THE EVACUATION OF THE SICK AND WOUNDED IN THE TERRITORIAL FORCE.

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INTRODUCTION.

The paper which I have the honour to read before you this evening is, I fear, a very dull one, and I have found it necessary to quote freely from official publications. I think, however, you will agree that it is an important subject, and I hope that the discussion will prove of value to all of us.

The disposal of the sick and wounded after any large engagement between modern armies presents many difficulties, and requires a very high standard of efficiency of medical services. Even regular troops will often find themselves taxed to their utmost to provide means for the speedy evacuation of their sick and wounded to the base. Any scheme, therefore, for carrying out this service in the Territorial Force must be approached with a full knowledge of the difficulties that are likely to occur, not one of the least being the absence of any official publication dealing clearly with this subject as applied to the Territorial Force.

PART I.

COMPARISON OF THE MEDICAL SERVICES OF A DIVISION OF REGULAR AND TERRITORIAL TROOPS.

The existing Territorial medical services of a division have been modelled on those of the Expeditionary Force of the Regular Army, there being, however, some slight difference between the peace and war strength of these units. In "Peace Establishments" each Territorial battalion has two medical officers, whilst in war establishments there is only one; there should therefore be some slight surplus of medical officers to fill up casualties that occur, but inasmuch as a large number of battalions are without any medical officers at all at the present time, these supernumerary medical officers could not be relied upon, and, moreover, it has been laid down that a medical officer gazetted to a particular regiment can only be detailed to another regiment provided he volunteers to do so.

With regard to the field ambulances, their peace and war establishments are practically identical, and from personal experi-
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I can testify to their efficiency; being trained on a war footing they have greater facilities than the regular R.A.M.C. for learning the routine duties they would have to perform on mobilization. They lack, however, any practical training in nursing.

The only other medical unit existing in the Territorial Force is the general hospital, and as such it is only the nucleus of a hospital, its strength as shown in peace establishments being: Two officers and forty-four other ranks; and in war establishments: Twenty officers and 109 other ranks.

The eighteen officers not shown in peace establishments are those who belong, à la suite, to a general hospital, and are available on mobilization; but it is stated that sixty-six privates will be furnished under arrangements to be made by county associations.

Regulations for General Hospitals of the Territorial Force, 1912, Section 4, says:—

"On mobilization the Assistant Director of Medical Services will arrange with county associations for enlisting into the Royal Army Medical Corps, Territorial Force, the rank and file of the remaining personnel to complete the authorized establishment of a general hospital."

In Appendix II. of the same regulations it states that "County associations might invite county directors to approach voluntary aid detachments with a view to registering names of male members willing to enlist on mobilization of the Territorial Force, in Territorial general hospitals, and county directors should keep a list of the names and addresses of persons who have agreed to enlist, reporting to the War Office before March 31 in each year."

I have quoted these paragraphs simply to show that the provision of these sixty-six men really rests with the voluntary aid detachments. This is a very heavy burden to put on the voluntary aid organization, which at the present time has few men's detachments. It would appear to be wiser to have the peace establishment of the general hospitals increased to war strength.

The following units which exist in the Regular Army are not present in the Territorial Force in any form:—

(a) Clearing hospitals.
(b) Stationary hospitals.
(c) Ambulance trains.
(d) Convalescent depots.
(e) Medical store depots.

It is therefore left solely to voluntary aid to supply the deficiency.
PART II.

Voluntary Aid.

Voluntary aid has been found necessary in all large continental armies to supplement their existing medical services, and, although for the most part their organizations are more complete, our own scheme has a sound working basis.

It is not intended in this paper to give any detailed description of how voluntary aid is organized in this country. The official publication entitled "A Scheme for the Organization of Voluntary Aid in England and Wales," and the handbooks published by the different County Directors, and by the British Red Cross Society, put the whole matter very clearly and concisely. It will be sufficient to remark that the organization of voluntary aid primarily rests with the War Office, and is then delegated through the British Red Cross Society to county associations, then through county branches of the British Red Cross Society to county directors, who administer the whole of the voluntary aid detachments in their county in peace time.

On mobilization it is stated in Regulations for Voluntary Aid Detachments that:—

"A retired officer (not liable to recall) of any regular arm of the Service, but preferably a retired medical officer, should be nominated by the General Officer Commanding each Territorial Division, his name being notified to the War Office. The duties of this officer would be to superintend, under the Army Medical authorities on the lines of communication, the arrangement for evacuation of sick as far as voluntary aid detachments are concerned."

Circular Memorandum, No. 388, dated War Office, London, March 15, 1912, states:—

"(1) The normal functions of members of the detachments will be the care of the sick and wounded within the immediate neighbourhood of their homes, and, as they will while so employed live in their own homes, it is not contemplated that they should receive in the nature of pay and allowances.

"(2) A certain number of organizations (e.g., hospitals and ambulance trains) which have no existence in the time of peace will, however, be formed in the event of active operations, and the personnel of these units may be drawn from the voluntary aid detachments among other sources.

"The members of detachments who volunteer and are accepted..."
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for such specific duty will temporarily become part of the Royal Army Medical Corps organization, and will be required to assume the duties and obligations of that service for the time being, including a liability for service outside their own locality.

"(3) Members of the voluntary aid detachments so selected for service outside their own locality will be given a military grading in accordance with their qualifications and the requirements of the service, and will then receive the emoluments attached to the grading in question for the duration of their employment."

These instructions are good as far as they go, but to make the scheme effectual very wide volunteering will be necessary.

Rapid movement to meet a raid will probably be the main function in the early stages of the employment of the Territorial Force, and to permit of this a division must be self contained; with scanty and haphazard volunteering in voluntary aid detachments, it may very likely be impossible to secure a complete clearing hospital or stationary hospital for a division.

Also the terms "neighbourhood" and "locality" require definition. Practically it will mean within 2 or 3 miles of home, otherwise rationing and transport of personnel will be necessary.

I would here state that the county system on which voluntary aid is at present organized does not facilitate the raising of divisional units, such as clearing hospitals. For instance, in the Wessex Division there are six counties, and if a clearing hospital had to be formed for the division it might necessitate correspondence with six different county directors before enough volunteers could be found to complete the necessary personnel.

I think for this reason only it would be better if voluntary aid were organized on a divisional basis.

The Clearing Hospital of the Territorial Force.

No. 3 of the "British Red Cross Society's Training Manuals," Chapter XIX, is devoted to "Ambulance Organization in the Field," and inasmuch as this publication is stated to be issued with the approval of the War Office one might reasonably expect to find at least the outlines of some workable scheme for the evacuation of the wounded. This, however, is not the case. Clearing hospitals are mentioned, but no information is given as to how they are formed.

The impression with which one is left is that a Voluntary Aid Detachment walks up to a dressing station, takes over the sick,
and the dressing station goes on, this being the "alpha" and "omega" of the evacuation of the sick and wounded.

Having thus to some extent prepared the way, it is possible to consider the formation and rôle of the units which carry out the evacuation of the sick and wounded in a Territorial Division.

The first and most important of these is the clearing hospital, and a very able paper by Lieutenant-Colonel James and Major Pollock, read before this Society last year on the organization of this unit in the regular forces, also pointed out the great difficulties the officer commanding a clearing hospital is likely to meet with.

A clearing hospital is mobilized at the rate of one per division and should be able to accommodate 200 sick. It has a personnel of 8 officers and 77 other ranks, and I would add that if ordered to move by road, the equipment of the unit (including stores and supplies) totals about fifty thousand pounds and requires seventeen general service wagons to carry it.

It would not appear to be necessary to have quite such a large personnel in the clearing hospital for the Territorial Forces, as it would not be necessary for it to supply rest station parties, which could be formed by Voluntary Aid Detachments working in the vicinity of their own homes.

It should, however, supply a hospital section and a convoy section, and by deducting 2 officers and 14 men not required for rest station parties, a total personnel of 6 officers and 63 other ranks remains as the minimum of personnel necessary.

The first thing to be done on mobilizing a clearing hospital for the Territorial Force will be to get a commanding officer; and I would here point out that in no foreign power at the present day is the command of a clearing hospital vested in other than a commissioned officer of field rank.

I have previously remarked in dealing with regulations for Voluntary Aid Detachments, that it is intended that this officer should be found on mobilization, but I think it is hard to realize the difficulties which he would have to contend with (especially if he is a combatant officer), in mobilizing a large hospital without previous experience and a personnel unacquainted with service methods.

I would like to see this officer appointed in peace time, preferably a retired Royal Army Medical Corps officer, and he would have ample facilities for seeing and training his unit before mobilization.
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Arrangements for providing the remaining medical officers to complete the strength have not to my knowledge been made, nor can I find it stated anywhere how it is to be done, but it should be possible for names of medical men to be registered in the same way as they are registered for the general hospitals, to fill these vacancies, and I would suggest retired medical officers of the Royal Army Medical Corps and Royal Army Medical Corps Territorial Forces, as being the most suitable.

The remaining personnel of a clearing hospital consists of 1 warrant officer, 8 non-commissioned officers, and 68 other ranks, all of which must be provided by voluntary aid.

In the Circular Memorandum which has been quoted before it was stated that this personnel would be provided by volunteers from Voluntary Aid Detachments amongst other sources. No regulations have, however, been laid down for registering these volunteers in peace time, and I think it would be well if each County Director received definite instructions to register suitable volunteers for the personnel of a clearing hospital, and if facilities were provided for training the unit formed with the Territorial field ambulances at their annual training.

If this scheme were followed it would necessitate their receiving rank, and I would suggest their being embodied as reservists of "The Royal Army Medical Corps Territorial Force."

Rank is necessary in a clearing hospital as it helps to maintain discipline, which is a very serious matter when dealing with a large body of hungry "sick and slightly wounded" soldiers. The Russians, in the Manchurian Campaign, with considerable foresight, established refreshment stations at their clearing hospitals with tables set out, and a plentiful supply of hot food; yet instances were reported where clearing hospitals were rushed and looted by disorderly mobs of slightly wounded men.

The provision of transport for clearing hospitals is another serious problem requiring attention. The existence of a widespread and closely woven network of railways points to rail transport playing a predominant part in the evacuation of the wounded, but it will seldom, if ever, happen that the field ambulances are able to transfer their sick direct to an ambulance train, or even to take them back to the clearing hospital; and although the clearing hospital of the Regular Army has no transport of its own, but has to rely on empty supply carts and improvised transport, there seems everything to be gained by registering transport for this unit in peace time. I would suggest
motor cars and motor buses for this purpose, suitable materials being stored for altering these vehicles for the carrying of wounded.

Canals and rivers should not be lost sight of as a means of transport, and in the Midlands and Home Counties would form valuable adjuncts to road or rail transport.

Another very important question on the mobilizing of clearing hospitals in the Territorial Force will be the provision of medical stores. At present the onus rests with the county associations, who are expected to open a central depot for the storing of gifts by private donors; but even when this has been done, the equipment stored or promised has in my experience been insufficient to fully equip each detachment in that county, and in many cases equipment is lent or given to a specific detachment.

This leads to the question whether there are not too many detachments in some counties, and also to the point whether it would not be better if all gifts and donations were given to some central authority for distribution according to requirement.

Some counties, like Hampshire, reckon amongst their population many people of means, and the number of detachments formed (some 200 or so) is far in excess of the needs of the county; whilst other counties, not so fortunate, find the greatest difficulty in raising detachments owing to the scattered distribution of the inhabitants; while the detachments, when formed, find it hard to make both ends meet.

**Stationary Hospitals.**

The next point for consideration is that of stationary hospitals. In the Expeditionary Force they are mobilized at the rate of two per division, and should each be equipped for 200 beds.

In the Territorial Forces I do not think such large hospitals are in any way necessary.

The general hospital will never be so very far from the fighting line, and if occasion should arise, I see no reason against their receiving many of the less severe cases of wounded that would in the Expeditionary Force be retained in the stationary hospitals on the lines of communication.

The remainder of the "slightly wounded" could quite well be looked after in small temporary hospitals formed by Voluntary Aid Detachments, and many of the detachments I have personally seen at work would be quite capable of forming and administering a temporary hospital of some twenty or thirty beds, but there
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again occurs the question of maintaining discipline in these temporary hospitals. The fractiousness of convalescents and the difficult temper of "slightly wounded" arriving in crowds, famished and depressed, can only be met by stern discipline; and it would be very desirable to have a commissioned officer attached (not necessarily belonging to the Royal Army Medical Corps), who would be responsible for discipline.

If larger stationary hospitals were required, I do not think Voluntary Aid Detachments, unassisted, would be able to carry out the necessary administration to maintain them efficiently.

Another point to be considered is that of seniority. When one or more Voluntary Aid Detachments combine to form a temporary hospital, and if the commandant of the most senior detachment is a lady, will she command any men's detachment that may be attached to her unit? This may seem a point of minor importance, but some grading of officers commanding Voluntary Aid Detachments appears to be necessary, and personally I do not think it would be wise for a woman to act in any capacity other than a nursing sister or matron.

Rest Stations.

Rest Station parties have been alluded to before. Their duties will mainly be the feeding and dressing of sick and wounded at "stations" and "sidings," and these duties could well be carried out by Voluntary Aid Detachments working in the vicinity of their own homes.

Each detachment ought to be able to carry out its duties within a radius of 3 or 4 miles of its headquarters, and if maps were prepared by county directors, showing the area in which detachments would work on mobilization, they would prove most useful when hostilities occur.

On the Continent it has been found practicable, in some cases, to fix the localities of rest stations in peace time. Something of this nature I feel sure could be worked in this country, by notifying county directors of the more important railway junctions, &c., where rest stations would be likely to be required during hostilities.

Ambulance Trains.

The next unit to discuss is the Ambulance Train. Three varieties are described:—

(1) The permanent ambulance train.
(2) The temporary ambulance train.
(3) Improvised ambulance trains:

The permanent ambulance trains I think we need not bother about, as it is not likely that they will be provided for the T.F. in peace time.

The provision, however, of sufficient material in each division to provide one temporary ambulance train is very desirable.

Various ways and means of converting railway wagons into vehicles for carrying sick and wounded have been adopted by Continental armies, but the methods which appear to me most suitable for employment with voluntary aid are:—

The Linxweiler and Wulff Hoffman. The advantage of these methods being, that no screws or bolts are driven into the wagon and they can be easily packed up into a small space and the wagon used for conveying supplies on the return journey.

Whatever apparatus is chosen should be the "sealed pattern" for each county or division, and Voluntary Aid Detachments should have frequent opportunities for receiving instruction in fitting up the frames and loading them.

**Convalescent Depots.**

The only other units we have to deal with are the Convalescent Depots and Depot of Medical Stores. I do not think there would be any difficulty in providing for the convalescents if we had a war in this country. Names, however, of those willing to look after convalescents in their own houses should be registered in peace time. The only difficulty will be in maintaining discipline, and where any large number of wounded are together a commissioned officer would be necessary for this purpose.

**Medical Store Depots.**

The replenishing of the units we have just mentioned with medicines, &c., on active service is, I believe, totally unprovided for. With regard to those units which are to be formed from Voluntary Aid Detachments we have seen that their equipment is to be supplied by voluntary contributions, but it can be hardly expected when these units have exhausted their supplies, that they will be able to obtain more from the same source. The medical stores at Woolwich will be kept fully employed supplying the necessary requirements of the Expeditionary Force, and the only plan that
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suggests itself to me is, that each division should contract for its medical supplies in peace time.
Each division should only contract with firms in that division, and the divisional directors might be asked to form a voluntary aid detachment of chemists, which could be split up into an advance and base depot of medical stores on mobilization, but even if this were done, it appears to be most important that each division should have an adequate supply of medical stores in peace time, which can only be accomplished by establishing a divisional medical store depot.

 DISPOSAL OF INFECTIOUS CASES AND INSANES.

No mention has been made of the disposal of infectious cases and insanes, and there appear to be no regulations on the subject. Sanitary officers of divisions, however, might be asked to prepare maps showing available isolation hospitals and their average accommodation, but it must not be supposed that civilian requirements will be any less during war than they are during peace, but rather the reverse. Accordingly arrangements should also be made for providing isolation camps at approved places in each division, and rolls of volunteers for duty in these camps should be prepared before mobilization. Insanes should be accommodated in like manner at the nearest asylums.

SUMMARY.

In conclusion I would summarize the more important points that appear to be necessary to any efficient scheme for the evacuation of sick and wounded in the Territorial Force, as follows:—
(1) Voluntary Aid should be raised and administered on a divisional basis.
(2) Clearing hospitals require to be formed and trained in peace time.
(3) A Royal Army Medical Corps Officer is needed in each division to supervise the training of the lines of communication medical units.
(4) The provision and renewal of medical stores for Territorial Force units should not be left until mobilization has occurred, but should be collected in peace time, on some such system as that of the divisional medical store depot.
(5) Some official publication is needed dealing clearly with the whole subject of the employment of voluntary aid and the units they will have to form on mobilization.
And lastly, the appointment in peace-time of an A.D.M.S. of lines of communication who would be responsible for the organization and administration of the lines of communication medical units both in peace-time and after mobilization.

**DISCUSSION.**

Colonel Skinner, while cordially agreeing with the main contention as to the need for more complete organization in peace-time, pointed out that line of communication units ought not to be organized on a divisional basis. Although a clearing hospital was allotted to a division for purposes of evacuation of the sick and wounded, it was in no sense a divisional unit, but was under the command of the D.D.M.S. of the lines of communication. He laid great stress on the importance of furnishing the clearing hospital with transport.

Surgeon-General Sir Launcelot Gubbins, Director-General A.M.S., paid a high tribute to the keenness and efficiency of the Voluntary Aid Detachments. With regard to the sixty-six men required to make up the personnel of general hospitals to war strength, the twenty-three Territorial general hospitals would require 1,518 men. We now have 16,000 available. We have a total of 52,000 persons registered in voluntary aid detachments, of whom two-thirds are women. This leaves a good margin of males, but the able-bodied men under 30 should be in the fighting units—not in the voluntary aid detachments.

It is undesirable to limit the number of voluntary aid detachments, because this would limit the very important rôle of these detachments in training the people of this country in ambulance work. While, however, there cannot be too many detachments for peace, some limiting may be desirable for the purposes of war.

The War Office should not be looked to except in matters where large principles are concerned. Improvement and organization should be brought about by the initiative of county associations and efforts of the Territorial Force and Voluntary Aid Societies.

While agreeing that retired R.A.M.C. officers would be the most desirable commanding officers for Territorial clearing hospitals, the Director-General reminded the meeting that retired R.A.M.C. officers would be worth a very great deal in times of mobilization, and that it might not be possible to spare them for this purpose. With regard to the isolation of infectious cases, he believed that there was a superabundance of isolation accommodation available in this country, and that this point would present no difficulty.

Colonel Harper, A.M.S. (T.F.), feared that in the absence of medical units in the evacuating zone, the movements of fighting formations would
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be greatly hampered by the accumulation of sick and wounded. He asked for an opinion as to how far back the field ambulances might be expected to work in war, and as to how the sick were to be transferred from the field ambulances to the clearing hospital.

Major Waggett, R.A.M.C. (T.F.), said that the main point about our voluntary aid detachments is that they are longing for work. They are at the present time asking for a more complete organization. It would be a very popular step to form them into line of communication units. These voluntary aid detachments are very intelligent, and are quite capable of doing more than they are asked to do at present.

Lieut.-Colonel Bertram Soltau, R.A.M.C. (T.F.), pointed out that present the onus of finding, raising and equipping the whole of the personnel for the evacuation and distribution of the sick was thrown on the Voluntary Aid Detachments working under County Associations. The latter were already overtaxed, and to expect them efficiently to carry out the details of organization for line of communication units on mobilization was not fair. The Voluntary Aid Detachments in his neighbourhood, while full of enthusiasm, were lacking in administrative knowledge and each detachment was trained on somewhat individual lines. Concerted action in the event of mobilization was therefore not to be expected.

With regard to Clearing Hospitals, Lieut.-Colonel Soltau regarded them as the crux of the whole problem, the duties of which were far more difficult than those of the Field Ambulances. These units required just as much training as Field Ambulances, and if economical reasons made their formation impossible, it was a question whether it might not be better to cut down the number of Field Ambulances by one in each Division and substitute a Clearing Hospital. The placing of the work of evacuation on a voluntary basis placed too great a responsibility on a civilian population. For efficiency, far more preparation on a recognized and subsidized Territorial basis must be made.

Captain Sylvester Bradley, in reply, said that while Temporary Hospitals might be formed, on active service, from Voluntary Aid Detachments, this was not so with the Clearing Hospital which must be organized in peace, since it is the pivot on which evacuation turns. He regarded seven miles as the probable limit of distance between the Field Ambulances and the Clearing Hospitals. He expressed his thanks to the officers who had kindly taken part in the discussion.

Econocooker.

After the meeting, M. Emile Kiechle kindly gave a demonstration of an apparatus known as the “Econocooker” which should be of great service for field-cooking in medical units, or in officers’ messes. The principle of the cooker is that, after being heated over a fire, the food is placed inside a metal “container” lined with felt, which prevents loss
of heat; baking and roasting can be carried out without previous heating. The heat is supplied by metal discs previously heated over the flame of a "burner" and brought to such a temperature that water, when thrown on them, at once forms round droplets and runs off, or evaporates. These discs are placed one above and another below the series of cooking pots, the "container" being then put in position so as to cover the set. M. Kiechle proceeded to roast a chicken, an operation that was successfully performed in thirty-five minutes. While the meeting had been in progress, a stew, vegetables, fruit, and other delicacies had been quietly cooking in a separate apparatus, and the members had an opportunity of seeing how perfectly successful the demonstrator had been in preparing a complete meal. The advantages of the method may be summarized as follows:

(1) Fuel is greatly economized.
(2) Labour is reduced to a minimum.
(3) There is no loss of either flavour or nutritive value, since evaporation cannot take place during the process of cooking.
(4) The food cannot be over cooked as the retained moisture prevents this. A meal may be prepared and left in the "Econocooker" for many hours, and yet be exactly right, and fit to be served when it is required. It is needless to point out the value of this quality in a cooker for field purposes.

The accompanying photograph shows the component parts.