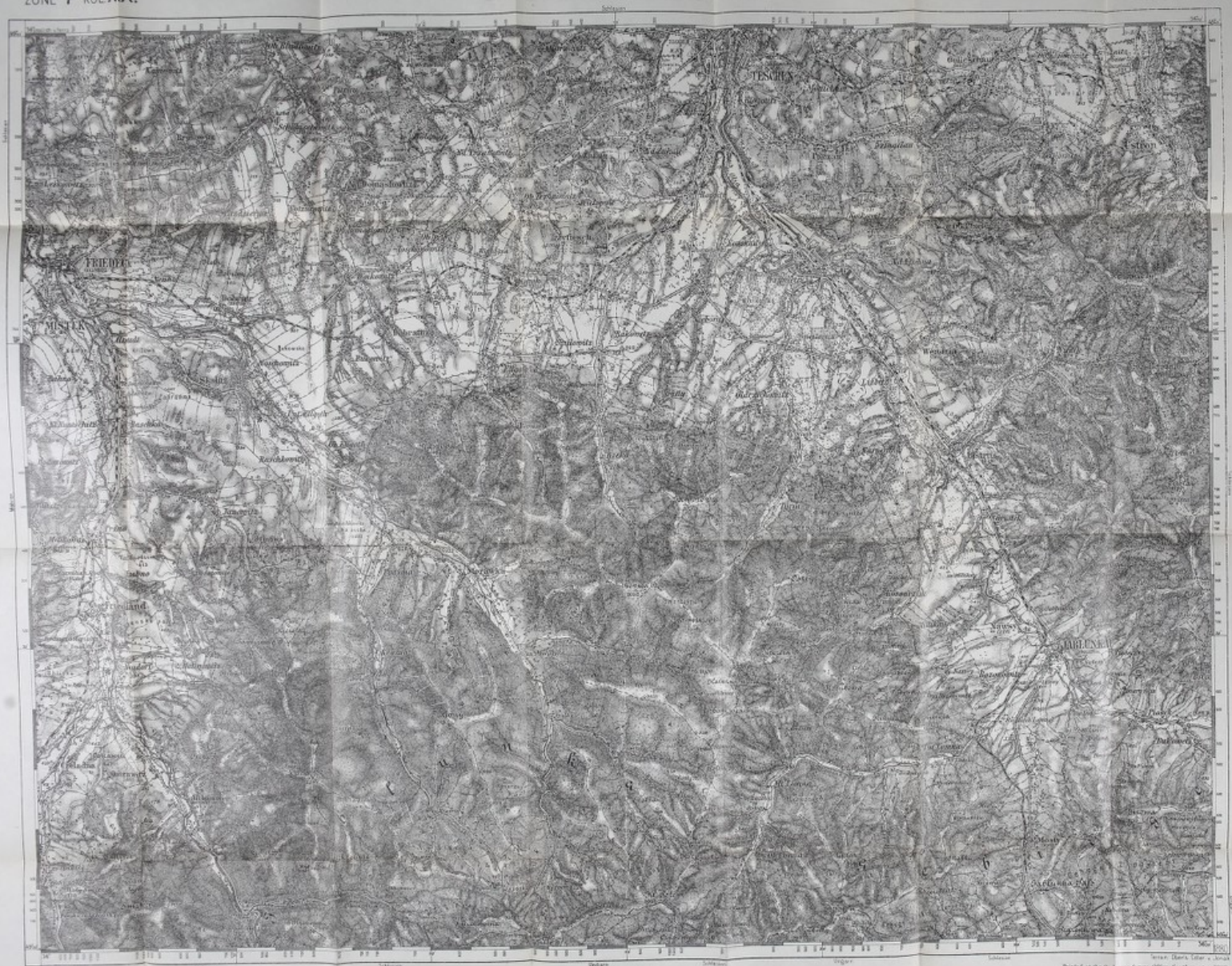
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Supplement 3.

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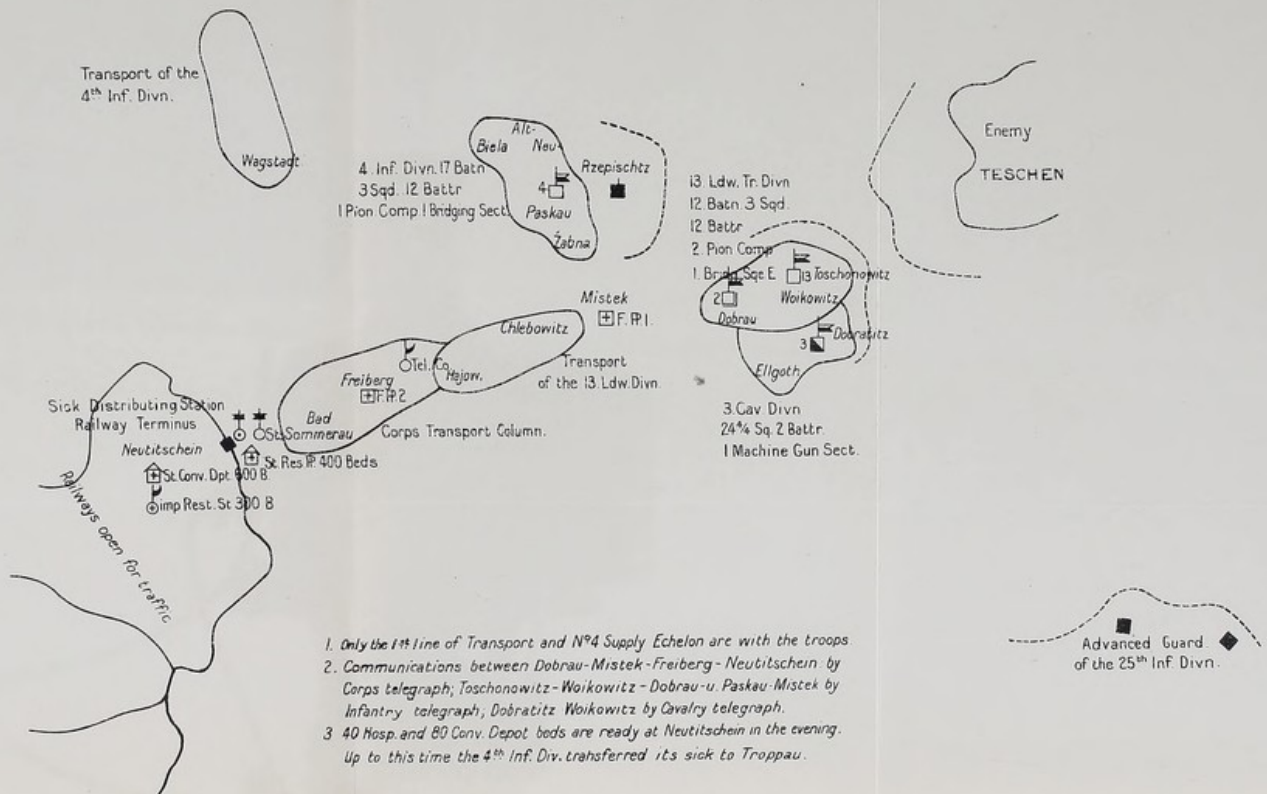
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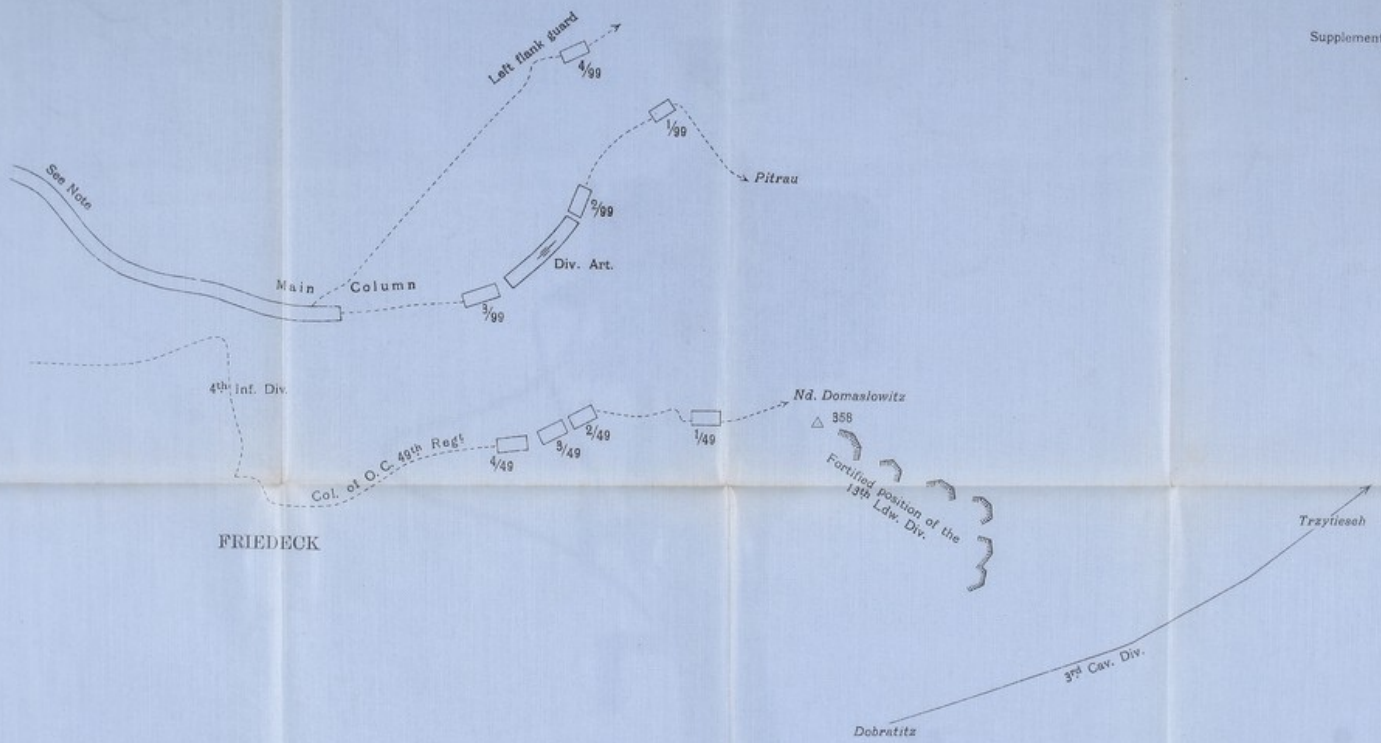
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Supplement. 4.

SITUATION OF THE 2ND CORPS ON THE EVENING OF 31ST AUGUST.

1:300,000.





Situation

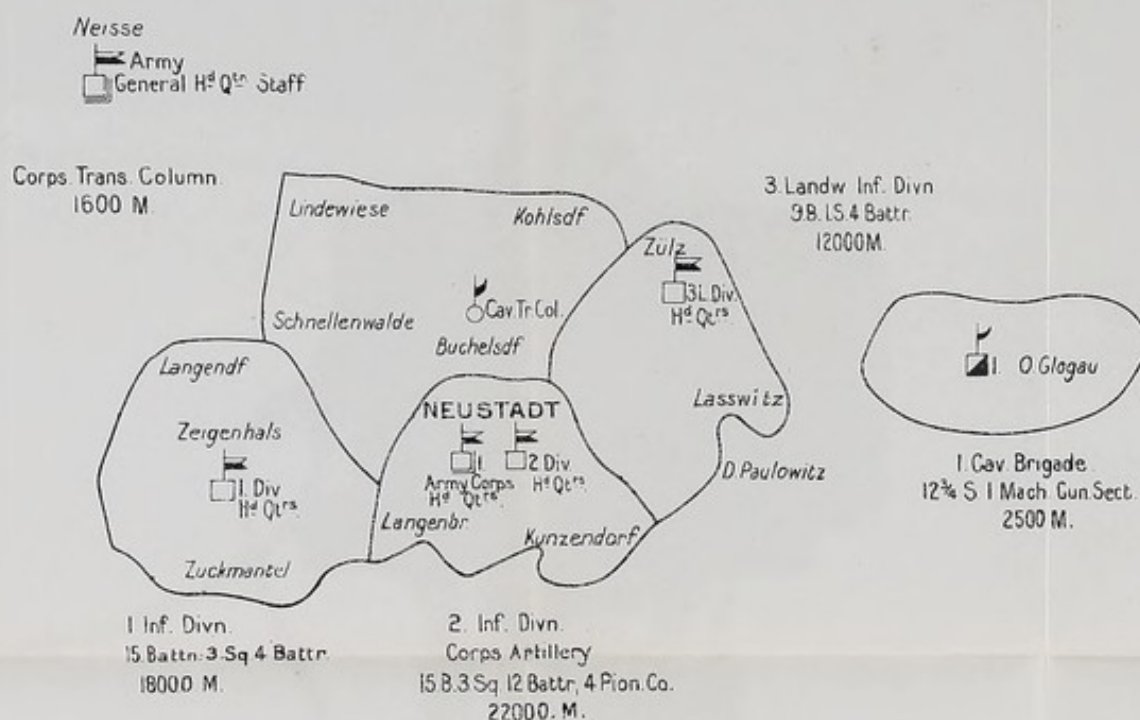
of the 2nd Army Corps on the 1st September 7 a.m.
To be placed on the special map
1:50,000, Z. 7. Kol. XIX.

Note

1. Order of march of the main body of the 4th Inf. Div., $\frac{1}{2}$ Batt^{le}, 8 Batt^{le} Corps Art., 4 Batt^{le} 81st Regt., 4 Batt^{le} 81st Regt., Div. Medical Unit, 4th Div. Amm^{un} Park, $\frac{1}{2}$ Corps Amm^{un} Park.
 2. The 13th Landw. Div. is ready at Dobratitz at daybreak and the 3rd Cav. Div. at 5:30 a.m.
 3. The 1st line transport of the 13th Landw. and 3rd Cav. Div.^{ns} assembles up to 8 a.m. at Chlebowitz west of Mistek, that of the 4th Inf. Div. remains on the west bank of the Ostrawitz.
 4. The Corps transport column stands fast, that of the 4th Inf. Div. proceeds to Freiberg and comes under the orders of the O. C. Corps transport column.
 5. The Corps Headquarters Staff is at Schloss Toschunowitz from 5 a.m. onwards.
- N. B. The details of the disposition of the 4th Inf. Div. would not be known to the P. M. O. of the Army Corps. They are given here with reference to point 3 of the problem (N^o 6).

BILLETING AREAS OF 1ST ARMY CORPS ON STRATEGICAL CONCENTRATION.


1:300,000.





1. In Neustadt there is a small Civil Hosp. (about 30 empty beds), and in Neustadt & O. Glogau: there are chemists' shops.
2. In Schlogowitz & Poln. Olbersdorf, S.W. of Zulz there are a few cases of Typhoid fever.
3. Permanent Station Staff in Neustadt and Neisse, Mobile Station Staff in O. Glogau, Hotzenplotz-D. Rasselwitz, Schnellenwalde and Polnischwette.
4. The Corps transport Column is normal composition (without Field Supply Depot and Slaughter Depot); included in it are No 1 Field Hosp. (at Neustadt on 14.5 noon), and No 1 & 4 Bridging Sections.
 3 Baking Oven Squads of the Corps Bakery are attached to the 2nd Inf. Div.

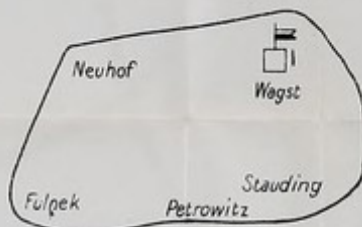
BILLETING AREAS OF THE 1ST ARMY CORPS ON THE EVENING OF 19TH MAY.







1:300,000.


 Impr. C.D. since morning of 16.5.
 Jägerndorf
 1 Landstrum-Bat as garrison troops

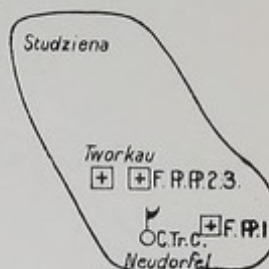
 Impr. C.D. since morning of 17.5
TROPPAU.
 1 Ldst. Brig. as garrison troops
 3 Bat. 1. Batt. 1 Sq.


1 Inf. Divn.
 15 B. 3 Sq 4 Batt.
 1 Pion Comp.
 Br. Section N°3.

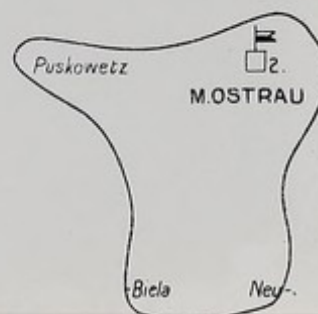


    St. R. C.D. St. Rest. St.
RATIBOR
  St.

Corps Transport
 Zauditz
 Impr. rest station
 with Refreshments



Haatsch Uchilsko
 3 L.
 Oderberg
 3 Lw. Inf. Divn.
 15 B. 3 Sq 4 Batt. P. Co.
 Br. Section N°4.

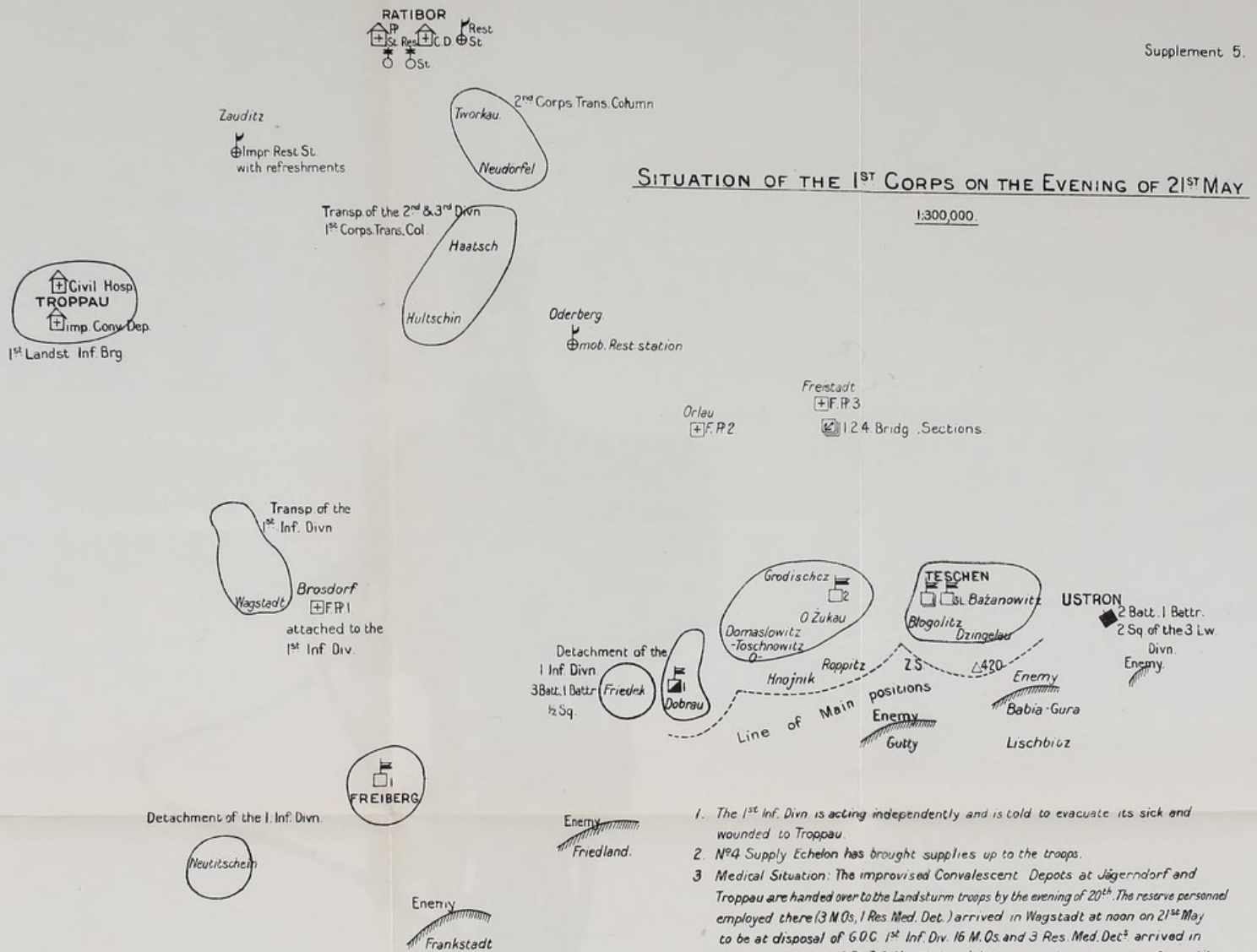


2 Inf. Divn.
 Corps Artillery
 15 B. 3 Sq 12 Batt.
 2 Pion Comp.
 Br. sections N°1 and N°2

NOTE

- 1 The 1st Cav. Brig. reaches Teschen
- 2 The divisions retain their transport.
- 3 Supplies: N°2 Supply Echelon is with the troops on the 19th May.
 N°1, 1/2 refill at the field depot in Troppau, where both divisions replenish their supplies also on 20th and 21st
 N°1 1/2 refills at Ratibor.
 The other Supply Echelons and the 1/2 Cav. Supply Column are already loaded.
 The latter together with baggage of the 1st Cav. Brig are in the area of the 2nd Divn.

- 4 Medical situation on evening of 18th May.
 Improvised Conv. Depot at Jägerndorf (1 I.M.O., 1/2 Res. Med. Det., Conv. Co Det.), with 140 sick
 Impr. Conv. Depot at Troppau, (2 I.M.Os, 1/2 Res. Med. Det., Conv. Co Det.) with 150 sick
 Impr. Rest and Refresh. Station at Zauditz. - Conv. Company.
 Impr. Rest and Refresh. Station at Leobschütz is closed on morning of 19th.
 Ratibor: Stationary Rv. Hosp. (350), Conv. Depot, (210), Conv. Co. (250).
 The Reserve personnel reaches Ratibor by Glogau-Leobschütz at 3 p.m. 19th May, and the corps unit of the Adv. Med and Surg. stores at noon on 20th.
- 5 The railway Ratibor-Oderberg is not open to traffic, the bridge over the Oder being blown up.



1. The 1st Inf. Divn. is acting independently and is told to evacuate its sick and wounded to Troppau.
2. N^o 4 Supply Echelon has brought supplies up to the troops.
3. Medical Situation: The improvised Convalescent Depots at Jägerndorf and Troppau are handed over to the Landsturm troops by the evening of 20th. The reserve personnel employed there (3 M.O.s, 1 Res. Med. Det.) arrived in Wagstadt at noon on 21st May to be at disposal of G.O.C. 1st Inf. Div. 16 M.O.s and 3 Res. Med. Det.^s arrived in Oderberg on the aftⁿ of 21st with 2 mobile rest stations on wagons. One mobile rest station was established there, and the remainder of the material of the Corps unit of the Advanced Med. & Surg. Stores remained at Ratibor with one reserve med. detachment, ready to advance.

Weller & Graham, Ltd. Litho. London.

Supplement 6.

TESCHEN

1 Cav. Brig.

1 Mach. G. Sect.

G. O. C. 3rd Div. 7 Bat. 11 Battr. 1 Sq^{dn} 3 Pion. Comp.


1st How. Regt 1st F. A. Regt
1 Battalion

3rd Div. Regt
2 Battalions

Res.

Div. C. 2

Rifles 2

G. O. C. 3rd Div. 

D. R. 2

Enemy

Energy

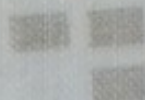
Enemy

Wendrin

Note

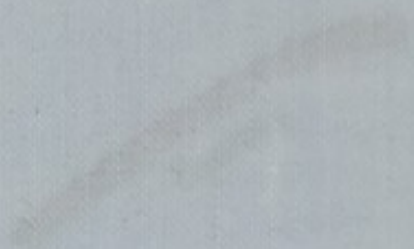
1. 3 Squadrons of the 1st Cav. Brigade in Dobrua.
2. 2 Battalions, 1 Battery, 2 Squadrons of the 3rd Lw. Div. in Ustros.
3. The order for the advances of the group under G. O. C. 2nd Div. will be issued by G. O. C. of the Army Corps.

Indiana Survey, Northampton, 1909



Res.

2344 3 Blow Comb



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Let. No. 20. 1891

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1891

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Supplement 3

- SWEDEN AND NORWAY.** Armies of. Handbook. 1901. 1s.
- SWISS ARMY.** Handbook. 1898. 6d.
- TELEGRAPH LINES. FIELD.** Instruction in Laying and Maintaining 1907. 6d.
- TELEGRAPHY AND TELEPHONY.** Army. Instruction in. Vol. I. Instruments. 1s. 6d.; Vol. II. Lines. 1s.
- TELEPHONES IN THE FIELD.** Technical Instructions for the Use of Provisional. 1908. 2d.
- TELESCOPES AND BINOCULARS. SERVICE.** Notes on. 1909. 6d.
- TELESCOPIC SIGHTS.** Handbook. Land Service. 1904. 4d.
- TERRITORIAL FORCE** (and see Equipment; Establishments):—
 Definition of "Corps" for the purposes of the Army Act. Special A.O., March 31 1908, enclosing the Royal Warrant dated March 30, 1908. 1d.
 Exemption from Jury Service. ½d.
 Leaflets:—No. 1. Organisation and Principles; No. 2. Terms and Conditions of Service; Service of the Imperial Yeomanry. 1d. each, or 6d. per dozen, or 3s. per 100.
 Organisation and Establishment. Special A.O., March 18, 1908. 6d.
 Regulations for the, and for County Associations. 9d.; Amendments. Aug. 1909. 1d.
 Scheme for the Transfer of the Honourable Artillery Company, the Imperial Yeomanry in Great Britain, and the Volunteer Force, and their Reorganisation into the Territorial Force. Special A.O., March 18, 1908. 2d.
 Training. Provisional. 2d.
 Transfer of Units to the. Special A.O., March 20, 1908, enclosing the Order of Council dated March 19, 1908. 2d.
 Uniform. Special A.O., June 12, 1908. 1d.
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- TRAINING AND MANŒUVRE REGULATIONS.** 1909. 4d.
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- TRANSPORT. MECHANICAL.** Regulations for the Appointment of Inspectors of. 1d.
- TRUMPET AND BUGLE SOUNDS** for the Army. With Instructions for the Training of Trumpeters and Buglers. 1909. 9d.
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- UGANDA PROTECTORATE.** Précis of Information. Sept., 1902. 5s. 6d.
- URDU-ENGLISH PRIMER.** For the use of Colonial Artillery. 1899. 15s.
- VALISE EQUIPMENT.** Instructions for Fitting:—
 Pattern 1888 with pattern 1894 Pouch opening outwards. 1895. 1d.
 Bandolier pattern. 1903. 2d.
- VALPARAISO.** The Capture of, in 1891. 1s.
- VENEREAL DISEASE.** See Medical Services.
- VETERINARY CORPS.** Army:—
 Regulations for Admission. 1906. 2d.
 Standing Orders. 1906. 4d.
- VETERINARY SERVICES.** Army. Regulations. 1906. 3d.
- WAR OFFICE LIST, AND ADMINISTRATIVE DIRECTORY FOR THE BRITISH ARMY.** 1909. Sold by Harrison & Sons, 45, Pall Mall. 5s. net.
- WATER SUPPLY MANUAL.** 1s. 6d.
- X-RAY APPARATUS.** Hints Regarding the Management and Use of. 3d.
- ZULULAND.** Précis of Information concerning. With a Map. Dec., 1894. 4s.
- ZULU WAR OF 1879.** Narrative of the Field Operations connected with the. 1881 (Reprinted 1907). 3s.

