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AN ESSAY

BY

SURGEON GEORGE, J. H. EVATT, M.D.,
ARMY MEDICAL DEPARTMENT.

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II.

SHORT SERVICE FOR THE ENGLISH SOLDIER IN INDIA.

By Dr. G. I. H. EVATT,

Army Medical Department.

INTRODUCTION.

1. We purpose in the pages that follow, discussing some aspects of the short service question with special reference to its applicability or the reverse to the Imperial Garrison in India. We propose to enquire whether advantages or drawbacks are likely to ensue from the application of short service soldiering to the English Army stationed in this portion of the empire, and to contribute some individual views towards the formation of a public opinion on this subject. No question that we are cognizant of is so rapidly coming to the front as this one. In a year or two the soldiers enlisted for six years under Lord Cardwell's Act will be time-expired for their period of service with the colors, and it seems advisable at this time to examine how a Short Service, system for India, is likely to affect England in her imperial position India, and the army.

2. A question of such deep importance, and so wide in its bearings as this, must be discussed in a wide and liberal-minded spirit. We must discuss it firstly in its English Imperial aspect, as to how it affects the mother country. Secondly, in its Indian aspect as concerning the Indian Government, the question of expense to the Indian revenues, and its general applicability to this country. Thirdly, as to how it would affect the military efficiency of our Home Army, and of our garrison in India. And fourthly, in its medical aspect as concerning the personal health, and well-being of the individual soldier. Any settlement or attempt at settlement of this question that is not based upon a just valuation of each of these aspects will certainly fail, and we may rest assured that unless the decision is thoroughly in accordance with modern ideas it will be quite useless. We cannot stem the current of modern ideas, the true aim should be to divert that current as best we can to do the work we want done.

3. In any consideration of this question of the service of the British Soldier in India we may lay it down as a first principle, that any attempt to revert to the system of a Local European Army in this country is quite out of the question. We take it for granted that the English Soldier is in future to be a wholly Imperial servant, and that all questions referring to the Army will be dealt with from an Imperial point of view. Without entering more fully into the invidious question of the efficiency of the old Company's European regiments in India we may conclude that the step taken in 1860 of abolishing the Loca

European Corps in India, and followed up since in the Cape, St. Helena, Canada and Ceylon, is a sound principle, and not to be departed from. We cannot allow the English Soldier to be hired or dealt with by any local administration; he must remain part and parcel of an imperial organization, a visible sign of our imperial existence.

4. Practically, as we shall note further on, India secures by the existing long service, or coming short service system, an ample supply of intelligent subordinates from the ranks of the Imperial Battalions, to fill the petty offices of the local Indian Administrations. Without any trouble in enlisting special men, without the drawback of taking a mixture of bad and good together, as she would have to do in any general enlistment, India skims off as it were the cream of the non-commissioned officers and men of the British Army in India for her service. So long as they behave well she keeps them, the moment they misbehave she returns them to the Imperial regiments, an easy mode of getting rid of them, and one quite impossible had she regiments of her own. It is literally by such subordinates—the cream of the Queen's European regiments, that all the sub-departments in the country are carried on. The Commissariat, the Public Works Department and the Canals are ably worked by these men. They are nominally soldiers, but really military civilians, in the pay of the local administrations, employed during good behaviour, and liable at any fault to revert to their position in the rank and file of the European corps. Such a privilege granted to India more than makes up for any supposed injury she may imagine she suffers, in not having European corps of her own from whom to choose subordinates.

5. It seems fair in the commencement of this paper to state, that its general tendency will be to place in prominence the various arguments which we believe have weight in favour of the short service system. In thus taking the reader into confidence, it is but just to ask that the various arguments put forward may be considered. Short service must be considered. It is in vain laying down fine theories that cannot be carried out. Short service must be fully and fairly discussed, the opinions and the prejudices of the service notwithstanding.

6. We shall divide this question for convenience of examination into four heads, viz:—

(a) The imperial aspect of short service in India as concerning England in her imperial and military position.

(b) In its Indian aspect as concerning the Government of India, the question of expense and efficiency.

(c) In its military aspect, as to the bearing of the question on the strengthening or weakening of our military position in this country.

(d) In its medical aspect, as concerning the personal fitness of the individual soldier.

Finally it would seem necessary to discuss some changes, which the introduction of such a system would necessarily entail in the routine of Indian service.

Section A.

The Imperial Aspects of short service in India.

7. We believe that viewed from an Imperial point of view, nothing but good will result to England and the empire from the introduction of short service for the European Soldier in India. By short service in India we mean service under six years in this country, and averaging five years for each individual man. It is needless to point out that short service refers only to the private in the ranks, and to a small percentage of non-commissioned officers. In any Short Service Army, a backbone of long service, and thoroughly professional officers and non-commissioned officers is a *sine qua non*. This is granted in all discussions on the subject. We must by every possible means keep the sergeants on the permanent long service back-bone of the army. Good pay and good pensions can secure this without any difficulty.

8. It is further necessary to note, that in discussing this question we do not propose to relieve regiments or battalions, as such, every five years. The relief will be entirely individual. It is of much importance that the short service soldier should not come to India as one amongst 800 in a battalion all equally ignorant of India as himself, and changed every five years; what is wanted is that the permanent cadre of officers and non-commissioned officers should serve for the same term as at present, and that their private soldiers should alone come and go for five yearly periods. The change of battalions every five years would disturb the roster too constantly. It would bring out to India a crowd of soldiers, all in the same battalion, with officers and staff quite ignorant of the country, and this we do not want. The colors should remain their full ten or twelve years in India, and the individual men alone be relieved as their period of service for five years expires. All errors made in India in the way of interior economy or of climate exposure are made by new regiments just arrived in the country, in which, as often happens, no one knows the Indian routine. It takes time to learn such routine. To bring out every five years raw battalions from England is to court serious losses from ignorance of the customs of Indian service. For the sake of convenience we shall examine each point of the imperial aspects of short service in India separately.

9. *(a) The empire is benefited* by the English soldier coming for a certain time to India, and taking his share of Indian service. We have adopted short service with the colors, and handing over to the reserve afterwards, as the rule for the future in our English Military System. Doubtless there are arguments against this system, but though it means a termination to our splendidly drilled Old Soldier Army, and although it means infinitely increased work for the officer and non-commissioned officer, it assuredly means national military efficiency.

Viewed from such a stand point we may freely sacrifice much of the old perfection in parade movements that so long made our army unique in Europe. With a Short Service system then it becomes necessary to force as it were the military knowledge of the recruit. It becomes necessary to compress into five years of active duty with the colors the amount of knowledge the average soldier gained in 21 years long service under the old system. This can be easily done, and the more insight, and the more intimate knowledge we give the man of his profession in those five years, by so much is England the gainer.

10. Now nowhere better than in India can a man be taught soldiering. It has been said and with some truth in the olden time that India may be to us what Algeria was to France under the third empire. A school for lax discipline. A school for happy-go-lucky campaigning. A country for gaining decorations in, but for forgetting all real military knowledge. The liability of such results is every day passing away in India. European efficiency is every day making greater inroads upon old Indian institutions, and the luxurious campaigning of old days is now merely traditional. Properly worked, India should be the rugged nurse of the soldier. Here the English private removed from the dissipations of an English Garrison Town is thoroughly under control. Discipline grasps him with a hold from which escape by desertion is impossible. Surrounded by a population which may perhaps one day become agressive, he feels more on the *qui vive* than he ever could be in any Home Garrison. He can see camp life most thoroughly. Long marches are the rule. He sees the Commissariat working in a far more complete way than in England. Ample leisure exists in which to study his profession, or to learn in the school. Removed from his friends and relatives, comradeship and the regimental bond becomes far closer than in England. If a man is to serve five years in the army, and then pass to the Reserve, every year he passes in India of that five, is for the reasons before mentioned, worth twice the time spent in England.

11. All we have written in these preceding lines refer to the first five years of a soldier's life in India. In these years of enthusiasm and bodily vigour the man is every day improving. Beyond that period to our mind the private soldier if still in the ranks and not a non-commissioned officer, begins to deteriorate morally and physically. He sinks into the indifferent type of Indian Soldier. He begins to be listless and used up. He has survived his enthusiasm for the new country and to enjoy the greatest ease may become his aim. He strives to get married. Such a man had far better return to England. If a man is still, at the end of five years service, a private in the ranks, he has stamped himself as a man devoid of energy unless in very rare cases. Such a man in the Barrack-room is deadly to the enthusiasm and energy of the recruit. It were far better to offer him any pension to leave the active ranks than to allow him to teach the young enthusiast that all is vanity in the military life.

12. After this period too, as we shall notice further on, the commencement of climatic deterioration sets in. Previously his diseases were those to which in any colony he might have been liable. Now commence the diseases of Indian deterioration. It is just before this period he should be returned to England, and to the Reserve there. Such a man knowing the army life, accustomed to a vigorous discipline, not too old to take up heavy labour at home, able if he choose to go home with money saved in India, is an excellent reserve soldier, but in the army ranks he would be terribly in the way. If we kept him with the colors he would demand a wife, and that alone entails innumerable drawbacks. Long service means married service. We must reduce the long service married men in the army to the fewest possible to obviate such a dead weight. The officers and the non-commissioned officers, who must be long service men, alone can be permitted to marry while in the active army. This should be a *sine qua non*.—England then is benefited by having her soldiers trained in a good school in India instead of living in a Home Garrison.

13. *(b) The Reserve at home is made more efficient* than it would be without the Indian trained soldier in it. This follows from the preceding argument.

14. *(c). The imperial spirit is fostered.* The English peasant coming out to India, and seeing there, and on the way out how great an empire his country rules, has his mind expanded to a great degree; education working hand in hand with this travelling does much for the man. Such an individual returning while still young and vigorous to England as a reserve soldier is somebody, and no doubt induces young lads to enlist.

15. *(d) Money can be saved in five years Indian service.* India must pay for her imperial garrison. They are cheap at almost any price. They represent English manhood, an article every day rising in value. The English non-commissioned officers' and privates' pay in India should be to their English pay as the pay of a Captain in India is to the pay of a Captain in England. This is the true principle. Thus paid, a stupid man who cannot hope to become a sergeant, can at any rate save money and go home after five years with a very good sum in his purse, he can rarely hope to do this if he has been serving all the time on English pay in England. Here in India he has few dissipations and almost of necessity saves money. There are besides many paid regimental appointments in this country held by private soldiers all tending to give more pay.

16. A man should be well paid in India. India secures her garrison of European troops at a cheap rate, because she pays only for healthy strong men. The moment a man breaks down, he is sent home, discharged, and becomes a dead weight on the imperial pension list. This is hardly fair; men break down from Indian exposure, and to maintain Indian state existence. Men so breaking down have a claim

on the Indian revenues. India escapes the dead-weight of a non-effective charge for broken down soldiers and Chelsea Hospital Pensions supply the man. If such be the case, then while serving in India he should be very well paid. Remembering that she escapes the pension charges India may fairly pay him well, while the soldier there serves with the colors.

17 *(e) The return of Indian invalids to England ceases.* It is necessary to explain that by Indian invalids, we mean men whose disability is traceable solely to Indian service. The great bulk of the invaliding for the first five years is such as would occur in any garrison at home or abroad. It is the invaliding of the imperial character. This first five years invaliding is very different from the invaliding of Indian deterioration that sets in about the 6th and 7th year in India. India is little to blame for the invaliding of the first five years, she is solely to blame for all after. When we say India is solely to blame, we do not say Indian climate, we mean the Indian life of the average long service soldier. The return of the Indian soldier, broken down from Indian long service to England, is an imperial loss and calamity. He is really a dead weight on the country. He is unfit for any heavy labour. He is fit only to carry parcels and letters as a commissionaire. In addition to the idle habits long service soldiering has too often taught him, actual organic disease has grasped him, and he finds himself unable to work hard. Such a man going home to England is a weakness to England. Now the invalid who breaks down in the first five years is not a weakness to England from Indian causes. He would probably break down in Woolwich as well as in Meerut or Lucknow. He is unfit perhaps for a soldier hereafter, but he is quite fit for civil life. Not so the long service Indian invalid. He is unfit for either soldier or civilian. He is hopelessly broken down. We avoid producing this man by having short Indian service. We return him home before Indian constitutional deterioration properly so called, sets in. We can send the man home fit for active labour, able to work at a trade. Not too old, not wedded to the diligent idleness of the long service private soldiers' life and on this account we say England would gain by short Indian service.

18. *(f) No married soldiers in India. No waste of English lives.* The more we examine the married private soldier as an army institution, the more terrible a dead-weight he seems while serving with the colors. If we keep men 21 years with the colors, we must let them marry. That goes without saying. Now nowhere more than in India is the married private soldier a thorough anachronism. He is wholly out of place. It is a down right waste of English life to let him exist in the country at all. As a necessary *sequela* of our long service soldiering system, we are year by year in India sacrificing hundreds of English children who cannot possibly be preserved. Fancy a Regiment of Infantry with 100 married women and 150 children moving in the rear of the column. What a terrible dead-weight. The moment a

regiment under long service rule, gets under orders for India, the men, often stationed in some garrison town, get permission to marry literally by dozens. Selection in such cases is not very marked—the man marries the first passable girl who will take him. Let us follow his career. He and his wife, and his married comrades occupy one-sixth of the troop-ship in its best and airiest place. A hospital is provided on board for his sick wife and children. Medical comforts on an expensive and liberal scale are carried for her. Scarlatina and measles are liable to be carried into the ship by the children, and it spreads amongst the fighting men. They arrive at Bombay. One-fourth of the train is taken up by the married privates' wives and children and their luggage. They arrive at Deolalee. Large married barracks are built specially for them. They come on the Indian Government pay list of Rs. 8 per woman and Rs. 2-8 per child. They again fill the train and encumber the march in going to the regimental station. Women and children perish in a terrible percentage year by year in this country. Every epidemic disease fastens first upon them. Large tracts of cantonments are built upon to provide barracks for them. Special hospitals are provided for them and special nurses. The school master, who ought to be teaching the rank and file, is teaching their children. A mutiny occurs, they form a mass of unprotected women, or one-fourth of the fighting men are withdrawn from the field to defend them in a cantonment. A Camp of Exercise takes place; one-fifth of the regiment is to remain behind, being married. A campaign beyond the seas takes place; form a depôt for the married women. They get sick, and a special share of hill sanitaria is set apart for them. Now, if the married private is to exist, his wife and children deserve all this and more. If we bring them to India we must care for them tenderly. But why bring them? The married private is really an encumbrance in the service. If he is killed, a helpless widow and children fall on the country for support. Would it not be better then to have short service men, who cannot possibly marry, and let the permanent *cadre* alone be married. With twenty-five married sergeants and some married officers, not much injury is done to efficiency, but add on sixty married privates, and it becomes a really crying evil. It was the necessary result of an old-soldier army, but is it necessary to-day? Certainly not; if we introduce short service into this country. The death rate of the English women and children of the rank and file of the army is very dreadful, and by refusing to allow the long service married man to come to India, England imperially must be considered as a gainer. In ten years between 1860-69, 1,180 women and 4,000 soldiers' children died in India. (Vital Statistics Bengal Presidency, tables CLXXVI and CLXXVII, Bryden.)

Section B.

Indian Aspects of Short Service.

19. We now turn to the Indian aspects of the question, having in the preceding section, noted the imperial advantages. At first sight it

seems impossible to say anything to combat the idea of expense in relief, always supposed to attend a short service system. This, however, has to be considered very fully. But in the very outset we may state that the duty of India is to pay for her garrison. Having no European force of her own to enlist at home, no mixture of good and bad bargains to accept as soldiers, able to take the cream of the British Imperial regiments for her sub-departments, with no heavy pension list which would certainly exist had she European levies of her own, India can well afford to pay heavily for reliefs. But we shall show easily that she can save money by this short service system in many directions, and this money can be employed in defraying transfer charges. But it is of paramount importance to state our belief that very rarely any question of Indian expense should be permitted to interfere with direct Imperial advantage.

20. *India would secure young active soldiers.* By this system of short service, India would receive young enthusiastic men in the prime of youth, from twenty to twenty-five years of age. The old soldier class, that is, the class over seven years' service, would no longer form a part of the rank and file of the army. If a man wanted to remain in India, he should qualify himself for the non-commissioned grades. In the ages under twenty-five years a man is full of enthusiasm and vigour, able to endure fatigue, and desirous of distinction. After thirty years of age the soldier dies off rapidly in India. For a man over thirty years of age to come to India as a private soldier is quite useless. He will certainly die in the field. This was proved very thoroughly by the sickness of the 6th and 73rd Regiments during the Mutiny.

21. *Any man permitted to remain after five years' service would be thoroughly good.* By laying down the rule that no private soldier was to remain in India after five years' service, unless on certain conditions, an immense impetus would be given to many men, who would desire to remain in the country. These conditions should be, that of being sergeants in the regiment, having passed into Roorkee and the military sub-departments, having passed the lower standard, having so much money amassed in the savings bank, and such like regulations. Soldiers will, many of them, like to remain in India. If they desire it, it should be a boon to be gained by special service as above. By such a system, India would strain out, and keep in India, the cream in intelligence and conduct of her European garrison, and those who were either so careless or so dull as to be unqualified in the ways we have laid down would be returned to England. We do not need in India the slothful, listless stamp of soldier. Above all things we do not need the married private of long service. If India enlisted men direct for a Local Army, she would be infinitely worse off than she now is, in the way of absence of efficiency and increase of expense. In the first place she would have to offer high pay and pension, further she would have to take the good and bad recruit according as he enlisted, but now she takes only the intelligent Sergeant of the Queen's Troops. She would have to allow her private soldier to marry, because they would certainly have to be long service men, and a heavy pension list would also exist.

22. *New ideas from England.* By the interchange of officers and men from England, India is kept up to European ideas in weapons, equipment, and modern military ideas. England no doubt benefits in return by the interchange with India, as we know that many military improvements came from the Local Indian Service.

23. *Question of cost.* The existing rule of battalions remaining out ten to twelve years need not be changed. On the contrary it would be hopeless to attempt to relieve battalions as such every five years. We do not want to bring out to India a crowd of officers and soldiers, all in the same corps together, and all equally ignorant of the country. We want the reliefs to be wholly individual reliefs. Let the battalion vacancies be filled up by recruits from England, but let the recruit join in India a battalion that knows the country and its ways. Two hundred men thus arriving out each year do not disturb the tenor of regimental life, but soon find their places divided amongst eight companies in a battalion. But great confusion and disorder would reign if every fifth year one-fifth of the battalions in India were to go home and one-fifth from England arrive out. By causing the relief to be individual all such confusion is averted. Now, with reference to cost, it is necessary to record that India would save immensely by abolishing the married private, the *incubus* of long service soldiering. She would save thus : (*a*) by having the married quarters in the troopships available for soldiers, as the sergeants would alone be married ; (*b*) by having no train accommodation necessary in India ; (*c*) by almost complete abolition of married quarters in cantonments ; (*d*) by abolition of regimental female hospitals, one per station being ample for the few sergeants' wives and children ; (*e*) by abolishing the family grant, averaging Rs. 10 per married family in payment, in addition to the cost of quarters ; (*f*) abolition of the Lawrence Asylums, except for Eurasian children. The married privates' children would be drafted from India.

24. *Efficiency of her Garrisons.* The married soldier, reduced or removed to a minimum, we should be able to bring into the field nearly every man in a battalion. To-day when a campaign occurs, one-sixth of the men are kept back to guard the married women. India would gain then in efficiency by having every man available in case of a campaign.

Section C.

Military Aspects of the question.

25. When looked at from the military point of view the following aspects present themselves :—

(a). Good reserves of men accustomed to field work, accustomed to marching, and full of regimental spirit, are formed in England. These men would be a back-bone of strength to the Reserves in the day of trial.

(b). Discipline can be very exact in India, far more so than in England, where desertion is so much the rule. England therefore, in a

military aspect, would gain by sending her young soldiers out here. The hold of the officer over the soldier is far greater in India than at home, and this is an advantage.

(c). The English soldier deteriorates in India as a fighting man, if he remains more than five years out in a private's grade. If, before the end of his five years' service, he has not risen to a sergeant's rank, or has not passed the lower standard examination in Hindustani, or passed the examination into the Roorkee Engineering College, or has not shown himself specially useful and handy in some regimental employment, it is far better to send him home to England and the Reserve. After five years' service, more or less, the relaxing effects of the Indian climate begin to tell upon a man's constitution and habits. If he be active and energetic enough to struggle against this tendency, he may conquer it. If, on the contrary, he is careless and listless he may sink, as many old soldiers do, into a useless and idle being, who is a bad element in any barrack room. Such a man had far better be returned to England. There hard work and an invigorating climate may again waken up life in him, but to keep him in India is to encourage him in becoming a drunkard. All medical evidence too goes to prove that a soldier after thirty years of age, and still doing duty as a private, exposed to sentry duty, and the wear and tear of a soldier's life, soon ages and becomes debilitated. Such men are useless for field service, and once stricken with disease never rally. Young men on the contrary, even if attacked with sickness, have the power of rallying and often recover. The period of active degeneration in India from a physical point of view is after the seventh year, but a certain way to avoid it is by returning the men who don't suit the Indian climate after they have been five years in India. There is a lazy idle stamp of old soldier seen in every Indian barrack room. He is the bad element there. He knows where liquor can be purchased surreptitiously. He teaches the young soldier to grumble at all fatigue duties. He is the leader of complaints in all times and places. Such a man is useless; and worse than useless; he makes other men bad. To get rid of him into the Reserve is often a great boon.

26 *(d). We secure the enthusiastic young man as a soldier.* The soldiering life is one of terrible monotony in peace time. Routine holds the English soldier in a grasp of the strongest kind. Perpetual parade and barrack square drills, continued for years, soon kill all interest in soldiering. What we want is to secure a stream of young men in the days of their enthusiasm, and work them hard during the few years when enthusiasm exists. After it begins to pass away and monotony is settling down upon the man we must get rid of him to the reserve, if we would save our recruits from being injured by him. With young men properly handled by good officers any amount of work can be got through, and in the ranks of civil life the reserve soldier will be compelled to labour until the day when any mobilization of the forces calls him to his place in the active battalions. By careful training and continual teaching, such as must be introduced to make the short service soldier a good one, we will make of the young man in five years an

infinitely better being than 21 years of busy idleness did for the old stamp of English soldier. These old soldiers turned adrift at 40 years of age with a small pension, accustomed to idleness, unacquainted with any trade, so enfeebled by long service as to be unable to take up any hard labour employment, accustomed for twenty years to be cared for like children; such men are encumbrances to any nation, because they are unable to help themselves. Crowds of such men are to be seen in every city in England, striving to earn a living by carrying letters and such like labour. Such men will no longer be seen if short service gains the day. If a man remains 21 years in the service, he can only do so by becoming a sergeant early in life, and an ample pension should be his reward. The short service soldier will be returned to civil life thoroughly wakened up, while vigorous and strong, not enervated by prolonged barrack life, and unaccustomed to the idleness of the old soldier. In civil life, helped on by his retaining pay, he can make his way in a trade far better than an old soldier of 40 could, and hence the country gains. But the army gains most of all. It secures young men for the active battalions. For such youths, no amount of teaching can be too much. They can be taught everything appertaining to their calling, and the army with young men in it can become a great school for the education of the adult male population.

27 *(e). Advantages in having no married private soldiers.* The married private soldier is thoroughly an incumbrance; by getting rid of such a being military efficiency is promoted to a great degree with a short service system. Instead of having 100 married women in a battalion, 25 will be about the limit, and they will be the wives of the sergeants, who alone will be permitted to marry. When a man who is a private soldier desires to marry, he must at once join the reserve. In India the married soldier is greatly in the way. His wife and family require protection in time of war, and by doing so withdraw fighting men from important duties in the field. Sickness which haunts the married quarters, and there first of all discovers the weak points of sanitary conditions, will be much diminished by the abolition of the married private. The school, instead of being filled up by soldiers, is now filled by soldiers' children, and the schoolmaster, whose real duty is, instructing the rank and file, is wholly employed with the soldiers' children. Making every allowances for married sergeants and such like cases, the system of unmarried privates will bring at least 4,000 extra soldiers into the field in the Indian army alone.

28 *(f). If soldiers desire to serve in India demand of them special qualities in return.* Let us remember that if soldiers desire to continue serving in India it is a boon that cannot be granted without demanding something in return. Let us keep the permission to remain in India as the reward for special labour in certain directions. Thus we have in hand a fillip to study and to attention to duty. Let us say no man shall remain in India who has not a 1st class certificate in education, or who has not passed in the Hindustani language, or who is not a non-commissioned officer. By thus keeping the boon of Indian

service as a reward for certain good points in a man's service we do good to India and to the army, as we encourage hard work and study.

29 *(g). In case of war in India the men sent out from England, who had previously served in the country, would be better able to stand the climate.* Dr. Bryden says, "Vital Statistics, Bengal Presidency. Sickness and Mortality, European Troops." Report I, Section III, Page 38: "The old soldier landed in India dies or is invalided, and the old soldiers are the men above thirty." During the mutiny war of 1857-8 the old men of the 6th and 73rd Regiments in particular suffered, and the 6th Regiment in particular was ordered into cantonments, the Commander-in-chief fearing it would be rendered useless for service by the death-rate. Advantages in a military point of view would be gained by the reinforcements coming out from England having previously served in India and been more or less accustomed to the country.

Section D.

Medical Aspects of the question.

30. The medical aspects of the short service system for the European Soldier in India are most important. If it be found that young men stand the climate well, rally better from severe diseases, have more elasticity of constitution, and suffer less from diseases of Indian deterioration, it will be a great point gained. If, on the contrary, it is found that long service soldiers are better men, stand the climate more easily, do not sink under attacks of disease, and do not deteriorate in this country, such results would be arguments against short service systems, and would have to be dealt with.

31. Now, in all questions concerning the English Soldier's physical fitness in India it is necessary to remember that what would be called a vigorous young man in England would, in the ranks of a Battalion in India, be considered an old soldier. Such is the wear and tear of an average long service English Soldier's life, such the bad effects of varying climates, guard duties at night, a heedless, careless existence as regards food and drink, and indulgence of the passions, that a man over thirty years of age in our army, if still a private, is practically an old man, and of little use for active service in the field in India. We know from experience during the mutiny that to bring out to India soldiers of thirty years of age, who have not been before in India, is practically useless. Such men die off at once on Field Service, their constitutions being unable to adapt themselves to the exposure to the climate a private soldier's life entails. This truth is proved very clearly in Dr. Bryden's statistics of the European army in Bengal. This fact established, we know that at any rate the English Soldier for service in India must be under thirty years of age.

32. We also know that the soldier who has served in India more than 7 years without a change to England is liable to a very high death-rate and to an invaliding rate of a most startling amount. "The "British soldier can withstand the effects of the Indian climate for

"a limited period only." (Bryden's statistics, page 41.) "Whatever body "we may choose for illustration, the rapidity of the increase of death-"rate with age is most striking. Whether under exposure, in the "routine of cantonment life, or in the special conditions of the newly "arrived body, the phenomenon is constant." (Bryden, page 12.) The ratio of liability to death, per 1,000 men, on the average of the six years 1865-70 *was, under* 20, 11 *per* 1,000

20, 24 = 19 " "
25, 29 = 25 " "
30 & up. = 43 " "

"We have no difficulty in recognising that the young material is that "best qualified to stand the climate of India." (Bryden, page 16.) And for these reasons, when young men are attacked with disease they recover, but old men die. "The death rate of 1871 shows that the "death-rate for the men above thirty has been consistently double that "of men below that age in each Presidency." (Bryden, page 12, Report II.)

33. The truth about the English Soldier's health in India seems to be this. If he comes out young (20) he is liable for two years to suffer from one special disease only, and that is typhoid fever. During these two years the death-rate of the young men is due almost entirely to typhoid. "Enteric (typhoid) fever is the one disease of India by "which the young soldier dies." (Bryden, page 34, Report II.) Of course during these first two years young men break down from heart disease and consumption in India, as they would in England, and for these men India is not very specially to blame. The death-rate and invaliding rate of the young soldiers, apart from typhoid, is very similar to the death and invaliding rate of other stations out of India.

34. The English Soldier in India, after being three years out, emerges as it were from a stormy sea of death by typhoid and invaliding from imperial causes, into a belt of calms, which extend from the third to the seventh year. During these calm years, dying and invaliding are at a minimum. The young men who would break down, no matter where they were stationed, and the really delicate youngster have either died off from typhoid or been invalided for what we may call imperial or non-Indian causes, and as yet the actual Indian-deterioration, dying and invaliding, has not set in. During these four years the soldier, according to our present system, is at his best; he is young and active, has emerged from the weak period of his boyhood and not begun to descend the decline of his premature old age. These are the golden years of Indian soldiering.

35. But as he advances beyond the seventh year, again all is changed. He begins to decay of Indian disease properly so called. He falls a victim to heat apoplexy, liver disease and the ague fevers. And if he is badly attacked he dies, or recovers to be a wholly broken down invalid. Intemperance and climate are ravaging his constitution, and the man soon disappears. Common sense, and all observations tend to show then that a private soldier in the ranks after seven years in India

is in a bad way, and we had best be rid of him. Enthusiasm in his profession must be dead after the monotony of seven years soldiering as a private. If we wish to keep him we must let him marry, and at once he becomes an incumbrance and a weakness. What then are we to do with the private soldier?

36. Everything seems to point to this. Keep him not more than five years in India. If he be still a private send him home to the Reserve and get a young man in his place. Officers and Sergeants are differently placed. The officer in India enjoys a most liberal leave code. Change to Europe, to the English depôt, leave to the hills, all combine, with his temperate guarded life, to make him suffer less from India than the private sentinel who does his guard duty for seven or eight years. To be a sergeant is a guarantee that the man has some superior attainments over his comrades in the ranks, and it is also a proof of more careful life and less exposure on sentry duty. Consequently these two classes escape far more than the private soldier the deterioration of Indian climate exposure. When the private soldier over seven years' service is invalided he goes home to England often so broken down by tropical exposure, combined with his own want of care in personal health, that he is a drag upon the country while he lives. Too weak for any laborious trade, he strives to eke out a living by some light duties that always mean light pay as well. To prevent such occurences it were far better in an imperial sense to snatch the private soldier away from the likelihood of contracting severe Indian disease to which, as all statistics prove, he becomes liable in an extraordinary degree after his seventh year. Thus medical and imperial theories will be wholly in accord in this idea. The man's health will be preserved and England will be saved the loss she sustains in having to pension an utterly broken down invalid.

37. If it be true, as Trochu says it is, that the fully trained recruit is the *beau ideal* of the soldier, the military aspect of the case will also be favorable. We shall escape in our barrack room the existence of the unambitious old soldier who may do incalculable injury to the zeal and enthusiasm of the young soldier of the future.

38. There is one aspect of this medical portion of the question that must be considered. It is unfortunately true that young soldiers, during their first two years in India, die in too great a proportion. They die of a heat typhoid during the hot weather. Dr. Bryden points out how terribly fatal is this fever to the young men, it being almost the sole disease of which they die. The question arises is this death-rate unavoidable? Is there no way of escaping from such a blood tax? Are we to go on year by year losing so many youngsters, as we do from this fever? It is a great comfort to know that there is an easy refuge from at any rate a vast amount of this heat fever. Our system now a days with our long service soldiers is to move up an entire regiment *en masse* to the hills once during its twelve years' Indian Service and let it remain there two years. We have, in addition to these regimental

hill stations a series of convalescent depots along the Himalayan chains to which the breaking down old soldiers are sent for change of air for a season, and into which we send likewise as many young lads from the different battalions in the plains as can be accommodated, when the sickly men are provided for. The question of keeping the young recruits out of the plains is considered to be secondary in importance to giving the sickly old soldier a place for convalescence, and the lads accordingly occupy only such spare space as may remain available.

39. Immense advantages follow even this attempt at hill locations for the youngsters. They do not in the hills die of the typhoid fever. They escape the fierce heat that predisposes to it, and in a fine climate they grow up into strong healthy soldiers. Now this attempt at protecting them is most excellent, and plainly points out the path in which we are to advance in adopting short service system to India. Foremost amongst the changes necessary by such a system will be the abolition of removing a battalion *en masse* to the hills. It will no longer be necessary. It is certainly not essential for the officers' health, as they can get ample leave, and may every third year be told off for special duty in the hill depôts quite apart from their regiments. The Sergeants and the few long service men of the battalions of the future can also go up individually for duty at the hill depôts, but the battalion as such will remain always in the plains. Why? Because if we are to have every year crowds of young lads coming out under short service rules to India, it will be necessary to move them *en masse* to the hills. The present *regimental* hill stations will have to be abolished as such, and turned into hill depôts for the accumulated drafts of each year. In these hill climates the young recruit would have to spend certainly his first year, and in special cases his second year, in the cool climate. In the hills he would go through his first and perhaps second season, and thus be carried safely through the dangerous period of his Indian service, for practically it is during these first years the young men succumb. There would be no occasion to keep the lads the whole year in the hills. The Indian cold season in the plains is excellent in every way for them. But at once the weather began to get warm they should move up to the mountains. In those hill depôts schools for training, discipline, and education would exist, and in a climate as good as that of England in summer time, every physical and mental training could be carried out. In the hills the young men would learn of India, and what steps are necessary to guard against its dangers in a climate point of view.

40. Such a system would in a battalion of 800 bayonets have about 150 to 200 men in the hills each year, and the strength of the army in the plains would be diminished by such an amount. But practically the young men would be quite as available there for any war duty, as the present battalions quartered in the hills are. Even in case of insurrection they would hold the hill territories and do for garrisoning these depôts, to which it is certain in any future outbreak, that the women and children of the European population would retire.

41. We gain in the plains the head quarters of the regiments now stationed in the hills, but we would lose the recruits and drafts stationed under the system we propose in the hills. Every man in the plains would be thoroughly efficient, there would be very few married men, there would be no shiploads of broken down invalids returning to England. Surely these are advantages worth gaining.

Conclusion.

42. From what we have said on the question in the foregoing paragraphs, it will be seen that there is a subject for enquiry and discussion. However much our idea may be in favour of the systems under which we grew up in the army, it is necessary to foresee the future, and meet the altered state of modern opinion. We cannot in England compel the citizen to join the marching battalions. We must induce him to come. This can be done now as it always has been done for years past. If he will not come for the attraction offered him let us find out what will attract him, and he will come. Long service systems in every European Army have passed away. England is now following in the same lead. We must face the question how to maintain our Indian garrison by such a system. In the paragraphs that we have written we have endeavoured to shew that short service is not so wholly impracticable an idea as some think it, and that at any rate there are some points in its favour.

FYZABAD, OUDE,
January 1876.

G. J. H. EVATT, M. D. SURGEON,
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II.

NOTES ON A NATIVE ARMY HOSPITAL CORPS FOR INDIA,

by Surgeon G. J. H. EVATT, M. D. *Army Medical Department.*

SECTION I.

Introductory.

I propose in the paragraphs which follow, making some observations on the important subject of an Army Hospital Corps for carrying out the nursing and various routine duties of the Military Hospitals in India with more special reference to those of the European Garrison in this country.

1. One cannot claim for these remarks any merit of originality. The subject has long commended itself to many of the officers of the Army Medical Department serving in the Indian Garrisons, and especially to that officer whose lamented death at the post of duty terminated a life devoted to the British Soldier, Surgeon General George Beatson of the Army Medical Department.

The more his letters and recommendations are studied the higher must be the estimate formed of his devotion to the soldier, his admirable powers of organization and co-ordination, and his thorough sense of order and discipline, qualities almost as essential to the Military Surgeon as to the Military Commander.

Among the many medico—military subjects which occupied his attention the question of a Native Hospital Corps did not escape, and so for back as the year 1867 he drew up a memorandum which well nigh exhausts the subject—but ten years have elapsed since then and we are still without the Corps.

This paper of his is to be found in the A. M. D., reports for the year 1867 page 365 but it seems necessary to disinter it from its burial place and bring the subject in the first place before the Medical Officers of the service to whom it is of vital importance and secondly before the Military Officers to whom the question of Army Hospital efficiency should not be an uninteresting study.

3. Every Great Captain of the art of war and indeed every military leader who has risen out of the groove of ordinary military routine has recognized the importance of this branch of Military Detail, and to no officer of any existing Military Force in any Kingdom is the hospital question so vital in its bearings as to those of the British Service.

Not Germans, nor Frenchmen, nor Austrians are scattered over the world as our soldiers are, and Russia alone can compare with us in the

extraordinary chances that send the soldier on service from Halifax to Peshawur and from Hongkong to Jamaica or the Cape. Such varieties of climates mean varieties of disease and to have a thoroughly efficient medical organization to afford aid to the sick soldier, cannot be a secondary consideration. It bears most markedly on the *morale* as well as the *physique* of the soldier, and here in India it may safely be said, that until a Hospital corps is organized, through efficiency in Medical arrangements will be absent.

It seems a waste of time to point out how deeply interesting and important the question of a Hospital Corps is to us the Medical Officers of the service stationed in this country. Perhaps no profession needs aid in our work so much as we do. The nurse has well been called the right hand of the physician, and if this be true in Civil life, where relatives and friends are always near to tender nursing aid in sickness, how still more essential is it in the Army life where relatives are far away and the nursing must devolve on those bound to the sufferer by the ties of comradeship and duty alone.

For years in England we were trusting to the rude and untrained soldier from the ranks to assist us as a nurse, but now we have in that country and the Colonies a Corps specially trained to nursing duties, detailed for Hospital duty alone, and rapidly assuming an efficient and working condition. In India we are still without these assistants and our labours and responsibilities are much increased by their absence. The tour of service in India is now so much equalized for all Medical Officers, and the necessity for knowing the Indian routine so important for all Military Surgeons, that they should hail as a real boon the organization of a corps which would be their own, and to whose training and developement they could all lend a hand. That such a corps will be embodied is but a question of time. The principle has long since been recognised.

No difficulty stands in the way and in this, as in many other movements it is but the first step that is difficult.

4. My attention was first drawn to this hospital corps subject, by reading Dr. Beatson's remarks on the hospital servants in the A. M. D. blue book for 1872 page 163-164. In which he says " on the subject " of hospital servants as at present procurable, I can only say they are " in many instances as indifferent as they can be. At Peshawar I saw " not only boys but literally children mustered as ward coolies, the " Commissariat declaring their entire inability to procure any better " hospital servants. The difficulty in this respect is increasing every " day and for it there is only one remedy viz: to have an enlisted " body of men as hospital servants. A native Army Hospital Corps. " Until this fact is recognized the administration of hospitals in this " country will be imperfect and in the hour of utmost need there may " be no hospital attendance forthcoming"—" for my part I regard it as " a most vital element towards any real improvement in Hospital " organization in India."

These words are very strong words and coming from an officer of Dr. Beatson's position and acquirements they deserve the highest consideration.

5. At page 168 of the same report, while writing about the Hasan Abdal camp of exercise in 1873 he again uses almost the same words when referring to the camp Hospital arrangements there.

6. In the autumn of 1875 I was again very much struck with this question. The 51st Foot at Fyzabad, a very favourite Station, received orders to march to Peshawur, a very unhealthy and indeed for the low-country Hindustani a dreaded station.

For weeks before the Regiment marched the hospital servants began to desert, if such a word may be used in reference to men not sworn in to the service, nor bound to it in any way save by the slender bonds of four rupees per mensem—pay. When the eventful day did arrive, quite a number of the servants had disappeared and one could not help thinking if this was the result of an order to march to Peshawur, what would be the result of an order to march to Cabul, to Kandahar, or to Herat, or to embark for field service in Egypt.

7. Again when serving with the 25th Foot just arrived in the country one could see very well that the English soldier just arrived in the country, did not recognize in these badly dressed undisciplined Native servants, the Indian representatives of an Army Hospital Corps.

Without uniform, without a badge or distinctive mark, dressed in seedy native dress and but little trained in Hospital work, it was evident that the English soldier new to India looked upon them as any hospital orderlies.

These things impressed upon one the necessity of having a regular corps of Hospital servants organized, and the following paragraphs contain some views on this subject.

8. In the first part of this paper we will notice the existing condition of the nursing staff of our Army Hospitals in India, and in the second discuss some alterations and changes proposed, all tending towards corps organization of the Native hospital servants.

Section II.

The Existing Condition.

9. When an officer of the Army Medical Department comes to serve his five years tour of service in India he finds the hospitals nominally " Regimental" worked by the following Staff.

1*st* The Medical officers, officers of the A. M. D. temporarily attached to the corps.

2*nd* *The Apothecary class* a warrant grade with Hospital apprentices of N. C. O. grade carrying out the dispensing of drugs, minor dressing, and the making out of the indents for rations upon the Commissariat.

3*rd* *Hospital Sergeants* staff Sergeant of the Corps, and the only representative, except indeed the patients, of the regimental principle.

This official keeps the statistical records of the corps, supervises the discipline of the patients and has the charge of all the Barrack furniture in use in the Hospital.

4*th* The Purveyor. A Commissariat subordinate, having custody of the bedding and clothing before issue to the patients, and also responsible for the supply, but not the issue of the Commissariat rations.

And 5th and lastly. The Medical native staff some 50 to 60 strong divided into compounders, water carriers, sweepers, cooks, washermen, and last but far from least the ward coolies, the real nursing staff into whose hands the sick European soldier is confided to be attended to when ill. It is true that unofficially we fall back upon the barrack room for the aid of European private soldiers to nurse bad cases and I have known 19 men from a single company so employed, but that arises principally from the defective condition of the native nursing staff and it will be the aim of this paper to point out that although this adventitious European nursing element can never be wholly dispensed with in a hospital in this country, yet that by a judicious training of the native staff 9-10ths of it may be abolished with perfect safety to the sick, and no sacrifice of efficiency in any way.

10. Probably the true principle to act upon with reference to the supply of European hospital orderlies in this country would be to extend in a certain degree the service of the English Army Hospital Corps to India and by providing a Hospital Sergeant and a few orderlies of this Corps in each large Garrison a supply of hospital sergeants and orderlies could be obtained. This however is not an important matter as we can obtain European aid from the Regiments as a rule, and it is to the developement of the native servants this paper is devoted.

11. The permanent native establishment of a European Infantry hospital in an Indian Garrison is seldom under sixty (60) men and they fill the following offices. 1st *Compounders* working in the dispensary under the Apothecaries. 2nd *Dressers* carrying out the minor dressing in the wards. 3*rd* *Ward coolies*, the nurses of the sick soldier, who give him his food, arrange his bed, change his clothes, watch by him when seriously ill, clean the wards and are responsible as a rule for everything within their wards. 4th the *Bhesties* or water carriers supplying water. 5th *The Cooks.* 6th the *Sweepers* who clean

up the Hospital and carry out the conservancy rules. 7th the *Kahars* or Dooly (litter) bearers.

12. The *Chumar* or leather workers caste as a rule furnish more than half of these servants, thus all the ward coolies, the compounders, dressers and cooks belong to it and they have furnished the Hospitals with these servants for generations.

They come from the Dinapore and Arrah country, and seem to have an hereditory claim on hospital service. The Doolie bearers are Hindus of the *kahar* caste. The Bhesties are all Mussulmans, and the sweepers belong to the Hindu *Mihtar* caste.

There are now and then Mussulman compounders and ward coolies, but as a rule the Mussulman element is confined to the waterman's duties in a Hospital.

13. How a man becomes a compounder, a dresser, or a ward coolie is not quite apparent. The ward coolies son may be a cook, the cook's brother may be a compounder, the compounder's uncle may be a dresser. They seem to lapse into each billet by natural selection although as a rule the compounder is a more educated and intelligent man than the others.

14. These native servants of every rank and grade and office are not enlisted or bound to the service in any way save by their slender monthly pay. Any day they may desert, and no legal punishment lies against them.

They cannot be punished for military insubordination, although liable to field discipline as camp followers. They are liable to dismissal by their superiors on very petty examinations into their misdemeanours.

They can only be punished for neglect by fining and this although constantly done, is quite illegal.

15. They receive no uniform from the state, nor badge of any kind. They may any day be stopped by a sentry or seized by a military policeman for entering their own lines. They receive no medals for field service, nor promotion nor rewards for heavy cholera epidemic service. No camp equipage is allowed for them, nor carriage on the march if they fall sick. They lie for shelter under the walls of the hospital tents during the bitter cold of a Punjab night in camp or are alternately roasted, and drowned in that most trying of situations a cholera camp in the height of the monsoon. If they get sick there is no arrangement for sick leave, or for pay while ill. There is no good conduct pay nor increase of pay for long and faithful service. The young lad who joined yesterday receives the same pay as the old servant who served with Clyde in the mutinies or served in Umbeyla or in Hazara.

16. Their pay is so petty that one cannot compel then to be clean and respectibly clad without knowing they will be hungry. They receive no instruction in nursing or in carrying out ward duties. Their responsibilities and labours are not defined, and in many ways they are but drudges for the sick soldier often querulous in his temper and exacting in his demands. The code does not define their duty, nor have they any book of instructions to learn their labour more thoroughly. They are not trained to be cooks, nor is there any place to teach them, hence they go on from year to year producing dishes often far from dainty. They are as expensive as they are inefficient, because a crowd of untrained men are needed to do work which a skilled and well paid few would do far better, and bad as they are, the moment the order to march to a bad station comes they often desert bodily.

They have some good points. They are sober to a degree, long suffering and tender to the sick soldier, and their services in the cholera wards are devoted and excellent. The Apothecaries teach them nothing, the Medical officers do not do so, and it is impossible to say definitely how they learn what little they do know.

With any attempt at organization there would be an immense improvement.

By enlisting them in a corps, giving them good conduct pay, and increase for length of service, giving them clothing, camp equipage on the line of march and in camp, pensions on retirement, putting them through an annual course of instruction, and a preliminary training in a central Hospital, giving them a Hindustani book of instructions and having frequent practise parades in their duties, a fairly efficient corps can be developed.

17. To day it would be absurd to deny we are quite unready for a large expeditionary force or a campaign like 1845 or 1849.

With our badly paid and uninstructed native servants we fall back continually on the barrack room for European duty men to attend to every serious case, and in the end the state is being deprived of a duty soldier while paying an inefficient native.

And this is only possible in peace. In the field we shall have in Asia no European soldiers to draw upon for nurses and we may feel much anxiety as to what we are really to do.

We do not propose banishing the European soldier wholly from the hospitals as a nurse, but we can reduce the necessity of his employment there by having a few English Army Hospitals Corps men in each garrison, but far more certainly and almost as efficiently by carrying out the aim of this paper with enlisting, developing, and training the present rough and ready crowd of servants into a properly constituted hospital corps to which subject we now turn.

Section III.

The Proposed Changes.

18. It is necessary in writiug on this subject to say that the native establishments of the European Military hospital in India will always be numerous. The climate alone prevents Europeans performing menial duties to any great extent, and the sick rates for Europeans are often so heavy that if we were to ask for wholly European orderlies and Hospital servants we would have a mass of Europeans likely to get sick looking after a crowd of Europeans already sick. Such would be impossible on the grounds of efficiency and of cost, and what we should aim at, seems to be a fairly efficient native Hospital Corps supplemented by a few trained European soldiers of the English Army Hospital Corps. The more the General Hospital system spreads as it now is in every non Indian Garrison the more necessary it is to have a special body of European trained soldier orderlies upon whom the Medical officers of the Army can depend for the carrying out the nursing duties and indeed all duties of the Hospitals. Even with a few of these men we can do wonders. Why? Because they are our own corps. In them we can feel a deep interest—such men we can train to a high state of efficiency because they are always with us, and we know that the more we teach them the more useful they are to us, such men can learn a great deal, and unlike the rough and ready private taken hap hazard from the ranks and returned again to it when his temporary hospital service is over, we know that each case he attends to but makes the permanent Hospital corps man more useful and efficient as an assistant. We have in our English Army Hospital Corps which now serves everywhere but in India, a corps rapidly becoming efficient and which by comparison with the rough and ready orderlies of old days is as different as the perfectly trained duty soldier, is from the recruit of yesterday.

This Corps does not serve in India. But it seems to me that they could gain very much experience useful in the field in any country, if they did serve in India, and a Sergeant and three orderlies of this Corps serving in every garrison in India would be a great assistance to the Medical officers and furnish the men from whom good Hospital Sergeants would be developed. This however is a question of secondary importance to the primary one of the necessity of organizing the Hospital establishments into an enlisted Corps. Without that enlistment and the definite hold it gives the Government on the servant, all training or good teaching are impossible because the man may any day desert without the possibility of being punished. It will be advantageous to tabulate the various requirements in order.

19. *Title of the Corps.* The Corps to be named the Indian Hospital Corps or if necessary the Bengal, Bombay or Madras Hospital Corps, There seems to be little occasion to use the word "Native." And by ignoring this word, at any time hereafter the present Subordinate Medical Department including the Hospital assistants of the native

Army could be all merged under the one general title. There is no question but the title *subordinate* Medical Department is a strange one, and not at first understood by new comers to India. It is also a question if the Hospital Corps should serve only with the European Troops or why they should not serve in the Hospitals of the Native Army. This question however can be dealt with at any time hereafter.

20. *Enlistment and grading.* The whole question turns on this point; without enlistment, and the Military Discipline and thorough hold over the public servant that it entails, all else is useless. Enlistment acts in two ways. 1st in the duties it requires from the individual enlisting. 2ndly the protection and advantages it gives those whom are enlisted. Neither one nor the other now exists amongst the Native Hospital servants, the state has no hold on the man. The man has no claims on the state. Both suffer in consequence. The men then could be enlisted for a term of years, and the Hospital Corps would be simply another regiment of the Native Army doing duty in the Hospitals.

21. The various servants to be graded according to military custom into, sergeants, corporals, Lance corporals and orderlies, and to wear the distinguishing badges of their rank. The various servants may be graded thus. As senior sergeant, the present sirdar ward cooly. This is a most essential proceeding. Amongst the native establishments one man must be the head and responsible, and without doubt that man should be the senior servant of the nursing staff properly so called. One section of the Hospital staff is all important and that section is the existing ward coolie section. On them comes the whole pressure of the ward routine and nursing, and if anybody need developing these are the men. They are hourly in contact with the sick soldier and it is on their efficiency all his comfort depends. The senior servant then of the ward coolie class should be the chief native subordinate.

As sergeants on appointment :—Head compounders, assist: compounders, head cooks. It is essential to discipline not to have a crowd of men wearing sergeants' chevrons in this or any corps. They would simply lower the value of the grade and in the end be in the way. As sergeants after three to five years good service in their grade and recommended by their superior officers. Head Dressers. Head Tailors.

As corporals on appointment :—Assistant sirdar coolies, Head dressers. Head Tailors, clothiers, Head Bhesties, Head Dhobies, Head sweepers.

As corporals after 3 or 5 years service in their grade and being recommended, assistant dressers, Barbers, assistant head cooks.

As Lance corporals :—Mate ward coolies, barbers on appointment, Tailors.

As orderlies :—Ward coolies, shop coolies, cooks, bhesties, dhobies, sweepers, Purveyors servants, assistant tailors.

22. Dr. Beatson places the Head compounder as the senior Native servant in the Hospital and makes the sirdar ward coolie rank as a corporal only; on this subject there is something to be said. The compounder is quite a special employment and although ranking him as a sergeant is essential he must I think be subordinate to the sirdar ward coolie who is really the sergeant Major of the Native servants.

He also places head dhobies amongst the sergeant grade, while placing the sirdar ward coolie in the corporal grade. In working a hospital this would be very inconvenient as the dhobie is not in any way as important a man as the chief nursing subordinate and too many of the higher grade lower its value. One must have a responsible subordinate to exercise a general supervision over every sub-department and no man can do this so well as a good sirdar ward coolie. He knows what the cooks should do—what the sweepers should do—what the dhobies should do, what all should do, and he knows what the ward coolies should do. He then is the true chief subordinate.

23. It is essential that bodies of men doing duty with an Army should be organized on a military basis. Unless this be done confusion in titles will always occur, and the soldier will fail to understand the position of those with whom he comes in contact. Hence such titles as Steward, Ward master, Purveyor have little meaning to the average soldier, but " Hospital Quarter Master Sergeant," " Hospital Sergeant, " Hospital Commissary" are at once understood.

It is on this principal a Hospital Corps must be organized if it is to efficient from a Medico-military point of view.

It seems certain that if thorough efficiency is ever to be achieved for war hospitals, their organization should be as clearly defined and as definite and as self contained as that of a Battery of Artillery. With reference to these military titles it seems needless to say they imply no command over the sick soldier, it refers merely to internal Corps organization.

24. *Caste of men.* Caste is the one dead weight that will for years weigh India down in the struggle for progress. In a Corps like this, where the duties are so peculiarly and intimately connected with the European race, caste interferes very much. The mere handling of the food of the European would be defilement in the eye of a high caste Hindoo, and Indian Mahomedanism is so paltry a copy of Mahomets original creed that even the Mussulman in Hindostan is entirely caste ridden.

The present class of Hospital servants are mostly *Chumars.* This is a very low caste. One might perhaps imagine such a body of men

so low in the social scale would be without prejudice, so low do they stand in the Indian caste scale, but as is often the case in every country it is quite the reverse.

The ignorant lower classes are far more bigoted and prejudiced then their superiors.

These Chumars are much tied down by caste rules, as regards the handling of the food of Europeans, and specially in the performance of various hospital nursing details. These details the Chumar class will not carry out and hence other servants of the Mihtar or Sweeper caste are required. Farther, they will not themselves eat the food Europeans eat, and this in a body of men serving with European Corps is a great inconvenience as regards rationing in field service or at sea.

25. Having seen to what a high state of efficiency the Mihtar or sweeper caste can be brought to by Military discipline, and regular training as in the case of the Mazhabi regiments of the Bengal Native Army (23rd and 32nd Pioneers) one would be tempted very much to limit enlistments in the Hospital Corps to the Sweeper (*Mihtar*) caste, or at any rate to require from each individual native orderly the performance of such duties at the sweeper caste alone would undertake.

To day it is really absurd to see the way caste interferes with the efficient performance of ward duties by the Native Hospital servants. Every Medical officer must have noticed such occurrences which need not here be tabulated. By enlisting the sweeper (Mihtar) caste a body of men are secured without any prejudices whatsoever, they will do everything a European orderly will do in the nursing Department, they are a fine race physically, seeing that they eat freely of animal food, and they could on the field and at sea be rationed on European Commissariat supplies. The *Lallbegi* branch of the Mihtar caste is a particularly fine one as regards physique. That they are ignorant is true, but training that has made of the Mazhabi Sikh a most efficient soldier Pioneer can do the same for the Mihtar of Lower India. Such men would come into the Corps to perform at first the humblest cleaning and sweeping functions and it would be a period of probation for them whence the most intelligent could be chosen for promotion to ward duties of a higher class.

However it would be unfair now to cut off the claim the Chumar class have on the state from long hereditary connexion with the Army Hospitals, and doubtless at first the whole existing establishments of the chumars would have to be taken almost *en masse* into the Corps.

But the advantages of a Sweeper (Mihtar) caste of men for this duty are very many.

27. I am aware of Surgeon General Beatson's aim to raise the standard of caste in the Corps to as high a pitch as possible, but it never can rise beyond the *Chumar* caste, and if we go so low as Chumars and meet with inefficiency from caste prejudices, it would seem

to be better to take one step further, for it is but a step, and enlist the low caste, but physically strong and willing Mihtar who is wholly without prejudices and can with training be made a most efficient servant.

It is hopeless to imagine that any high caste man of Hindu faith will ever accept such service as this Corps would entail. We can never hope for anything higher than the chumar caste, and it is worth consideration whether tapping a lower social *stratum* such as the Mihtar caste is, would not end eventually in efficiency.

A certain number of Mahomedans will always enter the Corps. They come in principally as water carriers (Bhesties). The Kahars (Doolie bearers) are a Hindu caste. They will always form an important part of the Hospital Transport service, and certain number of them will always be embodied in the Corps in peace time, and trained to act as Sirdars or Head men of divisions of doolie bearers in field service. By training and practise they might be made efficient *Krankenträgers or removers of wounded men from the field.*

28. *Age*:—Dr. Beatson proposes the age for enlistment as from 18 to 28 years of age. The age question is of importance not so much for entry as for discharge from the service. The men should be thoroughly efficient, and to be so, and to keep them fit for duty with European Corps in the field they should not be retained when worn out and decrepid, which is now so often the case with many native officers and Non-Commissioned Officers in the Native Infantry Regiment. A definite pension after a definite service rarely exceeding 20 years is no doubt what is wanted for them.

29. *Dress*:—To enable the English soldier to recognize who they are, the Native Hospital Corps should be dressed as far as possible like our own Army Hospital Corps in the Imperial Army. In like manner as the Bengal sappers and miners copy the Royal Engineers dress with some modifications, so let the Hospital Corps of India copy the Hospital Corps of England. A blue serge jacket with blue facings piped with red. Blue knickerbuckers, a blue *pugri* with a badge of the Geneva cross pattern in white metal, white belts, Infantry great coat and sword bayonet or pioneers sword will make a suitable dress for the cold season. White or blue calico uniform would be worn in the hot season, and at all times and places the arm badge of the Geneva convention should be on their dress. Uniform is most essential for these men, and should be worn at all times, on duty. To day, without uniform, without any badge to distinguished them from any ordinary natives these men are stopped by sentries, taken up by Military police, now and then assaulted by the soldiers, and are frequently dirty and untidy on duty because they are without uniform. It is a mistake ignoring uniform in the Army Departments. It means order, regularity and discipline and all these things mean efficiency.

In no place is order, cleanliness, and efficiency, more essential than

in an Army Hospital, and making the attendants wear uniform and appear neatly and regularly dressed has a great moral effect upon them. In the field without uniform these unfortunate men would certainly be shot down or bayonetted by mistake as it said many were in 1857-1858. With uniform such disasters could not occur. Again the state gives certain articles of dress yearly to the native soldier and would act doubtless in a similar way by the Hospital Corps orderly to his great benefit, and the certain comfort of all who ever come in personal contact with him.

Uniform then is essential as an aid to efficiency and should be constantly worn when on duty.

30. *Training* :—Efficiency in a Corps such as all Army Medical officers desire to see organized from the present haphazard system will depend very much on the thorough training the orderlies will receive in their duties.

To secure this efficiency in the Army Hospital service alike in England and India one thing is necessary, namely complete and thorough uniformity of system in every Army Hospital throughout the empire. It is well known that such uniformity does not to-day exist. Under Regimental organization, now abolished, every separate regimental hospital varied in its petty details of organization, and so many different systems of working obtained owing to the ideas of different Medical or Commanding Officers that a medical officer or non-commissioned officer or orderly trained under one system was for a time at sea when ordered for duty in another Hospital. In India where the Hospital organization is more elaborate than at home and where for years the Medical Department has been more completely and departmentally organized than in England, this variation has long existed. The subordinate of the medical Departments in this way have suffered in efficiency, because, liable to move from one Corps to another there was no definite system defining the exact way in which every duty was to be done.

So long as a Regimental Commanding officer was supreme in his little Hospital and was alone responsible for its efficiency, so long, uniformity was impossible, and without uniformity order cannot exist.

31. If the Medical Department is to become efficient it can only do so by a system of rules being laid down so clear, and distinct and unmistakeable that no possible error can occur, and then a medical officer in Aldershot, Halifax, Hongkong or Peshawur can go into a hospital at any of these places to find one system working and one routine followed. Doubtless this routine will paralyze the extraordinary efficiency of some of the officers of the Department but it will level up to uniformity officers who cannot of themselves organize or arrange details. This strict tying down to uniformity will of course not apply to Medical treatments. There each officer must be entirely free to follow his own ideas, no code could define that podophyllin was to be used in liver

disease, but a code can easily define the responsibility of a Medical officer for the custody of stores, the due issue of rations, the roster of duty within the hospital walls and such like things. As in a battalion and in an Army the whole Infantry force shoulder arms in one fashion clearly laid down, so in like manner the interior working of an Army Hospital can be clearly defined by order.

But as no order can say to a Commander you are to fight your battle solely with your heavy guns, or solely by infantry attacks, so likewise no limit can be placed on individual ideas of medical treatment. There the fullest freedom must be allowed. But discipline requires that implicit obedience be given to orders defining certain methods of work. Without that all attempts at improvement are in vain, and intelligent chiefs are unable to drag their followers to a higher standard of efficiency.

32. In training these hospital corps orderlies then, what is required ? We shall note the requirements in order.

(*A*). *A Central training School* at a large military station where a good general hospital can be established.

This is a *sine qua non*. Centralization must take place at first to secure local efficiency afterwards.

Unless there be a central school where men can see a large military Hospital worked in all its fullest completeness it will be hard to carry out their training at petty little hospitals where everything being on a small scale, duties cannot be so well defined or strictly carried out.

Men desirous of joining the Corps might be accepted as probationers at any military station, and posted for duty to the military Hospital there.

After six months of such training, the medical officer should report on them as to whether they would be likely to become efficient in their duties, and if they did promise to be so they could be draughted to the Central Hospital for thorough training. Uniform would not be issued to them during their probation, a turban and badge being sufficient during such service. Lucknow and Meerut are without doubt the stations between which the choice would lie for establishing such a school, and Meerut from its proximity to the strong Punjab Garrisons, and its great advantages in climate would doubtless hold its own in any competition with Lucknow.

At Meerut then a large General Hospital being established the School might be formed where not only the Hospital Corps but many of the Sub Medical Department might be trained.

33. *A special Instructor needed* :—An officer of the Army Medical Department who could speak Hindustani and who had

considerable Indian experience would be needed as Instructor for the corps. He should by plain and simple vernacular lessons explain the various duties required of the men in peace times and in the field.

34. *A book of Instructions* :—A book of instructions written in simple Hindustani (Urdu) pointing out how each duty is to be performed would be needed. It should be written in Hindustani (Urdu) the language which the majority are acquainted with, and should have plenty of plates and pictures of everything that can be so illustrated. To men of little education pictures speak strongly instructors.

35. *A yearly course Instruction* :—The whole routine of training might be got through as far as lectures and practice parades are concerned in some eight months. The instruction course would thus be got through easily within the year. Say from October to June In this way both the hot and cold weather Hospital routine might be seen.

36. *Assistant Instructors* :—A certain number of warrant officers of the subordinate Medical Department and some old intelligent servants of the Hospital Corps would be needed as assistants to the Chief Instructor. They would carry out their duties under his instructions.

37. *Drill* :—Drill is an important agent in disciplining men. I do not now refer to elaborate movements with fire arms and such like, but a course of setting up drill, extension motions, and learning how to march is useful to all and particularly to a corps like the Hospital Corps. Drill means discipline and unhesitating and ready obedience to words of command, qualities essential in a hospital servant. It would be useful then to have a steady havildar of a Native Infantry Regiment at the training school, who would put these young men through a short drill course.

38. Some officers will think this a waste of time. It is far from being so. It is essential as a training to that discipline and obedience to the orders of superiors without which neither a Hospital nor any other organization can be well conducted. Such a short course would be particularly useful for the junior officials of the subordinate Medical Department and be a great aid to smartness and discipline on their part. The pitching and arranging of a field Hospital in all its various departments should also be made into a drill, every movement being defined and uniform throughout India in manner of packing, pitching and routine.

The removal of wounded men would be also made into a defined drill, the only way to mantain efficiency with natives is to lay down a routine and follow it invariably. The present *Kahars* or doolie bearers should be trained to carry off the wounded. At the central

Hospital, compounders would also be trained, and what is still more requisite there should be a class of men taught cookery for the sick soldier there. To make good soups, puddings, and dainty dishes is very important. To day, hospital cooking is far from being perfect.

39. *Pay* :—The pay question is one of great importance. At present with a great crowd of ill disciplined and untrained men, all more or less poorly paid, the charge against the state is still high because a great crowd of inefficients are kept to do work, which three fourths the number of well trained men would more easily accomplish. It is certain, that with a well trained corps a marked diminution might be made in the number of servants employed ; but the charge against the state would not be lessened, because, to procure good men good pay must be given, and it should be fully equal to that given to the private sepoy in a native corps. The Hospital Corps should in every way be treated as simply another Corps in the native Army as far as regards pay, good conduct pay, pension and claims to medals, gratuities, order of merit, clothing and such like advantages.

It may seem expensive at first to do this, in the end it will be really an economy, good and trusty men who will never desert and to whom dismissal would be the highest punishment, would be secured, and such men would go everywhere the soldier goes, be it Egypt or Candahar or Cabul or Malacca or China.

To day the pay is so poor that the servants can hardly live on it, and it is impossible to compel them to be clean and smart in their dress when they have not enough money to buy clothes.

Whatever their pay is settled at, it should be divided into two parts, one being *pay proper*, which would be theirs at all times, and the other part being *departmental pay* drawn when on hospital duty only, and liable to be cut by their superior officers for any neglect of duty. By having such a system of pay, order and discipline can be enforced by a system of fines, the most easy and fairest way in the end of punishing natives of their class. In like manner as subordinates of the Commissariat Department may be retrenched in part of their *Departmental* pay for any neglect of duty, so likewise should these Hospital Corps men be dealt with. Another advantage of a fine system is the power that it gives of having the punishment remitted in case of a superior officer considering the punishment excessive. All such fines would be inflicted by the senior medical officer of the Garrison Hospital and entered in the defaulter sheet of the man who should have an appeal either to the military Commander on the spot, or to the Principal Medical officer of the district, as may be decided on. A number of petty neglects, occur in hospital routine, apparently small in themselves, and impossible to be dealt with in any way save by petty fines.

These men should be paid as at present by the senior Medical officer with whom they are serving, either the Apothecary or the Pur-

veyor drawing up the pay sheets and keeping the accounts. Good conduct pay, compensation for clothing, compensation for dearness of provisions and all such claims would be dealt with in the same manner.

40. *Discipline* :—At present there is little or no check upon the crowd of Hospital servants.

Not being enlisted, it is impossible to punish them by imprisonment under the military act, and an illegal system of fines is with dismissal, the only disciplinary measure available for their control. At once on enlistment all this would cease. They would become amenable to a number of disciplinary measures, but the method now most in vogue for punishing them would become wholly illegal. Except for drunkenness no soldier can be fined in a direct manner, although practically it is done by depriving them of their good conduct pay. If the Hospital servants are ever embodied, I think the line system should be legalized and it can be done in this way. Let a portion of their monthly pay say 1-6th be departmental pay or employed pay, drawn only when on duty and let it be available for being cut by their departmental superior officers. To be able to fine such a servant even a few annas is a most important measure, and one very essential even in the Imperial Army Hospital Corps, where defaulter's drill, or confinement to Barracks would be dangerous to the health of a hospital orderly, already weary and fatigued with the depressing work of a sick ward. By fining such a man punishment is given, and no injury done, and indeed it seems to be a punitive measure still quite in its infancy in the service in every department. The more the pay of the soldier is increased the more easy it will be to fine him for misdemeanours now punished in other ways. This fining power in the case of the native Hospital Corps should be in the hands of the senior Medical officer of each hospital, and no one else, and all such fines should be entered in the defaulter's sheet as in the case of every soldier. Courts Martial and such like severe measures need only be resorted to in cases of grave misdemeanours.

The power of dismissal from the corps for ignorance of duty or unsuitableness for hospital work should also be reserved to the authorities or to a committee.

41. Dr. Beatson would seem much in favour of making the European Hospital Sergeant the responsible subordinate for dealing with the native servants.

I am opposed to such a view of the case and for these reasons. The Hospital Sergeant is a European, he may have just arrived in India, he is constantly ignorant of the language, quite unable to understand the prejudices and the customs of a totally different people from himself, and which take time and experience to learn. It would lead to constant friction between the warrant Medical officers and the sergeants if the latter who have nothing whatever to do with the servants were to be in charge of the discipline of those servants, and the former to be daily

and hourly in contact with the servants, but have no authority over them. The Warrant officers of the Subordinate Medical Service have full military authority over the Hospital Sergeant himself, and can place him in arrest at any time for neglect of hospital duty. It is to these men, knowing the natives, full of Indian experience, and generally fairly efficient that I would hand over the authority over the hospital servants under the Medical officers.

All kit inspections, parades and training parades should take place under these men and these can easily do it. Indeed, I think nothing but good results can come from giving the Subordinate Medical Department more work to do. The Senior Apothecary of the Hospital should keep all their documents and be under the Senior Medical Officer, the responsible person for their regularity and efficiency. This localization of responsibility is the true principle, and the more it is followed at home and abroad, the nearer will complete efficiency of the Medical Service be approached.

42. *Promotions* :—Promotions should take place on recommendations forwarded by the Local Medical Officers to the central authority of the Corps, at Meerut or elsewhere. Examinations can test efficiency to a certain extent and an intelligent man will soon work his way to the front. The book of instructions written in Hindustani should contain all a man needed to know in a hospital and any examination should be based on it. In this book there should be placed a vocabulary of English words say 100 to 200 words in common use. It is quite astonishing how many English words natives seem to know when one overhears them talking to the private soldiers, and by having a book or vocabulary this knowledge would be much increased. Knowledge of English would be a claim for promotion, and in the short service garrisons of the future would be found to be a great comfort.

Nothing further remains to be dealt with in the limits of this paper. The Medical Service can but point out the necessity for improvements. It rests with others to act on these suggestions. Every officer of the Army Medical Department would hail the institution of this corps as a real boon to himself personally, and what is still more important to us all, as a downright comfort and blessing to the sick English Soldier in India. Efficiency in our hospital has always been our aim, although perhaps not always in our grasp. This corps would be one step more in that direction.

With such men bound to us, by the ties of a common duty to the sick soldier, no work would be too arduous, nor any labour too excessive. But to ask us to work well, and not give us the materials with which to do good work, is the policy of Pharaoh and not of to-day.

It may be somewhat costly, and in the annual estimates people

will point out how heavy a charge the Medical Service has become; one word silences all such remarks. It is I trust the aim we all pursue, and that is "efficiency."

GEORGE. T. H. EVATT, M. D., SURGEON MAJOR,
Army Medical Department.

FYZABAD, OUDE.
April 1877.

ARMY MEDICAL ORGANIZATION

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A COMPARATIVE EXAMINATION

OF THE

REGIMENTAL AND DEPARTMENTAL SYSTEMS

ROYAL ARMY MEDICAL COLLEGE LIBRARY.

BY

SURGEON MAJOR G. J. H. EVATT, M.D.
ARMY MEDICAL DEPARTMENT

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THE THIRD EDITION OF THIS PAMPHLET

Is Dedicated

TO

DIRECTOR-GENERAL SIR W. M. MUIR, K.C.B.

AND

THE OFFICERS, ARMY MEDICAL DEPARTMENT,

BY THEIR BROTHER OFFICER

THE WRITER

FYZABAD, EAST INDIES;
January, 1878.

LIBRARY OF THE MEDICAL DEPARTMENT OF THE ARMY.

ARMY MEDICAL ORGANIZATION

SECTION I

INTRODUCTORY

I PROPOSE, in the following pages, discussing the question of the organization of the Medical Department of the British Army, and further to offer some remarks on the present requirements of the same branch of the service. I propose to treat the subject in a clear and simple manner, avoiding all technicalities, and from such points of view as will commend themselves—1*st*, to England and the common sense of the country; 2*nd*, to the military officers of the army; 3*rd*, to the medical officers of the army; and 4*thly*, to the members of the medical profession at large, whether professors, teachers, or practitioners in civil life. For a definite settlement of this question of organization, it is necessary that all these sections should be in accord on the subject, and I feel convinced that it is perfectly possible for a clear and well-defined understanding to be arrived at satisfactory to all.

It is only by thoroughly sifting this question that a satisfactory settlement can be arranged, and if, in the pages that follow, any statements are made that may appear unpleasant, it seems to me better that at all costs facts should be plainly stated, and not in any way glossed over, than that a rose-coloured picture should be painted, pleasing to the eye but utterly false in every other way.

2. To each of the four sections before mentioned, the question of army medical organization is deeply interesting. To England, more than to any nation in the world, is the thorough efficiency of her medical service essential. Not only are her soldiers obtained with great difficulty and maintained at vast expense, not only has she to attract the volunteers instead of compelling the conscript, but in addition to all this her soldiers are scattered over a widespread empire, garrisoning posts in every possible climate, and exposed not only to war risks, but to every possible variety of disease.

Not Germans, nor Frenchmen, nor Austrians are exposed to sickness as our soldiers are exposed, and Russia alone can compare with us in the extraordinary chances that send our men from Halifax to Peshawar

and Mecan Meer, and from Bermuda and Jamaica to Hong-Kong and the Cape. Apart from all field service, our soldiers are daily fighting in a campaign with tropical climates and acute diseases such as are never heard of in other European armies, and to assist these men in their struggle with disease, an efficient medical corps is most essential. England, too, demands for her sons, who are serving her in every quarter of the globe, an amount of care and attention such as the Governments of foreign nations rarely think necessary for their less valuable material; and if the English soldier has been valuable in the past, he will be, if anything, more valuable in the future. It behoves England, therefore, to give full consideration to her army medical service, and to force alike on her military and her medical servants such efficient organization as the good sense of the nation demands.

3. To the military officers of the service the subject of medical organization is of the utmost importance. Not only for their own sakes, but, for the sake of the *morale* of the men, it is essential that the medical service be thoroughly good of its kind and in every way efficient.

Every great captain of the art of war, and indeed every soldier who really deserved the name, has not failed to note how important an aid it is to the well-being of an army that their treatment in sickness, or when wounded, should be thoroughly good, and military history is full of examples of the care and attention bestowed by famous soldiers on the medical organization of their armies, and of the disasters and utter breaking down of efficiency and discipline when these essentials were neglected. It is a subject which cannot be ignored, and it is most important that the military officers should have clear and distinct views on the subject. The opinions of the leading minds of the English military service, and the routine and organization of foreign armies on this subject, should all be studied, and whatever system is based on such support, should receive their ready acceptance.

4. To my brother-officers of the Army Medical Department this subject of medical organization is simply vital. Their comfort, their efficiency, their readiness for service alike in field and quarters, is wholly bound up with it; and if we are to hold our own in comparison with other armies, and if we are to avoid disaster in future campaigns, we must go thoroughly into the subject of organization and seek out what is best in every way from the various competing systems. If we do not, certain failure awaits us in the field, and comparative inefficiency in ordinary barrack life.

5. To the medical profession in civil life, and to the teachers and professors of the various medical colleges, it is essential that the question of the position, the organization, the aims and drawbacks of the medical officers of the army, should be presented in a clear and easily-understood manner, free from all military technicalities, so as to enable them to first grasp the subject themselves before they undertake to advise the young members of our profession on their choice of the different paths of medical work presented to them.

6. It is needless to say that the army, both in the military and its medical branches, has been for some years divided into two schools of

thought on the question of army medical organization, one party supporting the system called regimental, the other standing by unification or departmental views; and in the following paragraphs both will be compared and fully dealt with, the good and bad points of each chosen out, and a definite conclusion arrived at. Afterwards some questions bearing on the condition and future of the army medical service will be discussed.

We shall deal with the various sections in the following order:

A.—The regimental system.
B.—Its supposed advantages.
C.—Drawbacks of the regimental system.
D.—The unification system.
E.—The wants of the medical service.

SECTION II

THE REGIMENTAL SYSTEM

7. It seems needless to say that to properly understand the question of the medical system of an army, one must first understand its military organization. Both are entirely bound together, and the medical organization of an army must bear a distinct relation to its military system.

The earliest records of our English military system all show that it was thoroughly a regimental one.

English military history points out that during the century and three quarters in which the English army has existed as a force, it, until 1871, existed as a series of detached regiments, a certain number of which garrisoned the home stations, and a great number of which were scattered about in single regiments and detachments over the face of an enormous empire. India and Canada were full of far-detached stations, each consisting of a single regiment. The West Indies, in like manner, was so garrisoned. Australia, New Zealand, the Cape, Ceylon, the Ionian Islands, were all so occupied; and forty years ago, if one wanted to find an English garrison consisting of a group of four or five battalions, Gibraltar and Malta were the only ones that could be pointed out. At home, Portsmouth, and perhaps Dublin, were the only large garrisons, and, as is well known, the other military stations were held by single regiments, and in very many cases by small detachments.

These regiments had no territorial connection whatever beyond the faintest shadow of a name. They had no reserves. They were as strong as the men actually present with the colours made them, but

no stronger. If war was declared they enlisted locally what raw material they could, but in those days a regiment was a definite unit never varying, and the army was not only a long service army, but for many years a life service one.

We shall show further on that in 1871 a radical change took place in our military system, and the old organization, which was in every way a feeble one, disappeared.

8. Corresponding in every way to the military organization the medical organization of the service in those days was wholly regimental, and remained so until 1873, when the departmental system was introduced. What is then the regimental hospital system?

It was a system by which the sick and wounded of the army were treated in separate regimental hospitals, each an adjunct of either a regiment, battalion, battery, or detachment, the military commanding officers of which were responsible for their efficiency. The medical officers who treated the sick were themselves specially commissioned for each regiment, wore its distinctive uniform, and confined their duties to treating the corps sick only. However numerous the various battalions or batteries in a garrison were, each had their own little hospital, wholly separate and distinct from every other corps in the garrison, whether as regards buildings, offices, instruments, medicines, medical officers, or sick attendants. The responsibility for the order and interior economy of these hospitals rested solely with the regimental or battalion commanding officer.

9. To the medical officers who acted under him were delegated the prescribing duties for the sick, but here their responsibility ended. The regimental commanding officer was responsible for the cleanliness and order of the hospital, and every day the subaltern on duty visited it to see that it was "clean and regular" in the same way that he visited each company room in the barracks. The hospital sergeant was a sergeant of the regiment, taken from the regimental ranks by permission of the commanding officer, and he and the nursing orderlies were returnable to duty at any time by the commanding officer's order.

The least irregularity in conduct, or neglect of duty by sergeants, orderlies, or patients, was investigated solely by the commanding officer, the medical officers having no responsibility in the matter beyond reporting it. The commanding officer issued all orders for the interior working of the hospital. The orders for the rising and going to bed of patients, their duties in the wards, and, in fact everything not included in their medical treatment, was arranged for by the commanding officer.

To obtain a new key for the door, a new pane of glass for the window, or a new slate on the roof, he alone was responsible, and he alone could apply to the supply departments. The transport for the hospital and all its supplies save medicines were arranged for by the commanding officer. The medical officer was simply the captain, as it were, of the sick troop or company, and the hospital was worked by the commanding officer as any other company in the regiment.

10. The hospital authority and organization was centralized in the hands of the regimental commanding officer, already supposed to be

very fully employed in other regimental duties, and it depended of course very much on his personal tastes how much or how little he did actively interfere. One commanding officer might be constantly interfering in the hospital and meddling in every petty detail, while another let things slide very much in their own way. Thus no doubt regiments would vary very much from one another in their interior working, depending on how much or how little the commanding officer cared to interfere. To whatever extent they did or did not interfere they were alone responsible, they alone were praised or blamed for its condition, and while such was the case, it was simply right that they should have the fullest authority in its working. Thus only can any system be worked. Whoever is responsible, to him give the power; blame him if he fails, if he succeeds, his be the credit. In this way only can order be preserved. The commanding officer's views were perfectly and strictly correct, and in a regiment there can be but one authority, *viz.* the military officer in command.

11. For their medical treatment of the sick, the medical officers were responsible to the inspecting medical officers, who half-yearly or yearly visited the hospitals, and looked into the records of treatment and dieting.

In those far-off days, from thirty to forty years ago, the medical officers of the army were almost wholly regimental, were commissioned specially in each regiment, and could not be moved for any duty elsewhere save by the sanction of the commanding officer of the regiment. The medical inspectors had no power whatever over them, and they were altogether free from his control, save only in their treatment of the sick. I find that in 1844 there were altogether under sixty assistant surgeons not in regiments in the service, and as these men were scattered over a far wider series of far-detached stations all over the world than exists nowadays, even one staff assistant surgeon in any garrison must have been a curiosity. These staff doctors were under the control of the inspecting doctors, and they were employed in filling up casualties amongst the regimental doctors, and in taking charge of commissariat and other garrison staffs over the empire.

12. Practically the medical department was wholly regimental, and there was not in the empire above three or four general hospitals, if indeed there were so many. A medical *department* properly so called did not exist, and every military hospital was a little one, forming as much an integral part of a corps or battalion as the regimental band or any other regimental institution.

13. When war came and general hospitals were, as in the Peninsula, established, their staff was made up of scratch contributions of individual medical officers and stray orderlies and recovered patients obtained with difficulty from regiments. Any attempt at ambulance assistance, or carriage or removal of sick and wounded, was done regimentally, and in every case general hospitals were, when established, "unsuccessfully administered"—*vide* Sydney Herbert's Introduction to Medical Regulations, 9th July, 1858. This regimental system of working the medical aid for the army was practically in existence until 1873, but since that date it has gradually been supplanted by the unification system.

The regimental system had at any rate one claim on the service, it was of long existence. It had a few advantages, it had many drawbacks, and both of these we will now consider.

SECTION III

SUPPOSED ADVANTAGES OF THE REGIMENTAL SYSTEM

14. The supporters of the regimental system of army medical organization claim for it advantages on three grounds :—

A.—That the regiment, battalion, or battery, had its hospital complete and ready at all times in peace and war, and the regiment was therefore perfectly independent, medically speaking, of the army as a whole in consequence.

B.—That the medical officers being constantly with the same regiment learned to know the men, prevented scheming, and thus benefited the State.

C.—That it formed a pleasant home for the medical officers of the service.

These we will consider in order.

15. **That the regiment, battalion, or battery, had its hospital complete and ready at all times in peace and war, and was therefore perfectly independent of the army as a whole in consequence.**

The supporters of the regimental system sit with eyes blindfolded as to the extraordinary changes made since Lord Cardwell's time in the service.

They seem to think that because the word regiment remains that the army is still regimental in the old sense. This is far from being the case. In the old days a regiment was a definite fixed unit, practically the same in number and organization in peace or war, and averaging 800 men at all times. It was, in fact, just as strong as the men serving with the colours made it, but no stronger. There was no local tie whatever, no reserve of any kind, nor any means of supporting the regiment in the field by supplies of trained reservists. Under the old system it was known then that 800 men would have an average number of sick, and a definite provision was made for them on this estimate. To-day all this is changed. The regiment is no longer the unit for the army, and the brigade has become the unit.

In peace a regiment will be perhaps 400, perhaps 450, strong, and when the army is mobilized it will be suddenly swelled up by calling in the army reserve, the militia reserve, the drafts from the linked battalion, and the brigade depôt to 1100 or perhaps 1200 men.

Long service with the colours for the private soldier is dead, and small *cadres* and large reserves will be the rule. Where, then, is the regiment in its old sense? Simply it does not exist. For the military

commander it practically matters not at all that his regiment is so suddenly increased. His reserve men will join him clothed, armed, and equipped, and in our service food-supplies and ammunition are not borne regimentally but supplied on an army basis. It matters little then to the military commander how the regiment swells its numbers provided rations are forthcoming.

16. But if the hospitals were to be worked regimentally, on what basis are we to reckon? Shall each regiment have enough medical officers, orderlies, and equipment for the peace establishment and the small skeleton of 500 men, or for the war footing and the full field strength of 1200? What about the orderlies and nursing staff? Are they to be entertained all through peace to await war, or are they to be always on a peace footing? How about the bedding and clothing, medicines, instruments, and such like? Either we would have a crowd of idle unemployed men in peace or a deficient number in war, the first entailing tremendous expense in peace, the second certain disaster in the field. But in addition to this we all know that no trustworthy regimental average of sick or wounded can be formed. Position in attack in battle, exposure to a heavy fire, or unhealthy camp sites, may always cause one regiment so exposed to suffer heavily, while other regiments in the same division probably escape altogether, so that all our regimental calculations are liable to be thrown out, although divisional calculations generally will maintain an average.

17. Of the frightful expense of maintaining a swarm of regimental hospitals and the absurdity of seeing ten or twelve distinct regimental hospitals marching in rear of a single division in the field, we shall treat hereafter.

The outbreak of any epidemic disease or any heavy sickness threw out all regimental hospital arrangements in peace, and in war heavy numbers of wounded likewise disorganized it. Further, the new army organization rendered it obsolete, and it is now supplanted by central garrison hospitals in peace, and large divisional field hospitals in war, to the great advantage of the service in every way.

18. **That the medical officers being constantly with the same regiment learned to know the men, prevented scheming, and thus benefited the State.**

Much baseless sentiment has been expended by officers wedded to the old system of the army on what is called knowing the men. Here again there is a failure to grasp modern changes in army life. All men who know the army life know that in the old days a soldier enlisted in the army for life, and could only get out by purchasing his discharge or by invaliding. In 1835 twenty-one years' service was introduced, and in 1847 the ten years' Limited Enlistment Act came into force, but practically, until 1870, the soldier re-engaged, and the army was until then a thoroughly long service army without any reserves. Since that time all has been changed. Men now enlist for six years with the colours, and six years in the reserve passed in civil life; but many thousands of men have gone to the reserve at three years' service, and owing to the linking of battalions and the interchange of men between them and other causes, a regiment now is continually changing its component parts. Men pass through the army

in a way never dreamt of ten years ago. The army has become like Niagara. The cataract goes on it is true, but each individual drop of water is ever changing. Soldiers now will not spend their whole lives, or indeed any long portion of them, with the colours as they did in the so-called good old days before 1871, and the old long service regimental feelings have widened out into an *esprit d'armée* little felt before. The mere regimental tie is quite weakened, and in India men now volunteer from corps to corps without the least hesitation whatever, often as many as 300 going way *en masse* from a single battalion. This shows how the wind is blowing. If the pre-Crimean doctor knew the pre-Crimean soldier, it was because, under long service rules, both served long years, in fact lifetimes, together, but that is now all passed away with the introduction of short service systems. Knowing the men in the old intimate way is quite impossible either for commanding or medical officers, and is indeed not essential.

19. On the subject of the detection of schemers, it may be said that in the old continuous service and long service army, *malingering* or shamming sick by the soldier was most common, and indeed rose to the dignity of a fine art, so carefully and thoroughly did the old soldier study it. Marshall, an army surgeon of the old school, who wrote some forty years ago, considered it one of the most essential duties of an experienced army surgeon to be able to detect schemers. Medical officers became experts in such studies and could make a name by it. To-day *malingering* simply does not exist. Short service, rational treatment, easier lives, and the facility of going to the reserve, removes from the soldier the necessity of scheming sick as they did in the good old days, and it is never now seen. It was the bugbear of the old army, but the diamond-cut-diamond stories of clever schemers and still sharper doctors are now merely traditions of the mess tables of the army.

20. Again, every individual soldier in the army has now a special medical history sheet. The old army never had this history, as it was not introduced until 1859. A more inquisitorial or a more useful document does not exist in the service. In it is entered the age, weight, lung power, pulse, and indeed every possible medical particular about the man it refers to. Every disease, ailment, vaccination, and in fact every medical item of any kind connected with the man therein is entered with the treatment, cause of disease, &c. This sheet follows a man everywhere he goes to, and finally is forwarded to the Director-General for statistical purposes at the termination of the man's service. No civil doctor has such a record of his patients. It is truer than even a patient's own statement, as it is a record made by a physician, and it avoids the erroneous ideas of their diseases patients often form. With this document a man can be sent to any army hospital or before any army doctor, and at once his medical history is seen.

21. This disposes very much of the "knowing-the-men" question, but we should remember that the soldier is likewise drawn from a class always treated in civil hospitals, rarely having any personal medical attendant, and the medical men who do treat them in civil life are not bound to them by the ties of army comradeship that binds us so intimately to the soldier.

22. Very constantly, too, we may see it advanced that a medical officer will take an interest in the men of his regiment which he would not take in a strange one. If any medical officer makes such a statement he is doing a very wrong act, and one perfectly indefensible. Considering that in all general hospitals in the field, in all convalescent depôts, and indeed in numerous other situations, the men must, under any organization, be treated by strange medical officers, any medical officer who thinks in this way should not remain in the service. It is of course the merest assertion and quite devoid of any foundation. Any man who wears the uniform of England should, if sick and weak, be of equal value in our eyes. This is the true basis to work upon. We see, then, that all knowledge of the men in the old way is impossible under short service rules, that officers and men will be constantly changing in every rank and grade, that scheming and malingering have disappeared, and that the medical history sheet tells us each man's previous history.

23. **That it formed a pleasant home for the medical officers of the service.**

This is another statement which melts away on examination. It cannot be denied that under the regimental system several hundred army medical officers had a definite home in a regiment, but we cannot ignore the fact that in 1873 at least 300 officers of the department never by any possible chance could find any regiment to get into, as of late years the army medical staff not attached to regiments has largely been increased.

This is quite well known to all medical and military officers. I find that in 1844 there were fifty-nine staff assistant surgeons, in 1872 there were 228, besides a very large number of staff surgeons, and this number existed at a time when every regiment had its regular complement. Were these officers never to have any home? Or were they to wander over the world for ever? As I shall show further on, this very homelessness of the staff doctors tended very much to injure their *morale*.

24. It would be absurd to deny that throughout the entire army, in every rank and grade, the regimental tie has of late years become much weaker. Regiments were in the old days so isolated in far-detached colonies that the officers were forced *nolens volens* to live more for one another, and the feeling of regimental brotherhood had not received the shocks it has of late years sustained. In the infantry the double battalion system, the linking of regiments, the selection system, and in the artillery the absorption of the Indian artillery and the system of Indian service, have all tended to weaken the bond that in the old days tied regimental officers together. The withdrawal of regiments from lonely colonial quarters, the abolition of Canada, Australia, New Zealand, the Ionian Islands, the weakening of the West Indian and Cape garrisons, and the concentration of the army at home, have rendered officers very independent of the regimental tie as it was of old. In the old times, without steam, without railways, without overland routes, officers lived in their regiments from year's end to year's end without leaving them. To-day it is quite the reverse. Leave is easily gotten, and steam carries one everywhere.

The concentration of the army at home is most evident: Aldershot, Shorncliffe, the Curragh, the increase of the garrisons at Plymouth, Dover, Portsmouth, and the abolition of petty detachments, have brought regiments together in a way never known even twenty-five years ago. Regiments in the old days seldom met; to-day between big camps and autumn manœuvres they are almost always together. The old detached regimental organization, or attempt at organization, has given way to a real *army system*.

In India the transfer of the Company's troops to the Crown has brought the local artillery and infantry under English rules, and now it is rare to find any garrison consisting of a single regiment. In the old day it was quite the rule everywhere in the empire. All these changes have weakened the regimental bond, but developed an army feeling unknown before the Crimean time. Every military officer knows this, and no one can deny that regimental brotherhood is not what it used to be.

25. For the medical officers the tie that bound them to their regiments was of late years becoming every day less marked, and the average service of each officer with his regiment was, in 1873, not more than three years. The increase in the non-regimental medical staff and the concentration of regiments in large camps in England and Ireland, and the withdrawal of corps from detached positions in the colonies, have all tended to draw both regimental and staff medical officers together, and to weaken the old regimental ties which were for the doctors so essential in the old army days, but are now not only of little necessity but positive drawbacks. The idea of unification and modern medical corps organization for ourselves has been gradually developing itself amongst the officers of the department, and the memory of the disasters in the Crimea, the experience of recent European campaigns, the wakening up of the medical officer to study the question of foreign medical organization and the great organic changes in the English army organization, have all furthered this movement.

26. In addition to this the many drawbacks attendant on the regimental medical system from its social aspects, and the friction it often caused between the medical and military officers, and the marked tendency of the regimental system to depress us as a unit of the army, cannot be ignored. All these things have stimulated the desire so strongly developed amongst very many army doctors of drawing ourselves closer together on a thoroughly efficient working medical basis suitable to peace efficiency and war needs, and these views are now gradually spreading. When fully understood by the military officers, the medical officers, and the medical world in civil life, the aims of the unificationists must certainly find many sympathisers, as it appeals to the *esprit de corps* of the military officer and to the professional spirit of our brother-doctors in civil life, as will be shown further on.

27. Now in every garrison at home and abroad the officers of the Army Medical Department form a separate and distinct corps of themselves, as united and compact as the Royal Artillery, the Engineers, or any other branch of the service.

They now serve under their own chiefs, work their own hospitals, wear their own uniform, and are perfectly free from any deadweight.

The regimental and the staff doctors have merged in a department, able, if it wishes, to develop a grand tradition and an unblemished name. One hundred and seventy years of regimental subdivision saw us in 1873 broken up, weak, inefficient, and devoid of unity or of *esprit de corps*. Let us see what a change will be apparent in 1883.

SECTION IV

DRAWBACKS OF THE REGIMENTAL SYSTEM

28. We now turn to consider the other aspect of the question, or the drawbacks and weak points of regimental medical organization. The medical corps of an army exists on two grounds—*1st*, that during war, when the safety of the State depends upon the efficiency of the army, there should be a thoroughly good hospital system, with officers, attendants, and appliances of every kind ready to assist the soldiers in their struggle with wounds and sickness; and *2ndly*, that during the longer eras of peace the best medical advice and the best medical appliances procurable should be available for the soldier, and that intelligent advisers should exist capable of guiding the military commanders on hygienic and sanitary questions affecting their health and physique. The regimental medical system of the English service abolished in 1873, in my opinion, failed on all these points, and this statement can easily and clearly be proved to all who impartially consider the question.

29. It failed, in the first instance, as a war organization because it taught us all to trust to a system that could never be worked in the field, and would certainly paralyse all medical efficiency there; and it failed in the second by interfering with the union of the army hospitals at one centre in every station where, with first-class appliances, suitable books and instruments, and, far and away, above all, the advantages of learning our professional work from each other, it kept us divided in petty little hospitals, where it was impossible to learn from one another, where interchange of professional views was impossible, and where the knowledge of the senior officers was lost, or the want of experience in the younger ones uncorrected.

30. Sidney Herbert, Lord Herbert of Lea, was without doubt the man to whom the English soldier owes an immense debt of gratitude. Animated by the truest sympathy with the soldier, Sydney Herbert remodelled the medical service of the army, and remodelled in such a way as to do good to the soldier and also to the surgeon.

The only pity is that his lamented and premature death took place at a time when our army was still running in the old-fashioned groove, and before any of the recent organic changes in organization had been introduced.

Had he survived to see the present day, there is no doubt that his

views would have been thoroughly in accord with the unification ideas. When Sydney Herbert lived, the old regimental organization of the army was in full swing. There was as yet no system whatever in our military arrangements. The great awakening in 1866 and the still further rousing of 1870 had not yet occurred. The army still consisted of a series of detached regiments wholly unconnected with each other or with reserves. The militia was undeveloped and the volunteers did not exist, and the only way of making England stronger when war threatened was to rush into the labour market and enlist 10,000 or 20,000 more raw recruits. Those primitive days have all passed away and now seem centuries distant from us. At last we have a military system which we, in truth, never had before, and the question of English army organization is now in everybody's mind. Then the question simply did not exist at all. In his day, too, our army was still, as we have pointed out, detached in far-scattered colonies, where regiments rusted their lives away and learned nothing whatever. Now we have few troops in the colonies, and the regiments are concentrated in England instead.

This, too, has involved a great change, and medical organization must keep pace with it. We shall tabulate in order the drawbacks of the regimental hospital system.

31. (A).—**Change in our Military System Regiments no longer the unit of organization.**—This being the keynote of the whole subject, it is necessary to constantly refer to it.

We pointed out that until 1870 and Lord Cardwell's administration the regiment was the basis of all army organization. It was in those days a definite unit. There were 800 men in each regiment, and in peace and war it remained much the same, save only by the increased enlistments made when war was declared. To-day this is quite changed. The regiment is now a weak cadre or skeleton of officers and non-commissioned officers engaged in training the private soldier, who, when fully trained, passes into the reserve in civil life as a right after six years' service, but constantly after three years' service with the colours.

These reserve men, when war is imminent, will return to the colours, and with them will come the reservists from the militia battalions forming the militia reserves, and also the volunteers and drafted men from the linked battalions of the line. Let us take the 1st battalion 25th regiment as an example.

Say, it is stationed at Aldershot, and war being imminent the order is given to mobilize. On the day the order is issued the regiment at home is 480 strong, consisting of the officers, the non-commissioned officers, and the young soldiers serving with the colours. Its brigade depôt is at York; its linked militia battalions are the 2nd and 5th West York militia; its reservists belong to the same Yorkshire district.

32. At once on the order to mobilize being received the regimental reserve in civil life hasten into York to the depôt, and are armed and clothed to the number of 400 men.

The depôt of the regiment permanently located in York furnishes 100 more men, being the young depôt soldiers of the 2nd battalion then abroad. The two associated battalions of militia are called out,

and the militia reserve from each 70 strong, or a total of 150, join the reservists and the depôt contingent in York. The whole, to the number of 650 strong, are put into the train, armed, clothed, and equipped, and arrive in Aldershot five days after the order to mobilize issued.

At Aldershot they join the regiment and are told off to the companies. As there is no hutting room, tents are drawn from the army store depôt, and they are sheltered. The commissariat, warned of their arrival, issue 1100 rations instead of 480, and all goes well.

33. But how about the hospital? Let us imagine it under the regimental system. The 480 men who formed the original regimental strength having only an average of about 30 sick, needed only two medical officers at most to look after them, and with them is a hospital sergeant and four or five orderlies—a staff based on 480 strength. The medicines, supplies, the bedding, all the equipment, the very building itself, is based on, say, 500 strength, but the new arrivals have made it 1100 strong. What is to be done? At once confusion would begin. The medical officers would be too few, the sergeant would be overwhelmed, and the orderlies simply overborne by the increased sick, which rose at once from thirty on the day the order was issued to mobilize, to eighty after the 650 men had been under canvas for a week. What is to be done? Apply to the principal medical officer of the camp? But, as we are imagining, the regimental system is at work; he has little, in fact no power. It is true the 36th regiment is close by the 25th, and the 47th is also near, and the 58th is not a quarter of a mile away, and two artillery batteries are within easy distance. Each of these separate regiments has two medical officers, one hospital sergeant, five orderlies, bedding, medicines and equipment quite idle. They are not mobilized, having just come from foreign service, and their medical staff are really quite idle, with perhaps 20 or 30 sick in each separate little hospital, each hospital having 20 spare beds in it. The principal medical officer is powerless to act; he cannot send one man of the eighty sick of the 25th into any other hospital, nor can he move an orderly, a sergeant, a medical officer, or a splint, or mattress, or a pillow, from one of the hospitals to the 25th. The 25th hospital is disorganized, men are neglected, improperly nursed, and all goes wrong.

34. By stress of applying to the general commanding, the principal medical officer gets two medical officers detached to assist the 25th doctors. One comes from the 36th and one from the 47th regiment. But not an orderly, a sergeant, or any supplies can be made available.

The 36th doctor is shortly after recalled to march away with his own corps, and perfect confusion remains.

Men die, the general finds fault, the press take it up, England is excited, and who is blamed? The medical department and the principal medical officer.

It is needless to say that he is wholly blameless. It is the system and not he that was wrong.

35. Thus we see that owing to the changes in our military organization, the abolition of the long service system, and the making the brigade the unit of organization, the system of regimental hospitals became an anomaly and eventually disappeared.

36. **(B).—In different peace hospitals.**—Under the regimental hospital system it was necessary in every garrison to have a separate hospital for every individual regiment, battalion, battery, or detachment, even if the regiments were, as in many existing garrisons, six, eight, or even ten in number. We had then in every garrison a great number of petty, roughly-furnished, poorly-equipped hospitals, devoid of those modern improvements and arrangements found in every good civil hospital, and which in the end mean comfort and efficiency.

Thus special eye wards, infectious disease wards, detached wards for special cases, were rarely, if ever, seen, because it was impossible, in a number of petty little hospitals, to provide such wards for every odd case that would occur in a single battalion or battery. No nation could afford to build six or eight perfect little hospitals in each garrison. To do so would be quite ruinous. How often have we not seen within a few hundred yards of one another two military hospitals, each with its separate dispensary and store of drugs, instruments, and its petty wards, where it was impossible to isolate cases requiring special treatment.

37. Doubtless what we want, and what unification claims, is to build on in each garrison one central hospital complete in every way, —with eye wards, detached wards, lunatic wards, prisoners' wards, lying-in wards, children's wards; in fact, everything needed in a really good hospital.

There let the sick soldier be treated with every aid art can give him. In the field things must be rough; they need not be so in garrison; there the sick soldier should have every comfort. Such hospitals could not be regimental, as one would have each regimental commanding officer interfering in various ways. They must be garrison hospitals under the officer commanding the garrison and the principal medical officer of the station. They two can arrange for the location of the sick and the uniform working of the hospital—a thing quite impossible if six or eight regimental commanding officers, all of equal authority, were struggling for supremacy there.

38. We have now as a department the charge of the army hospitals, they are altogether in our hands, and we can make them the most perfect in the world. Heretofore with a series of petty hospitals—mere cottage hospital adjuncts to every petty regiment or battalion—we never had in a garrison an institution fit to point to as a model English military garrison hospital, or fit to train a medical officer to the large requirements of an army in the field, or even of a large city civil hospital.

39. **(C).—Absence of libraries, chemical laboratories, and expensive instruments.**—To-day to carry out one's professional work thoroughly books are necessary; scientific magazines and professional journals are necessary; chemical laboratories are necessary; microscopes, laryngoscopes, aspirators, galvanic batteries, and a quantity of expensive instruments, are necessary. While divided into petty regimental groups of medical officers serving by twos or threes in wholly distinct little hospitals in the same garrison, it was impossible for these essentials to be collected, or if collected, they would be a great cost to the State, and by dragging them about from place to place with a

marching battalion they got smashed and injured. Consequently in very many cases the instruments did not exist, no microscopes were to be found in a whole garrison, no libraries or books of reference, and, as a consequence, we lost the benefit such books could give us. Civil doctors have all these aids. They do not knock about the world as we do, and we cannot carry these things with us. What we need are gradually-formed libraries of reference, book clubs, and good instruments collected in the central garrison hospitals all over the world, and available for the use of all. In Peshawar or Halifax we would there find the instruments or the books we wanted, and not be, as we now are, destitute of these aids to professional efficiency.

40. The absence of books has been of great injury to us as a professional body. Heretofore there was no centre in a garrison, where all medical officers could collect any, and they did not in consequence exist. A regimental hospital used to drag all its equipment, instruments, and records with it from garrison to garrison. Now these instruments and the equipment will remain permanently in each central garrison hospital, and books and such like aids and good instruments will be collected there to our certain advantage.

41. **(D).—Impossibility of obtaining skilled nurses and attendants.**—Under the regimental system it was impossible to obtain skilled nurses and attendants. The only post for a non-commissioned officer in a regimental hospital was that of hospital sergeant, of which there was but one in every corps. If he became smart and intelligent, he might any day be transferred to company duty because in the hospital he had no prospect of reaching the higher post of sergeant-major, or quartermaster-sergeant, or of getting a commission as quartermaster or as ensign. The orderlies in a regiment were constantly unpresentable men, who spoiled the appearance of the ranks and were hidden away as hospital nurses. If an orderly turned out intelligent and trustworthy, there was no possible way of getting him made even a corporal, so that any smart young man soon saw that to remain a hospital orderly was to sacrifice every prospect of regimental advancement. As a rule, they were ignorant, untrained men taken haphazard from the ranks. Nursing needs training nowadays. A private soldier taken from the ranks at random is about as useful in a hospital as a raw recruit is on a barrack square, but training and teaching can do wonders with men. Under the regimental system, if a regiment became sickly, or attacked with any epidemic disease, there were no orderlies available, and none could be applied for from other corps, as each regiment kept a definite number always by it. If there were few sick they were quite idle; if there was a high sick-rate they were worn out with fatigue. The true system is, in no doubt, the present army hospital corps one. We have a specially trained corps, specially employed in the hospitals, and specially promoted to corporal, sergeant, or commissioned ranks in the hospital corps if really efficient. If one garrison is perfectly healthy and another is sickly they can be moved at once to the sick station. There will not be in any garrison whole groups of orderlies lying idle, while a few hundred yards away other hospital staffs are burdened with work. However sick the 25th were in the old days, the 26th,

27th, 28th, all close by, gave no help, nor could these hospital orderlies be transferred for duty in the sickly corps.

By the old arrangement the State lost in every way. To-day every man in the hospital corps can be utilised wherever he is wanted.

42. **(E).—Expense of the regimental system.**—If the old system was inefficient it might perhaps have been thought to have been cheap. It was quite the reverse; whether as regards medical officers, orderlies, and medicines, or equipments, it was very expensive indeed. It was necessary to keep with each corps at all times a staff of officials sufficiently numerous to meet any ordinary extra demand, and these officials went with the corps everywhere. It constantly happened that in the same garrison regiments varied in sick-rate very much. Take Portsmouth: say one corps has just arrived from India and was full of sickly soldiers, the other six battalions were very healthy indeed, yet all of them had the same detail of two medical officers. Thus five hospital staffs were perhaps quite unemployed, the sixth was never at leisure. England kept paying for some medical men who perhaps had very little to do, and however anxious the medical officers were for work, each officer was compelled to limit his duty to his own little regimental hospital.

43. In India the same system went on. Peshawar is an unhealthy station. Bareilly is very healthy. In the former, the sick have been 250 in a single regiment; in Bareilly 50 is a full number, yet in both stations the regimental staff for work was the same, because the rule must be followed. Compare Meean Meer and Rawal Pindi, Chukrata and Morar, Secunderabad and Bangalore, Poonah and Nusseerabad; in each of these cases there was a marked dissimilarity in the sick-rates, yet the same strength of staff was detailed to treat them. Under the new system this cannot occur. If Meean Meer is unhealthy, let the medical staff be numerous and concentrated there. If Chukrata is healthy, reduce the staff to suit the place. In this way all goes well, economy is promoted, efficiency is developed, and every official is happier. As regards drugs, instruments, equipment, in all these needs the old system was expensive and injurious, the new economical and efficient.

44. **(F).—Utter failure in war time.**—If the regimental system was expensive in peace and injurious to professional efficiency, in war time it was simply unworkable.

The medical department under such a system was perfectly paralysed. It tied the hands and feet of the directing medical officers of the army, and then blamed them for not walking and working. Every regiment that embarked for Crimea, or that in 1871 would have embarked for any continental war, would have had its medical staff of three doctors, a sergeant and some orderlies, and its little regimental hospital with its little share of transport and equipment, all marching with the regiment. Fancy an army corps so organized with perhaps 30 battalions of infantry, 6 regiments of cavalry, and 10 batteries of artillery, each of them with its little hospital. In all 46 separate hospitals, each, say, with even two medical officers, or, say, 100 surgeons, 46 hospital sergeants, and some few hundred of regimental orderlies. Let us imagine all these separate hospitals marching in the

rear of the columns, each perfectly independent of every one save the regimental commanding officer, each hospital staff in separate regimental uniform, whether infantry, hussar, highlander, gunner, or sapper, &c. Imagine then the army corps forming into order of battle and attacking such a position as the Alma Hills. Ten battalions, two cavalry corps, and four batteries, alone come under fire, and they alone are full of wounded. The medical staff of the regiments under fire are at work night and day, and still men die unattended. In the mean time three fourths of the doctors are quite idle because their regiments have not been under fire, yet no one can move them to the assistance of the worn-out doctors of the wounded corps. The principal medical officers are in despair: but what can be done? Yet this was the system at the Alma, and it might have been the system still were unification not introduced.

45. It left the medical department a sham, and paralysed all efficiency. It seems impossible to believe such a system can find supporters. Not a single military writer of any character whatever supports such a system. It was simply courting ruin to carry it out. The lesson of the Crimea we have never forgotten. It was there in the tents of that devoted army that the thinking medical officers of the service first raised the question of unification; and to-day, after twenty years of patient waiting, it is an accomplished fact.

46. Wolseley, in his 'Soldiers' Hand-book,' says, at page 55: "Our present system of regimental hospitals is unsuited for a large army, it is very expensive and too cumbrous for rapid and constant moving." Again, at page 59: "It would be absurd to attempt such a system (regimental conveyance of sick) with a large army in the field."

47. Sidney Herbert's Commission considered that regimental hospitals are unsuited for field service, as they are "unable to adapt themselves to the requirements of an army in the field."

48. Sir Henry Storks, speaking before the short service system, considered the regimental hospital system "essentially a peace organization."

49. Surgeon-General Mouat, writing of the New Zealand campaign, considered it a wholly inapplicable system in the field.

50. During the American campaign of the rebellion the hospitals were all worked as an army department.

In Germany, where the medical service is thoroughly efficient and in many ways to be copied, they long ago abandoned the system of regimental hospitals and now have the most perfect departmental system in Europe, wholly apart from any regimental organization. Italy has made the same change.

51. Russia, which has made great strides in organization, has done the same thing and made her service wholly departmental; and France is doing the same.

52. The truth is, regimental hospitals have nowadays not one single argument in their favour, and the moment the subject is inquired into the fact becomes quite evident.

By having a separate medical corps organization wholly under the principal medical officer and the general officers commanding, a system of war hospital can be devised, perfect in every way, complete

in every want, and as easily movable and detachable as a battery of artillery.

The garrison hospital in peace and the divisional hospitals in war worked by the army medical corps quite as an army organization is the true principle for us to carry out, and this will be further treated of under the unification section.

Any other system was frightfully expensive, injurious to professional efficiency, hopelessly unfitted for war service, depressing to the medical officers socially, and quite at variance with the organization of a short service and territorially organized army such as ours now is.

53. **(G).—Prevented all training in administration of hospitals.**—Under the regimental system the medical department was quite untrained in administration. While in a petty regimental hospital the medical officer was not required to deal with any large medical question, of sanitation or administration, nor to have any responsibility outside the walls of his little hospital. The commanding officer, the adjutant, and the quartermaster of the regiment did all the transport, discipline, and all other non-prescribing duties. The principal medical officers of divisions and districts at home and abroad had no control whatever over the hospitals or the medical officers of regiments. If a principal medical officer got ill, or went on leave, or retired, he was always succeeded by some surgeon-major of a regiment, who up to that day had never dealt with any larger question than those arising in his own little regimental hospital. There was no training such as a good central garrison hospital can give us all, and a man stepped at once from the charge of 30 or 40 sick to the direction of a division of the army, say 10,000 strong.

54. No wonder that such men so trained in the enervating regimental hospital system were at first, and for years, poor administrators, and that the department has always been weak in such points.

To-day this is all passing away. We have now in most garrisons central hospitals taking in all the garrison sick and giving them all good nursing and attention.

Besides the principal medical officers of divisions and districts we have "senior medical officers" in every garrison who are daily learning to deal with large questions affecting the several corps in garrison, and who are daily controlling numbers of medical officers, arranging for their duties, distributing the hospital corps, and gaining practice in administration, such as never would be gained before in petty regimental hospitals.

The power of individual commanding officers of regiments is relegated to its true province of dealing with the discipline and training of the private in the ranks, the medical department taking sole charge of the same man when ill without any regimental interference. In this way we are becoming efficient, and such we never could become in the old days of regimental subdivision.

The department is at last begining to exist as a department of the army, and not as a mere petty adjunct to every battalion or battery.

Our feeble administration and organization in the Crimean campaign, when the regimental system was supposed to be in working order, are

well-known facts, yet the Crimean campaign should have been a singularly easy one as far as administration is concerned, as we never marched 100 miles the whole time, and we really were enclosed in a small tract of land bounded on one side by Sebastopol, and on the other by the Russian field army and the sea.

55. **(H).—Prevented all development of professional knowledge amongst the army medical officers.**—Unless professional men, whether lawyers, doctors, soldiers, sailors, or what profession you choose, meet and discuss questions connected with their work, progress will never occur. Observe how in civil life the medical profession have their meetings to read papers on various questions and to have discussions and arguments. Consider what advantages arise from medical men meeting in their hospitals and learning from one and another. With us in the army under regimental system this invaluable meeting together was quite impossible. Each little hospital, however close by the other, was wholly independent, and a medical officer dare not enter another hospital unless at the request of the medical officer in charge. How often have we seen an artillery hospital not 100 yards away from the infantry hospital—the former perhaps in charge of a young officer just out from Netley, very ignorant perhaps of tropical disease and Indian routine, the other directed by an officer of long service and knowledge, yet powerless to interfere.

56. How often, too, have we seen a well-experienced officer in charge of a small battery hospital and close by a regimental hospital in charge of a junior, yet each wholly independent in every way of each other.

We can never be efficient and thoroughly professional unless we meet together, unless we can consult and advise with one another. We can never promote true professional *esprit de corps* unless we are drawn together in our hospitals, and that the young officers meet the older officers and learn of them, and the older ones meet the young and advise with them, and indeed perhaps learn from them too. We want to improve; we aim at efficiency; by concentration alone can it be achieved, and by such assistance we can develop ourselves far more than we could when scattered over a garrison isolated from one another, with little opportunity for professional discussion or consultation. Unification aims at this. Professional efficiency in peace, war efficiency in the field, and on no other basis can these aims be secured. Regimentalism means letting professional knowledge go to a low ebb in peace, and in war it means disaster in the field. Choose then between the two, for the choice must be made. There can be no compromise, nor any medium course.

57. **(I).—The question of compromise.**—It has been proposed that a compromise system should be introduced for working in the medical service of the army. It advocates in peace petty regimental hospitals worked on a regimental basis by regimental officers to be the rule, but when war is declared, at once, general hospitals to be organized and worked by the regimental officers concentrated together. It is needless to say such a system is quite out of the question. If an army had one system for peace and another wholly different for war, disaster is as certain as anything can be. Men must be trained in peace for war. That is the basis of war efficiency, and neglect of the rule was the

cause of our Crimean failures. To advance such a theory to-day is to organize disaster and to make ruin certain. Imagine the English army, with its medical system worked regimentally, suddenly embarking for Antwerp. It left England with a regimental system, it disembarks with a sham departmental system.

58. That is to say, a crowd of regimental officers never trained in large hospitals, but taken from petty battery and regimental hospitals, are suddenly massed in large general hospitals, or put to work divisional field hospitals in a campaign. As in peace the regimental commanding officer and the regimental quartermaster did all the discipline and transport work; the regimental doctors know nothing of it; not one of them even saw a large army hospital worked. The senior medical officer perhaps comes from a battery of artillery and now takes charge of a division of an army and a set of army hospitals for 800 sick.

A crowd of medical officers each differently dressed, a crowd of hospital sergeants drawn from every corps, and a mass of orderlies without cohesion, without *esprit de corps*, grumbling to get back to their regiments, impatient of all discipline and control by officers and sergeants they never heard of or saw before. Transport brought from various quarters. A field hospital mobilized at a week's notice. No hospital corps. No fixed routine of work. Regimental commanding officers clamouring for their doctors and withdrawing them when most wanted! Doctors struggling to get away to their regiments, no co-ordination nor departmental *esprit de corps*, and directing all a principal medical officer whose duty in peace time is to inspect diet rolls and prescription books, and we have all the elements of disaster ready at hand.

Such a system of compromise is impossible.

59. In the army we know of no compromise. Everything is laid down by rule. A system exists, or it does not exist, and it can never be taught by any soldier or any army doctor that it is possible on the eve of a campaign to change an existing army system.

60. Try it in a battalion; try it in a battery of artillery. Subdivide a battery of artillery in peace into single guns and attach them for discipline and order to each regiment or battalion.

Let the regimental commanding officer arrange all questions of discipline administration, and transport, and let the artillery wear the uniform of the regiments to which they are attached. Then, when war comes, draw them together, group them in batteries, and what will be the result? Certain disaster from want of cohesion and *esprit de corps* and practice together in peace. These results are certain, and no one can deny them. It cannot be too often repeated that in any army the only real basis of efficient working is to make the peace routine so like the war routine that a soldier cannot distinguish one from another. The more this is aimed at and carried out, as it has been done in Germany, the nearer is efficiency, and the more variation that is allowed to be developed between peace customs and war requirements in any army, by so much the more is disaster organized and ruin made certain.

61. Sooner than have any compromise system it would be better to stand by the old regimental system than on the eve of a campaign to

change every arrangement. The old proverb about the danger of swapping horses in a ford holds good here.

62. **(J).—Prevented all station tradition of disease.**—Under the regimental system if a regiment marched into a foreign station it brought with it its own three doctors.

They might have experience of the new place; very often they had not. Numerous mistakes have taken place in this way from ignorance of local diseases and absence of local knowledge in sanitation and hygienic precautions.

Now under the new system, the garrison medical staff being permanent, regiments will come and go, and the army medical officers will remain and carry on the knowledge gained locally from one medical officer to another. In this way many mistakes will be avoided.

63. **(K).—The regimental system ruined true "esprit de corps" amongst the medical officers.**—In the old army days before the Crimean war the regimental system was excellent for medical officers. Regiments were hidden away by themselves for years in outlandish colonial stations where no two regiments ever met. In such days all the army medical officers were regimental officers, and practically no medical staff existed.

Now, under the altered conditions of army life, the concentration at home, the abolition of colonial garrisons, and the great increase of staff doctors who never could find any regiment to get into, it is quite out of date.

Instead of the Army Medical Department being, as it ought to have been, an army corps thoroughly imbued with *esprit de corps*, high professional and army feelings, and full of its glorious traditions, it was divided and split up into two main sections. On the one side were the regimental doctors, the lucky men who got into regiments, escaped all the drudgery of the army life, had comfortable messes, and were never moved about the country. On the other side were the staff doctors, 300 strong, a body of officers whose unhappy position it was impossible to describe in terms too strong. If the regimental system gave a home to half the army doctors, it threw the other half hopelessly on the world.

64. The condition of the medical staff officers, 300 of whom, through no fault of their own, could never get into regiments of late years, was most painful and objectionable under that system. I do not know any body of officers in Her Majesty's Army who suffered as they did. They were perfectly friendless and homeless; they were the drudges of the department; they were literally never at rest. Every move of troops, every outbreak of disease, every possible unpleasantness in army life, weighed down the old staff assistant surgeon.

His life in India was the joke of the service in every mess. Literally no man cared for them. They flitted from station to station, and from cholera camp to cholera camp in a surprising way.

They had no homes, no messes, no circle of friends. Their nameless graves are scattered over the land in no small number. That they were deficient in discipline and often injured in their *morale* was no fault of theirs it is easily explained.

65. It rose from the division of the department into two sections of

regimental and staff officers. The former once gazetted to a corps could not be moved from their corps for any detached duty, or if they were their colonels immediately worked on the military authorities to get them back.

The principal medical officers had no authority over them, and, as a consequence, the staff doctors whom they could move came in for a continual round of moves and unpleasant duties. When a staff doctor was attached to a corps he was often given the least inviting duties to do, and this itself drew down official rebuke from the higher medical authorities.

66. However senior a staff doctor was in the army, in any regiment he was attached to he was junior to the young boy fresh from Netley, if that boy had a regimental commission. This alone was a most depressing rule. The staff doctors themselves were the doctors left after every regimental commanding officer had picked out from the medical staff the doctors he liked and got commissioned in his regiment, and a further sorting was made by many of them themselves getting into the regiments they liked. In this way the army medical staff contained some men who needed very much the guidance and companionship of their brother-officers to teach them the army customs and traditions, and that companionship they never had. Their lives were spent on the march, on boardship, in epidemics, in every place but in a comfortable home. With the regimental people it is quite the reverse. Often by no special good quality a man got a regiment and was at once removed from the drudgery of the staff. This system ruined the prestige of the army medical staff. Every young medical officer tried to get out of it, struggled to get into a regiment, and, wearing its uniform and safe under its protection, cared little for principal medical officers for ever afterwards.

It was this hard life of the staff doctor that ruined the prestige of the Army Medical Department. Every one thought that when unification was brought in it would bring us all to the same level as the old staff doctor. This is far from being the case. Now the garrison staff of doctors are a permanent body rarely moved. If one regiment is sickly in a garrison and another healthy, a staff doctor is not wanting to be sent to the place, because the doctors have all equal work and share alike.

In former times the doctors of the healthy corps in the same garrison remained idle, and a staff doctor came from afar to assist the sickly regiment.

For movements of corps and such like, the moves are now spread over the whole staff, and as each man takes a share and returns to his station when it is over, a trip in a year is about the number a man has to make. There is now no class in the Army Medical Department specially told off for unpleasant duties.

The unpleasant duties have almost disappeared. We are now freed from mess and band subscriptions to regiments, and in the large garrisons messes of the army medical staff can soon be established. We are rapidly gaining a position we never had before, and as each man remains for a long time in each garrison and makes friends, he is no longer the wanderer as the old staff doctor often was. The department is developing the grand tradition of duty done in the old day, and we are existing as an army department that will soon stand high in the service, and daily increase in influence, professional knowledge, and efficiency in the field. Divided in regiments, we gave to them our *esprit de corps* and our strong attachments, forgetting that our department should be dearer than all in our eyes, and that its tradition is our best boast and truest standpoint to work from. Working from that basis we can devote our energy to the comfort and happiness of the sick soldier, and can give to the department the devotion and attachment so often given to our old regiments. We have a department to live for, and that we never had before.

We too often forgot in the old days that a department did exist, and divided by two and three amongst different regiments all departmental *esprit de corps* was at a low ebb. To-day it is different. We are drawn close together, and a feeling of comradeship and brotherhood is developing little felt before. Under the unification system we can be more useful to the soldier, be more perfect doctors, carry on field duties more completely, and be in every way more efficient than under the old system now disappeared. An organization such as we now have gives us a fair field to work in, and unties our hand to do this work.

67. Again, regimental sympathisers seem to forget that by the old system the staff doctors of the army often would have been the responsible officers for working the base general hospitals in the field.

That is to say, after every officer of any smartness was safely billeted in a regiment and free from his medical director's interference, the remainder left would do to work the great hospitals at the base of operations.

What order and what efficiency could have been effected under such a system? The officer who all through his service had never been disciplined, and had done little save the drudgery of the department, and who had always been junior of his rank in a regimental hospital, suddenly appeared as a director of a general hospital!!

68. (L).—**Minor drawbacks of the regimental system.**—No one with any idea of organization in an army but must agree that it is essential to efficiency and order that in the field or in quarters an officer or soldier should be recognised at once by his uniform. Let us imagine artillery men or engineers all wearing the uniform of the various infantry battalions in any army, and then ask a private soldier to identify the gunner or the sapper. Such was the rule with us under regimental organization. We had a crowd of varying uniforms in the department. Few officers could identify the medical officers from the others in full dress; and in undress it was wholly impossible. Some proofs may be useful. We begin with the cavalry. In full dress uniform the cocked hat distinguished the surgeons, and many corps ignored the ugly black cross belt and permitted the doctors to wear the regiment gold belts. But in undress it was perfectly impossible to distinguish any medical officer from any other officer. They wore the same dress in every particular. In the old times in the hussar corps the only distinction was the black cap lines of the busbies, and few people in the army even noticed this distinction. In the

horse artillery the dress was quite the same in full dress, except that the busby plume was black and the cross belt was departmental. In undress uniform the artillery doctors were in no possible way distinguishable from the other regimental officers, as they all wore the same sword belts.

I have myself seen the royal engineer doctors in former years wear the embroidered engineer cross belt, and it was quite impossible to tell them from the other officers. In highland regiments it was also quite impossible, as all alike wore the feather bonnet, and the plaid hid any departmental belt worn. In the rifle battalions the only distinction was the absence of a pom-pom in the shako.

In undress uniform throughout the service a medical officer was undistinguishable. This may seem a small thing. It is quite the reverse. Try and consolidate a war hospital, with officers, sergeants, and orderlies, all differently dressed in a dozen varying uniforms, place them in the field for assistance to the wounded, and who can recognise them? Few soldiers could distinguish them, and few officers either. The true principle is to have one definite uniform for the medical corps of an army, whether officers, sergeants, or orderlies, and let it be easily distinguishable, and never varying. In this way all the army know it and no errors arise. Such a uniform may be perfectly distinctive, at the same time it need not be ugly.

Esprit de corps is sustained and developed even by such petty things as the pattern of a man's uniform, and we want perfect distinctiveness without ugliness—a result not difficult of attainment.

69. **(M).—Unequal foreign service and irregular tours of duty.**—The medical department under the old regimental system was in a state of extraordinary chaos as regards the roster for foreign and home service.

Owing to one half of the doctors being commissioned in corps and battalions, and the other being staff doctors, no uniformity existed. Some regiments never go abroad. Their medical officers were always in England. Some corps, such as the engineers and army service corps, never serve in India, hence their doctors escaped India. In India battalions of infantry remained twelve years, and the doctors had to remain out all that time without a chance of a change, while the staff doctors went home every five years. I have seen medical officers often out for ten and twelve years without a chance of getting home. In Ceylon the staff doctors serve three years and then go home. Regiments serve ten and twelve years. At home some staff doctors might remain two years; others who knew how to exchange and arrange matters were left in England. Unless an officer in the English army serves abroad in his earlier years he is quite unqualified for promotion.

He can never grasp the varying questions of hygiene and sanitation or disease that daily arises in a wide-scattered army like ours, unless he has such experience.

Yet in a seniority corps such men, ignorant of foreign routine, eventually became senior in the department, and perhaps claimed promotion.

To such promotion they had but faint claims, and even if promoted

could be rarely efficient. Now we have a fair and uniform roster and a uniform tour of service for all. We are all benefited by it in a great degree.

70. Nothing need be said here of the friction that was often developed between the medical and other officers of regiments under the old system. That such friction did exist is undeniable, and the military and medical press teems with complaints on this head. By the new system these causes of complaints are reduced to a minimum, and a happier era is dawning for all of us.

In losing our regimental ties we gain an *esprit d'armée* never felt before, and our department for the first time stands forward on its own proper basis, not as in the past trusting to regimental support for existence.

Such a system ruined our professional feeling, and developed a false spirit of regimental *esprit de corps* that tended nothing to our improvement as doctors in any way, and however we may have gained *personal* esteem or regard for our services, no credit was ever given to the department.

This was the drawback of the old system. Every good service done by us was credited to the regiment we served with; every *faux pas* was set down to the fault of the long-suffering department.

But such a state of things cannot recur again. Now if we fail, we fail as a department; if we do good work, credit goes to our department.

SECTION V

THE UNIFICATION SYSTEM

71. We now turn to discuss the unification or departmental or non-regimental system of army medical organization.

Under this system the custom of having the hospitals of the army permanently divided into a crowd of petty regimental ones, mere adjuncts to regiments and battalions, will cease. The commissioning of the medical officers specially in separate regiments will be changed to commissioning of them in the Army Medical Department. The sick in peace will be treated in central garrison hospitals wholly under medical administration, where a definite garrison staff of medical officers will take charge of them. In war time field and general hospitals, each perfectly complete, self-contained, as definite as a battery of artillery, independent of regiments in every way, and directed in their movements by the principal medical officers under the authority of the general commanding the army, will supplant the regimental system.

This plan of organization which is now the rule in every army worth copying, and which contains efficiency and economy in peace with

thorough fitness for army service in war, is now being developed in our army, and its advantages may be tabulated in order.

72. (A).—**Localized responsibility in the medical department.**—We have pointed out the waste of medical aid and equipment that constantly existed under the regimental hospital system of administration by the medical officers and the hospitals themselves being divided into petty regimental subdivisions, each immovably attached to single battalions and regiments, and perfectly unavailable either in peace or in the field for any army duty outside their own petty regimental limits.

All this waste of men and material will now cease.

Under the commanding general the principal medical officer of each district in peace, and of each division or army corps in war, will now have entire power of disposition over every medical officer, orderly, and every hospital in that district, division, or army corps. In garrisons at home and abroad a fixed garrison staff of medical officers, forming a definite body of officers organized in every way, will carry on all medical duties there under the immediate direction of their own senior officer, presided over by the district principal medical officer and the general in command.

73. The senior medical officer in each garrison will be responsible in every way for the entire medical duties of that garrison. Under him the medical staff will treat the garrison sick in central army hospitals, over which he will have complete power of adjusting work, arranging orderly duty, and in fact directing every detail.

A medical officer will be detailed to each battalion or section of a camp in peace, and in war to each battalion or regiment, to send the sick of his battalion or camp to the central garrison hospital in peace, or the divisional field hospital in war. Once admitted there, the medical service will be responsible for the patient.

The medical officer will likewise treat such sick officers as may need his services under the instructions of the senior medical officer, but in the field such cases would likewise be treated in the divisional field or the stationary army hospitals.

A staff of medical officers will be detailed for the garrison female hospital, likewise a completely organized central institution, and thither all sick women and children of the garrison will be sent for treatment.

An officer of the medical staff of each garrison will be detailed by the senior medical officer to supervise the sanitary condition of the entire garrison, and in the field of the brigade or division as a whole. By due division of labour all the medical staff of any garrison will be equalised in their duties, the services of every officer and man will be made use of in a way impossible under the old system. If a garrison is healthy, the staff can be small; if it is sickly, the staff can be large in proportion.

74. The senior medical officer being responsible for all the corps in garrison, will be taught to deal with army medical questions and administration as a whole, and not as formerly as concerning his own little battery or battalion merely. The service will gain by having an officer of experience guiding everything.

A hospital corps of orderlies, sergeants, and officers, specially detailed for hospital service and it alone, will conduct all nursing and routine hospital duties in camp or garrison under the orders of the principal medical officer.

The instruments, drugs, and equipments, will be under the control of the same officer, who can dispose of them as most convenient for the good of the service.

The garrison sick will be all treated in one central place, and our opportunities of learning our profession and of developing our professional efficiency will be greatly increased in consequence.

75. In war time perfectly movable field hospitals, as completely and independently organized as a battery of artillery, with a fixed definite staff, and copies in every way of garrison hospitals in peace, will be attached in certain proportion to each division or army corps. Their medical and nursing staff will be especially trained, be wholly under the principal medical officer of the force, and the hospitals and the staff can be concentrated with a sickly division, or at the point of attack in battle, as easily as so many batteries of artillery can be concentrated. If one division be full of wounded and other divisions have none, the field hospitals, with staff of doctors and nurses complete, can be marched to the sickly or wounded division as easily as any battery of artillery is now transferred. If a part of a division halts, one of the field hospitals may halt with it. If a field hospital be full and cannot be evacuated it can halt by itself. If a division subdivides for any special service, one of the three field hospitals, or two or all three, if necessary, can move with it. If even a single detachment move away the field hospital can subdivide and again subdivide without any single part losing its mobility and efficiency, and on again joining the head-quarters of its division or army corps it resumes its place with the field hospital, as in a regiment any company resumes its place in its battalion.

76. By this facility of ready subdivision and perfect mobility every varying strength of the force detached from the army can be supplied with a proportionate hospital complete in every detail, and the medical service secures an efficient and independent organization, enabling it to concentrate or to divide its services to the wounded or the sick of the army in a way impossible under the old system.

It can combine into a divisional hospital, or separate into a regimental section with equal ease.

We cannot again see the absurd sight of a crowd of regimental hospitals with their doctors, orderlies, and equipment lying unemployed and unavailable, while a few hundred yards away other regimental hospitals were crowded with sick and the staff overpowered with work. Perfectly organized hospitals, complete patterns of medical efficiency with definite staff and equipment, can now be easily concentrated at any place or in any position.

77. A hospital corps exists, trained under medical direction, to remove the wounded from the field, to organize dressing places for them, and afterwards to hand them over to the field hospitals.

The field hospitals moving with the army, or, if necessary, able on special occasions to halt independently of it, eventually transmit all

suitable cases to the more stationary hospitals in the rear; but whatever is done, is done by the medical service as a department. We know who is responsible, and what our wants will probably be.

78. Think what a comfort it would have been to all, and what a different aspect the Crimean campaign might have assumed, if, after the Alma, the army, freed from all responsibility about its wounded by being able to halt four or six field hospitals for even a few days at the riverside, could have hastened on in pursuit of the disorganized foe.

But it was impossible. Trusting to regimental organization and imagining that the regimental system, of an army in every department was sufficient in every way for field service, there was no organization able to detain a suitable medical staff to carry on the work; and as all the regimental hospitals, the majority of them quite empty, had to march away with their corps, we saw in consequence two extraordinary sights, one of a whole army detained by a really paltry number of wounded men, the other that of a single medical officer (Thomson, 44th Foot) with his soldier servant left as a sufficient medical aid for 400 Russian wounded. Think what a comfort it would have been if we had had a medical department organization, or any attempt at an organized medical corps, to carry out the dressing and the embarkation of the wounded there.

79. To-day all this is changed. Now the Army Medical Department has a system. It has now become a corps of the army in the same way that the engineers gradually became a corps, and the artillery developed into a distinct branch of the army.

In old times last century the artillery of the army was kept divided into groups of two guns attached to each single battalion or regiment. That system fatal to all artillery improvement terminated long years ago in the battery system by which the guns and the gunners were no longer scattered by couples through a crowd of regiments, but were concentrated under their own officers in batteries and divisions. Efficiency as gunners and *esprit de corps* and pride in their service as artillerymen have been developed by such a system, and unification will do the same for the medical service. It means withdrawing each petty hospital from each battalion and concentrating them under their own officers in army hospitals completely and independently organized.

It means a professional efficiency being developed impossible before, and this is a great point gained.

80. (B).—**Efficiency in peace** is also secured by organizing first-class central garrison hospitals under medical direction in each station. In these hospitals ample arrangements can be made for all wants. Special wards, ophthalmic wards, infectious diseases and lunatic wards, with operating theatres, and special arrangements of every kind, can be prepared. Say that in the old days scarlet fever broke out in a garrison and cases occurred in each battalion. Every regimental hospital became tainted. To-day we can have special infectious wards for a garrison. In like manner special eye wards can be arranged. Similarly female hospitals with lying-in wards and children's wards can be organized, and much comfort given to every one in consequence.

81. (C).—**Mobility and readiness in war.**—By freeing the hospitals from their paralysing regimental attachments, and arranging them on a divisional or army corps basis, each hospital being free, mobile, perfectly self-contained, having all its wants provided for inside itself, and as readily movable as a field battery, the hospitals on receiving an order can concentrate at any particular place; whether it be an unhealthy part of the country, the probable place of attack, or anywhere that special medical aid is needed. The general in command informs the principal medical officer—"The enemy are in great force on the banks of the Alma. The field hospitals should concentrate near the village of Bourliouk." At once all the hospitals from the army corps can, if necessary, be moved there. Under regimental organization this was impossible. Unless the regiment was specially moved no hospital could be moved, so that three fourths of the doctors, orderlies, and *matériel* were wasted, while others were overborne with work. Again—"The 11th hussars will make a reconnoissance towards Eupatoria." Order for hospital—"The 2nd field hospital cavalry division will detach its No. 1 subdivision for service with the 11th hussars during the approaching reconnoissance." Again—"The army will advance to-morrow by way of Mackenzie's farm towards Sebastopol." Medical order—"The reserve field hospitals' 2nd army corps will halt on the Alma until all the wounded are embarked. The Russian wounded will likewise be attended to. On the termination of these duties the field hospitals will join their original divisions." Nothing is simpler and easier than this, provided we are trained to it, but fancy it under the old system. The regiments marched away, with them all the hospitals moved off.

82. (D).—**It establishes a uniform system for the medical service in peace and in war.**—No change will now occur when war is imminent. The army hospitals will at all times and in all places be worked in exactly the same way. We can measure in peace the requirements of war, arrange for them, and guard against disaster. Under the old system this was impossible. We had one peace system and one war system. Now we can have field hospitals organized and marched about at Aldershot or the Curragh, and a thorough training given to all concerned.

83. (E).—**It is economical.**—By preventing the waste of officers, orderlies, and equipment, in unemployed regimental hospitals, either in the field or in quarters, it guards against loss. By utilising instruments, microscopes, drugs, and special wards, it aids economy.

By lighting, warming, washing, and cooking being done in one place, it prevents waste. In the field it saves transport and hospital equipment being wasted in small regimental hospital establishments.

84. (F).—**Good nursing.**—By giving us a body of nurses, the army hospital corps, cooks, compounders, and sick bearers, specially trained and permanently serving in the hospitals, we obtain great assistance in the field or in garrison.

This was impossible under the old arrangements, as the orderlies were ignorant, and no promotion rewarded the careful and intelligent. Now we have all this foreseen. We have a corps of men trained to carry the wounded, trained to act as sanitary detachments, and they

are men whose whole hopes of promotion depends on doing good work in the hospitals.

85. (G).—**Sufficient garrison staff.**—It enables us to increase or to limit our garrison medical staff in accordance with the necessities of the place, and does not tie us down to a fixed number as the old system did—the same in healthy as in unhealthy places. It guards against the waste of men in the one case, or the overwork of them in the other.

86. (H).—**Develops "esprit de corps" and professional efficiency.**—By withdrawing us from the subordinate position in regiments, where our professional *esprit de corps* was injured, and our position as a unit in the army departments quite kept out of sight, it enables us to stand on our own basis simply as medical men. We can claim our rights, not by the fact of being in any regiment, but simply as army doctors. It gives us a place in the army never held before. By withdrawing us from regiments friction with other corps is reduced to a minimum; and we are free to develop our ancient traditions and our own *esprit de corps*, a thing impossible in the old days. Until we can appeal to the young officers of our department solely and simply on our *esprit de corps* as doctors, so long will we be weak and divided.

Professionally speaking, we have all to gain by union. In our petty little regimental hospitals we could never become good doctors. We had no intellectual friction, little real medical life, and the senior and junior officers had no opportunity of comparing notes or receiving information. Now we can all develop our knowledge and become better doctors than ever before. All good service done now will now count to the credit of our department, and all neglect or carelessness will equally injure us. We are taught then to live for our department.

87. (I).—In the larger garrisons we can have our own messes, libraries of medical books, clubs for papers and periodicals, good laboratories and microscope rooms, and all the essential aids to efficiency. By having messes in a few central garrisons the young officers can be kept together, and a comradeship and fellow-feeling developed that will always be of use.

88. (J).—**It equalises the roster** for home and for foreign service for all officers, and abolishes or reduces to a minimum the great irregularities which occurred in the old days by some officers never going abroad, and others being constantly on foreign service.

89. (K).—**Training in administration.**—By making the senior medical officer in each garrison act as director of all medical arrangements in the garrison consisting of several corps he is trained to administration and to deal with army medical questions on a large basis, not, as in regiments, from a very narrow standpoint. In this way a crowd of officers are learning to administrate, and they eventually will become our Directing Medical Officers. In the old days a man went from a small cavalry regiment or battalion to direct the medical affairs of a division of the army for which he had no training whatever.

90. (L).—It abolishes the absurd system of making a staff doctor, however senior, junior in hospital to a regimental doctor, however

junior—an anomaly constantly seen in old days, depressing to the department and detrimental to the efficiency of the service.

91. (M).—**A definite uniform.**—It makes one definite uniform possible for the Army Medical Department, whether officers, sergeants, or orderlies, and prevents the extraordinary variety that always existed on this head in the service. Such a variety was entirely opposed to efficiency, and rendered it impossible to find out a medical officer. Now a clearly defined rule can be laid down, and a distinct uniform made compulsory.

92. (N).—**Provides for the militia and volunteers.**—The medical care of our now very strong auxiliary forces can be quite easily carried out during embodiment under the unification system, as the sick men can be admitted at once into the garrison hospitals, or, if in camp, into the divisional field hospitals. If we were trusting to the old regimental system, each regiment of militia or corps of volunteers would on embodiment have, under great difficulties, to organize its own little hospital.

This would be very troublesome, but now when a militia corps joins a division or a brigade on embodiment, its sick can be treated in the hospital attached to the brigade.

What is wanting in the army, whether with the regular or auxiliary forces, is efficient and workable hospitals.

The actual presence of medical officers with corps in camp or barracks, although essential, is not so all-important by comparison with having the hospitals thoroughly ready and up to the mark. If an officer or soldier gets sick or is wounded, he can at any time be removed to hospital, and it is there efficiency is wanted.

In the old days medical officers really wasted their time quite uselessly in having to attend musketry parades and cavalry drills, where accidents never happened, or if they did, a medical officer on the ground, without appliances or ambulance waggons or stretchers, was quite useless. How many weary hours have we not spent attending these tiresome drills, when one forgot one's professional work and learned nothing whatever. Practically, if we acted on the principle of being constantly hanging about the soldier, waiting for accidents to happen him, we should never leave his side, and we would never get any practice. It is at stables, or when out amusing themselves, that, as a rule, accidents happen men, and it is to hospital they should be at once taken.

93. (O).—**Finally, it gives us all a centre in the service to work round**, and a department to live for in every garrison in the empire. Up to the present day a medical department properly so called did not exist in the army, for that name could not justly be applied to a few principal medical officers almost powerless over their department, and a crowd of homeless staff assistant surgeons quite unorganized, doing every fatiguing and unpleasant duty.

To-day every doctor in the service is combined in a single medical corps, standing on its own footing, wearing its own uniform, performing its own duties, and enjoying its rank and privileges on the sole basis of being army medical officers.

The irregularities and unfairness of the old system are passing away,

and the department is awaking from its old torpor to a true professional and army life. Even in the short time since unification was established considerable advantages have been gained by the department, and many more have yet to come.

We, however, stand now on a clear and defined basis.

It is a basis on which we are perfectly unassailable, and that standpoint is professional efficiency.

94. We want to be better doctors in war and in peace, and it is well that our cry should be heard and understood. It is no clamour for absurd privileges or boons, it is a true and sensible movement that cannot be laughed down or derided. It appeals to the common sense of England, for it is thoroughly a movement towards efficiency and towards economy, and modify or change how we may, it cannot be found fault with on these grounds.

It appeals to the civil profession in medicine by its cry for a more thorough medical life, a closer application to our own scientific duties, and an aiming at hospital efficiency in its widest sense. We do not want to ignore medicine. We want to stand by it. To be known as doctors. To wear a doctor's uniform and that only. To base all our claims for rank and pay and rights of all kinds on this basis above all; we are doctors, soldier-doctors it is true, but above all doctors.

95. It appeals to the soldier on irresistible grounds. We want to be good men at our work, to stand by you all the better in your hour of need. The more we become proficient the better for you. The old system injured us as doctors in peace, and would have left us powerless to help you in war. Now all is changed.* You have fine traditions. So have we. You have *esprit de corps*. We want it also. You stand up for your position as soldiers; we for our as doctors. There is no cause for a quarrel between us. We can get on capitally together. But we want a corps of our own. We want to be able to appeal to our young men not as Buffs, or Borderers, or Connaught Rangers, or Highlanders. We want to say to them you are army doctors, that and that only, and we can only do so by having a corps organization. We shall stand by the service and the soldier as we have always stood by it, sharing every danger—sharing every success—with you in the glorious advance—with you in the day of danger and distress. We have marched with you, sailed with you, served with you everywhere. Often killed in battle, often wounded, constantly sick and swept away by epidemics. As we have done in the past, so we shall do in the future, unfaltering, devoted, true to the soldier to the last, but we want a corps to live for and a tradition of our own to be developed.

We want to see our department and our officers and men as proud of the Army Medical Department and its uniform as the best regiments are proud of their tradition and their good service, and it is only by so developing this corps-feeling we can ever hope for efficiency. Unless we are proud of our department, unless we are proud of being doctors, we can never rise to any efficiency. Unification means promoting that efficiency, and it is well to let this be clearly understood. The question has become so involved with sentimentalities that the central fact may be lost sight of.

96. Unification means one thing only. It means we want to be

doctors. We want to stand or fall by that rallying cry. We want a deeper professional life, and we can only get it by unification. We want to be with the soldier. We want to be able to assist our men well and thoroughly when ill in peace time. Unification alone can aid us to do so.

We want to be ready in war, to give heart and soul to our wounded comrades, and to be ready to aid them in an efficient and practical way.

Unification and it alone enables us to do so. No other road remains open. This and this only is our true path to advance upon.

97. Finally, when we accept boons or ask for concessions, we want to ask for these on one clear, open, and unquestionable basis, that of being simply army doctors and officers in the army entitled to perfect equality with all other officers.

We desire to stand by this faith, and if we progress we progress with it; and if we fall we fall for a known and an apparent reason.

SECTION VI

THE WANTS OF THE ARMY MEDICAL SERVICE

98. If any officer of the military or medical departments of the army imagines that in aiming at unification principles the medical officers are striving to do less work or to lead easier lives, they are thoroughly and entirely mistaken. It means harder work, more responsibility, and more attention to duty than ever was necessary under the regimental system. The medical department will by it be entrusted with most arduous responsibilities, but its hands will be untied to do the work. Heretofore we have led in regiments by comparison an easy life. But now we will have far harder work but a freer field to work in.

The principle is so true, so easily defended, and such a thoroughly good one to stand up for, that no drawback exists in urging its complete acceptance by the army and the profession. We can all, without fear or shame, stand up for a cause that aims at making us in peace times better doctors, and that in war time enables us to assist and succour the wounded soldier in the field in a way quite impossible before. Up to the present day in our aims at progress, regimentalism constantly intervened as a principle fatal to all real development, but now that old man of the sea has at last been removed from us. Nevertheless, although unification is essentially true in principle, and that not a single valid argument exists against it, it has been indifferently received, and in several instances clamoured against. There must be reasons for this outcry, and it would be far better they should

be clearly pointed out. Why should a body of professional men, such as army doctors are, oppose, as some do, the development of a system so true in its every bearing? Let us examine the reasons.

99. **Up to 1873 no Medical Department as an army unit really existed.**—This may seem a strange assertion to make, yet it is really correct. Until 1873 the department's strength and energy was subdivided and frittered away in petty regimental streamlets, and, whether as regards army position or prestige, no real medical department existed.

It is true there were some forty principal medical officers and some 300 staff surgeons and assistant surgeons, but the former officers were quite devoid of any real power over the medical officers, and the latter were merely engaged in filling up the casualties in the ranks of the regimental doctors. The medical department really existed as a subdepartment of every regiment classed officially with the pay service and the quartermaster's department. To-day this is all changed. We are now relieved from these dead-weights, and a free field exists before us. The medical service will no longer be either fostered or depressed by extraneous aid, and it must stand or fall by the test of its own efficiency.

That it can develop itself when given a fair and open field to work in, and when its wants are duly met, no fear need exist. Subdivided as we have been up to the present time in a crowd of heterogeneous groups, how could a departmental spirit exist? With a hundred varying regimental subdivisions, dressed in a hundred varying uniforms, never concentrated together, with no means at our disposal to preserve our traditions or to develop our *esprit de corps*, how could we but be weak? Divided still more by the great division of regimental and staff doctors, the former monopolising all the comforts, and the latter suffering all the hardships of army life—was it not but natural that to be a non-regimental army doctor seemed at first to many of us not to be a pleasant thing? Let such a system of subdivision be tried on with any corps or department and see how *esprit de corps* will perish. Try it with the Royal Artillery and see if its spirit will survive.

100. In the old days the Royal Artillery, instead of being grouped in batteries and brigades, was scattered over the army at the rate of two guns to each battalion of infantry.

Such subdivision was fatal to its efficiency, and was stopped long years ago. But let us imagine that the artillery had remained until to-day scattered by single guns attached to every single regiment of cavalry and battalion of infantry in the army.

Let the theory be yes, truly, artillery is useful in an army, but each regiment should have its own gun. Who can look after it so well as the commanding officer of the regiment whose men it is to protect? Let each gun be furnished with transport, and let its interior economy be watched over by the regimental commanding officers. Let the gunners and the gun officers be all dressed in the regimental uniform of the corps to which they are attached. On the line of march let each gun follow its own battalion distinct from every other gun in the army. Although there may be in the same garrison five or six guns, all attached to as many different regiments, let them be wholly distinct in

every way, and let the officers never meet together for drill or conversation. When one regimental gun in action has spent all its ammunition and is practically worked out, let no one have the power to detach another gun or its gunners, or a round of ammunition, from a regiment not engaged to give assistance, because, forsooth, each regiment would have a gun of its own. Let there be gunnery inspectors nominally responsible for the artillery service, but let them have no power whatever over the artillery save to count the cartridges half-yearly or such like duty, and let a crowd of gunners not attached to regiments be kept constantly knocking about from place to place and doing all the drudgery of the artillery. Let every artillery man know that the detached gun system had already failed in the field, was abandoned by every other European army, and was perfectly unworkable in peace. Let them, although heavily engaged under fire, be called non-combatants, because artillery do not themselves charge positions or capture guns. Let the decorations given freely to other corps come rarely to them.

Do all this, and say where will artillery *esprit de corps* be? Simply nowhere. But that system does not exist for the gunners; they are all concentrated in batteries; they are responsible for all their own duties; they have a grand tradition, and wear on their appointments memorials of good service done.

They have a history and a noble name, and how could they have ever had it under such a system as I have imagined.

For under that system, however well each regimental gun worked in action, however well the gunners did their duty, it is to the officer commanding the regiment all the credit would go. However well the medical men worked in the by-gone campaigns, the credit went to the regimental commanding officer, and the department as a department is never mentioned.

101. Now we have a fairer system. We stand or fall by our department. If it is weak and bad, we fall with it; if it is devoted, brave, enduring, full of hard work, skilful, we rise with it. This means the basis of *esprit de corps*. These are the elements of all comradeship and brotherhood in any service. That we can develop them if we get a fair field, no doubt whatever exists.

But until 1873 we saw the staff doctors uncared for, hurried about everywhere without prestige or position, and employed in every unpleasant medical duty, and very many of us dreaded becoming like them.

The fear is groundless, it can never occur again. The support we imagined we had in the regimental system was a false support; it paralysed all professional efficiency; it ignored our grand profession; it rendered us less useful than we should be to the soldier and the country; and in war time it left us helpless and useless in the field of battle.

That system is now dead, the long-suffering staff doctor is abolished, we are now detailed to garrisons almost permanently, and it is our fault if we do not organize our comforts.

102. Another cause tending to make army doctors dislike unification was the fear that by it they would lose the protection and the

shelter their regimental commanding officers afforded them in any question of rights, privileges, or boons, or the representation of grievances or the like. Seeing how utterly powerless in the old days the directing doctors were to guard the interests of the medical officers, and how centralized all authority was in the regimental commanding officer, many medical officers looked forward with dread to the day that would take them from their regiments and reduce them to the friendless level of the old staff assistant surgeon. This fear is also groundless. Increased power has been given to the directing officers, and they will use it doubtless as they should do to guard the interest of all.

The protection and assistance that in every corps or department should be derived from the kind advice and friendly services of one's seniors will now develop itself in our department, and we will all be happier for it.

103. Another reason making medical officers dread unification was fearing that, once removed from regiments, all warrants and privileges granted them would be gradually taken away, and that under powerless and timid directing medical officers no one would be left to stand up for them or speak in favour of their just rights.

See, say some of them, how our privileges disappear one by one. Let us cling close to the regiments. Let us hide in every way our departmental sympathies. Let us have complete solidarity with our regimental brother-officers. Let us ignore our position as doctors. All will then be well, for no Government ever attempts to take from us those boons we hold in common with the military department.

Look, they say, at the history of the past, judge from it the prospects of the future. If we unify we perish. It is true it means good doctoring; it is true it means war efficiency; it is true it means professional development in every way; but we are but men after all, and if it deprives us of guaranteed advantages and privileges conceded to us by royal warrants, who can blame us for preferring the comparative drawbacks of regiments with the superlative personal evils of departmentalism.

Here it is difficult to answer them. Sheltered under such an argument, what answer can be given them? But the unificationists have a firm faith in the future. They believe that although it is true that drawbacks have arisen in the past, and that many acts of the State need clear explanation and straightforward answering, that in the end it is better to stand forward as army doctors alone, fighting their own battle, trusting to their own vigour for guarding themselves, and appealing with confidence to the good sense of the country and of the army that justice shall be done. In this we all agree. We cannot exist in the army if this be not the rule.

Our basis for work must be clear, definite, unassailable, and assured. Members of a profession daily rising in the social scale, daily becoming more scientific in its character, daily building itself up on a basis more secure against attack than either church or sword or gown can to-day boast of, working its way ahead, not by powerful interest or the fostering hand of patronage, but by sheer force of hard work,

intelligence, and thorough modern spirit, the doctor serving England in her army cannot exist on dubious privileges, but must be openly and fairly dealt with as a man of education and daily increasing difficulty of production.

104. We who have been with the soldier in every phase of his varied life, we who have been shot down in the battle and wounded in the trench, who have perished by fifty at a time in the pestilences of the great campaigns, who are covered with medals and decorations won in the field, who have been stricken down by tropical suns, or swept away by cholera epidemics along with our soldier comrades, who have shared in every danger the soldier shares, have been nearer to him in suffering in every land than even his own kindred, who on every shore and on every sea have served England honourably, faithfully, devotedly—aye, even unto death, who have struggled more for the comforts of the soldier and his wife and children than even his own officers, who have taken part in a hundred campaigns and have always loved the soldier well, we who have been with the soldier in his service a thousand times oftener than any other army department, we do not come on sufferance.

We come as a part of the army, serving the same Queen, serving the same people, willing, if it must be, to die for the nation, but we do not come on any less definite footing. We want clearly defined position, clearly defined and unassailable rights. An equal share of the rank, honours, and rewards with those whose dangers we share. We want protection in our duty and freedom in our work, a defined position in the service, and it is better to claim these things on the true basis as army doctors than by stratagem, as it were, to obtain them under the masquerade of hussars, artillerymen, or infantry officers, as we did in the regimental days.

We may briefly notice some points needing examination.

105. **Absence of honorary distinctions.**—When a regiment or corps distinguishes itself in a campaign, it is the custom of the service that they receive permission to place the name of the battle or campaign upon their colours or appointments.

By these memorials *esprit de corps* is preserved, and tradition developed.

When the corps consists of a large body of officers and men, some of whom must share in every campaign, a more general honorary distinction is given, such as "Ubique" and "Quo fas et gloria ducunt" in the artillery and engineers, and "Per mare et terram" in the royal marines. Corps also as a reward are made "Royal," or "Queen's," or "King's," or such like. Small as these things may seem in civil eyes, they are dear to the soldier and soldier-doctor, and form the most pleasant rewards a regiment can receive. Knowing as we do the long and faithful services of army doctors in the century and three quarters that have passed away since Marlborough's days, and the constant share the medical service has taken in continual campaigns, one opens the Army List to find that no reward of any kind exists at the head of the department, differing in this way from every other corps in the service. That army doctors feel this I am certain, and it has often been pointed to by doctors favouring regimental views to show the

neglected condition of the medical service. It seems impossible to answer such a complaint. Take even the latest example—"Ashantee."

106. The 23rd bear the word on their colours, although, as it happens, through no fault of theirs, the share they took in the campaign was principally lying off the African Coast in transports. Seventy-three army medical officers served there, all exposed to disease, many under fire, yet no record, general or particular, would show this to the uninitiated. The average civilian would think we had done nothing.

Many officers feel disheartened at this apparently unequal treatment of the Army Medical Department by comparison with other branches of the service. Whether it be the Crimea, Mutiny campaign, Abyssinia, China, it is in every case the same. We get no record of duty done, although every other body does.

Yet no corps of officers can compare in service with ours, and for this reason. We have taken share in every European campaign from Marlborough's battles to Sebastopol, and in addition have served in all the long Indian wars that built up our empire in the east—a service few other corps have done. The artillery and engineers never went to India until 1857, neither did the commissariat, the chaplains, nor the other departments. We, on the contrary, have shared in all these wars, and some of our noblest acts of devotion have been done under an Indian sun, in the days of 1857, at Delhi and Lucknow, and in the old days before them.

107. We are not honoured with the prefix "Royal," although artillerymen and a crowd of infantry corps are so honoured; we, equally devoted to England, are left out in the cold. Small things like these are often great because they are so small. They are dear to the soldier and the soldier-doctor, and we would put up with many a hardship, knowing that by-and-by recognition of good service done would come.

What would be acceptable to many would be the grouping together under one title of army medical corps, or royal medical corps, of the existing Army Medical Department and the Army Hospital Corps. Considering that we will always serve together and that we are indissolubly connected with one another, such a union might well be consummated by a single title being given. In the old days we had Royal Engineer officers and "Sappers and Miners" men, now all are united in a single corps of Royal Engineers, and it tends much to uniformity and *esprit de corps*. There are boons dearer to the soldier-doctor than any increase of pay. Those boons are just appreciation by the State of duty well done, and the recording of it in the way customary in any other branch of the service. Such boons are easily given, and how dearly would they be valued.

108. **Classed as "non-combatants."**—In every army there must be a number of departments whose duty is to provide for the fighting-man. The feeding service, the transport service, the ammunition supply service, the postal service, the provost marshal service, the pay service, the chaplain's service; all these in our army are classed as "non-combatants," and amongst them is included the medical department. It is an unfair classification. The term "non-combatant" practically means, in all other departments, not being exposed to fire or chance of death by war missiles. What is objected to by army

doctors is, that it is unfair to class us with those other departments. Take the case of the Crimea—India, where you will. We march down to the trenches, and are daily exposed to shot and shell and sortie. At the assault the medical officers accompany the advance and are constantly under fire.

109. At the Alma, at Inkermann, at Balaklava, at the siege of Delhi and Lucknow, in Abyssinia, and China, where are the doctors? Under fire, and constantly liable to be wounded and killed. We have constantly gotten the Victoria Cross, probably more often than any other corps. The department is covered with medals, some 800 alone, in a single branch of the service. The record of its services in Hart's Army List contains some of the finest records in the book. Then again remember the services during epidemics. Think of the cholera scourge that sweeps over India yearly and carries off so many hundred gallant men. Service during a long cholera epidemic is far more trying than any campaign service, and the great brunt of the labour falls on the army doctors. Yet all these things are never remembered, and we who go through campaigns and epidemics are merged amongst a crowd of departments who are never exposed either to fire in the field or to sickness in peace time.

The commissariat service is always in the rear; it was so in the Crimea, and must always be so. I am, I hope, no Philistine, but there is a difference in the quality of services rendered to the State by the different branches of the service. The commissariat, the transport, the military store, the pay and law branches, are always far in the rear of the fighting line, and in peace never in cholera camps or trying hospital service. We are always in both. We claim equality with the fighting-man on all these points, and our claim is quite a just one, readily granted by the true soldier who knows what war is and who has seen service. Despite all this, take a recent example. In May 1877 a warrant was published limiting honorary Queen's cadetships to the sons of the combatant officers, and effectually cutting out all children of medical officers from this boon. Such acts as these cause pain, and paralyse the *esprit de corps* of everybody in the department. We are neither combatant nor non-combatant. We are medical officers, and as such should be designated.

110. **Permanent warrants.**—The continuous change in the warrants under which the medical officers serve is a cause of much anxiety to every one in the department. Take Sydney Herbert's warrant of 1858. It has always been looked on as our Magna Charta. In it the old rank of surgeon was made equal to that of major in the army—a just concession in every way. Hardly had the warrant been a few months in existence when a new reading of the warrant was published, stating that although ranking as a major, the surgeon should be junior of the rank always, a most painful proviso. It deprived the surgeon of position and many advantages. At once the medical service took alarm, the civil profession was surprised, and, as has always been the case when rights are meddled with, agitation commenced. Questions in the House, appeals, deputations, discussions in the schools, and the usual routine of agitation was set to work. Of course the objectionable reading was cancelled and surgeons were made to rank with

majors as before. The doctors won by agitation, discipline was shaken, and the State gave way. But a new question arose. An Indian commander-in-chief, seeing the surgeon mounted on parade as became his field rank, made him dismount on parade, and laid down a rule that no surgeon, although drawing forage and mounted on the line of *march*, was to appear so mounted on parade. Again agitation commenced, again deputations, again questions, again letters in the journals, and again it was decided that they were always mounted officers on parade, and the commander-in-chief was wrong. But the injury done to the doctors by the public dismounting of a senior officer rang through the service and did much damage. It injures *morale* and shakes men's faith in warrants if such things can occur. But in 1873 came a new warrant, and the much-struggled-for horse and forage were taken away at a blow. Again agitation, again questions in the House, again clamour and discussion in the schools, and again horse and forage are given back. Discipline again was shaken, and the old confidence, where was it? Gone, they say. Men's minds get shaken by such variations, it ruins discipline, and it paralyses efficiency that such things should occur. But they occur constantly.

111. In the same way medical officers were made to rank in the regiments they were attached to, under the warrant of 1873, according to date of appointment and not of rank in the army, although it was apparent that owing to the five years' rule such a regulation would keep them nearly always junior of their grade in a regiment.

112. In the same way in India the pay is still based on the warrant of 1858, although many increases in its rate have occurred since then.

113. Again, medical officers are now staff officers, but while quartered in barracks are not entitled to staff allowance of quarters, to their great discomfort and annoyance.

114. What we need is permanency in our privileges. For the sake of a couple of thousand pounds a year forage was withdrawn from the doctors contrary to the old warrants, but it was a poor economy, as it rang through the civil schools, and frightened men from entering the service. Examinations came round, and no men appeared. Men dreaded leaving their regiments on this account. They say "The privileges held in a regiment in common with a crowd of captains or majors are never touched. So long as a right is held in common with the military officers of the army, it is practically safe. Once," say they, "leave the regiment, all is unsafe." This variation leads to heartburning, agitation, appeals in the papers, the civil schools get frightened, the department gets a bad name, its discipline is ruined, and in the end the department gets all its wants and more after clamouring for it loudly. But the shock to discipline is ruinous, and after all the grace of the boon is gone, it has been wrenched as it were from the State, and a body of officers full of discipline, loyal to their duty, devoted to their work, and anxious to be good servants of the State, get disheartened, and a number of useless men make it an excuse for every laxity. Such evils as these are easily corrected and should not occur in future. Liberal treatment means good service, and true devoted men will come to a service that treats them well. But precarious privileges that melt

away in a month or two attract none save the indifferent and the useless who come to the army to idle and to lounge.

115. **Military control over the Hospital Corps.**—To promote thorough efficiency in an army hospital, the senior medical officer should be wholly responsible.

Unless trust be reposed in him, and power granted him, it is impossible to be really efficient.

To promote that aim all control over the hospital servants should centre in the hands of the senior medical officer.

116. The young medical officers at Netley should go through a course of military law as part of their training. Ignorance of it is fraught with drawbacks as they go in the service, and knowledge of it would do them the greatest service.

117. In the same way they should be drilled in company drill to learn its simple movements, both as an aid to discipline and to teach them order and regularity.

Some of the best doctors in the service were so trained in their old regiments, and always speak of its usefulness.

118. In the same way riding should be taught to enable them to be prepared for any class of military duty. The services of medical officers are daily needed on mounted duties, and the whole department should be taught to ride. It seems strange that up to the present this instruction has not been given.

119. **Dress.**—The question of dress is important in this way. For years the staff medical doctors were poorly dressed, with ugly appointments.

The story of their improvement in this direction is the story of a wretched struggle and a final conquest, but it seems to be wiser to avoid these struggles on the part of the authorities, and to give medical officers a dress, *distinctive* certainly but not ugly. Since 1873 much improvement has taken place, and will no doubt continue. Equality with the rest of the army is important in this as in other matters. The struggle for every improvement in dress the department gets teaches men indiscipline. Agitation gains everything, and nothing comes as a free gift. In this way men learn to agitate, and order is interfered with. We need good handsome uniform, but distinctive and departmental. We serve in every branch of the army, and for that reason should be so dressed that in a well-dressed cavalry corps or elsewhere a medical officer should not be utterly conspicuous by ugly uniform.

We agree with a crowd of officers of every branch of the service that gold lace and trumpery embroidery is but poor ornament for a soldier. But that is not the question at issue. While it is the custom of the service to wear it, we must sail with the stream. When the army discards it, we will do likewise. But to send a badly dressed officer of the medical service to be with well-dressed cavalry or horse artillery injures the *morale* of the younger men of our service, and people think the State considers any dress good enough for its medical servants.

120. This is wrong. If we want to develop *esprit de corps* and a pride in our department, the dress is one of the little things that mean so much as an aid to that *esprit de corps*. Equality with the army is

the true principle to act on. Yet every department is dressed more handsomely than we were; and no department needs it more, for we serve with the soldier under arms. No other department does so. Practically the commissariat and the store services never wear uniform. With us quite the reverse.

121. **Rank.**—The position of junior of the rank for the senior grade of surgeon-major ranking as lieutenant-colonel is a very painful one. In India and elsewhere, where official rank is regulated by army standards, a crowd of officials pass over one's head constantly on this account, that a surgeon-major ranks as junior of his rank. Considering that the junior of the rank system does not exist in the commissariat, chaplain's, or store department, why should we have it? It is in no way needed. It is a relic of old regimental life, and has now no cause for existence, especially since the deputy surgeons-general were made to rank with colonels. Surgeons-major over twenty years' service should rank with lieutenant-colonels according to dates of commission. Nothing is more painful than to remain for years junior of one rank. In India this is particularly the case, as a crowd of civil officials rank with lieutenant-colonels and go over our heads constantly.

However senior a surgeon-major is, he ranks junior of his rank.

In the same way the title of the senior surgeons-major need change to denote their increased rank, and the title of surgeon given on entrance to the service is not any boon to a man already a surgeon and physician in civil life. It should show his rank in the army, and be clear and easily understood.

122. The Sovereign has designated twelve army doctors of distinguished service her honorary physicians and surgeons. It is a boon of great value, and meant to be so. But in the Army List these officers are placed in an obscure corner under everybody else, and not in their proper place after the Queen's aides-de-camp. The boon given to the military officers by making them Queen's aides-de-camp corresponds to the boon given doctors of making them honorary physicians and surgeons, and both should be in the same position in the Army List. To-day nine persons out of every ten would never notice their names, nor in departmental list is any indication of the distinction given, although every Queen's aide has the letters A.D.C. after his name. These little things mean much to all of us.

123. Mere pay increase by itself is nothing if other boons and privileges are withheld. In all the points above referred to, it is not money that is called for, it is not extra pay. It is equal treatment in every way with the rest of the army that is needed, and who can say it is an unjust demand?

124. **A medical reserve.**—It will always be impossible to form a reserve of medical men for war service in foreign territories from the average English physician or surgeon practising in civil life. It is not so done in any country, even where general service prevails.

A man cannot resign his practice and his patients at a few days' notice without ills happening to the whole population, almost more ruinous than a foreign war. But it is possible to arrange for the perfect freeing of the army medical officer from every home garrison, and the sending of them bodily to the scene of action. This can be

done by following out in the medical service the system of militia organization in the military branch of the army.

125. At once on war being imminent the Militia Medical Department should be called out.

It would be a force organized from the medical profession in England and serving only there. By a judicious training in peace it would be perfectly possible for the militia doctors in each county or garrison town to carry on the whole garrison medical routine of that town, freeing the entire army medical staff for the field.

It is probable that for the first few days some confusion might occur in a hospital, but in the end all would be well, and by simply retaining an army doctor to direct in a garrison the work would be satisfactorily done, and the whole body of army doctors could be sent away to the field. No difficulty should exist preventing a militia and volunteer branch of the army hospital corps being organized for home duties, thus freeing the regular army hospital corps for field work.

126. It seems hopeless to imagine that a reserve fit for war service out of England of any efficiency could be made from ordinary civil physicians or surgeons. Fancy 100 such officers ordered to Egypt with a force; no pay or pension could induce men to join such an organization, and if they did join they would justly claim such army rank and seniority as to place them senior to the average specially trained army doctors in the field. Confusion and friction would result, but when militia doctors serve, as I propose, in a garrison by themselves, they could regulate their own seniority, and in no way interfere with army field efficiency.

127. Many of such men, too, would be old and unfitted to stand the change of climate and habits English army field-life would require. They would soon get broken down, and would also be thinking continually of their practice in England fading away from their grasp. No iron law should prevent either militia or volunteer doctors joining an army in the field if necessary, but they would never come in any number, and it is better to utilize them where they would be really of use in our home garrisons. To fit them, however, for our service in England in case of invasion, it would be well if they were trained in the routine of field hospitals and such like duties. From these standpoints of the unfitness of doctors engaged in civil practice to take their place in our foreign fighting army, it is very evident that the idea of forming a medical reserve by the ten years' medical service system will be a failure.

128. Such men on retirement from the army with the thousand pounds gratuity would at once attempt to enter private practice, and certainly would not return to the army ranks in war time to enter without increased rank or increased pay, and to serve under their former juniors in every hospital.

If they come back to the colours, they would claim to come back, as every soldier claims, with commissions dated from their original entry into the service, and thus, although cast out for inefficiency, would claim to direct in a campaign. For an *army reserve* man is not like a militia man, always junior of his rank to the regular, but claims to rank with the regular in every way.

If engaged in practice, then, the ten years' service men could not give it up, or if they did would claim their old army seniority and paralyse everything.

129. Further, the whole army would know that the rejected men who would not be kept in peace would form the reserve doctors in war, and it would be a dismal idea for any of us to go into action knowing that, although we had good doctors in the comparatively unimportant routine of peace, in war when wounded and ill, the worthless, the rejected, the indifferent, the lazy doctors who were refused re-engagement, were to be our attendants. This would be a dismal support in the day of battle for any of us.

130. But again it will not necessarily be the good men who will be kept in the service. Connections, interests, the opportunities of being useful to those in authority, or the good luck of having opportunities of showing one's skill, will always tend to make the rejected men anything but those who should be rejected, and in this way a thorough sifting would be paralysed. And in addition to it all the regular soldiering pet who serve alike in the military and in the medical services would be indisposed to join a service where no future was provided as a certainty. Such men are found in our department,—men who have from their earliest day determined to enter the medical service, and they are not to be despised as a small unit. They are of use as bearing with devotion all the drawbacks of army life for the sake of old family connections and early training. They will never come with the danger of being turned adrift because they fail to propitiate those in power, and with the chance hanging over their head that even if they do fall sick or ill in the service and have to leave it, all the world will say "We know why he left the army; he is one of the ten-year people who would not be kept."

131. Hence the department will enlist from a lower stratum of professional efficiency, and its working power will be injured by every young man who is fond of idleness and ease, letting everything slide and going always on leave, knowing he will be told to go at the end of his ten years.

What is possible perhaps is to enlist men for five years, and make retirement optional at that time. If a man stays on, give him increased rank and pay, and take him permanently into the service. If he leaves, give him a militia commission, and he will be of use then. He will have seen the world, not be too old for practice, and will in war time be useful in our garrisons as an army doctor.

But ten years will paralyse efficiency. Good men will scarcely come, and bad men will make interest to be retained, and in this way many conflicting elements will be introduced. Time will soon show how it will act. Let us hope that, however it ends, England will be the better ready for the field in the future than in the past.

SECTION VII

CONCLUSION

132. Little now remains to be said. In this paper the advantages and drawbacks of the old and the new army medical systems have been fully compared. A verdict wholly in favour of the unification principle is arrived at, and one awaits with confidence its trial in peace or in war. If medical organization can ever attain perfection it will be under this system.

It is necessary again to call attention to the principle that lies behind all this discussion.

Unification means taking our stand as army doctors, and from that basis asking for privileges or for the removal of grievances.

It means living for our profession, and, if possible, combining the learning and skill of the physician with the organization, the discipline, and the order of the soldier, and such a unification is perfectly possible.

133. It is true we labour under difficulties in developing our culture, thrown as we are in a thousand situations, where all study is impossible, and books and periodicals are never seen.

What we can achieve is comparative professional efficiency in peace, as compared with the old days, and certain readiness in campaign such as never was feasible in any of the old wars.

In England we have intellect, wealth, a splendid tradition of devotion to duty and high professional spirit. And if, with all these advantages, we cannot develop a medical service finer than any in Europe, something must be rotten somewhere. Under the regimental system efficiency could never be secured. Now it is perfectly attainable.

134. We want for our department *esprit de corps*, strong traditional feeling of devotion to duty in peace and war, and a determination to stand by the soldier in every danger that besets him in every way. We want to be able to appeal to our young officers in the name of a medical department, not a neglected subdivision of the army, but a branch of service with equal privileges, rights, and advantages, with every other corps in it.

With such treatment all will go well. Without it men will come as army doctors, but they will be poor creatures, devoid alike of the spirit of the soldier or the skill of the physician, and they will fail England in the day of her need.

135. No department can look back on so long and so glorious a record of devotion to duty as our own army medical corps. Its officers have served England loyally, faithfully, devotedly, pouring out their life and their strength freely in the same stream that her soldiers do. Side by side with the gallant men who sleep in the Crimean graveyards lie sixty soldier-doctors. The Russian bullets and the trying winter of 1854 made no distinction there between the soldier and his surgeon. The doctors who served with them everywhere in peace fell by their side at the last, and the Tartar herdsman to-day feeds his flocks over both their graves alike.

In India, where so many gallant men have fallen, the record of what England's doctors have done is a splendid history in itself, and we are proud of it in every way. Equally devoted to duty with the men they serve with, their rewards have been few and far between, but we trust a better day is now dawning. It is a day of better hope for all of us.

We claim that England should pour out with an equal hand her appreciation and her rewards on us, her soldier-doctors, as on her soldiers themselves. If we did good and trusty service in the bad old times when we were forgotten and unhonoured, think how much more likely we are to do well under the more generous treatment of to-day. Few services have such elements for good in them as ours has, and when they are united in one full stream as they never until now have been, we may rest certain that the Army Medical Department will be second to none in every phase of its varied work.

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I
Army Medical Dept
Kelley.

"Meet is it changes should control
Our being, lest we rust in ease."

TENNYSON.

July 1875.

CONCERNING

THE

ARMY MEDICAL DEPARTMENT.

"UNION."

JUBBULPORE:
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1875.

CONCERNING THE ARMY MEDICAL DEPARTMENT.

Section I.—Introductory.

1. I propose in the following pages to notice some points concerning the Medical Service of the British Army, which seem worthy of examination, and to put forward some suggestions concerning this important branch of Army organization.

I believe that advantages and not drawbacks result from the statement of individual opinion on this as on most other subjects, and that in the end progress is achieved rather by selecting the good points from many sources than by adopting *en masse* the views of any single individual. If such be the case, it is necessary that individuals should state their opinions for public criticism and comment.

2. It would be mere waste of time to dilate here on the advantages that should accrue to a small and expensive Army like ours from having its medical service in a highly efficient state. No Army in the world has more need of a thoroughly good Medical staff than ours has. Other Armies, in addition to having unlimited supplies of men, never serve out of their native countries, never campaign out of temperate climates, are never exposed to deadly diseases, and the strain of war is the only strain their Medical staff is called on to bear; but for us in addition to campaign risks we have ever to contend against tropical climates and epidemics of the most fatal character, not once in a generation but every year and unceasingly. Quartered in every latitude of the globe our soldiery are continuously fighting in a campaign more fatal in the long run than a bloody war, and to assist them in this combat as well as in the field of battle our Medical department exists. Whatever means its efficiency means more efficiency for the Soldier; whatever weakens its good working condition, acts prejudicially against him in like manner.

3. Every Military commander who has risen to any high place in his profession has recognized the importance of this fact, and its bearing on the *morale* as well as the *physique* of his soldiers, and he can no more ignore the health state of his forces taken as a whole, than any single individual can despise his individual health as a factor of great importance in his successful career in life. Even as that individual requires to take precaution and exercise forethought to protect his constitution in every day life, so must the Military commander or administrator protect the Army of which he is the thinking head. To have an efficient Medical corps highly trained, thoroughly organised, well acquainted with their duties, and willing to devote themselves in every way to the good of the service, is useful in even the large Armies of the continent serving in temperate climates, but for us with small and costly Armies serving often in pestilential climates it is an absolute and an imperious necessity.

4. Let us read our national Military History, that great storehouse rich in warnings and information alike for the Military physician as for the Military commander; let us lay to heart the stern lessons it contains of previous failures and mistakes, and we will find that the lessons of Walcheren in 1809 did not prevent the disasters in Turkey in 1854–55; nor was there any reason until 1873 why what was true in 1855 might not have been true in 1885.

The question still comes home to us very thoroughly to-day as to the efficiency of the Medical service of the Army, and we may ask, have all the lessons of the past been taken to heart; the good points singled out and developed and the weak points removed and obliterated. Have we taken to heart the sad warnings given us only too often in the past, or do we still keep running in the old groove to meet like disasters in like situations again. There were excuses in 1854–55 after a long European peace; there will be none in the future. 22,000 dead men lying before Sebastapol and at Scutari are surely a lesson sufficient for all time. Yet to show how slowly and with what caution we act, it was not until to-day a limit was placed to the existence of the system mainly to blame for these bitter memories.

5. Ever since any Medical aid was organized for our Army a century and a half ago, the system known as the Regimental Hospital System has been the principle on which it has been worked. Existing at first in a very rude and primitive form the medical arrangements of the old Armies that fought in Germany and the Low Countries were poor and incomplete to a degree, and since then gradually the organization and condition of these arrangements have been changed and improved; but what is called the Regimental Hospital System remained the basis and the rule of working until the Royal Warrant of 1873.

That mode of working the Medical aid of the Army, which sat like an old man of the sea upon the shoulders of the service for so many years has now disappeared, and let us hope for the sake of the Empire we shall see it no more. It is a true saying that the first sentence of the Warrant of 1873 abolishing Regimental Hospitals was written seventeen years before the Crimea, but such is the conservative tendency of our Army that it took the long intervening lapse of years to complete it. Let us trust that work so slowly done has been very surely done.

6. Such a change as abolishing these Hospitals could not take place in an Army like ours, which lives on tradition, without many officers of the Military Department of the Army and some officers of the Medical Department regretting the step, and it seems advisable to note here the features of that system, whether good or bad, and to weigh them against each other, that seeing the good points we may cherish them, and noticing the defects we may avoid them.

Section II.—The Regimental Hospital System.

7. The Regimental Hospital System was a system by which the sick and wounded of the Army were treated in separate hospitals, each an adjunct of either a Regiment, Battalion, Battery or Detachment, the Military Commanders of which were responsible for their efficiency. The Medical Officers who treated the Regimental sick were themselves commissioned specially in the several Regiments or Battalions and confined their duties to treating their corps sick only. However numerous the various Regiments or Batteries or Detachments in a Garrison were, each of them had their own separate Hospital establishments, whether as regards buildings, offices, attendants, instruments or medicines. The responsibility for the correct working and proper condition of these Hospitals rested with the Officer Commanding each Regiment or Detachment; and no person had any power or authority to interfere with them in any way save himself. To the Medical Officers who acted under him were delegated the prescribing duties for the sick, but beyond this no further responsibility rested upon them. The Regimental Commanding Officer was responsible for the cleanliness and order of the Hospital, and being so caused the subalterns on duty to visit the Hospital daily and report to him of its condition and general state. He chose the Hospital Serjeant in conjunction with the Medical Officer, and by his sanction the orderlies and attendants were allowed to be employed in the wards, and by him they could alone be withdrawn. Over them he alone exercised control, and it was not competent for the Medical Officer to check in any way either their or the patients' irregularities, except by notifying them to the Commanding Officer.

By him all the duties of the Regimental Doctors were detailed. The Regimental Adjutant kept the roster for the Subordinate Medical Officers and through him every order in connexion with the Hospital was issued. The orders for the interior economy of the Hospital, regulating the hours of rising and going to bed of patients, the hours at which they should walk out, and in fact every order except those referring to the medical treatment issued from the Commanding Officer. To obtain a new key to the door, or a new pane of glass for the windows, he alone could apply to the Supply Departments, and on the march the Regimental Quartermaster arranged for the transport and carriage of supplies for the sick and under the control of the Commanding Officer assigned the locality for the Hospital.

8. Simply the Hospital authority and organization was centralised in the hands of the Regimental Commanding Officer already very fully employed in other duties, and it depended very much on his personal tastes how much or how little he actively interfere, one Commanding Officer being constantly directing every petty detail, while another let matters take their own course to a great degree. To whatever extent they interfered or did not interfere, officially they alone were responsible for the state of the Hospital; they alone were praised or blamed for the condition, and while such was the case it was but simply right that they should have the fullest authority in its working.

Whoever is responsible to him give the power. Blame him if he fails, applaud him if he succeeds. In this way only can order be preserved. The Commanding Officer's view of the case was perfectly and strictly correct, and there can never be allowed any *imperium in imperio* in a Regiment; one man must be responsible and he alone. Under such a constitution the Regimental Doctors had nothing to do save prescribe for the sick; they shifted to the Regimental Commanding Officer, the Adjutant, and the Quarter Master all questions as to organization, discipline, order, transport or administration, and lived a life wholly apart from all such questions as these, or if they did interfere it was a work of supererogation, and might as such be at any time resented by a Commanding Officer of strict views.

9. For their medical treatments, the Regimental Doctors were responsible to the Inspecting Medical Officers, who from time to time visited the Hospital, and looked into the records of treatment, the dieting, and such like subjects. In by-gone days, that is before the Crimean epoch, the Medical Officers of the Army were almost wholly Regimental, there being very few Medical Staff Officers, but since then these officers had very largely increased, and were employed in filling up vacancies in the Regiments caused by sickness or leave amongst the Regimental Doctors. They carried on the Regimental routine like the officers whom they relieved, and although their postings were regulated by the Inspecting Medical Officers, once attached to a corps these Staff Doctors were solely under the orders of the Regimental Commanding Officer.

10. Such was the system, venerable it is true by long existence, which terminated in 1873. It had some advantages, it had many drawbacks, and both one and the other we will now consider.

11. The supporters of the Regimental system claim for it advantages on three grounds. (*A.*) That each regiment had its Hospital perfectly complete at all times and was perfectly independent of the Army in consequence. (*B.*) That the Medical Officers being constantly with the Regiment learned to know the men; and (*C.*) That it formed a pleasant home for the Medical Officers. We shall enquire into the accuracy of these statements.

12. (*A*) That the Regiment under this system had its hospital always ready and was quite independent on this head of the rest of the Army. If this statement was true and that the Regiment would really be independent at all times it would settle matters at once in favour of the system. Unfortunately it is not true. One cannot too often remember that the old Army systems have undergone a great change of late years. In none more than in the meaning of the word "Regiment." In the old days every one knew a Regiment meant 800 men neither more nor less, it was as strong as the actual number of men serving with the colours made it, but no stronger. Accordingly there existed a given fixed data to work upon in preparing equipment, supplies, and medical aid while the regiment was serving in ordinary barrack life. It was known that the sick percentage was generally so much, and needed so much provision for them. The tradition of the Peninsula which clings to our army with frightful pertinacity shows that even in those days when a regiment was a known number, the system failed if a corps was heavily engaged, and such like. But what is a Regiment

to-day? The Army has ceased to be Regimental in the old sense. The Brigade is now the unit, and the long service customs of the old army are disappearing. The rule for the future will be small numbers with the colours and large reserves. There will be in the case of war the men from the linked Battalion joining the fighting Battalion, the Army Reserve men, and the Militia Reserve men, and amongst all these additions what will be the meaning of the word "Regiment". It will be in peace, 400, 500, or 600 men, while in war it may rise to 900, 1,000 or 1,200. It little matters for the Military Commander how much it is, provided the men are armed and dressed. Food supplies are not borne regimentally, and the Army strength will always be estimated for, apart from regimental strength. But it is quite the reverse with the Hospital system. The Hospital supplies and attendants if they are to be supplied and borne regimentally, must have a definite data to work upon, and if the Medical Officers and equipment be based upon 400 men, it will be insufficient for 1,000 men in war, and if based upon 1,000 in war, it will be too much for 400 men in peace. 400 men means say 20 sick, 1,000 men means 50 sick. Such variation of strength matters little to the Military Commander, as regards his Military duties; if food be obtainable all goes well, but in the Medical arrangement it means disaster from want of proper supplies and sufficient medical aid. In noting the drawbacks of the system further on, we will show that even if suitably estimated for, the first month's campaigning threw out all calculation.

13. (*B.*) As to the Medical Officer "knowing the men" as it is called, there is something to say. The Regimental advocates say it as a great thing to know the constitution of the men, and to understand their varying temperaments. There is no doubt advantage to be gained from knowing the men. But we have in this argument another survival of old Regimental tradition. All Military people know that in the old times, in the days of continuous service, a Soldier joined his Regiment and served with it uninterruptedly until he died, or was worn out, or invalided. This system was stopped some forty years ago by introducing the twenty-one years' service rules. In 1847 the limited enlistment for ten years came into force, and now we have come to three years' service with the colours, and three years with the reserve. Each succeeding alteration meant greater change of men individually. The truth is that long service systems have been so intolerably expensive, and in the end so weak in the field, that small cadres and large reserves will be more and more the rule. Soldiers will not now live their whole life in a Regiment as they did in the "good old days," and with a three years' service with the colours, and with streams of men coming in and leaving yearly the Regimental ties of the past become quite weakened and disappear. If the Pre-Crimean Doctor knew the Pre-Crimean Soldier, it was because both served long years, in fact lifetimes together. To-day we have changed all this. Linked Battalion men, Army Reserve men, and Militia Reserve will all pass through the Regiment, and all such intimate knowledge of the men will be impossible. To-day men leave their corps without hesitation either to volunteer for service in India, or for any purpose that suits their inclination. In the old days such occurrences were very rare.

14. Further, in the old Army, when the men were tied for life to the service, "*malingering*" or shamming various ailments was common, and indeed rose to the dignity of fine art. A soldier knew he could not escape from the service unless he was sent out by the Medical Officer as an invalid, and accordingly he shammed sick continually. It is said the old Medical Officers became experts in detecting this line of conduct, and an officer might make a reputation by his skill in detecting the schemer.

To-day malingering simply does not exist. Short service, pleasanter lives, more rational treatment and the ease of joining the reserve, removes from the soldier the necessity of scheming sick, and it is really never seen. It was the bugbear of the old Army and the diamond cut diamond stories of clever shammers and still sharper Doctors are now merely traditions of the mess tables.

15. Again, in the old days, the Medical History sheet established in 1859 did not exist. A more inquisitorial or more useful document does not exist in the Army. In it the age, weight, strength and every possible medical information about the man is entered, and from time to time the diseases he suffers from, their treatment, causes, &c. &c. are also entered. No Civilian Doctor has such a record of his patients.

It is truer than even a patient's own statement, for it cannot err, nor cannot take up false ideas of what his former sicknesses were, as patients often do. The old Army had not this document. Armed with it a man can be sent to any Regiment or Hospital and his Medical Officer sees at a glance his whole Medical History. Let us then be candid. "Knowing the men," even in the old days meant knowing the Regimental gossip and such like chit chat with which in weary stations and on dull evenings we wiled away the time. The Medical Officer could chime in with his contribution to the general stock, but the knowledge was not necessarily medical in its aspects.

16. Further, it is necessary to remember that with the unification system one Army Medical Officer will still be attached to each corps for five years with power of re-appointment. He will be the sanitary adviser of the Regimental Commanding Officer, will see the men of the Regiment daily, and will, when they are sick, have them sent to the Station Hospital, sending with them their Medical History Sheet and such special information as may be necessary to be given to the Medical Officers there. While in Hospital the Medical Officer of the Battalion he belongs to can see him constantly if necessary, and can advise as to his treatment with the Medical Officers of the Hospitals. His officers can see him constantly also, and his comrades at very frequent intervals. When one remembers that civilians of his class are treated always by strange Doctors in Civil Hospitals, and by persons not bound to them by the strong Army ties that bind us to the soldier, we must acknowledge the soldier has the best of it.

17. Besides even in civil life now-a-days change of physicians, owing to travelling, visiting the sea-side, consulting leading men in London is not only common but frequent, and in the old Army life the Regimental Doctors themselves changed at times. Of late years even under the Regimental system it became perfectly common and even frequent. This we will now discuss.

18. (*C.*) That it forms a permanent home for the Medical Officers of the Army. In discussing every phase of this Regimental Hospital subject, it is necessary to remember we are living in 1875, and not in 1835, and that the ideas that prevailed then in the Army do not many of them now exist. In the old days the Regimental tie in the Army was very strong, if tradition speaks truly. Officers and men lived longer together. Second Battalions did not exist to cause change of Officers. Great camps like Aldershot and the Curragh were not. Indian Garrisons were fewer by far and about one-third of the present strength. Foreign service tied men down to their station more closely, for steam did not exist, and Railways in England did not carry every one to town as they now do. The Colonies occupied many Regiments in far detached posts, and Canada, the West Indies, and the Ionian Islands had not had their garrisons withdrawn and concentrated at home. The Army is larger in point of numbers. The ease of interchange is infinitely greater, and it is certain the Regimental bond is weaker.

For the Medical Officers it certainly was much weakened, and it was exceptionable to see a Medical Officer remain as in the old days with one Regiment for any long time. Before the Crimean war Medical Officers grew grey in the same corps. Since then their average service has been three years. The large increase in the Medical Staff not attached to Regiments is well known to all Military men, and the gradual separation of Medical Officers from their corps has been quite apparent. In the old days they could not exist apart from their Regiments as they were too few and too scattered. To-day it is quite the reverse, and there is much desire for a closer union on their own basis as Medical Officers simply.

19. The Regimental system of our Army is good, very good, but it was never intended for the Medical Officers. They are outside its grasp, and the union although useful in the old days is now drawn to a close. In truth the majority of the Medical Officers admire so much the Regimental organization that they desire to apply it to themselves. Regimental life by all means that it should be a corps of our own. To-day when the system of Regimental Hospitals is dead and the tie that bound us to our old Regiments is severed, not one word shall be said against the good kindly comrades with whom the best days of our life were spent; it was the system and not they that were at fault. But admire as we may Regimental *esprit du corps*, we must have felt that we were hardly in its grasp, and the disaster of the Crimea had taught us all that we were carrying out a failing system that would not work.

20. To be with a Regiment and still not to be of it, never to represent it, to be at the whim often of varying Commanding Officers, to have questions raised about precedence, to be alienated by petty bars from our brother Doctors, to wear uniforms of corps to which we in no real sense belonged, to be members of an important and every day rising profession and still be at the bottom of Regimental Lists and wholly without a centre to work round in the service; to submit to these things was intolerable. Better far better to stand forward the Army Doctor pure and simple than to wear a travesty of the uniforms of the finest corps in the service. Better

the simplest style at one's own Medical Mess than the most elaborate display where one's authority was nought and one's seniority ignored.

21. Army Doctors while serving in Regiments have constantly, always I may say, drawn round them the respect and the love of the best spirits in their Corps. The friend of the soldier, the friend of his wife, the kindly fellows who felt for all, I am certain they will be missed, but the separation must come, and though the pang is painful at first, it will be the best for the service in the end; of that I am quite certain. Whatever our organization it cannot change our nature, and on new foundations truer and better, the old likings will grow up again, and all petty questions be terminated for ever. Thrown as we are in constant intercourse with the officer and the soldier, with them more than any other Department can possibly be, there must always be many bonds tying us together, but they will not be the painful yokes the Regimental system could be made in the hands of Commanding Officers who were not nice, and the interchange of friendships will be truer when working on the Army basis only. Together at home and abroad, in the field and in cantonments, in the troopship or on the march, there need be no fear that we will grow up with any sympathies apart from the service.

Section III.—Drawbacks of the Regimental System.

22. We shall now turn to the other side of the picture and note the drawbacks of the Regimental Hospital System. The Medical Corps of an Army exists on two grounds, one that during war, when the safety of the State depends upon the efficiency of the Army, there should be a thoroughly good Hospital system with officers and equipments complete, assisting the soldiers in their struggle with wounds and sickness; and the second, that during peace the best medical advice and the best medical appliances procurable should be available for the soldiers in their sicknesses, and that competent instructors should exist to advise the Military Commanders on questions concerning their health and physique. Viewed from either of these stand-points the Regimental system in my opinion failed. It failed in the first instance by training up Army Medical Officers in a system which every one acknowledged could not be carried on in the field, and would certainly lead to disaster, and on the second, because preventing the union of the Hospitals at one centre in each station, where with every modern appliance, and modern books and instruments, the best treatment might be available, and the Medical Officers might meet for mutual instruction and learn of one another, it kept the sick and the Medical Officers scattered in petty Hospitals, where it was impossible that extensive libraries or instruments could be collected or intellectual friction between the Medical Officers take place. We shall tabulate the objections in order.

23. (*A*) *Failure in War-time.*—In the first place the Regimental Hospital system failed in war. This is allowed by Lord Herbert's Commission in 1858 in a letter dated 9th July 1858, "it is incapable of adapting itself to the Hospital requirements of an Army in the field," by every Military hand-book on

field service, and even by a distinguished advocate of the system in a pamphlet lately published. Why did it do so? Because it separates the medical department in the field into numerous small divisions each attached to every separate regiment, battalion, battery, or detachment, and places each of them under the command and disposal of their immediate military commander only, men who from their subordinate position are unable to take a view of any *Army* wants beyond their own immediate corps. Hence if one regiment was very sickly or had suffered much in an action and other regiments in the same brigade were wholly unhurt, there was no authority able to co-ordinate the Medical Aid, and send all available resources to the place most needed. In the same division of eight regiments of the army two regimental hospitals might be full of wounded and even overflowing, while six other corps not engaged or under fire had few if any men in Hospital. The equipment and officers of the six corps lay idle while men were lying neglected in the other two. It was not competent for any authority to direct assistance to be given, and even if medical officers were detached to help, the equipment and appliances without which they were useless were still untransferable.

24. The inspecting medical officers had no authority to move or change any regimental officers and it was only by official application to the chief commander of the army, necessitating long delays, that authority could be obtained to transfer even a single officer, and even then his commanding officer might throw obstacles in the way, and even this did not include the equipment. It tied up the hands of the medical department in every way, by wasting the services of three-fourths of the doctors in empty regimental hospitals, while many other medical officers were overcome by exhausting labours.

With such a system we marched to the heights before Sebastopol, and there, despite the heroic labours and self-sacrifice of the officers of the department, the army melted away, until between deaths there, and at Scutari, 20,000 men had died of preventible disease.

The medical department trusting to regimental organization and worked by officers trained up in that vicious and enervating system was, despite every wish and desire to do so, wholly unable to cope with disease.

The system failed then for one reason amongst others, that was the powerlessness of the medical department under the regimental system to direct every energy on the point most needing assistance, and not to allow one set of hospitals to be empty while others overflowed.

25. (*B.*) *A fallacious unit for organization.*—The unit of the regiment is uncertain now-a-days. It may be 400, or it may when going into the field and when the reserves and linked battalion men are with the colours, amount to 1,200. There is no certain data to work upon as regards the number of medical officers, the amount of equipment and supplies, or of transport and carriage needed. As we showed before, in the old days the regiment was a definite unit, and one to be trusted to base an estimate upon.

Even if suitably estimated for, the first action or the first field service or epidemic will throw out all the arrangements, because during a campaign,

although the sick and wounded will always be an average when estimated by army corps, or groups of divisions, they will never be so when estimated by regiments or batteries; because position in the field, exposure to heavier fire, or having to bear the brunt of an attack, or unhealthy camp sites, will always swell up one regiment to an irregular degree, while others are wholly untouched.

26. (*C.*) *Change of system between Peace and War Hospitals.*—Even granting that during peace regimental hospitals were to have remained, and general hospitals under the control of the Divisional Principal Medical Officers were to be the rule in war, nothing but disaster could occur because you train men up under the enervating regimental hospital system, with the regimental commanding officer supreme, and carrying out all duties during peace; and in war when that officer would be far away, the Medical Officer accustomed to nothing but prescribing for the sick, and he left wholly helpless although responsible. Such could not be allowed. Men must be trained in peace for war. There can be no two systems. If regimental, the regimental commanding officer must be supreme and direct everything, and if not regimental, the Principal Medical Officer must direct. There can be no medium course, as it would lead to intense and constant friction. The regimental system trained up medical officers to look upon all duties, except prescribing for the sick, as foreign as themselves; a fallacy which every campaign has disproved, and in consequence of regimental training through many years men grew unable to administrate. We have been for years choosing our administrators from officers nursed in Regimental institutions, in which they never felt their legs under them, were wholly unaccustomed to take wide army views of medical needs, and never learned to deal with officers of the department nor to carry out discipline amongst their subordinates. Such men so trained in regimental schools laboured under great difficulties in trying, when old, to learn to use the new powers entrusted to them. The practice of administration should commence from the first day the young medical officer joins the army, to accustom him to arrange for contingencies certain to arise in war time. Such is the system in the military department of the army. The young officer learning to deal with his squad, or half company, and eventually commanding the regiment, the brigade, or the division. There are no two separate systems, one for peace and one for war, and men learn to administrate from the first.

27. (*D.*) *Centralized power in Regiment or Battery Commanding Officer.*—The theory now-a-days obtaining in the conduct of every system of affairs in the world is not to over-burden one man with a host of various and dissimilar duties in some of which he is certain to fail, but to divide the responsibility amongst specially trained officers in each department. This as all reversed in the old regimental hospital system. A battery commander besides fighting his guns, and looking after his horses, and the interior economy of his Battery, had likewise to arrange about his hospital, its supplies, discipline, and regularity, and the Medical Officers, who by proper training, could have done all much more efficiently, were in the meantime idle. By removing such foreign duties from the hands of the military officers and organizing under entire medical management efficient

brigade and divisional hospitals, the medical staff of the service will be thoroughly utilized and waste of time and trouble by military commanders, who might be more suitably employed, obviated.

It seems absurd to think that to obtain a new pane of glass in a Hospital window, applications had to be forwarded through the commanding officer of the regiment, and to check the neglect of an attendant a tedious enquiry in the orderly-room before the commanding officer was necessary. That every-day regimental subalterns, boys fresh from school, should come as representatives of the commanding officer to inspect and report if the Hospital was "clean and regular," although there were two or three medical officers, men grown grey in the service and full of experience, to look after it if needed. That the hospital serjeant or any of the orderlies were lent as a favour by the commanding officer and might by his wish be any moment returned to duty in the ranks. Yet, it is true, and what is more, as long as the regimental system existed, the commanding officer was strictly correct in everything he interfered in; he was responsible and not the Medical Officers, and to him therefore was entrusted the power.

28. (*E.*) *Indifferent Peace Hospitals.*—Under the regimental system it was necessary in every garrison to have a separate hospital for the use of each individual regiment or battery even if the regiments in the garrison were eight, ten or more in number. We had thus in every garrison a great number of petty, roughly furnished, deficiently equipped Hospitals, poor in style, and without those modern improvements and fixtures which are found to-day in every civil hospital, and which in the end mean comfort and efficiency. Now-a-days hospitals are expensive things, and no nation could afford to build a first-class hospital for every battalion and battery in a garrison. To do so would be ruinous. No doubt the true principle is to build one perfect Central Hospital in each garrison, replete with every improvement, and there being to the treatment of the sick the best appliances of the day. In the field things must be rough; there is no reason they should be so in garrison: there at least the soldier should have all the advantages given to his civilian brother. Such hospitals could not exist under regimental organization, as there would be no central authority, and each regimental commanding officer would be striving to have his views carried out until chaos would result.

29. (*F.*) *Absence of Libraries, Chemical Laboratories and expensive Instruments.*—To-day to carry out one's professional studies thoroughly books are necessary, scientific magazines and professional periodicals are necessary, chemical laboratories well equipped are necessary, microscopes and expensive instruments are necessary. While divided into petty regimental groups of medical officers, serving by ones and twos in distinct and separate little second-rate hospitals, it was impossible for these necessaries to be collected together, or if collected they would be a tremendous expense to the State, and they could not be carried from place to place with marching battalions and batteries. They consequently did not exist and the medical officers were deprived of these all-important aids to increase their efficiency. By the absence of these essentials, the health of the army suffered more or less, because it operated against the further improvement of the medical officers

in professional studies. Such necessaries can only be collected at great central hospitals, where all can have access to them and thus improve themselves. It is quite certain that in a few years after the unification system is at work, particularly in the larger garrisons, we will find libraries and museums formed in each central hospital, together with clubs for the purchase of medical periodicals and professional papers of various sorts.

30. (*G.*) *Prevented all Station tradition of diseases.*—Under the regimental system as all the medical officers marched into the station with the regiment when it came in, and marched out with it when it left the station, all the medical history of the station had to be learned afresh by each successive wave of regimental medical officers. This was a great drawback, especially in tropical and unhealthy climates, where men learned in the bitter school of experience what might have been handed down from one medical officer to the other under the garrison hospital system. It further necessitated regimental returns of sickness instead of garrison returns, and no continuous station statistics could be prepared, which are so useful, particularly in tropical climates.

31. *(H.) Impossibility of obtaining skilled Nurses and Attendants.*—Under the regimental system it was impossible to obtain skilled nurses and attendants. The only post for a non-commissioned officer in a regimental hospital was that of hospital serjeant, and even he retained his post at the will of the commanding officer. If he became intelligent and smart he might at any moment be taken away for regimental military promotion and a perfectly strange man be sent in his stead. As regards the orderlies they were generally either old soldiers, or awkward men, who were in the way in the ranks, and who were hidden out of sight in the hospital. If a man turned out intelligent and trustworthy, he could not be promoted to even a lance corporalship without resigning his position in the hospital, so that it was impossible to retain a good active ambitious man, and often impossible to get rid of a bad idle fellow. Now nursing needs training, and the practise of trusting to ignorant but kindly men from the ranks could never last without a crash. If sickness became great the orderlies were too few, and there was no reserve to fall back upon; if a great crowd were always employed, they were idle and caused expense. The true way to avoid such difficulties is by having an efficient trained corps of soldier nurses such as the Army Hospital Corps employed in garrison hospitals, and receiving regular promotion in that corps when efficient and active.

32. *(I.) Prevented uniform system of having all the sick in Hospital.*—Although strictly contrary to army rule many commanding officers permitted men not actually sick but delicate and weakly to remain in barracks attending hospital, or on convalescent duty. Other commanding officers forbid this system. No definite rule was followed, and the returns of sickness were quite vitiated in their accuracy by not having a uniform system. Now under the garrison hospital system a man must be either in hospital or at duty and the apparent rise in the sick rate under the new system is caused by its putting an end to all irregular customs in this respect. In my own regiment we had five or six various forms of letting men attend hospital and not do duty, all of which were contrary to army rule, but

were winked at regimentally. No such half and half system should be allowed. It ruins discipline to have men half in hospital and half out of it, and when the day of duty comes round the men supposed to be fit for it are found wholly the reverse. The sick state should show every man not at duty for medical reasons. Many corps keep down their apparent number of sick by this most objectionable and false practise, of allowing men to attend daily at the hospital and do no duty.

33. *(J.) Ruined true esprit du corps amongst the Medical Officers.*—The medical officers of the army under the regimental system instead of being united in one body for mutual instruction, mutual comradeship, and professional improvement, were torn into a hundred varying petty sections by being divided amongst a hundred regiments, each with separate systems and separate regimental customs. If the regimental system gave a home to a certain number of medical officers who were commissioned in the regiments, it threw several hundred officers perfectly on the world. The condition of the medical staff officers was most objectionable under that system. They did not belong to any regiment. They were knocked about from post to pillar. Their *morale* was injured by having no definite circle to look to for social amenities. They were too few to have a mess of their own, because the majority of the department were in regiments, and had to attend the regimental messes, whereas if all had been simply departmental officers, they might have had pleasant Medical Staff Messes, where the young officer would have a home and would learn the tradition of the service and of their department. It is impossible to overrate the positive injury the young medical staff officers suffered by the old system. Literally no man cared for them. It was impossible for their regimentally commissioned brother officers to take them to the regimental messes constantly, and even if they did they were strangers and outsiders there. Serving only a few weeks in a Regiment no one cared to take an interest in them, and if the abolition of the old system did no more than this, its abolition was an universal boon. Doubtless the true condition should have been to have had in every large garrison a properly organised Medical staff mess where all the medical officers might have found a home, and where the senior officers might have been able to guide and to form the young men. Such institutions will now spring up, and nothing but good will come of them. We have a splendid tradition in the medical department of devotion to duty, of self-sacrifice, of courage, and of every manly quality, but, alas! up to the present it has been an individual, instead of a departmental tradition.

34. *The Dress of the Medical Officers* under the old system varied in every corps. Men who were not Artillerymen wore Artillery dress, who were not Highlanders wore the kilt, who were not Hussars wore Hussar dress. Weak-minded men now and then forgot that although dressed in these varying uniforms, they were neither Hussars nor Highlanders nor Gunners, but simply Army Medical Officers, nothing more but assuredly nothing less. It was impossible under regimental organization to have one army uniform for the medical officers, which every soldier might know, which would not be a travesty of the uniform of any corps, but handsome as

the best of them, the same no matter where serving, and an outward and visible sign of their department. To distinguish the medical officers of regiments under the old system was the work of an expert, and provoking and petty withdrawals of ornaments or special articles of dress had to be made to distinguish the medical officer from the combatant. Under the army system this will disappear. One uniform, distinct and definite, the badge of a department which should and will stand as high as the best corps in the service will be the rule, and let us hope it will be the sign of union and great departmental *esprit du corps*.

35. (*K.*) *Irregular tours of Foreign Service.*—No officer suffered more than the medical officer under the old regimental system for want of a definite roster of foreign service. One regiment would remain abroad twelve years, while another never left England. By exchanging and keeping one's eyes open foreign service might be completely avoided or the least quantity gotten through by some lucky individuals, while others were always abroad. Take Ceylon for example as a station for medical officers. Regimental medical officers remained there ten years at a spell in the old days, the staff doctors remained there only three years. In India a regiment remained for service twelve years and often more, while staff doctors came home every five years. It was wholly impossible to have any method or system in the roster, because men had to follow their regiments and stand by them at all hazards. The military department got the chance of coming home to the depôts every three or four years, and thus although the regiments nominally remained abroad twelve years, no officers except the medical officers were without a turn of home service. Now we can have a fair and uniform system inaugurated and every one will benefit by it.

36. (*L.*) *Impossibility of suiting the Medical Staff to the varying requirements of Garrisons.*—If there were three medical officers in a battalion they had to remain with it in every station it went to, whether a healthy or a sickly one. One corps serving in Rawul Pindi in an excellent climate had the same staff as another cantoned at Morar or Mian Mir. The system had to be maintained and there was no power of increasing or decreasing the staff to meet the varying wants of each station. This was a false principle. Even in the same garrison if one regiment was more sickly than the others, there was no power of equalizing the labours of the medical officers. One body might be quite idle and the other quite over-worked. By having the garrison hospital this will be prevented, and further, leave of absence impossible often under the divided system, will under the new system be more easily obtained.

37. Again, it is to be noted as important that while Medical officers were regimentally commissioned, and the Hospitals worked regimentally, the most senior medical officer of the staff or of another corps was junior to the youngest regimental Medical officer in his regimental Hospital; he took responsible charge over their heads; was alone consulted in all medical questions, and directed the action of his seniors in the army but his juniors in the regiment. Friction, disagreements, and divisions were fostered by such a system to the detriment of the service and the department. Now by

having one medical corps every officer will have his seniority respected and his proper place preserved.

38. It is quite a true although a sad thing to state, that it has been necessary to forbid officially the system that obtained in some regiments of assigning the least important and least inviting duties to the staff doctors temporarily attached to the regiment whatever their seniority was. It seems that a few senior medical officers were weak enough to believe that unless a man was commissioned in their own regiment he could not have been of much account. Such perverted *esprit du corps* would be laughable if not rather painful.

39. (*M.*) *Depressed the position of the Army Medical Officer as a unit in the Army.*—Much sentiment has been expended on the "happy home" theory of the regimental system. Let us calmly look into the question. Old army days are dead, and when Surgeons General who served in regiments before that great epoch called the Crimean war, talk of their early days, they are quite "in the air" if they think the same feeling exists to-day as in those apparently very good old times. The younger men in great proportion do not share those feelings. They believe it truer in principle to exist alone as an important Army corps standing on its own basis, knowing its own position, doing its own work, and wearing its own uniform, than to cling for support, for prestige, and for position to any corps, be that corps what it may.

The day for submitting quietly to a hundred petty but harassing frictions, such as must occur between the military and medical departments when working in the same corps, has now passed by. Why should we go on working a false and failing system that was certain to break down in the field, and which in addition depressed us as a body into nothingness, when a better system can be adopted and all these frictions set at rest for ever?

Turn back the pages of the *Lancet* and the Medical Journals, or the files of the military papers, and read the complaints in the much vaunted regimental days. Were there none? aye hundreds. In the good regiments —for there are good regiments—a man's position was singularly happy, but in the regiments less good it was often the reverse. It depended too much on the varying views of a Commanding Officer what *official* position the medical department of a corps occupied. All this is to-day ended. We can stand by ourselves, if we determine to do so. We shall be better doctors, better administrators, and stand forward as a department in the Army which cannot be overlooked, if we only stand true to one another. Our division has been our weakness. Unification in the medical department of the Army means increased professional and military efficiency, which is our highest aim, and a more definite and far more independent social existence.

* In India

Section IV.—The Unification System.

40. We now turn to discuss the unification system, or the principle of handing over to the Army Medical Department the fullest control over the Medical service of the forces, subject at all times and in all places to the command of the chief Military authority present either in garrison or in the field.

It would be absurd to ignore, in discussing this question, the causes that are at work in the medical department promoting the desire for unification. No profession has during the past fifty years made any thing like the social progress ours has done. Better men, with better education, and wider views join it every day. When one remembers the position it occupied in not very distant times by comparison with the sword, the church, or law, no one can deny that it has risen amazingly, while their position is every day more liable to assault. Large armies and volunteer military systems have made military rank common, the *odium theologicum* has died out amongst rational beings, disestablishment is held as a threat over every state religious organization, and the codification and simplification of the law will render the number at least of that profession fewer. But as civilization advances the need of the medical art increases, Doctors become more valuable, and rise to their true social position. Considering the expense, the trouble, and the danger of their education and their labours, it is but their just due. These influences act in full force upon the Army medical officers and each succeeding decade and each succeeding war but raises and will raise their value. If former Army Doctors were satisfied with small pay and indefinite position, the present men are not.

We desire to serve England faithfully and well, and to give our best energies to the Army we belong to, and with which we have done devoted service; but we desire to do that service in the best and most sensible way, and to have our hands untied to do the work. Repose trust in us, give us responsibility, give us the power to organize; then, if we succeed, give us the praise, if we fail ours be the blame. What then are the aims of the supporters of unification views and what the advantages their system holds out?

41. (*A.*) *Centralized responsibility in the Medical Department.*—It means first that we shall have in each garrison, with each Brigade, and Division, or Army Corps a single authority responsible for the medical care of the soldiery, with power to direct all the energies of the department in the direction where there is most need of them. Under the control of that authority the Medical Corps of the Army, officers, attendants, hospitals, equipments, and transport will in certain fixed proportions be placed. To the Principal Medical Officer in each Brigade or Division the entire Medical Staff of that division will look for instructions and for co-ordination. He will arrange that no hospital shall remain empty while another is full to overflowing. That the duties of the medical staff are equalized. That when needed to act in small parties, detached portions of the Army Hospitals with sufficient officers, attendants and equipments accompany the force, not in proportion to the numbers of its separate Regiments or Batteries, but in

proportion to its total strength and its probable needs. All divided responsibility between the commanders of separate regiments and the senior medical officers shall cease, and in the Principal Medical Officer under the Commanding General all responsibility and guiding power shall centre, leaving each regimental commander free to attend to his regimental duties proper. In like manner in garrisons all the sick shall be treated in central army hospitals, there being with each regiment a permanently attached medical officer who will *send* the men to hospital when sick or wounded, treat the sick officers and their families out of hospital and accompany the regiment wherever it may go. In the central hospitals all arrangements for duty, division of labour, discipline and administrative authority shall centre in the senior medical officer subject at all times to the authority of the officer commanding the garrison or the army or section of the army in the field.

42. (*B.*) *The formation of first-class Garrison Hospitals.*—Instead of a number of petty hospitals scattered over a garrison there will gradually be formed first-class garrison hospitals with every modern appliance and comfort for the sick. Chemical laboratories, expensive instruments, libraries and museums will in these centres gradually accumulate. There medical officers can learn their profession more thoroughly, consult freely with one another, have every available modern professional assistance, and learn how to administrate and preserve order in the hospitals.

43. (*C.*) *Great economy by co-operation.*—Instead of having in a single garrison eight or ten microscopes or such like things, one alone will be needed. Cooking, washing, lighting, all will be carried on in a more economical and equally efficient manner: of its economy there can be no question.

44. (*D.*) *War and Peace Hospital System the same.*—No change will take place between the systems in war or peace, and the terrible danger of inangurating new systems in the field be avoided. To this error in the old days we may attribute the maladministration of the war general hospitals.

45. (*E.*) *It gives a Station tradition of diseases.*—As the medical officers of each garrison will be permanent for a certain time, and will not all change at the same time, it enables a station tradition of the sickly seasons, local causes of disease, and best steps for avoiding them to be handed down, a thing wholly impossible before.

46. (*F.*) It enables the medical department to limit or increase the medical staff in each garrison according to its healthy or unhealthy characters, which could not be done with fixed regimental establishments, and enables the Divisional Principal Medical Officer to withdraw or increase the staff from neighbouring stations when needed.

47. (*G.*) *Good Nursing.*—By having a special corps of medical attendants it enables men to be trained as nurses and gives them scope for promotion if intelligent, which was impossible under the old system.

48. (*H.*) *Avoids Friction.*—It puts an end to or diminishes to the least possible amount all friction between the military and medical departments of the army. Contact can only take place between the administrative

chiefs of either departments, and the subordinate officers shall be simply the officers of two separate corps.

49. (*I.*) *Equalizes Foreign Service.*—It enables a roster to be kept of the home and foreign service of the medical officers, and equalizes it for all. It prevents a man spending his whole service in England or being compelled to spend excessively long times in India or the Colonies.

50. (*J.*) *A single Uniform.*—It enables one definite uniform to be determined on for all medical officers of the army, by which they can be always recognized, and which will avoid the wretched questions about invidious distinctions and absence of ornament or decoration. It will prevent the anomaly of medical officers being compelled to wear the uniform of corps to which they never really belonged, and will save a few weak-minded men from forgetting that they are medical officers, and dreaming that they are Hussars or Artillerymen.

51. (*K.*) It gives us the opportunity in each garrison of having suitable accommodation, where we can organize our own messes, and gives the young officers of the department a home, which if they served on the staff they never could have had. This is a most important advantage. The absence of messes under the old system was a great injury to the *morale* of the young medical officers.

52. (*L.*) *Abolishes Regimental Medical Officers' seniority.*—It abolishes the anomaly of a junior medical officer commissioned in a regiment being senior there to the oldest staff medical officer or medical officer of another corps.

53. (*M.*) It makes a uniform system of having every man not at duty on medical grounds in hospital, and puts an end to constant regimental breaches of the existing army rule.

54. (*N.*) It makes leave of absence easier to be obtained for the medical officers.

55. (*O.*) It does away with the annoying inspections of hospitals by junior regimental officers; a duty many of them objected to, knowing it to be a farce.

56. (*P.*) It enables good and healthy sites for hospitals apart from the regimental camps or barracks to be chosen. With regimental hospitals close to barracks and camps, the same evil influences acted on the one as on the other.

57. (*Q.*) It saves the furnishing of regimental guards to regimental Hospitals, and requires but one guard for a whole garrison or division instead of six or eight as at present.

58. (*R.*) It enables indifferent senior medical officers to be employed under seniors, while under the regimental system all seniors had to be employed as chief medical officers in regiments.

59. (*S.*) It enables us to get rid of *mauvais sujets* in the department. In the regimental system if a medical officer was a "good fellow" at mess and popular, his commanding officer could overlook his conduct in the hospital, and he alone could take cognizance of it. In this way indifferent officers were at times retained in the service.

Section V.—What still remains to be done.

60. If any officer of the military or the medical department of the army imagines that by the introduction of the new system the medical officers aim at doing less work or leading easier lives, they are thoroughly and entirely mistaken. It means harder work, more responsibility, more forethought, and more attention to duty than ever was necessary under the old system.

The medical department will now be entrusted with most arduous responsibilities, but they will have their hands untied to accomplish the work.

Deprived of the swathing bandages from which they so long derived a false and ruinous support, the limbs of the department may and will totter at first, but in the end the firm step and decided gait will be theirs.

Mistakes and errors are likely to occur when we commence our new labours, but the great thing to remember is that now while peace exists they can be noted and corrected, whereas they were certain to have occurred in the first campaign under the old system, and would have involved disaster. It was as certain that any great European campaign before 1873 would have been disastrous to the medical service of the army, as it is certain that men died of preventible sickness in the Crimea. What then are we to ask for and to aim at under the new organization?

61. (*A.*) *Disciplinary powers in Hospitals over officers, attendants, and patients.*—Foremost amongst the wants the new system will involve will be full disciplinary powers in the station hospitals in the field and in garrisons over officers, attendants, and patients. No order can exist without that being granted, and now during the time of peace is the time to give it fully to the medical officers. The senior medical officer of a garrison should have the powers granted to a regimental commanding officer for the punishment of military offences, that is up to 168 hours' cells, the power of confining to barracks, and of fining for drunkenness.

We all know these powers will be rarely used, yet it is necessary they should be there for use. All references to the commanding officer of the station will be tedious, and involve much trouble to every one. These powers the medical officers are quite qualified to use, and if mistakes occur at first they can be corrected now in peace times. The medical officers now senior in the army are well acquainted with the routine of the service and will use these powers with discretion. Every one knows that in India the Indian medical service govern the enormous jails of that country and exercise magisterial functions even to the extent of corporal punishment, efficiently and well. This power will prevent medical officers resorting to the irregular customs of old days, in which it is said perfectly illegal punishments, like feeding on spoon diet, were given constantly to soldiers in hospital for any breach of regulations. This power should extend over the subordinate Indian medical attendants, who will form the nucleus as of the Indian Hospital Corps. On all courts-martial on medical officers a proportion of medical officers should sit as members, to see that no absurd plea prevented justice taking effect on delinquents. Medical officers as is

well known to-day sit on courts-martial, and it should be the rule in the trial of all hospital subordinates.

62. (*B.*) In future it will be necessary to have any new army hospitals built for the garrison and not for the regiment.

63. (*C.*) The Army Hospital Corps should be wholly under the medical officers in every particular, and Quartermasters chosen from the non-commissioned officers should be commissioned and attached to each district at home, and each division abroad, to look after their clothing and payment. Their uniform should be changed to the scarlet colour of the medical staff of the army with the same facings. Their title should be the same as that of the medical corps and in every way they should be taught to look to the medical officers in every thing. If their discipline be at all defective, it arises from the absence of any interest in their welfare by the medical officers, and now under the new system this should not be the case. They are our own corps. That they should be efficient is our best hope, and if they fail we are undone. Every means should be taken to make them comfortable, for their duties are particularly onerous and depressing.

64. In India it will be necessary to organize the present Native establishments into a Native Hospital Corps. This can easily be done, and the late Surgeon-General Beatson has left on record a plan ready for adoption. The uniform of the subordinate medical department in India should be made similar to our own, and the Geneva Cross worn by the whole medical corps, from the most senior officer down to the most junior orderly.

65. (*D.*) It will be necessary to have hung up in every barrack-room instructions explaining the system of army hospitals to the men that no mistake can occur; very soon it will be fully understood. No explanation of the meaning of the Geneva Cross has as yet been given to the army, and most men believe that the Geneva Convention discussed the Alabama claims. This should be corrected.

66. (*E.*) The ambulances that would accompany the army in motion should be kept mobilised and in working order at Aldershot and the Curragh, to train men to the system, and constant practice given to the officers, attendants, horses and waggons as if in the field. The young medical officers from Netley should be sent to see the system working as part of their course. Officers will always learn the routine of the General Hospitals, but the management of the ambulances can only be learned at the large camps. No expense will be given to the state, as the waggons would be used for conveying the regimental sick from barracks to the hospitals at ordinary times. Medical officers detailed for service with these should be horsed at all times, in the same manner as the field artillery officers are.

67. (*F.*) *Netley.*—With unification the Netley training of the young officers becomes of the greatest importance. When one notices the care given to the young Royal Artillery officers at Woolwich and the Royal Engineer officers at Brompton, it merely indicates how necessary like care is at Netley. There should be there a publicly appointed officer of much army experience as "Superintendent of Cadets," to whom the young officers could look for instruction and guidance on all questions not dealt

with by the professors and medical officers of divisions. Our young brother officers enter there a new career, and very much depends upon the impressions they receive. Unless their care be the special duty of a responsible officer it may be neglected, and this should not occur. The traditions of the service and the department are not learned in a day, and the young cadets should be carefully taught them. All of them are anxious to learn, and doubtless in the future great care will be taken on this head.

68. They should be taught to ride at Netley if possible, or by sending them to Aldershot; but the best way is to let these young gentlemen learn at Netley amongst their own people. A medical officer who cannot ride is useless and an encumbrance to the service. The state may well demand of its officers an efficiency equal to that demanded from every medical practitioner's assistant. A short course of drill should be given. It would teach them more of the sufferings of the soldier with badly fitting accoutrements than many lectures. The first day I dressed in heavy marching order I learned a lesson I have never forgotten from the old pack. They should likewise be instructed in the elements of Military law. The Superintendent of Cadets could, in half a dozen lectures, teach these young officers much that they now have to learn in the rough school of experience. We should all be induced to look to Netley as our centre, and our best and happiest station.

69. (*G.*) The formation of medical staff messes at all the larger garrisons is most important. At Aldershot, Woolwich, Portsmouth, Plymouth, Dover, Dublin, the Curragh, Cork, Gibraltar, Malta, Poona, Bangalore, Secunderabad, Allahabad, Lucknow, Meerut, Morar, Umballa, Mian Mir, and Rawul Pindi, and Peshawur such messes should be at once organized. Nothing is of greater importance to our *morale* than this. We must not be dependent on the regimental establishments that the young men may have a place to meet. I see no reason to excuse any medical officer from payments to these institutions, and the rules applying to regimental messes should likewise apply to them about subscriptions.

70. If the department is to stand amongst the other branches of the Army there must be a centre where the social amenities of life can be carried out. Entertainments if given should be in the name of the senior medical officer and medical officers of the garrison. Cards should be left on regiments or individuals in the name of the P. M. O. and officers of the Medical staff, and all invitations should come for the officers of the medical staff as a body. But it is needless to mention these things save casually. However, simple as these things seem, they are not unimportant. The Regent's allowance as given in the line battalions might be claimed in England, but in India the mess allowance of Rs. 10 per officer for mess-house accommodation should, as in the Royal Artillery, certainly be granted to the department. It can in no possible way be refused and only needs representation.

71. (*H.*) The honorary distinction "Royal" should be given to the department, and likewise to the Army Medical School at Netley. It is the rule in the service to give this honorary distinction to corps and regiments that have done good service. If there be Royal Artillery and Royal Engineer and Royal Military Academy, there should be likewise Royal Medical

department. Our labours, our devotion, our long and faithful services exceed if possible even these distinguished corps. Nothing shows more painfully the bad effects of the regimental system on the medical officers themselves than the utter absence of *departmental* tradition. There should be honorary mottos and badges as in every other corps in the service, and that badge should be the Geneva Cross, which if we will we can make the most honorable badge in the army. It is absurd to despise these little things. "Trifles make perfection, and perfection is no trifle." The history of the department should likewise be written.

72. (*I.*) *With reference to dress*, a few principles should be laid down. I have yet to learn whether our influence, prestige, respect, or position is to be increased by despising and ignoring our uniform. I have met officers who believed such would be the case. They were not remarkable for any superiority. Uniform means order, and system, and in the military service can never be ignored. Under the regimental system wretched distinctions made by absence of ornaments were in the old day the rule, and even to the present time more or less acted upon. Now as we are a separate corps we want the medical staff uniform, already very fair, made in every way as good as the best in the army. We all agree that though the taste for gold lace is a false taste, yet while the army wears it we will sail with the stream. We are but men after all, and although our dress should be *perfectly* distinctive it should not be ugly. Hence the cocked-hat for all except the administrative officers, the forage cap and the undress trousers need change to equalize them with the Engineers, with whose position we are most nearly allied. The dress belts should always be worn as the Engineers always wear their's. The Geneva Cross worked in ornamental embroidery should be worn on the forage cap, on the collar of the tunic in front of the rank badges, on the collar of the mess jacket, and on the front of the helmet or hat that is to be worn, and on the collar of the patrol jacket. It is better to adopt this badge in peace as we must wear it in war, and let it become known as the medical department badge. If worn only in war times our men will never understand the meaning of it. The collar and cuffs of the patrol jacket should be of the same pattern as the Engineers' black velvet being substituted for garter blue.

Distinct and clear orders should be laid down about our dress when on various duties. All mistakes arise with us from want of clear definite orders on this as on other subjects. The Honorary Physicians and Surgeons to the Queen should wear the tunic of the Queen's A. D. C.'s with their own belts. If the army tailors do not object, perhaps as an outsider one might suggest something. Our facings are black. We adopt the colour. All broad lace worn by the department should have a quarter of an inch of black in the centre, where the military department wear crimson. This broad lace will suit for the forage-cap band, and for the trousers in full dress: for the undress trousers let a black stripe, half an inch wide, run down a broad scarlet band. Advantage might be gained by choosing some good London house, and treating with them for the supply of uniforms to the department as a speciality. Our uniform will now be the same for a corps of a thousand officers. It should pay a house well to secure the

patronage of so many officers. The co-operative principle would be the one followed.

73. (*J.*) *Titles.*—While we serve in a military organization, and deal with soldiers accustomed to respect their officers in proportion to their rank, we would be very foolish not to adopt a definite system for our titles. To call both ranks of Surgeons by the same title is a mistake, to call both grades of Surgeon Major by the same title is a mistake. If a title means anything it means different grades of rank, and if we adopt the same title for two different grades it is wrong.

The title "Surgeon-General," retained for the officers ranking with Brigadier Generals and Major-Generals is true in principle, the title "Deputy Surgeon-General" is like all three-worded titles too cumbersome. They should be called Surgeon-Colonel, which every one understands.

The title "Surgeon-Major," as at present used, should be reversed for those ranking with Majors and not used for the higher grade. A distinct and definite title should be given for each grade in military rank and the affix "Surgeon" or "Doctor" added to it.

The rank and file of the army always speak of the Major-Doctor and the General-Doctor in common parlance. The title Surgeon is never used at any time, except officially. Every medical officer is considered to be a doctor.

74. (*K.*) *Rank.*—As regards rank, we will always be unsatisfied while two things exist. One is while the Senior Surgeons-Major are *junior of the rank* as Lieutenant-Colonels, and the other while the Deputy Surgeons-General rank with Lieutenant-Colonels only. The former grade will under the new system be at the head of large garrison hospitals, and it is absurd to keep these junior of their rank with no prospect of any further rise. In no other department does the "junior of the rank" system obtain.

For the latter their now most important duties in arranging the medical duties of divisions of the army require that they should get extra position, and they should rank as Colonels from the date of their appointment, and retain that rank throughout their service in the grade. Sooner or later both these demands must be met. The reason why the Surgeons-Major were made junior of the rank was to suit the regimental system and prevent the medical officer being senior in the army to his Lieutenant-Colonel. That reason does not now exist.

75. (*L.*) *Custody of stores and rationing.*—For the hospital rationing and custody of all equipments, and medical stores in general hospitals and throughout the department, quartermasters of the Army Hospital Corps should be appointed to act under the senior medical officer.

Without some encouragement to the Army Hospital Corps in the way of commissions it would suffer much in *morale*. These officers would carry on their duties as in a regiment, and under them quartermaster serjeants of the corps would be trained for duty with small section hospitals. Introducing all titles like "stewards" and such like which are not used elsewhere in the army is wrong in principle, because soldiers do not understand them and they cause confusion.

We cannot copy too closely the system that works in the regiments. Uniformity is a great comfort if it can be achieved. On this principle, paymasters of the Army Hospital Corps should be so commissioned if needed to carry on the payment of the entire hospital department, &c. The quartermaster otherwise would superintend the payments, but the senior medical officer should be responsible. A hospital should draw its supplies from the Supply Department, in just the same way as a regiment does. In India officials of the subordinate medical department of that country should discharge all the purveying duties, whether as regards rationing, custody of stores, or any other duty, under the responsibility of the medical officer in charge of garrisons, brigades, or divisions.

76. (*M.*) *Principal Medical Officer's Staff.*—As every officer commanding an Artillery district, or commanding a battalion, has an adjutant to act as secretary and assistant, every medical officer administering a division of the army, or a district in England, should have a medical officer as staff officer or adjutant to him. To assist in carrying out the medical administration of a large body of troops such an officer is quite necessary ; and it would be a capital training for the younger officers in administration. He should be called either the Medical Staff Officer or the Surgeon-Adjutant of the district. In all large hospitals the senior medical officer would of course nominate one of the junior officers to act as adjutant and conduct the routine duties of the administration. He would not be excused from any duty on that head, but an officer is required to intervene between the administrator and the rank and file of the orderlies and patients, &c., &c. Military medical officers will see that this is a necessity.

77. (*N.*) *Roster of Moves.*—Definite rules as regards moves and change of station should be laid down. A roster should be kept and all moves should go by rotation as far as possible. Constant movings and knocking about the country was the great drawback of the old staff system, and by proper administration it should be reduced to a minimum. For all duties on the march the young men under six years' service should be generally taken to teach them experience. A good Principal Medical Officer will always avoid needless moves. In the hands of a weak man constant changes might occur unless some system was adopted defining his powers.

78. (*O.*) *Pay.*—We will always be an expensive corps to keep up. All good things are dear and bad medical officers are dear at any price. Our pay in India until promoted to Surgeon-Major is very bad and greatly below the amount it ought to be. The rise in pay given us by the Warrant of 1867 has not taken effect up to the present day in India. All medical officers ranking as Field Officers should be allowed forage as a part of their pay. The allowance to the young officers at Netley should be raised to the pay of a Surgeon. They do work equal to one and it is a shame to let them be paid at a lower rate than sub-lieutenants are paid at.

79. When we remember that we come into the army fully educated as medical men, and able if we choose to seek employment in civil life, we must always be more highly paid than the military department who receive all their training at government expense.

All Engineer officers are so taught at Brompton, and the Staff College, the advanced artillery class and Sandhurst are kept up at great cost to the state to teach officers at government expense. All this is saved in the Medical Department. Add on further the expense of the garrison instruction now going on throughout the army to the cost of the pay of the military department, and it will about double the charge against the state. This is never estimated. We are trained at our own cost, and it seems fair that we should demand either a second course at Netley before promotion, or six months leave on full pay during our service to study in the civil schools. Considering our real value and that for us there are no good things like army staff billets, our services are reckoned at a very low figure indeed, with reference to the value of professional knowledge in the market. The whole charge of the Medical Corps can be and is estimated in one place. The apparently small pay of the military department is really much increased by staff and extra allowances.

80. As regards pensions to widows it is necessary to note that the widows of all medical officers who die during epidemics should draw the higher rate of pension granted for widows of officers dying in the field. Epidemics are our campaigns. In like manner Queen's Cadetships should be granted to their sons.

The State should found Queen's Cadetships for medical officers' orphans at the Medical Schools, to enable them to enter the service in which their fathers died.

81. The young medical officers should be compelled to join the Army Medical Officers' Widows' Fund, for the first five years of their service, if after that time they are so foolish as to discontinue, they will do so with their eyes open. Great pressure should be exercised by the senior officers on this head.

82. (*P.*)—The Geneva Cross Flag should always be flown over the hospitals even during peace. Our soldiers are so stolid that without this they would never recognize it in war. It should be painted on the ambulance waggons and on the hospital marquees. In every possible place it should be conspicuous. In India it should be the badge of the hospital establishment simply as a distinguishing mark. Our Indian enemies did not sign the convention at Geneva.

83. (*Q.*)—Servants from the Army Hospital Corps should be provided for all medical officers serving at home, and the servants' allowance withdrawn. It is quite wrong to allow the non-regimental medical officers to be without soldier servants. In the field they sicken and die for want of food and attendance, and a medical officer is far too valuable to be thus expended.

Servants are not wanted in the West Indies, China, Ceylon and India, and the increase to the corps would be quite nominal. There will always be some men in it unfit for orderlies, and they should be so employed. If need be the cost of an orderly over an ordinary soldier could be paid by the medical officer. It is about fourpence a day.

84. (*R.*) The Departmental Blue-Book should become the life-blood of the department. It is now with its rather old statistics of regimental sick-

ness little read. It should be published quarterly as the returns come in, and if India be late or Hongkong behindhand, let their returns be published in the next number. We live too quickly now-a-days to read the statistics of 1872 in the year 1875. All regimental statistics too are of little use; we want station statistics. Few officers will now write for the blue-book. It is too slow in its appearance. If published in smaller portions quarterly it would succeed. There is a great fund of knowledge in the department if it were properly gotten at, and we very much want a paper or journal for the purpose. The blue-book should be that journal.

85. (*S.*) The whole question of sitting on military boards should be reconsidered. It would be far better to let us go back to the old system of sitting on the boards than to continue the present one of attending them. Many of the boards do not need any medical officers at all.

86. (*T.*) Lectures to the rank and file of the army on sanitary and medical subjects should be given at intervals during the year. The men take to them very kindly, and are eager listeners. It is a little trouble, but it does much good.

87. (*U.*) In certain barracks quarters should be specially told off for the medical officers and lettered accordingly. It is done for the Control service and we should also have it. It saves friction very much. What will be required are officers' quarters and mess rooms near the garrison hospitals.

88. (*V.*) As a rule when the medical officer in charge of the regiment is junior to the officer in charge of the station hospital, he should be employed there under the orders of the Principal Medical Officer in addition to his regimental duties. In small detachments the one officer will perform both regimental and hospital medical duties.

89. (*W.*) The following Army List corrections are needed. The Honorary Physicians and Surgeons to the Queen to be placed under the Queen's Aide-de-Camps, and not in their present absurd position. The appointment is given as an "Honor and Reward" and should be placed under that head. The letter H. P. (Honorary Physician) or H. S. (Honorary Surgeon) should be placed after their names in the departmental list, like the letters A. D. C. after the Queen's Aide-de-Camps. The right of private entrée has doubtless been given these officers, in consideration of their honorary post.

90. The names of the Deputy Surgeon Generals in India should be added under the names of the Principal Medical Officers of each Presidency in the list of army staff at the beginning of the book. If every Brigade Major is named surely every Deputy Surgeon General should be so.

Army Medical Officers will note in Hart's Army List the following omissions. The Honorary Physicians and Surgeons to the Queen are omitted from special entry. The Director-General's name and the headquarters staff at Whitehall-yard are omitted in the list of army staff at the beginning of the book. The names of principal medical officers of districts and commands are omitted, although entered in the official Army List. The Army Medical School at Netley is omitted, although Woolwich and Sandhurst are entered. This needs no comment.

91. The names of the British medical department in the Bombay presidency Army List should be placed before the Bombay medical department, the former being the senior corps. The names of the senior medical officers of stations to be entered in the station staff lists at the back of the Bengal Army List.

92. (*X.*) It still remains for consideration if an organization similar to the Royal Artillery could not be given us. By separating us into units of field hospitals with the doctors permanently working with each hospital, we might thus have the Base hospitals like the Garrison Brigades, the Field Hospitals like the Field Brigades and the Ambulances like the Horse Artillery. No insuperable obstacle prevents this being done.

93. (*Y.*) A graduated system of fines for neglect of duty, as now used with such advantage in cases of drunkenness in the army, would suit admirably as a disciplinary measure for the Hospital Corps, and for all irregularities in Army Hospitals.

Whether an Army Hospital stands on Aldershot Common, on the plains of Flanders, in a mango-tope in Oude, or amongst New Zealand fern thickets, it should be self-contained, perfectly complete in every way,—as easily moveable and as independent as a battery of field artillery, and have within its establishment every want provided for. The more nearly this ideal is attained, the nearer is efficiency.

Conclusion.

94. Little now remains to be said. It is necessary on this question to be patient. In England, and particularly in the army, all change is brought about slowly, but in the end all will be well. One hundred and fifty years of Regimental systems did nothing for us. Let us try ten years of unification. No one will dispute that the old system was abolished in a seemingly harsh way, and that it caused pain to many people. Old associations torn asunder are always painful, and we know that the captive long confined learned even to love his prison-house and felt at first homeless when freed.

A better day is in store for us. Higher medical culture, freer room to work, and a truer professional and army basis to work upon, are all bound up with the unification system, and they are great things to achieve. In many ways the grievances put forward by some medical officers are quite illogical. They refuse to undertake any responsibility apart from prescribing. A battery commander might with equal sense say, "My duty is to fight my guns and that alone." To him I reply, "Your duty is to fight your guns doubtless, but to be able to do so, you must look after your horses, train your men, and see to the interior economy of your batttery." To the army medical officer I say, "Your duty is doubtless to treat the sick; to do so thoroughly, you must see to the hospital administration, train the attendants, organize the staff, look after the rationing; this is your true duty." If gentlemen object to do this, civil practice offers them a wide extensive field for work; in the military service they are rather in the way. It is wholly impossible to carry out their theories and be efficient or inde-

pendent. If the regimental system exists the regimental commander must have the fullest powers, and that brings back all the old friction, and certain disaster in the field. If the medical department are to be independent, they must be responsible and must undertake *all* the work. There can be no medium course. With the new system properly working, we can, on medical grounds at any rate, go on a campaign, "with a light heart"; working under the old system, nothing but constant dread of a crash could be our anticipations.

95. We build too much for our European efficiency in every department of the army on Peninsular tradition, and Indian victories. From India we may in some European campaign one day learn the lesson that France learned from Algeria, and of the Peninsula few experiences apply to-day. What we want is a system in consonance with modern requirements, and that is the "Unification" one. Any other is striving to fill the round hole with the square block.

96. To the officers of the military and of the medical departments of of the army I would say, "Have no fear that under the new system we will grow less interested or less bound up with the soldier and the service than we have been in the past." No organization can change our nature, and we have come into the army freely and for the love of it. Other officers often join the army because it is the only profession open to them, and often when very young, while their taste are still unformed. Not so with us, we can if we choose find other walks of life, but we come to the service when mature in years and of our own freewill. That means that our sympathies are with it. No department in the service has ever been or can ever be so cordially, so intimately bound up with the soldier as we. We have been with the army in every danger and in every success during the past, and we will be with them in every one that is to come. We alone of all the departments have been at all times with the army, and must always be with it. Remember neither the Royal Artillery nor the Royal Engineers, nor the Control department, nor the Chaplains' department ever came to India until 1857, and even now the two latter do not serve there. We on the contrary have borne our share in every Indian campaign, from Plassey to Magdala, and in every other quarter of the globe as well.

All we ask for is a fair field; untrammel us from petty regulations; clear away the forms that seem to keep us up but drags us down and makes us against our will helpless and weak; give us our way, and in the campaigns and epidemics that are to come, we will do, as we have often done in the past, good and trusty service for the army and the country. Amongst the thousand graves that lie to-day uncared for on the heights before Sebastopol are the tombs of sixty officers of the Army Medical Department, who fell by disease and wounds in that most lamentable campaign.

The same spirit of loyal devotion to duty that animated them animates us to-day, and we are ready now to do as they did.

Contented when justly dealt with and when receiving that equal share of the rewards which we no less than the bravest soldier in the army earn at the risk of our lives, we will in the day of trial do our utmost, and men can do no more. *February*, 1875.

I

ARMY MEDICAL ORGANIZATION.

A

COMPARATIVE EXAMINATION

OF THE

REGIMENTAL AND DEPARTMENTAL SYSTEMS.

BY

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ARMY MEDICAL ORGANIZATION.

SECTION I.—Introductory.

I PROPOSE, in the following pages, discussing the question of the organization of the Medical Department of the British Army, and further to offer some remarks on the present requirements of the same branch of the service. I propose to treat the subject in a clear and simple manner, avoiding all technicalities, and from such points of view as will commend themselves—*1st*, to England and the common sense of the country; *2nd*, to the military officers of the army; *3rd*, to the medical officers of the army; and *4thly*, to the members of the medical profession at large, whether professors, teachers, or practitioners in civil life. For a definite settlement of this question of organization, it is necessary that all these sections should be in accord on the subject, and I feel convinced that it is perfectly possible for a clear and well-defined understanding to be arrived at satisfactory to all.

It is only by thoroughly sifting this question that a satisfactory settlement can be arranged, and if, in the pages that follow, any statements are made that may appear unpleasant, it seems to me better that at all costs facts should be plainly stated, and not in any way glossed over, than that a rose-coloured picture should be painted, pleasing to the eye but utterly false in every other way.

2. To each of the four sections before mentioned, the question of army medical organization is deeply interesting. To England, more than to any nation in the world, is the thorough efficiency of her medical service essential. Not only are her soldiers obtained with great difficulty and maintained at vast expense, not only has she to attract the volunteer instead of compelling the conscript, but in addition to all this her soldiers are scattered over a widespread empire, garrisoning posts in every possible climate, and exposed not only to war risks, but to every possible variety of disease.

Not Germans, nor Frenchmen, nor Austrians are exposed to sickness as our soldiers are exposed, and Russia alone can compare with us in the extraordinary chances that send our men from Halifax to Peshawar and Mecan Meer, and from Bermuda and Jamaica to Hong-Kong and the Cape. Apart from all field service, our soldiers are daily fighting in a campaign with tropical climates and acute diseases such as are never heard of in other European armies, and to assist these men in their struggle with disease, an efficient medical corps is

most essential. England, too, demands for her sons, who are serving her in every quarter of the globe, an amount of care and attention such as the Governments of foreign nations rarely think necessary for their less valuable material; and if the English soldier has been valuable in the past, he will be, if anything, more valuable in the future. It behoves England, therefore, to give full consideration to her army medical service, and to force alike on her military and her medical servants such efficient organization as the good sense of the nation demands.

3. To the military officers of the service the subject of medical organization is of the utmost importance. Not only for their own sakes, but, for the sake of the *morale* of the men, it is essential that the medical service be thoroughly good of its kind and in every way efficient.

Every great captain of the art of war, and indeed every soldier who really deserved the name, has not failed to note how important an aid it is to the well-being of an army that their treatment in sickness, or when wounded, should be thoroughly good, and military history is full of examples of the care and attention bestowed by famous soldiers on the medical organization of their armies, and of the disasters and utter breaking down of efficiency and discipline when these essentials were neglected. It is a subject which cannot be ignored, and it is most important that the military officers should have clear and distinct views on the subject. The opinions of the leading minds of the English military service, and the routine and organization of foreign armies on this subject, should all be studied, and whatever system is based on such support, should receive their ready acceptance.

4. To my brother-officers of the Army Medical Department this subject of medical organization is simply vital. Their comfort, their efficiency, their readiness for service alike in field and quarters, is wholly bound up with it; and if we are to hold our own in comparison with other armies, and if we are to avoid disaster in future campaigns, we must go thoroughly into the subject of organization, and seek out what is best in every way from the various competing systems. If we do not, certain failure awaits us in the field, and comparative inefficiency in ordinary barrack life.

5. To the medical profession in civil life, and to the teachers and professors of the various medical colleges, it is essential that the question of the position, the organization, the aims and drawbacks of the medical officers of the army, should be presented in a clear and easily-understood manner, free from all military technicalities, so as to enable them to first grasp the subject themselves before they undertake to advise the young members of our profession on their choice of the different paths of medical work presented to them.

6. It is needless to say that the army, both in the military and its medical branches, has been for some years divided into two schools of thought on the question of army medical organization, one party supporting the system called regimental, the other standing by unification or departmental views; and in the following paragraphs both will be compared and fully dealt with, the good and bad points of each chosen out, and a definite conclusion arrived at. Afterwards some questions bearing on the condition and future of the army medical service will be discussed.

We shall deal with the various sections in the following order:—

A.—The regimental system.

B.—Its supposed advantages.

C.—Drawbacks of the regimental system.

D.—The unification system.

E.—The wants of the medical service.

SECTION II.—The Regimental System.

7. It seems needless to say that to properly understand the question of the medical system of an army, one must first understand its military organization. Both are entirely bound together, and the medical organization of an army must bear a distinct relation to its military system.

The earliest records of our English military system all show that it was thoroughly a regimental one.

English military history points out that during the century and three-quarters in which the English army has existed as a force, it, until 1871, existed as a series of detached regiments, a certain number of which garrisoned the home stations, and a great number of which were scattered about in single regiments and detachments over the face of an enormous empire. India and Canada were full of far-detached stations, each consisting of a single regiment. The West Indies, in like manner, was so garrisoned. Australia, New Zealand, the Cape, Ceylon, the Ionian Islands, were all so occupied; and forty years ago, if one wanted to find an English garrison consisting of a group of four or five battalions, Gibraltar and Malta were the only ones that could be pointed out. At Home, Portsmouth, and perhaps Dublin, were the only large garrisons, and, as is well known, the other military stations were held by single regiments, and in very many cases by small detachments.

These regiments had no territorial connection whatever beyond the faintest shadow of a name. They had no reserves. They were as strong as the men actually present with the colors made them, but no stronger. If war was declared they enlisted locally what raw material they could, but in those days a regiment was a definite unit never varying, and the army was not only a long service army, but for many years a life service one.

We shall show further on that in 1871 a radical change took place in our military system, and the old organization, which was in every way a feeble one, disappeared.

8. Corresponding in every way to the military organization, the medical organization of the service in those days was wholly regimental, and remained so until 1873, when the departmental system was introduced. What is then the regimental hospital system?

It was a system by which the sick and wounded of the army were treated in separate regimental hospitals, each an adjunct of either a regiment, battalion, battery, or detachment, the military commanding officers of which were responsible for their efficiency. The medical officers who treated the sick were themselves specially commissioned for each regiment, wore its distinctive uniform, and confined their duties to treating the corps sick only. However numerous the various battalions or batteries in a garrison were, each had their own little hospital, wholly separate and distinct from every other corps in the garrison, whether as regards buildings, offices, instruments, medicines, medical officers, or sick attendants. The responsibility for the order and interior economy of these hospitals rested solely with the regimental or battalion commanding officer.

9. To the medical officers who acted under him were delegated the prescribing duties for the sick, but here their responsibility ended. The regimental commanding officer was responsible for the cleanliness and order of the hospital, and every day the subaltern on duty visited it to see that it was "clean and regular" in the same way that he visited each company room in the barracks. The hospital sergeant was a sergeant of the regiment, taken from the regimental ranks by permission of the commanding officer, and he and the nursing orderlies were returnable to duty at any time by the commanding officer's order.

The least irregularity in conduct, or neglect of duty by sergeants, orderlies, or patients, was investigated solely by the commanding officer, the medical officers having no responsibility in the matter beyond reporting it. The commanding officer issued all orders for the interior working of the hospital. The orders for the rising and going to bed of patients, their duties in the wards, and, in fact, everything not included in their medical treatment, was arranged for by the commanding officer.

To obtain a new key for the door, a new pane of glass for the window, or a new slate on the roof, he alone was responsible, and he alone could apply to the supply departments. The transport for the hospital and all its supplies save medicines were arranged for by the commanding officer. The medical officer was simply the captain, as it were, of the sick troop or company, and the hospital was worked by the commanding officer as any other company in the regiment.

10. The hospital authority and organization was centralized in the hands of the regimental commanding officer, already supposed to be very fully employed in other regimental duties, and it depended of course very much on his personal tastes how much or how little he did actively interfere. One commanding officer might be constantly interfering in the hospital and meddling in every petty detail, while another let things slide very much in their own way. Thus no doubt regiments would vary very much from one another in their interior working, depending on how much or how little the commanding officer cared to interfere. To whatever extent they did or did not interfere they were alone responsible, they alone were praised or blamed for its condition, and while such was the case, it was simply right that they should have the fullest authority in its working. Thus only can any system be worked. Whoever is responsible, to him give the power; blame him if he fails, if he succeeds, his be the credit. In this way only can order be preserved. The commanding officer's views were perfectly and strictly correct, and in a regiment there can be but one authority, *viz.*, the military officer in command.

11. For their medical treatment of the sick, the medical officers were responsible to the inspecting medical officers, who half-yearly or yearly visited the hospitals, and looked into the records of treatment and dieting.

In those far-off days, from thirty to forty years ago, the medical officers of the army were almost wholly regimental, were commissioned specially in each regiment, and could not be moved for any duty elsewhere save by the sanction of the commanding officer of the regiment. The medical inspectors had no power whatever over them, and they were altogether free from his control, save only in their treatments of the sick. I find that in 1844 there were altogether under sixty assistant surgeons not in regiments in the service, and as these men were scattered over a far wider series of far-detached stations all over the world than exists now-a-days, even one staff assistant surgeon in any garrison must have been a curiosity. These staff doctors were under the control of the inspecting doctors, and they were employed in filling up casualties amongst the regimental doctors, and in taking charge of commissariat and other garrison staffs over the empire.

12. Practically the medical department was wholly regimental, and there was not in the empire above three or four general hospitals, if indeed there were so many. A medical *department* properly so called did not exist, and every military hospital was a little one, forming as much an integral part of a corps or battalion as the regimental band or any other regimental institution.

13. When war came and general hospitals were, as in the Peninsula, established, their staff was made up of scratch contributions of individual medical officers and stray orderlies and recovered patients obtained with difficulty from regiments. Any attempt at ambulance assistance, or carriage or removal of sick and wounded, was done regimentally, and in every case general hospitals

were, when established, "unsuccessfully administered"—*vide* Sidney Herbert's Introduction to Medical Regulations, 9th July 1858. This regimental system of working the medical aid for the army was practically in existence until 1873, but since that date it has gradually been supplanted by the unification system.

The regimental system had at any rate one claim on the service, it was of long existence. It had a few advantages, it had many drawbacks, and both of these we will now consider.

SECTION III.—Supposed Advantages of the Regimental System.

14. The supporters of the regimental system of army medical organization claim for it advantages on three grounds:—

A.—That the regiment, battalion, or battery, had its hospital complete and ready at all times in peace and war, and the regiment was therefore perfectly independent, medically speaking, of the army as a whole in consequence.

B.—That the medical officers being constantly with the same regiment learned to know the men, prevented scheming, and thus benefited the State.

C.—That it formed a pleasant home for the medical officers of the service.

These we will consider in order.

15. *That the regiment, battalion, or battery, had its hospital complete and ready at all times in peace and war, and was therefore perfectly independent of the army as a whole in consequence.*

The supporters of the regimental system sit with eyes blind-folded as to the extraordinary changes made since Lord Cardwell's time in the service.

They seem to think that because the word regiment remains that the army is still regimental in the old sense. This is far from being the case. In the old days a regiment was a definite fixed unit, practically the same in number and organization in peace or war, and averaging 800 men at all times. It was, in fact, just as strong as the men serving with the colors made it, but no stronger. There was no local tie whatever, no reserve of any kind, nor any means of supporting the regiment in the field by supplies of trained reservists. Under the old system it was known then that 800 men would have an average number of sick, and a definite provision was made for them on this estimate. To-day all this is changed. The regiment is no longer the unit for the army, and the brigade has become the unit.

In peace a regiment will be perhaps 400, perhaps 450, strong, and when the army is mobilized it will be suddenly swelled up by calling in the army reserve, the militia reserve, the drafts from the linked battalion, and the brigade depôt to 1,100 or perhaps 1,200 men.

Long service with the colors for the private soldier is dead, and small *cadres* and large reserves will be the rule. Where, then, is the regiment in its old sense? Simply it does not exist. For the military commander it practically matters not at all that his regiment is so suddenly increased. His reserve men will join him clothed, armed, and equipped, and in our service food-supplies and ammunition are not borne regimentally but supplied on an army basis. It matters little then to the military commander how the regiment swells its numbers provided rations are forthcoming.

16. But if the hospitals were to be worked regimentally, on what basis are we to reckon? Shall each regiment have enough medical officers, orderlies, and equipment for the peace establishment and the small skeleton of 500 men, or

for the war footing and the full field strength of 1,200? What about the orderlies and nursing staff? Are they to be entertained all through peace to await war, or are they to be always on a peace footing? How about the bedding and clothing, medicines, instruments, and such like? Either we would have a crowd of idle unemployed men in peace or a deficient number in war, the first entailing tremendous expense in peace, the second certain disaster in the field. But in addition to this we all know that no trustworthy regimental average of sick or wounded can be formed. Position in attack in battle, exposure to a heavy fire, or unhealthy camp sites, may always cause one regiment so exposed to suffer heavily, while other regiments in the same division probably escape altogether, so that all our regimental calculations are liable to be thrown out, although divisional calculations generally will maintain an average.

17. Of the frightful expense of maintaining a swarm of regimental hospitals and the absurdity of seeing ten or twelve distinct regimental hospitals marching in rear of a single division in the field, we shall treat hereafter.

The outbreak of any epidemic disease or any heavy sickness threw out all regimental hospital arrangements in peace, and in war heavy numbers of wounded likewise disorganized it. Further, the new army organization rendered it obsolete, and it is now supplanted by central garrison hospitals in peace and large divisional field hospitals in war to the great advantage of the service in every way.

18. *That the medical officers being constantly with the same regiment learned to know the men, prevented scheming, and thus benefited the State.*

Much baseless sentiment has been expended by officers wedded to the old system of the army on what is called knowing the men. Here again there is a failure to grasp modern changes in army life. All men who know the army life know that in the old days a soldier enlisted in the army for life, and could only get out by purchasing his discharge or by invaliding. In 1835 twenty-one years' service was introduced, and in 1847 the ten years' Limited Enlistment Act came into force, but practically, until 1870, the soldier re-engaged, and the army was until then a thoroughly long service army without any reserves. Since that time all has been changed. Men now enlist for six years with the colors, and six years in the reserve passed in civil life; but many thousands of men have gone to the reserve at three years' service, and owing to the linking of battalions and the interchange of men between them and other causes, a regiment now is continually changing its component parts. Men pass through the army in a way never dreamt of ten years ago. The army has become like Niagara. The cataract goes on it is true, but each individual drop of water is ever changing. Soldiers now will not spend their whole lives, or indeed any long portion of them, with the colors as they did in the so-called good old days before 1871, and the old long service regimental feelings have widened out into an *esprit d' armee* little felt before. The mere regimental tie is quite weakened, and in India men now volunteer from corps to corps without the least hesitation whatever, often as many as 300 going way *en masse* from a single battalion. This shows how the wind is blowing. If the pre-Crimean doctor knew the pre-Crimean soldier, it was because, under long service rules, both served long years, in fact lifetimes, together, but that is now all passed away with the introduction of short service systems. Knowing the men in the old intimate way is quite impossible either for commanding or medical officers, and is indeed not essential.

19. On the subject of the detection of schemers, it may be said that in the old continuous service and long service army, *malingering* or shamming sick by the soldier was most common, and indeed rose to the dignity of a fine art, so carefully and thoroughly did the old soldier study it. Marshall, an army surgeon of the old school, who wrote some 40 years ago, considered it one of the most essential duties of an experienced army surgeon to be able to detect schemers. Medical officers became experts in such studies and could make a name by it.

To-day *malingering* simply does not exist. Short service, rational treatment, easier lives, and the facility of going to the reserve, removes from the soldier the necessity of scheming sick as they did in the good old days, and it is never now seen. It was the bugbear of the old army, but the diamond-cut-diamond stories of clever schemers and still sharper doctors are now merely traditions of the mess tables of the army.

20. Again, every individual soldier in the army has now a special medical history sheet. The old army never had this history, as it was not introduced until 1859. A more inquisitorial or a more useful document does not exist in the service. In it is entered the age, weight, lung power, pulse, and indeed every possible medical particular about the man it refers to. Every disease, ailment, vaccination, and in fact every medical item of any kind connected with the man therein is entered with the treatment, cause of disease, &c. This sheet follows a man every where he goes to, and finally is forwarded to the Director-General for statistical purposes at the termination of the man's service. No civil doctor has such a record of his patients. It is truer than even a patient's own statement, as it is a record made by a physician, and it avoids the erroneous ideas of their diseases patients often form. With this document a man can be sent to any army hospital or before any army doctor, and at once his medical history is seen.

21. This disposes very much of the "knowing-the-men" question, but we should remember that the soldier is likewise drawn from a class always treated in civil hospitals, rarely having any personal medical attendant, and the medical men who do treat them in civil life are not bound to them by the ties of army comradeship that binds us so intimately to the soldier.

22. Very constantly, too, we may see it advanced that a medical officer will take an interest in the men of his regiment which he would not take in a strange one. If any medical officer makes such a statement he is doing a very wrong act, and one perfectly indefensible. Considering that in all general hospitals in the field, in all convalescent depôts, and indeed in numerous other situations, the men must, under any organization, be treated by strange medical officers, any medical officer who thinks in this way should not remain in the service. It is of course the merest assertion and quite devoid of any foundation. Any man who wears the uniform of England should, if sick and weak, be of equal value in our eyes. This is the true basis to work upon. We see, then, that all knowledge of the men in the old way is impossible under short service rules, that officers and men will be constantly changing in every rank and grade, that scheming and malingering have disappeared, and that the medical history sheet tells us each man's previous history.

23. *That it formed a pleasant home for the medical officers of the service.*

This is another statement which melts away on examination. It cannot be denied that under the regimental system several hundred army medical officers had a definite home in a regiment, but we cannot ignore the fact that in 1873 at least 300 officers of the department never by any possible chance could find any regiment to get into, as of late years the army medical staff not attached to regiments has largely been increased.

This is quite well known to all medical and military officers. I find that in 1844 there were fifty-nine staff assistant surgeons, in 1872 there were 228, besides a very large number of staff surgeons, and this number existed at a time when every regiment had its regular complement. Were these officers never to have any home? Or were they to wander over the world for ever? As I shall show further on this very homelessness of the staff doctors tended very much to injure their *morale*.

24. It would be absurd to deny that throughout the entire army, in every rank and grade, the regimental tie has of late years become much weaker.

Regiments were in the old days so isolated in far-detached colonies that the officers were forced *nolens volens* to live more for one another, and the feeling of regimental brotherhood had not received the shocks it has of late years sustained. In the infantry the double battalion system, the linking of regiments, the selection system, and in the artillery the absorption of the Indian artillery and the system of Indian service, have all tended to weaken the bond that in the old days tied regimental officers together. The withdrawal of regiments from lonely colonial quarters, the abolition of Canada, Australia, New Zealand, the Ionian Islands, the weakening of the West Indian and Cape garrisons, and the concentration of the army at home, have rendered officers very independent of the regimental tie as it was of old. In the old times, without steam, without railways, without overland routes, officers lived in their regiments from years' end to years' end without leaving them. To-day it is quite the reverse. Leave is easily gotten, and steam carries one every where. The concentration of the army at home is most evident: Aldershot, Shorncliffe, the Curragh, the increase of the garrisons at Plymouth, Dover, Portsmouth, and the abolition of petty detachments, have brought regiments together in a way never known even twenty-five years ago. Regiments in the old days seldom met; to-day between big camps and autumn manœuvres they are almost always together. The old detached regimental organization, or attempt at organization, has given way to a real *army system*.

In India the transfer of the Company's troops to the Crown has brought the local artillery and infantry under English rules, and now it is rare to find any garrison consisting of a single regiment. In the old day it was quite the rule every where in the empire. All these changes have weakened the regimental bond, but developed an army feeling unknown before the Crimean time. Every military officer knows this, and no one can deny that regimental brotherhood is not what it used to be.

25. For the medical officers the tie that bound them to their regiments was of late years becoming every day less marked, and the average service of each officer with his regiment was, in 1873, not more than three years. The increase in the non-regimental medical staff and the concentration of regiments in large camps in England and Ireland, and the withdrawal of corps from detached positions in the colonies, have all tended to draw both regimental and staff medical officers together, and to weaken the old regimental ties which were for the doctors so essential in the old army day, but are now not only of little necessity but positive drawbacks. The idea of unification and modern medical corps organization for ourselves has been gradually developing itself amongst the officers of the department, and the memory of the disasters in the Crimea, the experience of recent European campaigns, the wakening up of the medical officer to study the question of foreign medical organization and the great organic changes in the English army organization, have all furthered this movement.

26. In addition to this the many drawbacks attendant on the regimental medical system from its social aspects, and the friction it often caused between the medical and military officers, and the marked tendency of the regimental system to depress us as a unit of the army, cannot be ignored. All these things have stimulated the desire so strongly developed amongst very many army doctors of drawing ourselves closer together on a thoroughly efficient working medical basis suitable to peace efficiency and war needs, and these views are now gradually spreading. When fully understood by the military officers, the medical officers, and the medical world in civil life, the aims of the unificationists must certainly find many sympathizers, as it appeals to the *esprit de corps* of the military officer and to the professional spirit of our brother-doctors in civil life, as will be shown further on.

27. Now in every garrison at home and abroad the officers of the Army Medical Department form a separate and distinct corps of themselves, as united and compact as the royal artillery, the engineers, or any other branch of the service.

They now serve under their own chiefs, work their own hospitals, wear their own uniform, and are perfectly free from any deadweight.

The regimental and the staff doctors have merged in a department, able, if it wishes, to develop a grand tradition and an unblemished name. One hundred and seventy years of regimental sub-division saw us in 1873 broken up, weak, inefficient, and devoid of unity or of *esprit de corps*. Let us see what a change will be apparent in 1883.

SECTION IV.—Drawbacks of the Regimental System.

28. We now turn to consider the other aspect of the question, or the drawbacks and weak points of regimental medical organization. The medical corps of an army exists on two grounds—*1st*, that during war, when the safety of the State depends upon the efficiency of the army, there should be a thoroughly good hospital system with officers, attendants, and appliances of every kind ready to assist the soldiers in their struggle with wounds and sickness; and *2ndly*, that during the longer eras of peace the best medical advice and the best medical appliances procurable, should be available for the soldier, and that intelligent advisers should exist capable of guiding the military commanders on hygienic and sanitary questions affecting their health and physique. The regimental medical system of the English service abolished in 1873, in my opinion, failed on all these points, and this statement can easily and clearly be proved to all who impartially consider the question.

29. It failed, in the first instance, as a war organization because it taught us all to trust to a system that could never be worked in the field, and would certainly paralyse all medical efficiency there; and it failed in the second by interfering with the union of the army hospitals at one centre in every station where, with first-class appliances, suitable books and instruments, and, far and away, above all, the advantages of learning our professional work from each other, it kept us divided in petty little hospitals, where it was impossible to learn from one another, where interchange of professional views was impossible, and where the knowledge of the senior officers was lost, or the want of experience in the younger ones uncorrected.

30. Sidney Herbert, Lord Herbert of Lea, was without doubt the man to whom the English soldier owes an immense debt of gratitude. Animated by the truest sympathy with the soldier, Sidney Herbert remodelled the medical service of the army, and remodelled in such a way as to do good to the soldier and also to the surgeon.

The only pity is that his lamented and premature death took place at a time when our army was still running in the old fashioned grove and before any of the recent organic changes in organization had been introduced.

Had he survived to see the present day, there is no doubt that his views would have been thoroughly in accord with the unification ideas. When Sidney Herbert lived the old regimental organization of the army was in full swing. There was as yet no system whatever in our military arrangements. The great awakening of 1866 and the still further rousing of 1870 had not yet occurred. The army still consisted of a series of detached regiments wholly unconnected with each other or with reserves. The militia was undeveloped and the volunteers did not exist, and the only way of making England stronger when war threatened, was to rush into the labour market and enlist 10,000 or 20,000 more raw recruits. Those primitive days have all passed away and now seem centuries distant from us. At last we have a military system which we, in truth, never had before, and the question of English army organization is now in every body's mind. Then the question simply did not exist at all. In his day, too, our army was still, as we have pointed out, detached in far-scattered colonies, where regiments rusted their lives away and learned nothing whatever. Now we have few troops in the colonies, and the regiments are concentrated in England instead.

This, too, has involved a great change, and medical organization must keep pace with it. We shall tabulate in order the drawbacks of the regimental hospital system.

31. *(A).—Change in our Military System Regiments no longer the unit of organization.*—This being the keynote of the whole subject, it is necessary to constantly refer to it.

We pointed out that until 1870 and Lord Cardwell's administration the regiment was the basis of all army organization. It was in those days a definite unit. There were 800 men in each regiment, and in peace and war it remained much the same, save only by the increased enlistments made when war was declared. To-day this is quite changed. The regiment is now a weak cadre or skeleton of officers and non-commissioned officers engaged in training the private soldier who, when fully trained, passes into the reserve in civil life as a right after six years' service, but constantly after three years' service with the colors.

These reserve men, when war is imminent, will return to the colors, and with them will come the reservists from the militia battalions forming the militia reserve, and also the volunteers and drafted men from the linked battalions of the line. Let us take the 1st battalion 25th regiment as an example.

Say, it is stationed at Aldershot, and war being imminent the order is given to mobilize. On the day the order is issued the regiment at home is 480 strong, consisting of the officers, the non-commissioned officers, and the young soldiers serving with the colors. Its brigade depôt is at York; its linked militia battalions are the 2nd and 5th West York militia; its reservists belong to the same Yorkshire district.

32. At once on the order to mobilize being received the regimental reserve in civil life hasten into York to the depôt, and are armed and clothed to the number of 400 men.

The depôt of the regiment permanently located in York furnishes 100 more men, being the young depôt soldiers of the 2nd battalion then abroad. The two associated battalions of militia are called out, and the militia reserve from each 70 strong, or a total of 150, join the reservists and the depôt contingent in York. The whole, to the number of 650 strong, are put into the train, armed, clothed, and equipped, and arrive in Aldershot five days after the order to mobilize issued.

At Aldershot they join the regiment and are told off to the companies. As there is no hutting room, tents are drawn from the army store depôt, and they are sheltered. The commissariat, warned of their arrival, issue 1,100 rations instead of 480, and all goes well.

33. But how about the hospital? Let us imagine it under the regimental system. The 480 men who formed the original regimental strength having only an average of about 30 sick, needed only two medical officers at most to look after them, and with them is a hospital sergeant and four or five orderlies—a staff based on 480 strength. The medicines, supplies, the bedding, all the equipment, the very building itself, is based on, say, 500 strength, but the new arrivals have made it 1,100 strong. What is to be done? At once confusion would begin. The medical officers would be too few, the sergeant would be overwhelmed, and the orderlies simply overborne by the increased sick, which rose at once from thirty on the day the order was issued to mobilize, to eighty after the 650 men had been under canvas for a week. What is to be done? Apply to the principal medical officer of the camp? But, as we are imagining, the regimental system is at work; he has little, in fact no power. It is true the 36th regiment is close by the 25th, and the 47th is also near, and the 58th is not a quarter of a mile away, and two artillery batteries are within easy distance. Each of these separate regiments has two medical officers, one hospital

sergeant, five orderlies, bedding, medicines, and equipment quite idle. They are not mobilized, having just come home from foreign service, and their medical staff are really quite idle, with perhaps 20 or 30 sick in each separate little hospital, each hospital having 20 spare beds in it. The principal medical officer is powerless to act; he cannot send one man of the eighty sick of the 25th into any other hospital, nor can he move an orderly, a sergeant, a medical officer, or a splint, or mattrass, or a pillow, from one of the hospitals to the 25th. The 25th hospital is disorganized, men are neglected, improperly nursed, and all goes wrong.

34. By stress of applying to the general commanding, the principal medical officer gets two medical officers detached to assist the 25th doctors. One comes from the 36th, and one from the 47th regiment. But not an orderly, a sergeant, or any supplies can be made available.

The 36th doctor is shortly after recalled to march away with his own corps, and perfect confusion remains.

Men die, the general finds fault, the press take it up, England is excited, and who is blamed? The medical department and the principal medical officer.

It is needless to say that he is wholly blameless. It is the system and not he that was wrong.

35. Thus we see that owing to the changes in our military organization, the abolition of the long service system, and the making the brigade the unit of organization, the system of regimental hospitals became an anomaly and eventually disappeared.

36. *(B).—In different peace hospitals.*—Under the regimental hospital system it was necessary in every garrison to have a separate hospital for every individual regiment, battalion, battery, or detachment, even if the regiments were, as in many existing garrisons, six, eight, or even ten in number. We had then in every garrison a great number of petty, roughly-furnished, poorly-equipped hospitals devoid of those modern improvements and arrangements found in every good civil hospital, and which in the end mean comfort and efficiency.

Thus special eye wards, infectious disease wards, detached wards for special cases were rarely, if ever, seen, because it was impossible, in a number of petty little hospitals, to provide such wards for every odd case that would occur in a single battalion or battery. No nation could afford to build six or eight perfect little hospitals in each garrison. To do so would be quite ruinous. How often have we not seen within a few hundred yards of one another two military hospitals each with its separate dispensary and store of drugs, instruments, and its petty wards, where it was impossible to isolate cases requiring special treatment.

37. Doubtless what we want, and what unification claims, is to build on in each garrison one central hospital complete in every way,—with eye wards, detached wards, lunatic wards, prisoners' wards, lying-in wards, children's wards in fact everything needed in a really good hospital.

There let the sick soldier be treated with every aid art can give him.

In the field things must be rough; they need not be so in garrison; there the sick soldier should have every comfort. Such hospitals could not be regimental, as one would have each regimental commanding officer interfering in various ways. They must be garrison hospitals under the officer commanding the garrison and the principal medical officer of the station. They two can arrange for the location of the sick and the uniform working of the hospital—a thing quite impossible, if six or eight regimental commanding officers, all of equal authority, were struggling for supremacy there.

38. We have now as a department the charge of the army hospitals, they are altogether in our hands, and we can make them the most perfect in the world. Heretofore with a series of petty hospitals—mere cottage hospitals adjuncts to every petty regiment or battalion—we never had in a garrison an institution fit to point to as a model English military garrison hospital, or fit to train a medical officer to the large requirements of an army in the field, or even of a large city civil hospital.

39. *(C).—Absence of libraries, chemical laboratories, and expensive instruments.*—To-day to carry out one's professional work thoroughly books are necessary; scientific magazines and professional journals are necessary; chemical laboratories are necessary; microscopes, laryngyscopes, aspirators, galvanic batteries, and a quantity of expensive instruments are necessary. While divided into petty regimental groups of medical officers serving by twos or threes in wholly distinct little hospitals in the same garrison, it was impossible for these essentials to be collected, or if collected, they would be a great cost to the Sate, and by dragging them about from place to place with a marching battalion they got smashed and injured Consequently in very many cases the instruments did not exist, no microscopes were to be found in a whole garrison, no libraries or books of reference, and, as a consequence, we lost the benefit such books could give us. Civil doctors have all these aids. They do not knock about the world as we do, and we cannot carry these things with us. What we need are gradually-formed libraries of reference, book clubs, and good instruments collected in the central garrison hospitals all over the world, and available for the use of all. In Peshawar or Halifax we would there find the instruments or the books we wanted, and not be, as we now are, destitute of these aids to professional efficiency.

40. The absence of books has been of great injury to us as a professional body. Heretofore there was no centre in a garrison, where all the medical officers could collect any, and they did not in consequence exist. A regimental hospital used to drag all its equipment, instruments, and records with it from garrison to garrison. Now these instruments and the equipment will remain permanently in each central garrison hospital, and books and such like aids and good instruments will be collected there to our certain advantage.

41. *(D).—Impossibility of obtaining skilled nurses and attendants.*—Under the regimental system it was impossible to obtain skilled nurses and attendants. The only post for a non-commissioned officer in a regimental hospital was that of hospital sergeant, of which there was but one in every corps. If he became smart and intelligent, he might any day be transferred to company duty because in the hospital he had no prospect of reaching the higher post of sergeant-major, or quartermaster sergeant, or of getting a commission as quarter-master or as ensign. The orderlies in a regiment were constantly unpresentable men who spoiled the appearance of the ranks and were hidden away as hospital nurses. If an orderly turned out intelligent and trustworthy, there was no possible way of getting him made even a corporal, so that any smart young man soon saw that to remain a hospital orderly was to sacrifice every prospect of regimental advancement. As a rule, they were ignorant, untrained men taken haphazard from the ranks. Nursing needs training now-a-days. A private soldier taken from the ranks at random is about as useful in a hospital as a raw recruit is on a barrack square, but training and teaching can do wonders with men. Under the regimental system if a regiment become sickly, or attacked with any epidemic disease, there were no orderlies available, and none could be applied for from other corps, as each regiment kept a definite number always by it. If there were few sick they were quite idle; if there was a high sick-rate they were worn out with fatigue. The true system is in no doubt the present army hospital corps one. We have a specially trained corps, specially employed in the hospitals, and specially promoted to corporal sergeant or commissioned ranks in the hospital corps if really efficient. If one garrison is perfectly healthy and another is sickly they can be moved at once to the sick station. There will not be in any garrison whole groups of orderlies lying idle,

while a few hundred yards away other hospital staffs are burdened with work. However sick the 25th were in the old days, the 26th, 27th, 28th, all close by, gave no help, nor could these hospital orderlies be transferred for duty in the sickly corps.

By the old arrangement the State lost in every way. To-day every man in the hospital corps can be utilized wherever he is wanted.

42. *(E).—Expense of the regimental system.*—If the old system was inefficient it might perhaps have been thought to have been cheap. It was quite the reverse; whether as regards medical officers, orderlies, and medicines, or equipments, it was very expensive indeed. It was necessary to keep with each corps at all times a staff of officials sufficiently numerous to meet any ordinary extra demand, and these officials went with the corps every where. It constantly happened that in the same garrison regiments varied in sick-rate very much. Take Portsmouth: say one corps has just arrived from India and was full of sickly soldiers, the other six battalions were very healthy indeed, yet all of them find the same detail of two medical officers. Thus five hospital staffs were perhaps quite unemployed, the sixth was never at leisure. England kept paying for some medical men who perhaps had very little to do, and however anxious the medical officers were for work, each officer was compelled to limit his duty to his own little regimental hospital.

43. In India the same system went on. Peshawar is an unhealthy station. Bareilly is very healthy. In the former, the sick have been 250 in a single regiment; in Bareilly 50 is a full number, yet in both stations the regimental staff for work was the same because the rule must be followed. Compare Meean Meer and Rawal Pindi, Chukrata and Morar, Secunderabad and Bangalore, Poonah and Nusserabad; in each of these cases there was a marked dissimilarity in the sick-rates, yet the same strength of staff was detailed to treat them. Under the new system this cannot occur. If Meean Meer is unhealthy, let the medical staff be numerous and concentrated there. If Chukrata is healthy, reduce the staff to suit the place. In this way all goes well, economy is promoted, efficiency is developed, and every official is happier. As regards drugs, instruments, equipment, in all these needs the old system was expensive and injurious, the new economical and efficient.

44. *(F).—Utter failure in war time.*—If the regimental system was expensive in peace and injurious to professional efficiency in war time, it was simply unworkable.

The medical department under such a system was perfectly paralysed. It tied the hands and feet of the directing medical officers of the army, and then blamed them for not walking and working. Every regiment that embarked for Crimea, or that in 1871 would have embarked for any continental war, would have had its medical staff of three doctors, a sergeant and some orderlies, and its little regimental hospital with its little share of transport and equipment, all marching with the regiment. Fancy an army corps so organized with perhaps 30 battalions of infantry, 6 regiments of cavalry, and 10 batteries of artillery, each of them with its little hospital. In all 46 separate hospitals, each, say, with even two medical officers, or, say, 100 surgeons, 46 hospital sergeants, and some few hundred of regimental orderlies. Let us imagine all these separate hospitals marching in the rear of the columns, each perfectly independent of every one save the regimental commanding officer, each hospital staff in separate regimental uniform, whether infantry, hussar, highlander, gunner, or sapper, &c. Imagine then the army corps forming into order of battle and attacking such a position as the Alma Hills. Ten battalions, two cavalry corps, and four batteries, alone come under fire, and they alone are full of wounded. The medical staff of the regiments under fire are at work night and day, and still men die unattended. In the meantime three-fourths of the doctors are quite idle because their regiments have not been under fire, yet no one can move them to the assistance of the worn-out doctors of the wounded corps. The principal medical officers are in despair:

but what can be done? Yet this was the system at the Alma, and it might have been the system still were unification not introduced.

45. It left the medical department a sham, and paralysed all efficiency. It seems impossible to believe such a system can find supporters. Not a single military writer of any character whatever supports such a system. It was simply courting ruin to carry it out. The lesson of the Crimea we have never forgotten. It was there in the tents of that devoted army that the thinking medical officers of the service first raised the question of unification; and to-day, after twenty years of patient waiting, it is an accomplished fact.

46. Wolseley, in his Soldiers' Hand-book, says, at page 55: "Our present system of regimental hospitals is unsuited for a large army, it is very expensive and too cumbrous for rapid and constant moving." Again, at page 59: "It would be absurd to attempt such a system (regimental conveyance of sick) with a large army in the field."

47. Sidney Herbert's Commission considered that regimental hospitals are unsuited for field service, as they are "unable to adapt themselves to the requirements of an army in the field."

48. Sir Henry Storks, speaking before the short service system, considered the regimental hospital system "essentially a peace organization."

49. Surgeon-General Mouat, writing of the New Zealand campaign, considered it a wholly inapplicable system in the field.

50. During the American campaign of the rebellion the hospitals were all worked as an army department.

In Germany, where the medical service is thoroughly efficient and in many ways to be copied, they long ago abandoned the system of regimental hospitals and now have the most perfect departmental system in Europe, wholly apart from any regimental organization. Italy has made the same change.

51. Russia, which has made great strides in organization, has done the same thing and made her service wholly departmental: and France is doing the same.

52. The truth is, regimental hospitals have now-a-days not one single argument in their favor, and the moment the subject is inquired into the fact becomes quite evident.

By having a separate medical corps organization wholly under the principal medical officer and the general officers commanding, a system of war hospital can be devised, perfect in every way, complete in every want, and as easily moveable and detachable as a battery of artillery.

The garrison hospital in peace and the divisional hospitals in war worked by the army medical corps quite as an army organization is the true principle for us to carry out, and this will be further treated of under the unification section.

Any other system was frightfully expensive, injurious to professional efficiency, hopelessly unfitted for war service, depressing to the medical officers socially, and quite at variance with the organization of a short service and territorially organized army such as ours now is.

53. *(G).—Prevented all training in administration of hospitals.*—Under the regimental system the medical department was quite untrained in administration. While in a petty regimental hospital the medical officer was not required to deal with any large medical question, of sanitation or administration, nor to have any responsibility outside the walls of his little hospital. The

commanding officer, the adjutant, and the quartermaster of the regiment did all the transport, discipline, and all other non-prescribing duties. The principal medical officers of divisions and districts at home and abroad had no control whatever over the hospitals or the medical officers of regiments. If a principal medical officer got ill, or went on leave, or retired, he was always succeeded by some surgeon-major of a regiment, who up to that day had never dealt with any larger question than those arising in his own little regimental hospital. There was no training such as a good central garrison hospital can give us all, and a man stepped at once from the charge of 30 or 40 sick to the direction of a division of the army, say 10,000 strong.

54. No wonder that such men so trained in the enervating regimental hospital system were at first, and for years, poor administrators, and that the department has always been weak in such points.

To-day this is all passing away. We have now in most garrisons central hospitals taking in all the garrison sick and giving them all good nursing and attention.

Besides the principal medical officers of divisions and districts we have "senior medical officers" in every garrison who are daily learning to deal with large questions affecting the several corps in garrison, and who are daily controlling numbers of medical officers, arranging for their duties; distributing the hospital corps, and gaining practice in administration, such as never would be gained before in petty regimental hospitals.

The power of individual commanding officers of regiments is relegated to its true province of dealing with the discipline and training of the private in the ranks, the medical department taking sole charge of the same man when ill without any regimental interference. In this way we are becoming efficient, and such we never could become in the old days of regimental subdivision.

The department is at last beginning to exist as a department of the army, and not as a mere petty adjunct to every battalion or battery.

Our feeble administration and organization in the Crimean campaign, when the regimental system was supposed to be in working order, are well known facts, yet the Crimean campaign should have been a singularly easy one as far as administration was concerned, as we never marched 100 miles the whole time, and we really were enclosed in a small tract of land bounded on one side by Sebastopol, and on the other by the Russian field army and the sea.

55. *(H).—Prevented all development of professional knowledge amongst the army medical officers.*—Unless professional men, whether lawyers, doctors, soldiers, sailors, or what profession you choose, meet and discuss questions connected with their work, progress will never occur. Observe how in civil life the medical profession have their meetings to read papers on various questions and to have discussions and arguments. Consider what advantages arise from medical men meeting in their hospitals and learning from one and another. With us in the army under regimental system this invaluable meeting together was quite impossible. Each little hospital, however close by the other, was wholly independent, and a medical officer dare not enter another hospital unless at the request of the medical officer in charge. How often have we seen an artillery hospital not 100 yards away from the infantry hospital—the former perhaps in charge of a young officer just out from Netley, very ignorant perhaps of tropical disease and Indian routine, the other directed by an officer of long service and knowledge, yet powerless to interfere.

56. How often, too, have we seen a well experienced officer in charge of a small battery hospital and close by a regimental hospital in charge of a junior, yet each wholly independent in every way of each other.

We can never be efficient and thoroughly professional unless we meet together, unless we can consult and advise with one another. We can never promote true professional *esprit de corps* unless we are drawn together in our hospitals, and that the young officers meet the older officers and learn of them, and the older ones meet the young and advise with them, and indeed perhaps learn from them too. We want to improve; we aim at efficiency; by concentration alone can it be achieved, and by such assistance we can develop overselves far more than we could when scattered over a garrison isolated from one another, with little opportunity for professional discussion or consultation. Unification aims at this. Professional efficiency in peace, war efficiency in the field, and on no other basis can these aims be secured. Regimentalism means letting professional knowledge go to a low ebb in peace, and in war it means disaster in the field. Choose then between the two, for the choice must be made. There can be no compromise, nor any medium course.

57. *(I).—The question of compromise.*—It has been proposed that a compromise system should be introduced for working the medical service of the army. It advocates in peace petty regimental hospitals worked on a regimental basis by regimental officers to be the rule, but when war is declared at once, general hospitals to be organized and worked by the regimental officers concentrated together. It is needless to say such a system is quite out of the question. If an army has one system for peace and another wholly different for war, disaster is as certain as anything can be. Men must be trained in peace for war. That is the basis of war efficiency, and neglect of the rule was the cause of our Crimean failures. To advance such a theory to-day is to organize disaster, and to make ruin certain. Imagine the English army, with its medical system worked regimentally, suddenly embarking for Antwerp. It left England with a regimental system, it disembarks with a sham departmental system.

58. That is to say, a crowd of regimental officers never trained in large hospitals, but taken from petty battery and regimental hospitals, are suddenly massed in large general hospitals, or put to work divisional field hospitals in a campaign. As in peace the regimental commanding officer and the regimental quartermaster did all the discipline and transport work; the regimental doctors know nothing of it; not one of them even saw a large army hospital worked. The senior medical officer perhaps comes from a battery of artillery and now takes charge of a division of an army and a set of army hospitals for 800 sick.

A crowd of medical officers each differently dressed, a crowd of hospital sergeants drawn from every corps, and a mass of orderlies without cohesion, without *esprit de corps*, grumbling to get back to their regiments, impatient of all discipline and control by officers and sergeants they never heard of or saw before. Transport brought from various quarters. A field hospital mobilized at a week's notice. No hospital corps. No fixed routine of work. Regimental commanding officers clamouring for their doctors and withdrawing them when most wanted! Doctors struggling to get away to their regiments, no co-ordination nor departmental *esprit de corps*, and directing all a principal medical officer whose duty in peace time is to inspect diet rolls and prescription books, and we have all the elements of disaster ready at hand.

Such a system of compromise is impossible.

59. In the army we know of no compromise. Everything is laid down by rule. A system exists, or it does not exist, and it can never be taught by any soldier or any army doctor that it is possible on the eve of a campaign to change an existing army system.

60. Try it in a battalion; try it in a battery of artillery. Sub-divide a battery of artillery in peace into single guns and attach them for discipline and order to each regiment or battalion.

Let the regimental commanding officer arrange all questions of discipline administration, and transport, and let the artillery wear the uniform of the regiments to which they are attached. Then, when war comes, draw them together, group them in batteries, and what will be the result? Certain disaster from want of cohesion, and *esprit de corps* and practice together in peace. These results are certain, and no one can deny them. It cannot be too often repeated that in any army the only real basis of efficient working is to make the peace routine so like the war routine, that a soldier cannot distinguish one from another. The more this is aimed at and carried out, as it has been done in Germany, the nearer is efficiency, and the more variation that is allowed to be developed between peace customs and war requirements in any army, by so much the more is disaster organized and ruin made certain.

61. Sooner than have any compromise system, it would be better to stand by the old regimental system than on the eve of a campaign to change every arrangement. The old proverb about the danger of swapping horses in a ford holds good here.

62. *(J).—Prevented all station tradition of disease.*—Under the regimental system if a regiment marched into a foreign station it brought with it its own three doctors.

They might have experience of the new place; very often they had not. Numerous mistakes have taken place in this way from ignorance of local diseases and absence of local knowledge in sanitation and hygienic precautions.

Now under the new system the garrison medical staff being permanent regiments will come and go, and the army medical officers will remain and carry on the knowledge gained locally from one medical officer to another. In this way many mistakes will be avoided.

63. *(K).—The regimental system ruined true "esprit de corps" amongst the medical officers.*—In the old army days before the Crimean war the regimental system was excellent for medical officers. Regiments were hidden away by themselves for years in outlandish colonial stations where no two regiments ever met. In such days all the army medical officers were regimental officers, and practically no medical staff existed.

Now, under the altered conditions of army life, the concentration at home, the abolition of colonial garrisons, and the great increase of staff doctors who never could find any regiment to get into it, is quite out of date.

Instead of the Army Medical Department being, as it ought to have been, an army corps thoroughly imbued with *esprit de corps*, high professional and army feelings, and full of its glorious traditions, it was divided and split up into two main sections. On the one side were the regimental doctors, the lucky men who got into regiments, escaped all the drudgery of the army life, had comfortable messes, and were never moved about the country. On the other side were the staff doctors, 300 strong, a body of officers whose unhappy position it was impossible to describe in terms too strong. If the regimental system gave a home to half the army doctors, it threw the other half hopelessly on the world.

64. The condition of the medical staff officers, 300 of whom, through no fault of their own, could never get into regiments of late years, was most painful and objectionable under that system. I do not know any body of officers in Her Majesty's Army who suffered as they did. They were perfectly friendless and homeless; they were the drudges of the department; they were literally never at rest. Every move of troops, every outbreak of disease, every possible unpleasantness in army life, weighed down the old staff assistant surgeon.

His life in India was the joke of the service in every mess. Literally no man cared for them. They flitted from station to station, and from cholera camp to cholera camp in a surprising way.

They had no homes, no messes, no circle of friends. Their nameless graves are scattered over the land in no small number. That they were deficient in discipline and often injured in their *morale* was no fault of theirs it is easily explained.

65. It rose from the division of the department into two sections of regimental and staff officers. The former once gazetted to a corps could not be moved from their corps for any detached duty, or if they were their colonels immediately worked on the military authorities to get them back.

The principal medical officers had no authority over them, and, as a consequence, the staff doctors whom they could move came in for a continual round of moves and unpleasant duties. When a staff doctor was attached to a corps he was often given the least inviting duties to do, and this itself drew down official rebuke from the higher medical authorities.

66. However senior a staff doctor was in the army, in any regiment he was attached to he was junior to the young boy fresh from Netley, if that boy had a regimental commission. This alone was a most depressing rule. The staff doctors themselves were the doctors left after every regimental commanding officer had picked out from the medical staff the doctors he liked and got commissioned in his regiment, and a further sorting was made by many of them themselves getting into the regiments they liked. In this way the army medical staff contained some men who needed very much the guidance and companionship of their brother-officers to teach them the army customs and traditions, and that companionship they never had. Their lives were spent on the march, on boardship, in epidemics, in every place but in a comfortable home. With the regimental people it was quite the reverse. Often by no special good quality a man got a regiment and was at once removed from the drudgery of the staff. This system ruined the prestige of the army medical staff. Every young medical officer tried to get out of it, struggled to get into a regiment, and wearing its uniform and safe under its protection, cared little for principal medical officers for ever afterwards.

It was this hard life of the staff doctor that ruined the prestige of the Army Medical Department. Every one thought that when unification was brought in it would bring us all to the same level as the old staff doctor. This is far from being the case. Now the garrison staff of doctors are a permanent body rarely moved. If one regiment is sickly in a garrison and another healthy, a staff doctor is not wanting to be sent to the place because the doctors have all equal work and share alike.

In former times the doctors of the healthy corps in the same garrison remained idle, and a staff doctor came from afar to assist the sickly regiment.

For movements of corps and such like, the moves are now spread over the whole staff, and as each man takes a share and returns to his station when it is over, a trip in a year is about the number a man has to make. There is now no class in the Army Medical Department specially told off for unpleasant duties.

The unpleasant duties have almost disappeared. We are now freed from mess and band subscriptions to regiments, and in the large garrisons messes of the army medical staff can soon be established. We are rapidly gaining a position we never had before, and as each man remains for a long time in each garrison and makes friends, he is no longer the wanderer as the old staff doctor often was. The department is developing the grand tradition of duty done in the old day, and we are existing as an army department that will

soon stand high in the service, and daily increase in influence, professional knowledge, and efficiency in the field. Divided in regiments, we gave to them our *esprit de corps* and our strong attachments, forgetting that our department should be dearer than all in our eyes, and that its tradition is our best boast and truest standpoint to work from. Working from that basis we can devote our energy to the comfort and happiness of the sick soldier, and can give to the department the devotion and attachment so often given to our old regiments. We have a department to live for, and that we never had before.

We too often forgot in the old days that a department did exist, and divided by two and three amongst different regiments, all departmental *esprit de corps* was at a low ebb. To-day it is different. We are drawn close together, and a feeling of comradeship and brotherhood is developing little felt before. Under the unification system we can be more useful to the soldier, be more perfect doctors, carry on field duties more completely, and be in every way more efficient than under the old system now disappeared. An organization such as we now have gives us a fair field to work in, and unties our hand to do this work.

67. Again, regimental sympathizers seem to forget that by the old system the staff doctors of the army often would have been the responsible officers for working the base general hospitals in the field.

That is to say, after every officer of any smartness was safely billetted in a regiment and free from his medical director's interference, the remainder left would do to work the great hospitals at the base of operations.

What order and what efficiency could have been effected under such a system? The officer who all through his service had never been disciplined, and had done little save the drudgery of the department, and who had always been junior of his rank in a regimental hospital, suddenly appeared as a director of a general hospital!!

68. *(L).—Minor drawbacks of the regimental system.*—No one with any idea of organization in an army but must agree that it is essential to efficiency and order that in the field or in quarters an officer or soldier should be recognized at once by his uniform. Let us imagine artillery men or engineers all wearing the uniform of the various infantry battalions in any army, and then ask a private soldier to identify the gunner or the sapper. Such was the rule with us under regimental organization. We had a crowd of varying uniforms in the department. Few officers could identify the medical officers from the others in full dress; and in undress it was wholly impossible. Some proofs may be useful. We begin with the cavalry. In full dress uniform the cocked hat distinguished the surgeons, and many corps ignored the ugly black cross belt and permitted the doctors to wear the regiment gold belts. But in undress it was perfectly impossible to distinguish any medical officer from any other officer. They wore the same dress in every particular. In the old times in the hussar corps the only distinction was the black cap lines of the busbies, and few people in the army even noticed this distinction. In the horse artillery the dress was quite the same in full dress, except that the busby plume was black and the cross belt was departmental. In undress uniform the artillery doctors were in no possible way distinguishable from the other regimental officers, as they all wore the same sword belts.

I have myself seen the royal engineer doctors in former years wear the embroidered engineer cross belt, and it was also quite impossible to tell them from the other officers. In highland regiments it was also quite impossible, as all alike wore the feather bonnet, and the plaid hid any departmental belt worn. In the rifle battalions the only distinction was the absence of a pom-pom in the shako.

In undress uniform throughout the service a medical officer was undistinguishable. This may seem a small thing. It is quite the reverse. Try and consolidate a war hospital with officers, sergeants, and orderlies, all differently dressed in a dozen varying uniform, place them in the field for assistance to the wounded, and who can recognize them? Few soldiers could distinguish them, and few officers either. The true principle is to have one definite uniform for the medical corps of an army, whether officers, sergeants, or orderlies, and let it be easily distinguishable and never varying. In this way all the army know it and no errors arise. Such a uniform may be perfectly distinctive, at the same time it need not be ugly.

Esprit de corps is sustained and developed even by such petty things as the pattern of a man's uniform, and we want perfect distinctiveness without ugliness—a result not difficult of attainment.

69. *(M).—Unequal foreign service and irregular tours of duty.*—The medical department under the old regimental system was in a state of extraordinary chaos as regards the roster for foreign and home service.

Owing to one half of the doctors being commissioned in corps and battalions, and the other being staff doctors no uniformity existed. Some regiments never go abroad. Their medical officers were always in England. Some corps, such as the engineers and army service corps, never serve in India, hence their doctors escaped India. In India battalions of infantry remained twelve years, and the doctors had to remain out all that time without a chance of a change, while the staff doctors went home every five years. I have seen medical officers often out for ten and twelve years without a chance of getting home. In Ceylon the staff doctors serve three years and then go home. Regiments serve ten and twelve years. At home some staff doctors might remain two years; others who knew how to exchange and arrange matters were left in England. Unless an officer in the English army serves abroad in his earlier years he is quite unqualified for promotion.

He can never grasp the varying questions of hygiene and sanitation, or disease that daily arise in a wide-scattered army like ours, unless he has such experience.

Yet in a seniority corps such men, ignorant of the foreign routine, eventually became senior in the department, and perhaps claimed promotion.

To such promotion they had but faint claims, and even if promoted could be rarely efficient. Now we have a fair and uniform roster and a uniform tour of service for all. We are all benefited by it in a great degree.

70. Nothing need be said here of the friction that was often developed between the medical and other officers of regiments under the old system. That such friction did exist is undeniable, and the military and medical press teems with complaints on this head. By the new system these causes of complaints are reduced to a minimum, and a happier era is drawing for all of us.

In losing our regimental ties we gain an *esprit d' armee* never felt before, and our department for the first time stands forward on its own proper basis, not as in the past trusting to regimental support for existence.

Such a system ruined our professional feeling, and developed a false spirit of regimental *esprit de corps* that tended nothing to our improvement as doctors in any way, and however we may have gained *personal* esteem or regard for our services, no credit was ever given to the department.

This was the drawback of the old system. Every good service done by us was credited to the regiment we served with; every *faux pas* was set down to the fault of the long-suffering department.

But such a state of things cannot recur again. Now if we fail, we fail as a department; if we do good work, credit goes to our department.

SECTION V.—The Unification System.

71. We now turn to discuss the unification or departmental or non-regimental system of army medical organization.

Under this system the custom of having the hospitals of the army permanently divided into a crowd of petty regimental ones, mere adjuncts to regiments and battalions, will cease. The commissioning of the medical officers specially in separate regiments will be changed to a commissioning of them in the Army Medical Department. The sick in peace will be treated in central garrison hospitals wholly under medical administration, where a definite garrison staff of medical officers will take charge of them. In war time field and general hospitals, each perfectly complete, self-contained, as definite as a battery of artillery, independent of regiments in every way, and directed in their movements by the principal medical officers under the authority of the general commanding the army, will supplant the regimental system.

This plan of organization which is now the rule in every army worth copying, and which contains efficiency and economy in peace with thorough fitness for army service in war, is now being developed in our army, and its advantages may be tabulated in order.

72. *(A).—Localized responsibility in the medical department.*—We have pointed out the waste of medical aid and equipment that constantly existed under the regimental hospital system of administration, by the medical officers and the hospitals themselves being divided into petty regimental subdivisions, each immovably attached to single battalions and regiments, and perfectly unavailable either in peace or in the field for any army duty outside their own petty regimental limits.

All this waste of men and material will now cease.

Under the commanding general the principal medical officer of each district in peace, and of each division or army corps in war, will now have entire power of disposition over every medical officer, orderly, and every hospital in that district, division, or army corps. In garrisons at home and abroad a fixed garrison staff of medical officers forming a definite body of officers organized in every way, will carry on all medical duties there under the immediate direction of their own senior officer, presided over by the district principal medical officer and the general in command.

73. The senior medical officer in each garrison will be responsible in every way for the entire medical duties of that garrison. Under him the medical staff will treat the garrison sick in central army hospitals, over which he will have complete power of adjusting work, arranging orderly duty, and in fact directing every detail.

A medical officer will be detailed to each battalion or section of a camp in peace, and in war to each battalion or regiment to send the sick of his battalion or camp to the central garrison hospital in peace, or the divisional field hospital in war. Once admitted there the medical service will be responsible for the patient.

The medical officer will likewise treat such sick officers as may need his services under the instructions of the senior medical officer, but in the field such cases would likewise be treated in the divisional field or the stationary army hospitals.

A staff of medical officers will be detailed for the garrison female hospital, likewise a completely organized central institution, and thither all sick women and children of the garrison will be sent for treatment.

An officer of the medical staff of each garrison will be detailed by the senior medical officer to supervise the sanitary condition of the entire garrison, and in the field of the brigade or division as a whole. By due division of labour all the medical staff of any garrison will be equalized in their duties, the services of every officer and man will be made use of in a way impossible under the old system. If a garrison is healthy, the staff can be small; if it is sickly, the staff can be large in proportion.

74. The senior medical officer being responsible for all the corps in garrison, will be taught to deal with army medical questions and administration as a whole, and not as formerly as concerning his own little battery or battalion merely. The service will gain by having an officer of experience guiding every thing.

A hospital corps of orderlies, sergeants, and officers, specially detailed for hospital service and it alone, will conduct all nursing and routine hospital duties in camp or garrison under the orders of the principal medical officer.

The instruments, drugs, and equipments, will be under the control of the same officer, who can dispose of them as most convenient for the good of the service.

The garrison sick will be all treated in one central place, and our opportunities of learning our profession and of developing our professional efficiency will be greatly increased in consequence.

75. In war time perfectly moveable field hospitals as completely and independently organized as a battery of artillery, with a fixed definite staff, and copies in every way of garrison hospitals in peace, will be attached in certain proportion to each division or army corps. Their medical and nursing staff, will be especially trained, be wholly under the principal medical officer of the force, and the hospitals and the staff can be concentrated with a sickly division, or at the point of attack in battle, as easily as so many batteries of artillery can be concentrated. If one division be full of wounded and other divisions have none, the field hospitals, with staff of doctors and nurses complete, can be marched to the sickly or wounded division as easily as any battery of artillery is now transferred. If a part of a division halts, one of the field hospitals may halt with it. If a field hospital be full and cannot be evacuated it can halt by itself. If a division sub-divides for any special service, one of the three field hospitals, or two or all three, if necessary, can move with it. If even a single detachment move away the field hospital can sub-divide and again sub-divide without any single part losing its mobility and efficiency, and on again joining the head-quarters of its division or army corps it resumes its place with the field hospital, as in a regiment any company resumes its place in its battalion.

76. By this facility of ready sub-division and perfect mobility every varying strength of the force detached from the army can be supplied with a proportionate hospital complete in every detail, and the medical service secures an efficient and independent organization, enabling it to concentrate or to divide its services to the wounded or the sick of the army in a way impossible under the old system.

It can combine into a divisional hospital, or separate into a regimental section with equal ease.

We cannot again see the absurd sight of a crowd of regimental hospitals with their doctors, orderlies, and equipment lying unemployed and unavailable, while a few hundred yards away other regimental hospitals were crowded with

sick and the staff overpowered with work. Perfectly organized hospitals, complete patterns of medical efficiency with definite staff and equipment, can now be easily concentrated at any place or in any position.

77. A hospital corps exists, trained under medical direction, to remove the wounded from the field, to organize dressing places for them, and afterwards to hand them over to the field hospitals.

The field hospitals moving with the army, or, if necessary, able on special occasions to halt independently of it, eventually transmit all suitable cases to the more stationary hospitals in the rear; but whatever is done, is done by the medical service as a department. We know who is responsible, and what our wants will probably be.

78. Think what a comfort it would have been to all, and what a different aspect the Crimean campaign might have assumed, if, after the Alma, the army, freed from all responsibility about its wounded by being able to halt four or six field hospitals for even a few days at the riverside, could have hastened on in pursuit of the disorganized foe.

But it was impossible. Trusting to regimental organization and imagining that the regimental system of an army in every department was sufficient in every way for field service, there was no organization able to detain a suitable medical staff to carry on the work; and as all the regimental hospitals, the majority of them quite empty, had to march away with their corps, we saw in consequence two extraordinary sights, one of a whole army detained by a really paltry number of wounded men, the other that of a single medical officer (Thomson, 44th Foot) with his soldier servant left as a sufficient medical aid for 400 Russian wounded. Think what a comfort it would have been if we had had a medical departmental organization, or any attempt at an organized medical corps, to carry out the dressing and the embarkation of the wounded there.

79. To-day all this is changed. Now the Army Medical Department has a system. It has now become a corps of the army in the same way that the engineers gradually became a corps, and the artillery developed into a distinct branch of the army.

80. In old times last century the artillery of the army was kept divided into groups of two guns attached to each single battalion or regiment. That system fatal to all artillery improvement terminated long years ago in the battery system by which the guns and the gunners were no longer scattered by couples through a crowd of regiments, but were concentrated under their own officers in batteries and divisions. Efficiency as gunners and *esprit de corps* and pride in their service as artillerymen have been developed by such a system, and unification will do the same for the medical service. It means withdrawing each petty hospital from each battalion and concentrating them under their own officers in army hospitals completely and independently organized.

It means a professional efficiency being developed impossible before, and this is a great point gained.

80. *(B)—Efficiency in peace* is also secured by organizing first-class central garrison hospitals under medical direction in each station. In these hospitals ample arrangements can be made for all wants. Special wards, opthalmic wards, infectious disease and lunatic wards with operating theatres, and special arrangements of every kind, can be prepared. Say that in the old days scarlet fever broke out in a garrison and cases occurred in each battalion. Every regimental hospital became tainted. To-day we can have special infectious wards for a garrison. In like manner special eye wards can be arranged. Similarly female hospitals with lying-in wards—and children's wards can be organized, and much comfort given to every one in consequence.

81. *(C).—Mobility and readiness in war.*—By freeing the hospitals from their paralysing regimental attachments, and arranging them on a divisional or army corps basis, each hospital being free, mobile, perfectly self-contained, having all its wants provided for inside itself, and as readily moveable as a field battery, the hospitals on receiving an order can concentrate at any particular place, whether it be an unhealthy part of the country, the probable place of attack, or anywhere that special medical aid is needed. The general in command informs the principal medical officer—"The enemy are in great force on the banks of the Alma. The field hospitals should concentrate near the village of Bourliouk." At once all the hospitals from the army corps can, if necessary, be moved there. Under regimental organization this was impossible. Unless the regiment was specially moved no hospital could be moved, so that three-fourths of the doctors, orderlies, and *matériel* were wasted, while others were overborne with work. Again—"The 11th hussars will make a reconnoissance towards Eupatoria." Order for hospital—"The 2nd field hospital cavalry division will detach its No. I sub-division for service with the 11th hussars during the approaching reconnoissance." Again—"The army will advance to-morrow by way of Mackenzie's farm towards Sebastopol." Medical order—"The reserve field hospitals' 2nd army corps will halt on the Alma until all the wounded are embarked. The Russian wounded will likewise be attended to. On the termination of these duties, the field hospitals will join their original divisions." Nothing is simpler and easier than this, provided we are trained to it, but fancy it under the old system. The regiments marched away, with them all the hospitals moved off.

82. *(D).—It establishes a uniform system for the medical service in peace and in war.*—No change will now occur when war is imminent. The army hospitals will at all times and in all places be worked in exactly the same way. We can measure in peace the requirements of war, arrange for them, and guard against disaster. Under the old system this was impossible. We had one peace system and one war system. Now we can have field hospitals organized and marched about at Aldershot or the Curragh, and a thorough training given to all concerned.

83. *(E).—It is economical.*—By preventing the waste of officers, orderlies, and equipment, in unemployed regimental hospitals, either in the field or in quarters, it guards against loss. By utilising instruments, microscopes, drugs, and special wards, it aids economy.

By lighting, warming, washing, and cooking being done in one place, it prevents waste. In the field it saves transport and hospital equipment being wasted in small regimental hospital establishments.

84. *(F).—Good nursing.*—By giving us a body of nurses, the army hospital corps, cooks, compounders, and sick bearers, specially trained and permanently serving in the hospitals, we obtain great assistance in the field or in garrison.

This was impossible under the old arrangements, as the orderlies were ignorant, and no promotion rewarded the careful and intelligent. Now we have all this foreseen. We have a corps of men trained to carry the wounded, trained to act as sanitary detachments, and they are men whose whole hopes of promotion depends on doing good work in the hospitals.

85. *(G).—Sufficient garrison staff.*—It enables us to increase or to limit our garrison medical staff in accordance with the necessities of the place, and does not tie us down to a fixed number as the old system did—the same in healthy as in unhealthy places. It guards against the waste of men in the one case, or the overwork of them in the other.

86. *(H).—Develops "esprit de corps" and professional efficiency.*—By withdrawing us from the subordinate position in regiments, where our professional *esprit de corps* was injured, and our position as a unit in the army departments quite kept out of sight, it enables us to stand on our own basis simply as medical men. We can claim our rights, not by the fact of being in any regiment but simply as army doctors. It gives us a place in the army never held before. By withdrawing us from regiments friction with other corps is reduced to a minimum; and we are free to develop our ancient traditions and our own *esprit de corps*, a thing impossible in the old days. Until we can appeal to the young officers of our department solely and simply on our *esprit de corps* as doctors, so long will we be weak and divided.

Professionally speaking, we have all to gain by union. In our petty little regimental hospitals we could never become good doctors. We had no intellectual friction, little real medical life, and the senior and junior officers had no opportunity of comparing notes or receiving information. Now we can all develop our knowledge and become better doctors than ever before. All good service done now will now count to the credit of our department, and all neglect or carelessness will equally injure us. We are taught then to live for our department.

87. *(I).*—In the larger garrisons we can have our own messes, libraries of medical books, clubs for papers and periodicals, good laboratories and microscope rooms, and all the essential aids to efficiency. By having messes in a few central garrisons the young officers can be kept together, and a comradeship and fellow-feeling developed that will always be of use.

88. *(J).—It equalizes the roster* for home and for foreign service for all officers, and abolishes or reduces to a minimum the great irregularities which occurred in the old days by some officers never going abroad, and others being constantly on foreign service.

89. *(K).—Training in Administration.*—By making the senior medical officer in each garrison act as director of all medical arrangements in the garrison consisting of several corps, he is trained to administration and to deal with army medical questions on a large basis, not as in regiments from a very narrow standpoint. In this way a crowd of officers are learning to administrate, and they eventually will become our Directing Medical Officers. In the old days a man went from a small cavalry regiment or battalion to direct the medical affairs of a division of the army for which he had no training whatever.

90. *(L).*—It abolishes the absurd system of making a staff doctor, however senior, junior in hospital to a regimental doctor however junior—an anomaly constantly seen in old days, depressing to the department, and detrimental to the efficiency of the service.

91. *(M).—A definite uniform.*—It makes one definite uniform possible for the Army Medical Department, whether officers, sergeants, or orderlies, and prevents the extraordinary variety that always existed on this head in the service. Such variety was entirely opposed to efficiency, and rendered it impossible to find out a medical officer. Now a clearly defined rule can be laid down, and a distinct uniform made compulsory.

92. *(N).—Provides for the militia and volunteers.*—The medical care of our now very strong auxiliary forces can be quite easily carried out during embodiment under the unification system, as the sick men can be admitted at once into the garrison hospitals, or, if in camp, into the divisional field hospitals. If we were trusting to the old regimental system, each regiment of militia or corps of volunteers would on embodiment have, under great difficulties, to organize its own little hospital.

This would be very troublesome, but now when a militia corps joins a division or a brigade on embodiment, its sick can be treated in the hospital attached to the brigade.

What is wanting in the army, whether with the regular or auxiliary forces, is efficient and workable hospitals.

The actual presence of medical officers with corps in camp or barracks, although essential, is not so all-important by comparison with having the hospitals thoroughly ready and up to the mark. If an officer or soldier gets sick or is wounded, he can at any time be removed to hospital, and it is there efficiency is wanted.

In the old days medical officers really wasted their time quite uselessly in having to attend musketry parades and cavalry drills, where accidents never happened, or if they did, a medical officer on the ground, without appliances or ambulance waggons or stretchers, was quite useless. How many weary hours have we not spent attending these tiresome drills, when one forgot one's professional work and learned nothing whatever. Practically, if we acted on the principle of being constantly hanging about the soldier, waiting for accidents to happen him, we would never leave his side, and we would never get any practice. It is at stables, or when out amusing themselves, that, as a rule, accidents happen men, and it is to hospital they should be at once taken.

93. *(O).—Finally, it gives us all a centre in the service to work round*, and a department to live for in every garrison in the empire. Up to the present day a medical department properly so called did not exist in the army, for that name could not justly be applied to a few principal medical officers almost powerless over their department, and a crowd of homeless staff assistant surgeons quite unorganized, doing every fatiguing and unpleasant duty.

To-day every doctor in the service is combined in a single medical corps, standing on its own footing, wearing its own uniform, performing its own duties, and enjoying its rank and privileges on the sole basis of being army medical officers.

The irregularities and unfairness of the old system are passing away, and the department is awaking from its old torpor to a true professional and army life. Even in the short time since unification was established considerable advantages have been gained by the department, and many more have yet to come.

We, however, stand now on a clear and defined basis.

It is a basis on which we are perfectly unassailable, and that standpoint is professional efficiency.

94. We want to be better doctors in war and in peace, and it is well that our cry should be heard and understood. It is no clamour for absurd privileges or boons, it is a true and sensible movement that cannot be laughed down or derided. It appeals to the common sense of England, for it is thoroughly a movement towards efficiency and towards economy, and modify or change how we may, it cannot be found fault with on these grounds.

It appeals to the civil profession in medicine by its cry for a more thorough medical life, a closer application to our own scientific duties, and an aiming at hospital efficiency in its widest sense. We do not want to ignore medicine. We want to stand by it. To be known as doctors. To wear a doctor's uniform and that only. To base all our claims for rank and pay and rights of all kinds on this basis above all; we are doctors, soldier-doctors it is true, but above all doctors.

95. It appeals to the soldier on irresistible grounds. We want to be good men at our work, to stand by you all the better in your hour of need. The more we become proficient the better for you. The old system injured us as doctors in peace, and would have left us powerless to help you in war. Now all is changed. You have fine traditions. So have we. You have *esprit de corps*. We want it also. You stand up for your position as soldiers; we for our as doctors. There is no cause for a quarrel between us. We can get on capitally together. But we want a corps of our own. We want to be able to appeal to our young men not as Buffs, or Borderers, or Connaught Rangers, or Highlanders. We want to say to them you are army doctors, that and that only, and we can only do so by having a corps organization. We shall stand by the service and the soldier as we have always stood by it, sharing every danger—sharing every success—with you in the glorious advance—with you in the day of danger and distress. We have marched with you, sailed with you, served with you everywhere. Often killed in battle, often wounded, constantly sick and swept away by epidemics. As we have done in the past, so we shall do in the future, unfaltering, devoted, true to the soldier to the last, but we want a corps to live for, and a tradition of our own to be developed.

We want to see our department and our officers and men as proud of the Army Medical Department and its uniform as the best regiments are proud of their tradition and their good service, and it is only by so developing this corps-feeling we can ever hope for efficiency. Unless we are proud of our department, unless we are proud of being doctors, we can never rise to any efficiency. Unification means promoting that efficiency, and it is well to let this be clearly understood. The question has become so involved with sentimentalities that the central fact may be lost sight of.

96. Unification means one thing only. It means we want to be doctors. We want to stand or fail by that rallying cry. We want a deeper professional life, and we can only get it by unification. We want to be with the soldier. We want to be able to assist our men well and thoroughly when ill in peace time. Unification alone can aid us to do so.

We want to be ready in war, to give heart and soul to our wounded comrades, and to be ready to aid them in an efficient and practical way.

Unification and it alone enables us to do so. No other road remains open. This and this only is our true path to advance upon.

97. Finally, when we accept boons or ask for concessions, we want to ask for these on one clear, open, and unquestionable basis, that of being simply army doctors and officers in the army entitled to perfect equality with all other officers.

We desire to stand by this faith, and if we progress we progress with it; and if we fall we fall for a known and an apparent reason.

SECTION VI.—The Wants of the Army Medical Service.

98. If any officer of the military or medical departments of the army imagines that in aiming at unification principles the medical officers are striving to do less work or to lead easier lives, they are thoroughly and entirely mistaken. It means harder work, more responsibility, and more attention to duty than ever was necessary under the regimental system. The medical department will by it be entrusted with most arduous responsibilities, but its hands will be untied to do the work. Heretofore we have led in regiments by comparison an easy life. But now we will have far harder work but a freer field to work in.

The principle is so true, so easily defended, and such a thoroughly good one to stand up for, that no drawback exists in urging its complete acceptance by the

army and the profession. We can all, without fear or shame, stand up for a cause that aims at making us in peace times better doctors, and that in war time enables us to assist and succour the wounded soldier in the field in a way quite impossible before. Up to the present day in our aims at progress, regimentalism constantly intervened as a principle fatal to all real development, but now that old man of the sea has at last been removed from us. Nevertheless, although unification is essentially true in principle, and that not a single valid argument exists against it, it has been indifferently received, and in several instances clamoured against. There must be reasons for this outcry, and it would be far better they should be clearly pointed out. Why should a body of professional men, such as army doctors are, oppose, as some do, the development of a system so true in its every bearing? Let us examine the reasons.

99.—*Up to* 1873 *no Medical Department as an army unit really existed.* This may seem a strange assertion to make, yet it is really correct. Until 1873 the department's strength and, energy was sub-divided and frittered away in petty regimental streamlets, and, whether as regards army position or prestige, no real medical department existed.

It is true there were some forty principal medical officers and some 300 staff surgeons and assistant surgeons, but the former officers were quite devoid of any real power over the medical officers, and the latter were merely engaged in filling up the casualties in the ranks of the regimental doctors. The medical department really existed as a sub-department of every regiment classed officially with the pay service and the quartermaster's department. To-day this is all changed. We are now relieved from these dead-weights, and a free field exists before us. The medical service will no longer be either fostered or depressed by extraneous aid, and it must stand or fall by the test of its own efficiency.

That it can develop itself when given a fair and open field to work in and when its wants are duly met, no fear need exist. Sub-divided as we have been up to the present time in a crowd of heterogeneous groups, how could a departmental spirit exist? With a hundred varying regimental sub-divisions, dressed in a hundred varying uniforms, never concentrated together, with no means at our disposal to preserve our traditions or to develop our *esprit de corps*, how could we but be weak? Divided still more by the great division of regimental and staff doctors, the former monopolising all the comforts, and the latter suffering all the hardships of army life—was it not but natural that to be a non-regimental army doctor seemed at first to many of us not to be a pleasant thing? Let such a system of sub-division be tried on with any corps or department and see how *esprit de corps* will perish. Try it with the royal artillery and see if its spirit will survive.

100. In the old days the royal artillery, instead of being grouped in batteries and brigades, was scattered over the army at the rate of two guns to each battalion of infantry.

Such sub-division was fatal to its efficiency, and was stopped long years ago. But let us imagine that the artillery had remained until to-day scattered by single guns attached to every single regiment of cavalry and battalion of infantry in the army.

Let the theory be yes, truly, artillery is useful in an army, but each regiment should have its own gun. Who can look after it so well as the commanding officer of the regiment whose men it is to protect? Let each gun be furnished with transport, and let its interior economy be watched over by the regimental commanding officers. Let the gunners and the gun officers be all dressed in the regimental uniform of the corps to which they are attached. On the line of march let each gun follow its own battalion distinct from every other gun in the army. Although there may be in the same garrison five or six guns, all attached to as many different regiments, let them be wholly distinct in every

way, and let the officers never meet together for drill or conversation. When one regimental gun in action has spent all its ammunition and is practically worked out, let no one have the power to detach another gun or its gunners, or a round of ammunition, from a regiment not engaged to give assistance because, forsooth, each regiment would have a gun of its own. Let there be gunnery inspectors nominally responsible for the artillery service, but let them have no power whatever over the artillery save to count the cartridges half-yearly or such like duty, and let a crowd of gunners not attached to regiments be kept constantly knocking about from place to place and doing all the drudgery of the artillery. Let every artillery man know that the detached gun system had already failed in the field, was abandoned by every other European army, and was perfectly unworkable in peace. Let them, although heavily engaged under fire, be called non-combatants because artillery do not themselves charge positions or capture guns. Let the decorations given freely to other corps come rarely to them.

Do all this, and say where will artillery *esprit de corps* be? Simply nowhere. But that system does not exist for the gunners; they are all concentrated in batteries; they are responsible for all their own duties; they have a grand tradition, and wear on their appointments memorials of good service done.

They have a history and a noble name, and how could they have ever had it under such a system as I have imagined.

For under that system, however well each regimental gun worked in action, however well the gunners did their duty, it is to the officer commanding the regiment all the credit would go. However well the medical men worked in the by-gone campaigns, the credit went to the regimental commanding officer, and the department as a department is never mentioned.

101. Now we have a fairer system. We stand or fall by our department. If it is weak and bad, we fall with it; if it is devoted, brave, enduring, full of hard work, skilful, we rise with it. This means the basis of *esprit de corps*. These are the elements of all comradeship and brotherhood in any service. That we can develop them if we get a fair field, no doubt whatever exists.

But until 1873 we saw the staff doctors uncared for, hurried about everywhere without prestige or position, and employed in every unpleasant medical duty, and very many of us dreaded becoming like them.

The fear is groundless, it can never occur again. The support we imagined we had in the regimental system was a false support; it paralysed all professional efficiency; it ignored our grand profession; it rendered us less useful than we should be to the soldier and the country; and in war time it left us helpless and useless in the field of battle.

That system is now dead, the long-suffering staff doctor is abolished, we are now detailed to garrisons almost permanently, and it is our own fault if we do not organize our comforts.

102. Another cause tending to make army doctors dislike unification, was the fear that by it they would lose the protection and the shelter their regimental commanding officers afforded them in any question of rights, privileges or boons, or the representation of grievances or the like. Seeing how utterly powerless in the old days the directing doctors were to guard the interests of the medical officers, and how centralized all authority was in the regimental commanding officer, many medical officers looked forward with dread to the day that would take them from their regiments and reduce them to the friendless level of the old staff assistant surgeon. This fear is also groundless. Increased power has been given to the directing officers, and they will use it doubtless as they should do to guard the interest of all.

The protection and assistance that in every corps or department should be derived from the kind advices and friendly services of one's seniors will now develop itself in our department, and we will all be happier for it.

103. Another reason making medical officers dread unification was fearing that once removed from regiments, all warrants and privileges granted them would be gradually taken away, and that under powerless and timid directing medical officers no one would be left to stand up for them or speak in favour of the just rights.

See, say some of them, how our privileges disappear one by one. Let us cling close to the regiments. Let us hide in every way our departmental sympathies. Let us have complete solidarity with our regimental brother-officers. Let us ignore our position as doctors. All will then be well, for no Government ever attempts to take from us those boons we hold in common with the military department.

Look, they say, at the history of the past, judge from it the prospects of the future. If we unify we perish. It is true it means good doctoring; it is true it means war efficiency; it is true it means professional development in every way; but we are but men after all, and if it deprives us of guaranteed advantages and privileges conceded to us by royal warrants, who can blame us for preferring the comparative drawbacks of regiments with the superlative personal evils of departmentalism.

Here it is difficult to answer them. Sheltered under such an argument, what answer can be given them. But the unificationists have a firm faith in the future. They believe that although it is true that drawbacks have arisen in the past, and that many acts of the State need clear explanation and straightforward answering, that in the end it is better to stand forward as army doctors alone, fighting their own battle, trusting to their own vigour for guarding themselves, and appealing with confidence to the good sense of the country and of the army that justice shall be done. In this we all agree. We cannot exist in the army if this be not the rule.

Our basis for work must be clear, definite, unassailable, and assured. Members of a profession daily rising in the social scale, daily becoming more scientific in its character, daily building itself up on a basis more secure against attack than either church or sword or gown can to-day boast of, working its way ahead not by powerful interest, or the fostering hand of patronage, but by sheer force of hard work, intelligence, and thorough modern spirit, the doctor serving England in her army cannot exist on dubious privileges, but must be openly and fairly dealt with as a man of education and daily increasing difficulty of production.

104. We who have been with the soldier in every phase of his varied life, we who have been shot down in the battle and wounded in the trench, who have perished by fifty at a time in the pestilences of the great campaigns, who are covered with medals and decorations won in the field, who have been stricken down by tropical suns, or swept away by cholera epidemics along with our soldier comrades, who have shared in every danger the soldier shares, have been nearer to him in suffering in every land than even his own kindred, who on every shore and on every sea have served England honourably, faithfully, devotedly—aye, even unto death, who have struggled more for the comforts of the soldier and his wife and children than even his own officers, who have taken part in a hundred campaigns and have always loved the soldier well, we who have been with the soldier in his service a thousand times oftener than any other army department, we do not come on sufferance.

We come as a part of the army, serving the same Queen, serving the same people, willing, if it must be, to die for the nation, but we do not come on any less definite footing. We want clearly-defined position, clearly-defined and

unassailable rights. An equal share of the rank, honors, and rewards with those whose dangers we share. We want protection in our duty and freedom in our work, a defined position in the service, and it is better to claim these things on the true basis as army doctors than by stratagem as it were to obtain them under the masquerade of hussars, artillerymen, or infantry officers, as we did in the regimental days.

We may briefly notice some points needing examination.

105.—*Absence of Honorary Distinctions.*—When a regiment or corps distinguishes itself in a campaign, it is the custom of the service that they receive permission to place the name of the battle or campaign upon their colors or appointments.

By these memorials *esprit de corps* is preserved, and tradition developed.

When the corps consists of a large body of officers and men, some of whom must share in every campaign, a more general honorary distinction is given such as "Ubique" and "Quo fas et gloria ducunt" in the artillery and engineers, and "Per mare et terram" in the royal marines. Corps also as a reward are made "Royal," or "Queen's," or "King's," or such like. Small as these things seem in civil eyes, they are dear to the soldier and the soldier-doctor, and form the most pleasant rewards a regiment can receive. Knowing as we do the long and faithful services of army doctors in the century and three-quarters that have passed away since Marlborough's days, and the constant share the medical service has taken in continual campaigns, one opens the Army List to find that no reward of any kind exists at the head of the department, differing in this way from every other corps in the service. That army doctors feel this I am certain, and it has often been pointed to by doctors favouring regimental views to show the neglected condition of the medical service. It seems impossible to answer such a complaint. Take even the latest example—"Ashantee."

106. The 23rd bear the word on their colors, although, as it happens, through no fault of theirs, the share they took in the campaign was principally lying off the African Coast in transports. Seventy-three army medical officers served there, all exposed to disease, many under fire, yet no record, general or particular, would show this to the uninitiated. The average civilian would think we had done nothing.

Many officers feel disheartened at this apparently unequal treatment of the Army Medical Department by comparison with other branches of the service. Whether it be the Crimea, Mutiny campaign, Abyssinia, China, it is in every case the same. We get no record of duty done, although every other body does.

Yet no corps of officers can compare in service with ours, and for this reason. We have taken share in every European campaign from Marlborough's battles to Sebastopol, and in addition have served in all the long Indian wars that built up our empire in the east—a service few other corps have done. The artillery and engineers never went to India until 1857, neither did the commissariat, the chaplains, nor the other departments. We, on the contrary, have shared in all these wars, and some of our noblest acts of devotion have been done under an Indian sun, in the days of 1857, at Delhi and Lucknow, and in the old days before them.

107. We are not honored with the prefix "Royal," although artillerymen and a crowd of infantry corps are so honored; we, equally devoted to England, are left out in the cold. Small things like these are often great because they are so small. They are dear to the soldier and the soldier-doctor, and we would put up with many a hardship, knowing that by-and-bye recognition of good service done would come.

What would be acceptable to many would be the grouping together under one title of army medical corps, or royal medical corps, of the existing Army Medical Department and the Army Hospital Corps. Considering that we will always serve together and that we are indissolubly connected with one another, such union might well be consummated by a single title being given. In the old days we had Royal Engineer officers and "Sappers and Miners" men, now all are united in a single corps of Royal Engineers, and it tends much to uniformity and *esprit de corps*. There are boons dearer to the soldier-doctor than any increase of pay. Those boons are just appreciation by the State of duty well done, and the recording of it in the way customary in any other branch of the service. Such boons are easily given, and how dearly would they be valued.

108.—*Classed as "Non-combatants."*—In every army there must be a number of departments whose duty is to provide for the fighting-man. The feeding service, the transport service, the ammunition supply service, the postal service, the provost marshal service, the pay service, the chaplain's service: all these in our army are classed as "non-combatants", and amongst them is included the medical department. It is an unfair classification. The term "non-combatant" practically means, in all other departments, not being exposed to fire or chance of death by war missiles. What is objected to by army doctors is, that it is unfair to class us with those other departments. Take the case of the Crimea—India where you will. We march down to the trenches, and are daily exposed to shot and shell and sortie. At the assault the medical officers accompany the advance and are constantly under fire.

109. At the Alma, at Inkermann, at Balaklava, at the siege of Delhi and Lucknow, in Abyssinia and China, where are the doctors? Under fire, and constantly liable to be wounded and killed. We have constantly gotten the Victoria Cross, probably more often than any other corps. The department is covered with medals, some 800 alone, in a single branch of the service. The record of its services in Hart's Army List contains some of the finest records in the book. Then again remember the services during epidemics. Think of the cholera scourge that sweeps over India yearly and carries off so many hundred gallant men. Service during a long cholera epidemic is far more trying than any campaign service, and the great brunt of the labour falls on the army doctors. Yet these things are never remembered, and we who go through campaigns and epidemics are merged amongst a crowd of departments who are never exposed either to fire in the field, or to sickness in peace time.

The commissariat service is always in the rear; it was so in the Crimea; and must always be so. I am, I hope, no Philistine, but there is a difference in the quality of services rendered to the State by the different branches of the service. The commissariat, the transport, the military store, the pay and law branches are always far in the rear of the fighting line, and in peace never in cholera camps or trying hospital service. We are always in both. We claim equality with the fighting-man on all these points, and our claim is quite a just one, readily granted by the true soldier who knows what war is, and who has seen service. Despite all this, take a recent example. In May 1877 a warrant was published limiting honorary Queen's cadetships to the sons of the combatant officers, and effectually cutting out all children of medical officers from this boon. Such acts as these cause pain, and paralyse the *esprit de corps* of every body in the department. We are neither combatant nor non-combatant. We are medical officers, and as such should be designated.

110.—*Permanent Warrants.*—The continuous change in the warrants under which the medical officers serve is a cause of much anxiety to every one in the department. Take Sidney Herbert's warrant of 1858. It has always been looked on as our Magna Charta. In it the old rank of surgeon was made equal to that of major in the army—a just concession in every way. Hardly had the warrant been a few months in existence when a new reading of the warrant was published, stating that although ranking as major, the surgeon should be junior of the rank always, a most painful proviso. It deprived the surgeon of

position and many advantages. At once the medical service took alarm, the civil profession was surprised, and, as has always been the case when rights are meddled with, agitation commenced. Questions in the House, appeals, deputations, discussions in the schools, and the usual routine of agitation was set to work. Of course the objectionable reading was cancelled, and surgeons were made to rank with majors as before. The doctors won by agitation, discipline was shaken, and the State gave way. But a new question arose. An Indian commander-in-chief, seeing the surgeon mounted on parade as became his field rank, made him dismount on parade, and laid down a rule that no surgeon, although drawing forage and mounted on the line of *march*, was to appear so mounted on parade. Again agitation commenced, again deputations, again questions, again letters in the journals, and again it was decided they were always mounted officers on parade, and the commander-in-chief was wrong. But the injury done to the doctors by the public dismounting of a senior officer rang through the service and did much damage. It injures *morale* and shakes men's faith in warrants if such things can occur. But in 1873 came a new warrant, and the much-struggled-for horse and forage were taken away at a blow. Again agitation, again questions in the House, again clamour and discussion in the schools, and again horse and forage are given back. Discipline again was shaken, and the old confidence where was it? Gone, they say. Men's minds get shaken by such variations, it ruins discipline, and it paralyses efficiency that such things should occur. But they occur constantly.

111. In the same way medical officers were made to rank in the regiments they were attached to, under the warrant of 1873, according to date of appointment and not of rank in the army, although it was apparent that owing to the five years' rule such a regulation would keep them nearly always junior of their grade in a regiment.

112. In the same way in India the pay is still based on the warrant of 1858, although many increases in its rate have occurred since then.

113. Again, medical officers are now staff officers, but while quartered in barracks are not entitled to staff allowance of quarters to their great discomfort and annoyance.

114. What we need is permanency in our privileges. For the sake of a couple of thousand pounds a year forage was withdrawn from the doctors contrary to the old warrants, but it was a poor economy, as it rang through the civil schools, and frightened men from entering the service. Examinations came round, and no men appeared. Men dreaded leaving their regiments on this account. They say "the privileges held in a regiment in common with a crowd of captains or majors are never touched. So long as a right is held in common with the military officers of the army, it is practically safe. Once, say they, leave the regiment, all is unsafe." This variation leads to heartburning, agitation, appeals in the papers, the civil schools get frightened, the department gets a bad name, its discipline is ruined, and in the end the department gets all its wants and more after clamouring for it loudly. But the shock to discipline is ruinous, and after all the grace of the boon is gone, it has been wrenched as it were from the State, and a body of officers full of discipline, loyal to their duty, devoted to their work, and anxious to be good servants of the State, get disheartened, and a number of useless men make it an excuse for every laxity. Such evils as these are easily corrected and should not occur in future. Liberal treatment means good service, and true devoted men will come to a service that treats them well. But precarious privileges that melt away in a month or two attract none save the indifferent and the useless who come to the army to idle and to lounge.

115.—*Military control over the Hospital Corps.*—To promote thorough efficiency in an army hospital, the senior medical officer should be wholly responsible.

Unless trust be reposed in him, and power granted him, it is impossible to be really efficient.

To promote that aim all control over the hospital servants should centre in the hands of the senior medical officer.

116. The young medical officers at Netley should go through a course of military law as part of their training. Ignorance of it is fraught with drawbacks as they go in the service, and knowledge of it would do them the greatest service.

117. In the same way they should be drilled in company drill to learn its simple movements, both as an aid to discipline and to teach them order and regularity.

Some of the best doctors in the service were so trained in their old regiments, and always speak of its usefulness.

118. In the same way riding should be taught to enable them to be prepared for any class of military duty. The services of medical officers are daily needed on mounted duties, and the whole department should be taught to ride. It seems strange that up to the present this instruction has not been given.

119.—*Dress.*—The question of dress is important in this way. For years the staff medical doctors were poorly dressed with ugly appointments.

The story of their improvement in this direction is the story of a wretched struggle and a final conquest, but it seems to be wiser to avoid those struggles on the part of the authorities, and to give medical officers a dress, *distinctive* certainly, but not ugly. Since 1873 much improvement has taken place, and will no doubt continue. Equality with the rest of the army is important in this as in other matters. The struggle for every improvement in dress the department gets teaches men indiscipline. Agitation gains everything, and nothing comes as a free gift. In this way men learn to agitate, and order is interfered with. We need good handsome uniform, but distinctive and departmental. We serve with every branch of the army, and for that reason should be so dressed that in a well-dressed cavalry corps or elsewhere a medical officer should not be utterly conspicuous by ugly uniform.

We agree with a crowd of army officers of every branch of the service that gold lace and trumpery embroidery is but poor ornament for a soldier. But that is not the question at issue. While it is the custom of the service to wear it, we sail with the stream. When the army discards it, we will do so likewise. But to send a badly dressed officer of the medical service to be with well-dressed cavalry or horse artillery injures the *morale* of the younger men of our service, and people think the State considers any dress good enough for its medical servants.

120. This is wrong. If we want to develop *esprit de corps* and a pride in our department, the dress is one of the little things that mean so much as an aid to that *esprit de corps*. Equality with the army is the true principle to act on. Yet every department is dressed more handsomely than we were; and no department needs it more, for we serve with the soldier under arms. No other department does so. Practically the commissariat and the store services never wear uniform. With us it is quite the reverse.

121. *Rank.*—The position of junior of the rank for the senior grade of surgeon-major ranking as lieutenant-colonel is a very painful one. In India and elsewhere, where official rank is regulated by army standards, a crowd of officials pass over one's head constantly on this account, that a surgeon-major ranks as junior of his rank. Considering that the junior of the rank system does not exist in the commissariat, chaplain's or store department, why should we have it. It

is in no way needed. It is a relic of old regimental life, and has now no cause for existence, especially, since the deputy surgeons-general were made to rank with colonels. Surgeons-major over twenty years' service should rank with lieutenant-colonels according to dates of commission. Nothing is more painful than to remain for years junior of one rank. In India this is particularly the case, as a crowd of civil officials rank with lieutenant-colonels and go over our heads constantly.

However senior a surgeon-major is, he still ranks junior of his rank.

In the same way the title of the senior surgeons-major need change to denote their increased rank, and the title of surgeon given on entrance to the service is not any boon to a man already a surgeon and physician in civil life. It should show his rank in the army, and be clear and easily understood.

122. The Sovereign has designated twelve army doctors of distinguished service her] honorary physicians and surgeons. It is a boon of great value, and meant to be so. But in the Army List these officers are placed in an obscure corner under everybody else, and not in their proper place after the Queen's aides-de-camp. The boon given to the military officers by making them Queen's aides-de camp corresponds to the boon given doctors of making them honorary physicians and surgeons, and both should be in the same position in the Army List. To-day nine persons out of every ten would never notice their names, nor in departmental list is any indication of the distinction given, although every Queen's aide has the letters A. D. C. after his name. These little things mean much to all of us.

123. Mere pay increase by itself is nothing if other boons and privileges are withheld. In all the points above referred to, it is not money that is called for, it is not extra pay. It is equal treatment in every way with the rest of the army that is needed, and who can say it is an unjust demand.

124.—*A Medical Reserve.*—It will always be impossible to form a reserve of medical men for war service in foreign territories from the average English physician or surgeon practising in civil life. It is not so done in any country, even where general service prevails.

A man cannot resign his practice and his patients at a few days' notice without ills happening to the whole population, almost more ruinous than a foreign war. But it is possible to arrange for the perfect freeing of the army medical officer from every home garrison, and the sending of them bodily to the scene of action. This can be done by following out in the medical service the system of militia organization in the military branch of the army.

125. At once on war being imminent the Militia Medical Department should be called out.

It would be a force organized from the medical profession in England and serving only there. By a judicious training in peace it would be perfectly possible for the militia doctors in each county or garrison town to carry on the whole garrison medical routine of that town freeing the entire army medical staff for the field.

It is probable that for the first few days some confusion might occur in a hospital, but in the end all would be well, and by simply retaining an army doctor to direct in a garrison the work would be satisfactorily done, and the whole body of army doctors could be sent away to the field. No difficulty should exist preventing a militia and volunteer branch of the army hospital corps being organized for home duties, thus freeing the regular army hospital corps for field work.

126. It seems hopeless to imagine that a reserve fit for war service out of England of any efficiency could be made from ordinary civil physicians

or surgeons. Fancy 100 such officers ordered to Egypt with a force; no pay or pension could induce men to join such an organization, and if they did join they would justly claim such army rank and seniority as to place them senior to the average specially trained army doctors in the field. Confusion and friction would result, but when militia doctors serve as I propose in a garrison by themselves, they could regulate their own seniority, and in no way interfere with army field efficiency.

127. Many of such men, too, would be old and unfitted to stand the change of climate and habits English army field-life would require. They would soon get broken down, and would also be thinking continually of their practice in England fading away from their grasp. No iron law should prevent either militia or volunteer doctors joining an army in the field if necessary, but they would never come in any number, and it is better to utilize them where they would be really of use in our home garrisons. To fit them, however, for our service in England in case of invasion, it would be well if they were trained in the routine of field hospitals and such like duties. From these standpoints of the unfitness of doctors engaged in civil practice to take their place in our foreign fighting army, it is very evident that the idea of forming a medical reserve by theten years' medical service system will be a failure.

128. Such men on retirement from the army with the thousand pounds gratuity would at once attempt to enter private practice, and certainly would not return to the army ranks in war time to enter without increased rank or increased pay, and to serve under their former juniors in every hospital.

If they come back to the colors, they would claim to come back, as every soldier claims, with commissions dated from their original entry into the service, and thus, although cast out for inefficiency, would claim to direct in a campaign. For an *army reserve* man is not like a militia man, always junior of his rank to the regular, but claims to rank with the regular in every way.

If engaged in practice, then, the ten years' service men could not give it up, or if they did, would claim their old army seniority and paralyse everything.

129. Further, the whole army would know that the rejected men who would not be kept in peace would form the reserve doctors in war, and it would be a dismal idea for any of us to go into action knowing that, although we had good doctors in the comparatively unimportant routine of peace, in war when wounded and ill, the worthless, the rejected, the indifferent, the lazy doctors who were refused re-engagement, were to be our attendants. This would be a dismal support in the day of battle for any of us.

130. But again it will not necessarily be the good men who will be kept in the service. Connections, interest, the opportunities of being useful to those in authority, or the good luck of having opportunities of showing one's skill, will always tend to make the rejected men anything but those who should be rejected, and in this way a thorough sifting would be paralyzed. And in addition to it all the regular soldiering pet who serve alike in the military and in the medical services would be indisposed to join a service where no future was provided as a certainty. Such men are found in our department,—men who have from their earliest day determined to enter the medical service, and they are not to be despised as a small unit. They are of use as bearing with devotion all the drawbacks of army life for the sake of old family connections and early training. They will never come with the danger of being turned adrift because they fail to propitiate those in power, and with the chance hanging over their head that even if they do fall sick or ill in the service and have to leave it, all the world will say "we know why he left the army; he is one of the ten-year people who would not be kept."

131. Hence the department will enlist from a lower stratum of professional efficiency, and its working power will be injured by every young man who

is fond of idleness and ease, letting everything slide and going always on leave knowing he will be told to go at the end of his ten years.

What is possible perhaps is to enlist men for five years, and make retirement optional at that time. If a man stays on, give him increased rank and pay, and take him permanently into the service. If he leaves, give him a militia commission, and he will be of use then. He will have seen the world, not be too old for practise, and will in war time be useful in our garrisons as an army doctor.

131. But ten years will paralyze efficiency. Good men will scarcely come, and bad men will make interest to be retained, and in this way many conflicting elements will be introduced. Time will soon show how it will act. Let us hope that however it ends, England will be the better ready for the field in the future than in the past.

SECTION VII.—Conclusion.

132. Little now remains to be said. In this paper the advantages and the drawbacks of the old and the new army medical systems have been fully compared. A verdict wholly in favour of the unification principle is arrived at, and one awaits with confidence its trial in peace or in war. If medical organization can ever attain perfection it will be under this system.

It is necessary again to call attention to the principle that lies behind all this discussion.

Unification means taking our stand as army doctors, and from that basis asking for privileges or for the removal of grievances.

It means living for our profession, and, if possible, combining the learning and skill of the physician with the organization, the discipline, and the order of the soldier, and such a unification is perfectly possible.

133. It is true we labour under difficulties in developing our culture, thrown as we are in a thousand situations, where all study is impossible, and books and periodicals are never seen.

What we can achieve is comparative professional efficiency in peace, as compared with the old days, and certain readiness in campaign such as never was feasible in any of the old wars.

In England we have intellect, wealth, a splendid tradition of devotion to duty, and high professional spirit. And if, with all these advantages, we cannot develop a medical service finer than any in Europe, something must be rotten somewhere. Under the regimental system efficiency could never be secured. Now it is perfectly attainable.

134. We want for our department, *esprit de corps*, strong traditional feeling of devotion to duty in peace and war, and a determination to stand by the soldier in every danger that besets him in every way. We want to be able to appeal to our young officers in the name of a medical department, not a neglected sub-division of the army, but a branch of service with equal privileges, rights, and advantages, with every other corps in it.

With such treatment all will go well. Without it men will come as army doctors, but they will be poor creatures devoid alike of the spirit of the soldier or the skill of the physician, and they will fail England in the day of her need.

135. No department can look back on so long and so glorious a record of devotion to duty as our own army medical corps. Its officers have served

England loyally, faithfully, devotedly, pouring out their life and their strength freely in the same stream that her soldiers do. Side by side with the gallant men who sleep in the Crimean graveyards lie sixty soldier-doctors. The Russian bullets and the trying winter of 1854 made no distinction there between the soldier and his surgeon. The doctors who served with them every where in peace fell by their side at the last, and the Tartar herdsman to-day feeds his flocks over both their graves alike.

In India where so many gallant men have fallen, the records of what England's doctors have done is a splendid history in itself, and we are proud of it in every way. Equally devoted to duty with the men they serve with, their rewards have been few and far between, but we trust a better day is now dawning. It is a day of better hope for all of us.

We claim that England should pour out with an equal hand her appreciation and her rewards on us her soldier-doctors as on her soldiers themselves. If we did good and trusty service in the bad old times when we were forgotten and unhonoured, think how much more likely we are to do well under the more generous treatment of to-day. Few services have such elements for good in them as ours has, and when they are united in one full stream as they never until now have been, we may rest certain that the Army Medical Department will be second to none in every phase of its varied work.

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NOTES ON THE INTERIOR ECONOMY

OF

ARMY HOSPITALS IN INDIA.

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[*Reprinted from the Indian Medical Gazette.*]

1. I propose, in the paragraphs that follow, making some remarks on the interior economy of Army Hospitals in India. The more Unification extends the more essential it is that our hospitals should be patterns of order, of regularity, and of comfort, for errors that would do little damage in a petty battery hospital might cause much confusion in a large garrison one. We should endeavour then to make our hospitals perfect in every way, more especially as they are coming every day under our own direct control. The more the Medical Department aims at free and independent authority in the army hospitals, the heavier becomes the responsibility of the Medical Officer, and the more we should labour to insure perfection. The paragraphs that follow aim at furthering the movement towards efficiency. I would notice in order a few points.

2. A *Native Hospital Corps.*—I think no officer of the Army Medical Department, who has given the matter any thought, but will agree that the present crowd of untaught native servants, over whom we have no hold, and who may any day desert, is capable of great improvement. We have now in every hospital a very numerous staff of coolies quite unorganized. They are badly paid, receive no clothing, camp equipage, nor any of the boons which the native soldier receives in the way of good conduct pay, sick furlough, ordinary furlough, nor promotion to the higher grades of Naik and

Harildar. We want very much an enlisted body of native servants constituting really a new regiment of the native army, and called the Bengal Hospital Corps. In this corps, if necessary, the subordinate staff of the N. I. Hospitals might also be included, and eventually the Subordinate Medical Department.

3. Such a corps is much wanted. With enlisted permanent men we could give time and take an interest in training and teaching them. A central hospital would be the school, a hand-book in Hindustani contain their instructions, and a few intelligent apothecaries, acting under a Medical Officer, would be their instructors. I would dress them in a uniform like the Home Army Hospital Corps, modified to suit the Indian climate.

To-day they desert as they please. I have seen 3-4ths of the hospital servants desert when their regiment was ordered to Peshawur, and the young soldier from England treats these men badly, because he does not recognize in the dirty ill-dressed coolie a Hospital Orderly.

We fall back too much on the barrack-room for our nurses, forgetting that with unification and in the field in India such help would be, if not absent, obtained with great difficulty Organization for the native servants is what we need. With regularly enlisted men, bound to the service by the ties of good pay and pension, clothing, sick leave, and the prospect of promotion, we need never fear, as we now do, that should our troops move to Candahar or Cabul, our hospital servants would be absent in the hour of need. Enlistment acts on a man in two ways: 1stly, by the advantages it gives him; and 2ndly, the hold placed on him—both are to-day absent in our crowd of native servants.

4. There is no class of men more suitable for the composition of such a corps as the sweeper caste, particularly the *Lallbegi* sub-division of it. They are of fine physique, are devoid of prejudice about work of any kind, they eat freely of any food, and when we remember that the chmars or mochi caste, who now form the bulk of our hospital servants, now and then put forward caste objections, when ordered to perform certain hospital duties, I should be inclined to cut the ground from under their feet, and look to the sweeper caste for our enlisted servants. Any officer who has seen to what splendid

efficiency the sweeper grade has risen in the 23rd and 32nd regiments of the Native Bengal Army need not fear that our servants can be made equally efficient.

The subject of these native servants' organization should not be allowed to drop—few things would be a greater step towards efficiency than this.

5. *The Purveyor's Department.*—Without going deeply into the present system of working the supply and store departments of an Army Hospital in India, with its extraordinary division of responsibility between the Commissariat, the Purveyor, the Hospital Sergeant and the Medical Officer, it would seem to be a simple way to obviate much of the trouble by having a Hospital Quarter-Master-Sergeant for all Station Hospitals and a Quarter-Master or Warrant Officer for large Garrison Central Hospitals.

In such a man every duty of the hospital referring to custody of hospital equipment and food could easily centre. He would receive over from the Commissariat all stores, clothing, and furniture, and be responsible for them with the Medical Officer, whether they were in the wards in use, or in the hospital store room. He would issue the rations, make out indents for such food and extras as were necessary, attend to the washing of the clothes, the indenting for carriage, the custody of camp equipage, the cleanliness of the hospital grounds, and, indeed, every duty not purely medical or connected with statistics and discipline.

6. With such a man no Purveyor would be needed. The Commissariat officer would hand over the hospital equipment complete to the Medical officer and the Q. M. Sergeant, and the latter would afterwards be responsible for its safe custody. To-day with a Purveyor in every hospital, the Apothecaries prepare the ration indents, the Hospital Sergeant has charge of the barrack furniture, and there seems to be a want of consolidation of similar duties in one person's hand.

In England and under Imperial rules the same system of a Hospital Quarter-Master-Sergeant might be introduced in the larger hospitals, and in the garrison hospitals of large size, a commissioned officer, or perhaps better still a warrant officer should have entire charge of the stores. The warrant grade in the Medical as well as other branches of the service is much needed in England.

7. *Office Equipment.*—In the Medical Officer's office of every hospital there should be, (a) a map of the province in which the station is in order to trace upon it the locality of cholera outbreaks or epidemic sickness; (b) a large scale map of the country ten miles round the cantonment showing the cholera camps plainly marked out with descriptions, written on the margin, of the roads, quality of soil, shelter, elevation, and such like. When epidemics come, newly arrived Medical Officers are often at a loss for want of this information.

It is an advantage to have Dr. Bryden's Statistical Sanitary Standard of each station copied out of the Sanitary Commissioner's report. It shows the sickness of almost every Indian Garrison for ten years, 1859 to 1869, and by copying out the page referring to each individual station, a rough forecast can be made of the probable sicknesses every month.

These maps and tables should be mounted in ordinary map fashion and hung up in the office. This latter room is very essential. Every hospital of any size needs such a room where the medical officers can discuss questions quite apart from the hospital sergeant or apothecaries. In many hospitals the sergeant has no other room to write in but this one, and in consequence matters intended for private discussion only get abroad in the regiment or station,

8. *Name-Boards, &c., &c.*—It tends to comfort and order to have every separate part of the hospital administration block marked by a board with the name painted clearly on it. Thus we have "Medical Officers' Office" clearly painted in black and white on a board and hung beside the door of the office. Again "Dispensary" is likewise painted and hung beside the dispensary door. Here likewise should be a board labelled "Medical Officer on duty" and another "Medical Warrant-Officer on duty," with spaces below sufficiently large to hold the name of the Dr. or Apothecary on duty printed in letters two inches long in order that they may be easily seen at some feet distance. In the same way "Purveyor's store-room," "Medicine store-room" and "Apothecary's Office" need labelling. Nothing gives people such confidence as to find these seemingly petty things looked to, and they all tend towards efficiency—our great aim.

9. Struck by the inconvenience caused during the winter-nights, and worst of all in the rains, by the dispensary not being easily found by men coming sick, marked advantage has resulted by placing a spare large kerosine ward lamp on a wooden stand, with a polished tin reflector behind it, in a well chosen position by the dispensary verandah.

The light of this lamp sweeps three-fourths of a circle towards the barracks, and is really a beacon of comfort to some unfortunate man coming sick at midnight and often groping vainly for the dispensary. The lamp should be red if possible. The kerosine oil may be obtained by economical use of the ordinary ward lights, but really it is a lamp that might well be included in the regulation allowance. Its use with us has given the very greatest satisfaction to apothecaries and all the hospital staff. Perhaps a considerate Commanding Officer would pay for the oil from that inexhaustible spring—the Canteen Fund.

The Geneva Cross flag in camp and in garrisons should be flown over the hospital. Unless we prepare in peace for war we shall break down when campaigns come.

10. *Hospital Order Book.*—As an essential to hospital efficiency nothing comes before a regular order book. Its use is not general in my experience. It should be so. In it the name of the Medical Officer for duty, the Medical Subordinate, and Hospital Orderly should be entered with as much regularity as is entered in a battery or regimental order book the details for the day or week. All orders for the hospital staff should be entered in it, and regimental or divisional orders concerning the hospital also copied into it. If we, as a Department, are to have the management of our army hospitals, we must copy the good points from other branches of army administration, and an order book is certainly an essential. It means order and regularity. Above all it means training up Medical Officers to administrate; a duty for which it has been said we are quite unfitted, why, I could never see.

11. *Weekly Inspection of Buildings and Instruments.*—It is conducive to order and regularity for the officer in medical charge of an Army Hospital to inspect every portion of his hospital, out-offices, stores, godowns, cook-houses, and grounds, at a regular hour weekly or perhaps fortnightly. By making it a set and special duty, portions of the building not often looked into are seen, and it keeps the whole staff up to the mark. In the wards I would note the condition of the furniture,

bedding, &c., the perfect cleanliness of wash-houses, latrines, and filters; the perfect order of that often neglected place, the cook-house; the careful keeping of the Purveyor's store. All presses open, the instruments and medicines to be seen; the splints and bandages, stomach pump, &c., all placed ready for any accident in a special compartment of the press. The cleanliness of the dead house. Its basins, towels, disinfectants all placed ready for its use *and for no other use*.

All these things and more are seen by having a regular weekly inspection; the Apothecary, Hospital Sergeant, sirdar coolie, sirdar bheestie and sirdar sweeper accompanying. Nothing escapes, and perfect order reigns through the establishment. Weekly parades of the servants for inspection of clothing, and now and then for fire alarms and fire engine working, is useful. Practising now and then at pitching a camp hospital is useful, and the system of moving the whole hospital under canvas in February for a few weeks is very good for every body.

12. *Practise-Parades for servants.*—As an aid to efficiency, now and then at uncertain intervals, a case of supposed sun-stroke, heat apoplexy, or fractured thigh should be brought in. Any hospital coolie does to practise on. Perhaps when the splints are needed they cannot be found, the fracture box is locked, and the key is not forthcoming, or pads and bandages are not ready to hand, or the bheestie is not present with the essential *mussuck* for the douche. All these things are avoided by constant practice at what really is an alarm parade. It is a good custom likewise to make the younger Medical Subordinates do all the Apothecary's office work for a week now and then, in order to make them understand their future duties.

13. In like manner if we get station hospitals under one administrative head, every medical officer should, at intervals, conduct the current duties of the actual charge to enable him to grasp the duties of the post. We may thus avoid the mistake made in the combatant branches of the service where from year's end to year's end, none of the captains or perhaps even the majors get any chance of commanding regimental parades, or conducting the correspondence or general work of an orderly-room. Unification, if not carried out in the way proposed above, would tend to injure the

junior medical officer's efficiency for want of practice at administration.

14. *Reading Rooms in Hospitals.*—Every hospital should have a reading room for the patients, with couches made from hospital beds with red mattrasses and pillows, easy chairs, a writing table and writing materials, and plenty of games. As regards pictures both here and in the wards, the best way to mount them is on calico with rollers like maps. They should be varnished with a clear transparent varnish, and the paste used should be poisoned against insects by sulphate of copper or other suitable poison. If glazed, they cannot be carried about without breaking, and by being varnished they can be cleaned by a damp cloth.

Much yet remains to be done to civilize our hospitals.

15. *Hospital Gardens.*—The order directing the preparation of a garden at each hospital is a thoroughly sensible one. In laying it out, care should be taken that good grass and shrubs be the end in view. Nothing is so good in India as a well cared grass plot with shrubs. The pathways should be wide, not less than six feet, perhaps more, to enable soldiers to walk two or three abreast on them. Petty pathways are merely to look at and are of no earthly use except to bother the *mali*. The garden should have the paths in circular or oval sweep of long radius to enable men to walk round and round without clashing. Seats can be obtained as a rule from condemned benches given by the barrack department, and should be permanently placed in good situations.

A punkah hung in the garden with benches placed under it is a great luxury for sick men. The cost is trifling and can be obtained, or should be, from the canteen.

Badminton, quoits and perhaps croquet are useful games in a hospital compound.

FYZABAD, OUDE, *March* 1877.

Army Medical Officers' Library
Netley.
1

To the Right Honorable EDWARD CARDWELL, P.C., M.P.,
Her Majesty's Secretary of State for War.

The memorial of the Surgeons-Major and Surgeons of the Medical Department of Her Majesty's Army at present serving in Her Majesty's garrison of Malta, humbly sheweth ;—

That your memorialists feel that the Royal Warrant for the regulation of the Army Medical Service, issued on the 1st of March, 1873, has materially lowered their position and seriously injured their prospects. Your memorialists had looked forward with confidence to the appearance of the said Warrant, believing that whatever further privileges and advantages Her Majesty might be graciously pleased to confer on them, none of the rights and privileges guaranteed by previous Warrants would be withdrawn.—

That many of them have been deprived of their regimental appointments, in which some of them had hoped to continue until promoted or retired, without having any corresponding advantage granted them in lieu thereof, or even being compensated for the loss of Band and Mess contributions and subscriptions and for change of uniform,—they feel that their position is uncertain; that they are more liable to be removed to any part of the world at short notice; and in the absence of any guarantee that a surgeon shall be promoted to the rank of surgeon-major at the end of fifteen years full pay service, under clause 3 of the said Warrant, they may have to serve in the lower rank on a reduced rate of pay—while at the same time their ceasing to be regimental officers will in many instances reduce their emoluments—for it will on many occasions practically deprive the married medical officers of passages for their families which though not guaranteed, have generally been given to regimental officers—

Secretary
Army Library Committee
Royal N. Hospital
Netley. Hants.

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once led the van now halts in the rear, and England once held fast by ultra conservative military theories, is now awake and rapidly coming to

That clause 5 deprives your memorialists of the precedence conferred by the Royal Warrant of the 1st October 1858, lowers their status, and indirectly reduces their emoluments—

That the word "necessarily" in clause 6 may have the effect of depriving your surgeons-major of forage for even one horse which was guaranteed to them by the Warrant of 1858 and which their position and rank as field officers entitled them to possess,—that by having often to feed and house their horse at their own expense, by having no right to conveyance for them from station to station, and by forced sales they will necessarily be pecuniary losers, and that the general effect of the clause is to reduce their emoluments.—

That they feel it particularly hard that any of the advantages which field rank used to confer on them should be curtailed, as in consequence of the increased number of officers of other departments raised to this rank, it does not now confer on medical officers the same comparative advantages as it did in 1858.—

That in clause 12 of the said Warrant promotions by seniority are limited to death vacancies, and vacancies caused by promotion; depriving in most instances the senior surgeon who may be qualified of the right to his step, as the greater number of vacancies are caused by retirements,—thus opening the door to patronage at the expense of long service or of merit, and should it at any time be determined to maintain a fixed number of surgeons-major promotions of juniors on account of retirement might keep seniors out of their just rights for an indefinite period.—

That by clauses 12 and 16 of said Warrant the responsibility of recommending medical officers for promotion is removed from the head of the department, who as a physician and surgeon is best qualified to form a correct judgment of the ability and merit of medical officers.—

That clause 14 of said warrant provides that surgeons serving in India "may" be granted local rank as surgeon-major after twelve years service—but it does not ensure to them either the rank or increased pay.—

That clause 15 of said Warrant provides that medical officers attached to a regiment or battalion shall remain with it as a general rule for five years, if this rule is applied to present incumbents they will be serious losers,—

That the permission to retain in employment officers who by the 20th article of the warrant of 1858 are required to retire at the ages of 55 and 65 respectively is in direct opposition to the recommendations of the committee of 1857 which introduced this rule with the view to maintain the efficiency of the service, besides which it will act prejudicially by stopping the promotion of those in rank below them, thus depriving them of emoluments when serving and of increased pension when retired.—

That in consequence of the decreased value of money and the great increase in the cost of the necessaries of life the retired pay of medical officers at 20 years has become insufficient—The utmost that a surgeon-major can receive after 20 years full pay service is 16s. 6d., and after 25 years full pay service 20s., and that only if his health is broken, so that he has no certainty of even this small retirement —

That the long tenure of office in the administrative grade confines that rank to but few and deprives the surgeons-major of the chance of promotion and of the increased retirements resulting therefrom.—

That the special circular of the 6th of March 1873 is in direct opposition to the recommendations of the Royal Commission of which MR. SIDNEY HERBERT was president in as much as it imposes great additional responsibilities and extra duties of a non-professional character on medical officers, duties for which they have had no special training, and which cannot fail to clash with their proper functions as medical men and seriously obstruct the public service;—they also feel that were it possible to arrange these duties so that they could be performed by your memorialists without detriment to the public service that it would be a hardship to have these duties and responsibilities imposed on them, without extra pay—the more so as the imposition is unaccompanied by any power or control over subordinates, or any pecuniary allowances to cover contingent losses.

That further your memorialists would urgently press a grievance under which they feel they have long suffered—the difficulty and uncertainty of securing a reasonable amount of leave of absence—

For these and other reasons not herein set forth your memorialists pray:—

once led the van now halts in the rear, and England once held fast by ultra conservative military theories, is now awake and rapidly coming to

That upon consideration you will be pleased to recommend to Her Most Gracious Majesty,—

That such of Her present surgeons-major as are in regiments may be permitted to retain their appointments and that the limitation in clause 15 may not apply to them; also that all surgeons-major and surgeons as may be hereafter detailed for duty with regiments may be purely Departmental Officers, having status according to their army rank, their actual commanding officer alone if junior to them taking precedence of them as was provided in the Warrant of 1858, and that forage may be an appanage of their rank.—

That the late assistant surgeons, who have been summarily removed from their corps may have such pecuniary compensation granted them as may seem to you to be just and that promotion to the rank of surgeon-major may be guaranteed to all qualified surgeons after fifteen years full pay service.—

That the decreased value of money and the great increased cost of the necessaries of life may be taken into consideration, and a more liberal scale of retirement allowed after 20 years full pay service, with such a daily increase after each years further service as may be considered necessary up to 25 years.—

That your memoralists may not be called upon to undertake any of the non-professional duties detailed under clause 6 of the special circular on hospital duties dated 6 March 1873.—

And your memorialists as in duty bound will ever pray.

Signed at Malta this
16th day of June, 1873.

(Signed by all the executive medical officers serving at Malta.)

Your memorialists since the above document was drawn out, have seen, as reported in the various papers, the memo: furnished by you to Dr. Lyon Playfair, and beg most respectfully to record their opinion that the explanations offered in it in reference to the Warrant do not appear in any way to mitigate or remove the grievances complained of.

[Regimental Press, 28th Regiment.]

Original forwarded by P.M.O. with his support to Director General for submission.

From Journal. U.S. Institution of India - March. 1879

I

III.

NOTES ON MILITARY MEDICAL ORGANIZATION IN INDIA

BY SURGEON MAJOR G. J. H. EVATT, M. D., A. M. D.

SECTION I.

Introductory.

1. I propose in the following paragraphs to examine into the system of Military Medical Organization in India, both in quarters, and in the field, to point out what appears to be some of its weak points as compared with the system of our Home and other European armies, and to offer some suggestions tending to assimilate as far as may be possible the Indian system with modern European ideas.

For my own part I have little doubt that there is a work to be done in India both in developing the efficiency of our Military Hospitals, as well as in laying down certain rules for the working of the Medical service in the field.

2. It is quite certain that any critic who enquires into the existing attempts at a system, will find many defects in it, and however true it may be that in olden times the Medical Organization of the Indian Army, European and Native was good in its rough way, to day it is far behind our English, or other European arrangements. The truth seems to be that England which was for so many years behind the age in the Medical as in other branches of the army, is now well to the front, while India still keeps "marking time" on the rough old tracks of the happy go lucky campaigns of the pre-scientific Military period.

This is a pity. India should be to all of us the nursery and training ground for good military organizations. It should not be possible for us to be able as we now are to accuse Indian service as being actually injurious to our efficiency, and to our development into good Medical Officers. Yet this can be done on fair grounds, and one can appeal with confidence to the judgment of unprejudiced men.

3. When we compare English Military Organization to day with what it was at the period of the Second Punjaub War in 1849, we are simply astounded at the enormous development and progress that has taken place since then, but if we ask what India has done in the meantime what answer can be given save the word "nothing."? India that once led the van now halts in the rear, and England once held fast by ultra conservative military theories, is now awake and rapidly coming to

the front of the nations. We cannot allow India to be accused as it is so often, of being to us what Algiers was to France under the Empire, a school where accurate organization, and correct military ideas, held little sway, and where the efficiency of the army was sapped and un-undermined instead of being strengthened and developed.

Yet it can easily be shewn that if in Medical Organization India does not make considerable improvements on her existing condition, we can well accuse her of being to us an injurious station. I maintain that weighed by the standard of Modern Military Medical requirements, India does thus injure and sap the efficiency of every Medical Officer, while the present arrangements exist in India.

The simplest way to set to work on this subject is briefly to sketch out the modern European system of Medical Administration in garrison and in the field and then to point out the short comings of India by comparison.

Section II.

Modern European system of working the Medical Corps of an Army.

4. Until the period of the War of the Great Rebellion in America in 1860—1865 the system of working the medical aid of an army was everywhere, in the old or the new world, by a system identical in principal with what is called the Regimental Hospital system, that is to say the Medical officers had no real control over the hospitals. The Medical Corps of an Army was quite powerless and was subdivided into a crowd of regimental hospitals as much a part and parcel of the Regiments they belonged to as was the Regimental Band. The Regimental Commanding Officer alone controlled them. The responsibility of working the hospital rested wholly on his shoulders, and the duties of the Inspecting Medical Officers were of the most trifling nature, in fact limited for years to totalling up the amount of extras issued in dieting the patients. The medical service had no autonomy. No medical official however senior had any disciplinary control or power to move or distribute the medical officers, they remained practically chained to the battalions however matters turned. Whether in the field or in quarters the hospitals of the army were wholly separate from each other, and the medical officers carried away by a false esprit de corps forgot to aim at medical efficiency as a Department whether in peace or war, and dwelt more upon their Regimental attachments than their Departmental efficiency ; owing to this subdivision by Regiments in peace and war great injury was done to the army. In peace the Doctors separated from one another by petty regimental barriers failed to develop a high professional and departmental *esprit de corps ;* and the soldier in consequence was deprived of the aids that high medical efficiency can give him in sickness, while in the field owing to the way the medical service was tied hand and foot to the battalions it was impossible to move the Medical aid of the army in any direction it was needed, and the Directing Medical officers being deprived of all administrative power in its fulness in peace, were quite unable for the strain that a campaign always entails upon them.

5. The medical officers instead of being accustomed in peace to do everything needed for war, and to have the fullest control over their hospitals and disposal of the Medical Staff, were kept fast bound in regimental swathing bands until their limbs from sheer disuse grew crippled and powerless.

We went in this way to the Crimea. We had no Army Hospital Corps, no ambulances, no bearer company, no detailed plan for removing the wounded to the field hospitals, nor for evacuating these hospitals when full. No hospital ships. No system of working general hospitals.

The P. M. Os. of Divisions were mere shams, devoid of any control over their officers, and the whole result was worthy of such a system. Twenty thousand dead men slain not by bullets or bayonets but by

disease shocked England to the core. Yet such is the Conservative nature of the English character that until March 1873, no really useful change was made by us.

6. America in 1861 untrammelled by tradition and free to develop her services to suit her wants first freed the Medical corps. She gave to her Medical officers, decentralized and full control in the distribution of the Staff, discipline of the subordinates and thorough freedom in the interior working of her hospitals

The Medical Officers responded freely to the trust and we saw for the first time in history a great Campaign well managed medically. Her hospitals are still quoted as our best models. Her medical officers are men, not children. Men trusted to do their duty and to impress their authority on the subordinates of the hospitals.

Prussia arming for the strife for German Unity next took the field.

The Prussians had for years seized all the intellect of their country and turned it to account in the army. By decentralization and due localization of authority they had developed a splendid military system well up to the age. In the Campaign of Sadowa they proved the efficiency of their organization as soldiers, and their medical service which even then was wondrously free by comparison with ours did well also. But after that Campaign a still further freeing took place. The experiences of 1866 were not lost and by the time the Campaign against France came round in 1870, the German Medical service had attained a high pitch of decentralized perfection, and well sustained its reputation.

7. France on whom the Medical disasters of the Italian war of 1859, had produced little effect was quite unable to compare in point of Medical efficiency with Germany. The Intendance paralysed everything in the Medical service, and it is only since 1871 that the French Medical Department has been freed as it now thoroughly is from Regimental on Intendance Control. The arguments dealing with every side of army medical organization laid before the French House of Assembly are well worth reading by all soldiers, and are models of logical clearness. In England a great movement towards Army reform commenced after the Franco-German war. It came to a head in 1873 by the abolition of the Regimental Hospital system. Between 1873 and 1877 very complete reforms have been carried out in freeing the Medical service, developing the Army Hospital Corps, the Ambulance trains, the Bearer companies, the field Hospitals, and the Etappen and Base hospitals; and finally in 1877, the Command warrant was granted establishing the full disciplinary control of the Medical service over all its officers, non-commissioned Officers and men, in fact making it autonomous.

Thus gradually the English Medical service has been freed from the withering restraints entailed by its old regimental organization and a new organization indentical with the German and American system has been laid down. In one word it has been decentralized from the Regiments. By it the medical system will be the same in peace and in war. In peace the Medical service of each garrison is controlled locally by the senior Medical Officer present. The Hospitals, no longer regimental but Army institutions, are wholly under his surveillance no matter how occupied. The duties in the garrison are alloted as best suits the requirements of the garrison; and the Officer Commanding the garrison holds *one man* responsible for all the Medical arrangements. The Officers, N. C. Os. and men of the Medical Corps, no longer tied to battalions or batteries are available for allottment as needed. The sick no longer scattered in detached and petty hospitals are more concentrated, to their great benefit. The Doctors are brought into closer professional contact, and more esprit de corps, is developed.

A Hospital Corps has been developed wholly our own, and able to assist us in our labours and to carry out all the minor details of the hospitals. A crowd of Senior Medical officers are being trained in the garrisons, who will one day succeed to the post of the Deputy Surgeons General and will be well qualified for the berth. The Department has been unified and has now a chance of being ready for war. In war time the same system will exist. A series of twenty five detached field hopsitals will be organized and attached to each Army Corps. These organizations, perfectly complete in every way, can go anywhere and do any medical work. They are as moveable and as independent as a battery of artillery. They can halt or march independently of all troops or can be concentrated or segregated as may be necessary. Each division will have two such hospitals always ready to march. These hospitals can again subdivide into halves, still complete units.

9. The Army Hospital Corps is also trained to form bearer companies of which four will be attached to each Army Corps being one to each division and one to the corps troops and cavalry. These perfect organizations take the wounded from the field and hand them over to the field hospitals after being dressed.

Complete regulations are drawn up for the field Hospitals, Etappen and Base Hospitals, Bearer Companies, and Floating Hospitals; and the career of a man from the time he falls struck with a bullet until he arrives at Netley is as clear as noonday. We now have a system worthy of the army and the nation and it is well worth studying. It is in unison with the systems of Germany, and America, and is quite up to the age.

The introduction has been slow and a work of intense labour and difficulty, but it is now accomplished, and no soldier should be ignorant of its working. It is a model of clear military organization.

In India we are still without a system. No one knows how the next campaign will be worked medically, and it is to assist in developing a system suitable to India and the army that is aimed at in this paper.

The subject is of immense interest to every one calling himself a soldier, and one appeals with confidence to all those who know what modern military organization should be, in favour of the English and European Unification systems.

Section III.

The meaning of Unification.

10. To many Military men of the old school and indeed to many army medical officers also there seems to be a want of grasp of what Medical unification really means. To many it seems to be simply not commissioning Medical Officers to individual battalions. To others it seems to be treating the sick in one large central hospital. It is neither one nor the other. The great end of unification as carried out in Gemany, America and England is the training the medical service in peace for its duties in war. We may safely say that if in any army there is much divergence between its peace and its war routine, disaster is certain to occur when the change takes place.

11. In India at present we are working our hospitals on the regimental system, every battalion, Regiment or Battery has still its separate hospital wholly independent of each other. Thus I find 12 hospitals in the encampment of a single division or 48 in an Army Corps. In every garrison these petty divisions of the hospitals exist, although in every other Army and in every English non Indian garrison they have been abolished.

The Medical Department while serving in India is completely injured in its training for modern war and in its developement of professional efficiency in peace by this system. In the first place in any campaign either in India or England, or elsewhere, Regimental hospitals could not be worked for even a single week without almost certain disaster. We know that in all English Campaigns, Divisional field hospitals will be the medical system. Yet India would have 48 hospitals in the front line of an Army Corps, and that without counting *ettapen* or base hospitals. In England and the Colonies every day the Medical Officers are working their hospitals in peace as they would in war; we in India are doing quite the reverse. We are to-day working in India on a wholly condemned system, and such being the case every day a Medical Officer spends in India is an injury to him because he cannot be trained in the English system.

So much for war organization. In peace the same ill is resulting. We still see in India detached hospitals for every battery of Artillery, Cavalry Regiment or Infantry Corps wholly independent of all medical supervision save once a year by the Deputy Surgeon Generals. We see medical officers of our service often of senior rank wasted in these petty battery establishments. Receiving no training in the large duties of their Department and becoming unfitted in consequence for the inspecting grade when their time of promotion comes. We see also, often in garrison young medical officers placed in detached battery hospitals and once placed there wholly free from inspection by the senior officers of their Department in the same garrison.

12. We may see also corps of infantry in charge of junior officers in a garrison. Batteries of artillery, very petty charges, in the hands of senior men, and in the end the efficiency of our officers is injured. We are not trained in a system that will work in the field, and on this account it is true and right to charge India with being to us in every way an injurious quarter.

The greatest evil that resulted from the old English regimental system was its ruinous effect on the senior medical officers, not yet promoted to the inspecting grades.

They never got any chance of training themselves for their new duties. They spent their years in petty little hospitals with their hands tied up in every way. Then when enfeebled and injured in their administrative powers they were, when old, granted promotion. Such men are little use. We want training to our duties as administrators, and that training is given in England by the garrison medical system.

Instead of having as of old in every garrison a crowd of officers idling their lives in petty Regimental Hospitals, all of equal powers, equal rank and equal duties, we have now in every garrison one man, the senior, administrating that garrison, dealing with every Medical question there, becoming a well qualified officer and fit for promotion for the higher grades, or at any rate being proved and tried to see if he has it in him to be efficient.

13. Such a man of old would have been kept in a regiment until the day of his promotion to the inspecting grades, and it would have been the merest fluke if he turned out a good man, because he would never have been tried, no one could tell what was in him and good as he might be the new duties would be at first very trying for him.

To promote the Surgeon Major of a Regiment to be Deputy Surgeon General in the old day at home, and still in India, was like sending a captain of a company to command a Division without any preliminary training. Have we not all seen Surgeons' Major in charge of petty regimental Hospitals up to the day they became Deputy Surgeons General.

Now, on the contrary by the European garrison system, one man is being trained in every garrison to deal with several regiments and large Medical questions, and in consequence be gets a chance of being efficient.

Further, in England a Senior Medical Officer in a garrison deals constantly with 10 or 12 Medical Officers, and a large force of non-commissioned officers and men of his corps. He learns to administrate, to supervise, and to control men.

14. These are duties which need training and practise. We do nothing of this kind in India. A man may come to India after

being Senior Medical Officer of a large English or Colonial garrison, to wither away into a useless officer of a petty battery hospital.

Such a system admits of no defence. It should not exist for one day, nor is there any occasion for it. It is perfectly possible without any expense, any injury to the soldier, or any disjointing of arrangements to introduce an English system in principle into India, and until it is done we will be kept back in the road to good work and efficient administration by our Indian tour of duty.

If we do not get a garrison organization there will be nothing whatever to prevent a Surgeon Major of standing in the Department being taken from the actual charge of four or five sick men in a battery hospital in India, and sent to be Deputy Surgeon General of an English Division in Roumelia, a post needing high training and tact.

We want an intervening duty between batteries and divisions of the army, as much as any military officer does, and that training is the medical charge of a garrison of two or three corps.

Section IV.

The Changes Necessary.

15. It is constantly advanced as an argument against Medical unification in India that the distances of the various barracks from a central hospital are too great to admit of such a system being introduced. Doubtless there are some stations in India where the distance is a drawback but what I desire most clearly to point out is that one Central Hospital although an immense advantage in administration and economy is by no means a *sine qua non* in the principle.

The basis of Medical unification is the centralization of the medical duties of each garrison in one man's hand, not in one central hospital. The hospitals may be far apart, may be scattered over a cantonment in any direction, what I desire to point out is that so long as they are under one administrative head, and open to the inspection and paramount control of the Senior Medical Officer in the garrison it matters little how far apart they are. Near or far they should still be garrison hospitals, being as it were mere scattered wards of one large hospital. This is the true principle at stake. This is what unification means.

16. That once granted it matters little save in expense how far apart they be. There is no particular reason why they should be closed up together into one consolidated mass, so long as they are practically one in administration.

What all unificationists inveigh against is the absolutely injurious effect the present Indian system has on all of us. Take Bareilly, or Fyzabad, or Lucknow, or Meerut, as an example. At Fyzabad we have a European Infantry Corps and a battery of Artillery, besides native troops. Now the Senior Medical Officer, who is in India a mere creature on paper, may be in charge of the Battery of Artillery with perhaps 3, or 4 or even 6 single men as a charge.

17. His whole time is supposed to be devoted to this paltry duty. He does not in any way enter into the organization or routine of the European Infantry Regimental Hospital, althongh it may be crowded with 100 sick. He has no power whatever of visiting that hospital. He dare not enter it without the sanction of the Commanding Officer of the Regiment. His whole time is wasted over his four or five sick men, and the Sanitary affairs of a Battery of 130 men. He has no officers under him. He has no training in any large administrative capacity. A young surgeon of a few years service may be in charge of the Infantry, he can in no way interfere. He cannot in any way supervise the routine of the hospital, nor give any order.

In the same way if a boy from Netley devoid of all Indian experience comes to the battery he is free from all inspection and control from the Senior Officer of his Department in the same garrison who may perhaps be in charge of the Infantry Corps. Such a system is ruinous.

It injures the Seniors by keeping them from experience in dealing with large questions, which must arise in the field and it injures the juniors by secluding them from inspection and direction by their seniors. Once a year it is true an Inspecting Officer comes, but it is not by such inspection good is done. It is by daily guidance, and frequent advice and direct orders too, such as only a man on the spot can give.

I say then that if we are to be made good army Doctors we should be unified in India as we have been in England.

Not by building extravagant hospitals, not by drawing the buildings close together, but by developing the existing Senior Medical Officer in each garrison into a real living entity with power to control and ability to direct. Such an officer would be a real aid to a Commanding Officer, would have at his grasp the whole medical details of the garrison, be able to exercise real sanitary supervision over the whole Cantonment and in fact be in reality and not in pretence a Senior Medical Officer.

In the same way at Lucknow, Mian Mir, Rawul Pindi, Meerut, or Umballa the authority of the Divisional Principal Medical Officer should be defined and more particularly limited to the Divisional work. Under him should be the garrison Senior Medical Officer dealing with the local hospitals and all local questions, of course under the eventual control of the P. M. O. of the Division.

19. But it is essential to have men in training and ready and able to take responsibility. Separated as we now are only in India we are injured in our efficiency, and one looks forward with dread to a campaign lest from sheer inexperience of dealing with large matters we are found wanting in men able to guide the Medical Corps. To day no man can say how any officer would turn out as senior in a Division in the field.

20. Then we must have a large field hospital and a separate organization, and is it fair and just to push us out into the field unorganized for our future work, we must train in peace for war, and can any soldier deny this. We alone of all the army in India seem to live in quite another atmosphere; viz. to live in peace wholly different from war, and how can such things end save in disaster. I propose then that in every Indian garrison the hospitals whether concentrated or detached be placed under one administrative head viz the Senior Medical Officer of the garrison. That with the Commanding Officer of the garrison we have full directing power in every way over every Medical Officer and subordinate of every grade in the garrison. That we detail and define the various duties of the officers and have full power when epidemics threaten to evacuate the troops from any hospital, to concentrate them in any hospital, and to utilise any hospital building for special disease. That all posting of officers to battalions and batteries while in garrison should cease and that a definite staff of

Doctors be posted to the Garrison. That over these officers and subordinates the Senior Medical officer should exercise his full power granted by the Royal warrant of 1877. That we be taught to obey this officer and to look to this officer for instruction or assistance in any case of doubt or uncertainty.

In fact that the English system of a single head be introduced.

21. I maintain that the responsibilities of such a post will develop good men. That no one will benefit by it more than the soldier and the army and the Commanding officer of the garrison. That we as a Department will be in far stricter discipline and more working order than now when we serve two masters and that by it a new start towards efficiency will be taken. For if a man fail in working in a garrison he can be detected and prevented doing still greater injury as a Divisional P. M. O. in the field. The authorities Medical and Military will soon find out the real men. Men in such posts soon sort themselves, the bad ones sink to the bottom, the good ones come to the top, but now with our petty little hospitals and narrow training we all in India float on a dead level of mediocrity. I feel certain men can and will be developed capable of any duty if only we get the chance of developing them. This work is going on in England, why should India stop the way.

If a hospital be near the Artillery Barracks keep it, if need be for the artillery ward of the garrison hospital. Then it is open to inspection by the Senior Medical Officer. Let the Sanitary charge of the Artillery and Infantry alike be the charge of the Senior Doctor, who through his juniors will make himself master of all details. It is the system in England and in Germany and no one can deny it is the true system. It is the same in peace and in war; by no other means can Medical efficiency be developed.

22. When a battery or battalion marches away a certain fixed staff would march with them. While on the march this staff would be under the control of the Commanding Officer on the spot. When it marched into a new Cantonment the staff would take their places amongst the Garrison Medical Corps, according to their standing and everything would go on as before. No difficulty whatever exists in the way of its being carried out, no expense and no trouble to any one save the Senior Surgeons-Major, but they are men to be troubled, for out of that trouble comes in the end the power to master it. This system enables the fittest Doctor to survive, and that is what we want; today we are in India only keeping every one in a state of mediocrity out of which no good, but much harm may came, then with free play to burst out and to grow, the good men will come to the front. Never at any time or in any country did we ever see Senior Surgeons Major in charge of battery hospitals as we do now in India. Even in the darkest days of the past such would never be allowed. Every duty now

done by the Medical Officer for the soldier can be done equally well, nay better by the garrison system than by the existing one; and every Sanitary duty or detail of daily routine required in Regimental Life can also be accomplished.

But in addition to all, we will be trained for good work and be made far and away better men than we now are. Further, and it is by no means unimportant, we will be assimilated to our English System; and that alone is a benefit.

Whenever uniformity can be secured between England and India in any army system it should be done. All change of system causes trouble and confusion and these should be reduced to a minimum. In case of medical officers sent out in time of war to India, the existence as now of two different systems would be disastrous.

What a comfort it will be when Cholera is threatening, to be able to evacuate any hospital by concentrating the garrison sick in one place, and keeping the empty hospital for those attacked with the disease. I maintain that if we get the hospitals put under one single authority the greatest comfort will be given to the sick by allowing special accomodation for special cases or special disease in every garrison.

23. To-day if two cases of Scarletina occur, one in each corps in a garrison both corps hospitals became poisoned, because no one now has power to concentrate all special diseases in one place owing to the Regimental detachment of buildings. In the same way in every corps in a garrison the want of lying-in-wards, and quiet wards for special cases exists because every corps has a petty little hospital attached to it for women, instead of there being one really good quiet hospital told off specially for such cases.

The Senior Medical Officer under the commandant of the garrison should have full power to allot the hospital accommodation to each disease, and much comfort would be given to all by such a power.

Gradually as new hospitals are built, and many such are needed, they can be so placed as to be convenient for garrison use, but this though an advantage is not essential.

24. Another great advantage of developing the position of Senior Medical Officer in each garrison is the power it gives the Surgeon General of assuring himself that Medical officers newly out from England and with no Indian experience shall not at first be put in positions needing any Indian experience such as the medical charge of corps or batteries.

It will always be possible so to post Medical officers arriving in the country that they will not be senior in a garrison, but will be under the supervision and control of officers of experience for, at any rate, sometime

after their arrival in the country. By this system their power of free action will be limited by having to refer to the Senior Medical Officer on the spot. To-day owing to our adhering to a practically regimental system the most inexperienced Medical Officer may be placed senior in a Regiment, and his recommendations lose force from his want of local knowledge. But by keeping him a year or so in a garrison, he soon learns the Indian routine, and is saved from all chance of error or misapprehension in his views of Indian Sanitary matters.

The saving of trouble to Medical officers by granting power to one controlling head to allot the garrison duties would be great. Decentralization and localization of duty would come into play, to our certain efficiency in every way.

Look at Dinapore with its Infantry and Artillery hospitals both in one building yet distinct in every way. Look at Lucknow with its two Infantry hospitals 50 yards apart yet wholly distinct in Staff, equipment, drugs, and routine. Look at Bareilly and Sitapur equally available for the new system. At Bareilly this summer when typhoid fever attacked the 2nd Queen's how easily could the infected cases have been removed to the Artillery hospital close by, and the ordinary sick of the Artillery treated in the Infantry hospital.

In the same way good opthalmic wards, special wards for dangerous cases, can be allotted if the hospitals be under one head. Yet at Bareilly in the same building two female hospitals, one artillery, and one infantry, exist wholly distinct in staff, nurses, and servants. Yet from both one really good hospital could be made.

Section V.

Field Hospitals.

In India under existing rules every army corps will have 48 hospitals in the first line, wholly excluding etappen and base hospitals which in England, are equal to the number in the first line or for India 96 hospitals per army corps.

In England, and in all European campaigns every army corps will have 25 Field hospitals including etappen and base hospitals attached to it. Each hospital will be a perfect unit in itself and capable of accommodating 200 sick men. Each hospital has a staff of seven medical officers, with Captains and Lieutenants of orderlies acting as Quarter Masters and Paymasters and a full detail of non-commissioned officers and men. Of these 25 Hospitals, 12 are attached to the army in motion, and 13 are to be posted at the base of operations and along the *etappen* lines.

Of the 12 with the Army corps, 2 are posted to each Division, making six, and six are with the corps details in the second line, in reserve.

In India every division at present has 12 hospitals in the first line, vide Regulations for encampments in India plate No. 7, 1876.

All hospitals attached to divisions are fully equipped with transport, and able to move in any direction, and three of the six in the 2nd line are also fully equipped with transport.

The arrangement is that as soon as any of the field hospitals attached to divisions became filled either with wounded or sick drafted into it, it halts, ceases to belong to the division, and its place with the division is taken by one of the hospitals in reserve in the 2nd line which if necessary takes over its transport, and marches off with the division.

26. The halted hospital practically becomes one of the etappen hospitals, and the reserve may be again filled up from the 13 hospitals originally detailed for this duty.

A field hospital is a perfect unit, complete in every way. Its Medical Commanding Officer has full control over it in every way. In fact he has been trained for it in garrison in peace. It practically is simply a garrison hospital able to march.

It has its own Paymaster, Quartermaster, transport officer, carriage equipment as clearly told off as any battery of artillery.

We need the same arrangements made for India where even with our 48 hospitals per army corps we have no transport officers, quartermasters, paymasters, nor trained staff. We want to be told what an

Indian field hospital will be, and how it is to be organized, how many officers are to be posted to it. How many subordinates, who is to be its Quartermaster, who is to enforce discipline, who is to be its transport officer, what number will be attached to each Division, where the orderlies and servants are to come from. These things should be as clear as noonday. They should be known to the most junior officer of the Medical corps.

When war comes it is too late to tell us. We should know it in peace, and work the same system in peace, if we do not we shall certainly go to grief in war.

27. If it is thought that an English field hospital is too large for India let it be reduced to fewer officers and a smaller unit, but it should be self contained, complete, a fixed and definite entity not capable of being a mistake in any way.

This is the secret of German efficiency. Everything is ready and known. No man unless a heaven born genius can devise schemes for an army off hand.

Even if he does devise them no one can be trained at once to carry out his views which must be quite novel. It is practice makes even the cleverest perfect in this as in everything, and without practice he cannot be perfect. It should be possible at Lucknow, Meerut, Umballa, Mean Mir, and in fact at a number of garrisons to mobilize a field hospital under canvas every cold weather for a few weeks, and actually treat the sick in it, we can then find out the hitches and errors and have them corrected.

It is a perfect treat to study the arrangements of an English or German field hospital. Everything is foreseen and provided for, but I am unable to say where we can find out what an Indian, field hospital is to be. Great or small, divisible or undivisible, it should be a perfect unit and be wholly self contained.

Quite apart from these field hospitals is the regimental Medical officer attached for the campaign to the corps. He has no hospital, simply a tent and a cart for a few seedy men who would be able in a day or two to return to duty.

The hospital should be quite separate from the Regimental aid. The Surgeon with the Corps goes with it everywhere it goes, in the first medical aid the sick or wounded soldier receives, if the man is merely indisposed he treats him in the lines or regimental camp, if he is ill he is sent to hospital. We want then to be told what our field hospitals will be, and then we want to try them, work them in peace, and see if they will work without a hitch.

We cannot at this hour of the day go to war with 12 hospitals per division while every other nation has but two, nor take into the field 48 hospitals for an army corps and an equal number along the communcations. Such a system would collapse in a week. Yet where are our orders for a better system.

Section VI.

The Bearer Column of an Army Corps.

An English Army Corps numbers about 37,000 men. Forming part of its Medical arrangements is a "bearer column" consisting of four "bearer companies."

Of these four companies one is attached to each of the three divisions, and half a company each to the Cavalry Division and the Corps Details.

What is a bearer Company?

We have pointed out that in Europe no regimental hospitals exist.

The field hospitals are perfect units, in themselves but they do nothing whatever to lift wounded men from the field. That is a special duty, provided for by regimental bearers, and the bearer company or sanitary detachment of the Germans.

Each English battalion has four men per company trained to remove wounded men from the field, and partially bind up their wounds. These men work under the Medical Officer with the battalion. They wear its uniform and are in every way part of the regiment. They constitute the Regimental aid. But in addition to them there is a divisional bearer company of 7 Medical Officers and some 130 men of the Army Hospital Corps organized as a complete divisional unit whose duty it is to remove the wounded from the field, dress them at the field dressing stations, place them in Ambulance wagons and deposit them at the door of the field hospitals, which duty being done they again return to their Division and are ready to march off with it almost at once. Had such a system been in force at the Alma Lord Raglan could have marched at once after the battle. These companies are perfect self contained units of which each Division has one, composed of medical officers, officers of orderlies and men of the hospital corps. They have stretchers, a large number of Ambulance wagons, tents for operating in, dressings for the wounded and nourishing food for them. These companies patrol the whole field of battle, and remove and guard all wounded men. By constant training in peace they become highly efficient and it is impossible to say what would have been the result following the battle of the Alma, if in 1854 we had had such an organization. We could have marched in one hour after the hill was carried.

We want such men in India. We want our "*galla*" establishments of Doolie bearers, supplemented by Ambulance waggons, trained to remove the wounded from the field.

29. We want them to be drilled and disciplined. Taught to work with stretchers, doolies and ambulances. To pitch a dressing station. To feed the wounded soldier on the field with water and soup.

To be trained and dressed so as to be easily recognised and to be formed into a real ambulance corps or bearer company. We want good ambulance carts, light and strong, we want litters and caçolets; we want strechers and mule caçolets for mountain warfare on the frontiers. We want a back bone or cadre of European soldiers of the Subordinate Medical Department to work with these doolie campanies.

The units of organization we want clearly defined, placed under our control, trained every cold season in every Indian garrison and taught to be efficient.

To day these men are unorganized and grossly ignorant.

They know nothing of their work and never will, unless trained.

We want a backbone of European Non-Commissioned Officers and men on the cadre of the company to give stability to the organization, and to aid in the field. Our Subordinate Medical Department are too weak to be enough for such a duty, and as in the Bengal Sappers and Miners a certain number of European soldiers are attached to each company, so we want the same.

30. We want a definite table drawn up of what the strength a bearer company should be for a Division.

The number of Medical Officers it requires, the number of Medical Subordinates needed whether for transport, payment or storekeeping duties.

We also need a certain trained cadre of European soldiers to work with this company.

Every year at the headquarters of every division or district this company would be mobilized.

They should be drilled, clothed and disciplined like sepoys.

In the summer they would pull the punkahs, but still could be kept in a more or less disciplined state. Weakly and delicate men should be cast out from the bearers and all men unable for the duties of a campaign.

At out stations where regiments are stationed the "*galla*" establishment, even if two few to make a bearer company, should be organized into a half or even quarter company, but organized it should be, and trained and drilled.

This cadre in the event of war would be expanded by the admission of civil doolie bearers and could easily be extended to double or treble

its peace strength. It would need tents like a sepoy corps, and when war came it would be placed wholly under the Medical Officers,

Ambulance carts would form a definite part of this company, and it is hopeless to try to get on without them.

Every day doolies are becoming rarer in India and in ten years will be still more rare. But cart roads and good country roads will every day be more common, hence we need wagons for our wounded men. Now we have hardly any. Wagons once made up would last for years, and the cattle to drag them could easily be hired or bought.

Every garrison should have its certain reserve of such wagons, and they would doubtless be used from time to time at cold weather field days.

I often wish that the moveable column of a Cantonment would parade once a month and march a few miles out of the garrison ready for the field. Merely putting such a thing in orders is quite a matter of form. But if it paraded complete in every department a good opportunity would be given to see its defects and its needs.

As the public cattle are mustered once a month advantage might be taken of the muster day for this marching out practice.

With it the Medical Corps would parade, whether as regards, bearer company, field hospital or otherwise. For mountain warfare mule litters and caçolets are needed as in every European army, and I suppose the cumbersome doolie will no more be seen in the Khyber or Khoord Kabul passes. One mule can carry two wounded men, why not use them?

The moment we come to detail a moveable column, our regimental hospital system goes to grief. If two companies of Infantry and a couple of guns and a squadron go out are they each to have a separate hospital. This would be impossible. Yet the gunner doctor if he goes out with the force leaves his hospital uncared for. At once another officer would have to be detached for this work. The moment field service begins our existing system falls through. The very tents for the field hospital would have to come from different sources, likewise the medicines and the servants. Having to keep the artillery hospital in cantonments working for the few sick that would remain entails all this. No one has power to send them to the Infantry Hospital.

Section VII.

Regimental aid to wounded.

32. We have described the bearer Company or Divisional aid to the wounded in battle. But there is the Regimental aid to be still dealt with.

We have copied from the German Medical system the institution of Regimental bearers. Every German battalion has its "Sanitary Detachment," that is to say a body of two, and sometimes four men per company trained to lift the regimental wounded off the field with stretchers, to bind up their wounds roughly and to carry them to either the dressing station of the bearer company or directly to the field hospital in rear. These men work under the Medical Officer attached to the corps for duty.

These men carry no rifles while on the duty, but have stretchers one per company always with the company and carried with its baggage. Wherever a company goes then either on outpost, picket or other duty it has at any rate four men trained to dress the wounded. This system is in full force in England. For India we want the same thing in principle. The subordinate Medical Department is too weak in India to give this aid by regiments. What is wanted is a special detail of doolies for each regiment, or of stretchers, and an ambulance wagon, with which these English soldiers even if not carrying the wounded themselves would superintend the carrying away of the wounded by the doolie bearers.

In every engagement soldiers will fall out to assist a wounded man, either from love of their comrade or from not being desirous of running any risk for their lives. It is better then to legalize this practise by detailing two or four men per company for the duty. These men will then be the only ones allowed to fall out. Otherwise many dodgers will seize the excuse to get away. This is the case in every army. These men should be lectured and taught every year *how* to lift the wounded, to pack the Ambulances, to apply tourniquets and in every way to aid the regimental Medical Officer.

Whether in peace or in war they would be useful to a corps.

I find men take an interest in this kind of work, and no officer should object to the loss of a few men for so useful a purpose. In petty engagements and skirmishes and at the outposts the Regimental bearers are sufficient for lifting the wounded, but in all larger fights the divisional bearer company would be called to take part.

33. A step towards this system might be made if we had unification, by making the doolie bearers who now are attached to the Regimental Hospitals, and who wait for sick at the quarter guard, part of the Regimental servants paid and mustered by the Quarter Master.

These men well trained and taught would work with the European soldiers at the wounded, and would be the cadre of the Regimental Dhoolie bearers, to be expanded in taking the field. If station hospitals are far from barracks a doolie or two extra would obviate much difficulty. I would supply the stretchers even in peace to the companies in India because there are many occasions even in peace when the men could use them as at night or in the cold season to carry men to hospital and it would gradually familiarize men with them and teach them to use them now and then, instead of always trusting to native doolie bearers as they now do. They are so light and handy as to be easily carried on a camel with the company tents.

A Non-Commissioned Officer or two should also be trained to take charge of the bearers under the Medical Officer.

34. I would have these men even in native corps, and give them the stretchers also. They are never in the way, and men would soon find occasion to use them. No reason exists why a couple of sepoys per company, should not be trained in this wound binding duty. It is useless training havildars and duffedars because in war these men are fully employed with the fighting men. It is a batch of sixteen sepoys who need to be trained and a couple of naiks or havildars to superintend.

As I will point out further on, I believe from the men in the European Corps trained to this wounded aiding work we can gradually get the subordinate Medical Department recruited with valuable subordinates.

Section VIII.

Doolies, Ambulances Caçolets, Litters.

35. For our army in India, we need several modes of carrying the sick and wounded.

1*st.* In the plains the Dhoolie will always hold a certain place in removing wounded from the field to the hospitals or dressing places.

Surgeon Major Bourke's Dhoolie is a very admirable contrivance.

It is light, portable, folds up and acts as a bedstead and stretcher. We need many hundred of them for the army in India. The existing Dhoolie is simply odious from its bulk, weight and non-compressibility.

2*nd.* We need ambulance waggons. These should be light, strong, capable of holding six men, or at least four, two lying down and two sitting up. They should be light so as to be drawn by ordinary bullocks, and strong so as to go over cross country roads.

It is hopeless to go on a campaign without them.

All work of evacuation of hospitals and much of the carrying to hospitals must be done by them.

The existing pattern seems to be very cumbersome and heavy They alone seem a load for a pair of bullocks.

3*rd* Caçolets are simply folding chairs strapped on like paniers to a mule, or perhaps a camel. They would do for mountain campaigns, and our mule batteries are a model to base them upon. One mule carries two slightly wounded or ailing men, and I suppose camel caçolets could be used in India. In Egypt the French army used them. The experiment might be tried in India with mules and camels.

An English "bearer company" has 50 caccolets and 26 litters, when engaged in mountain warfare. Such a company would do well on the north west frontier.

4*th* Litters are folding bedsteads giving lying down accommodation for the sick and wounded.

They too are strapped upon mules. They should be utilized in Mountain warfare.

26 Litters and 50 caçolets are the equipment of an English bearer company for mountain warfare.

Camel Kajawas or paniers might also be of use in carrying ailing or slightly wounded men.

Whatever carriage we could use in war ought to be carried

in peace; and in the cold weather field days there is no reason why they should not be used. Such parades are very useful to every medical officer and to the men of the Hospital corps. It seems to be a pity they are not the rule. Sham wounded should be picked up and removed eventually to the garrison hospitals.

Section IX.

The Subordinate Medical Department.

36. The subordinate Medical Department of the Army in India is supposed to correspond with our English Army Hospital Corps. The organization of the Subordinate Medical Department in India is a subject well worthy of consideration, the time has now arrived to introduce some changes in it. By some slight modifications in its mode of recruiting and training, it might be made a much more useful body to us all than it is at present; and the whole of the subordinate duty in a hospital of every description whether as regards the nursing of the sick, the preparation of statistics, the rationing, and the custody of stores, and the maintenance of discipline might be entrusted to it. To-day its duties are quite too narrow. At present the preparation of statistics forms no parts of its duties, being given over to a sergeant fresh from the parade ground. The custody of stores in every way its legitimate duty, and performed, without an exception, by the corresponding branch of every European Army including our own is in the hands of the Commissariat Department. The discipline is in the hands of the Hospital sergeant, and there is no clear order defining the responsibility of the medical subordinates acting as ward masters—for the equipment of their wards. I believe it possible by recasting the duties to make it possible for the Sub-Medical Department to be as useful to us in our Indian Hospitals as the Army Hospital Corps is to us in England, which it certainly is not at present. To-day it seems to me that we are carrying out a course of education for those subordinates of much too elaborate and expensive a character, considering that for the greater part of their life their duty is merely routine, and to carry out definite and clear orders as regards the compounding of drugs, and nursing details given by the medical officers under whom they are serving. The loss of service to the state and the great expense incurred by educating these young boys, called by Sir William Muir "lads of tender years" for three years at the Medical College in Calcutta hardly seems to be justified in consideration of the very routine duties required of them afterwards in the Army. We do not require a body of men who believe themselves to be almost physicians and surgeons, to whom the actual *nursing* of the sick soldier, and the custody of equipment constantly, seems to be considered a demeaning work. Did we instead of these lads, enlist a body of men of maturer years, fit for field service and more accustomed to discipline, it would be possible at much less expense to develop a set of officials perfectly competent to deal with such sudden emergencies as may arise in a Hospital before the arrival of a medical officer and who would really be nurses and compounders.

37. I maintain that to give us a number of young country born boys, wholly undisciplined, often of mixed parentage, without prestige or authority amongst the men, and who refuse to perform all the subordinate duties of a hospital, instead of being a boon and an assistance to us, is a dead weight and a drawback. Having before one's eyes the state of

efficiency to which the English Army Hospital Corps drawn from the ranks of the army has risen, I would press upon the authorities that it seems to me we are making a mistake in India in not utilising as subordinates in our hospitals, men drawn from the ranks of the army, in the same way that the subordinate officials of the Public Works Department, the Commissariat Department and the Barrack Department, are obtained. Why these Departments should be permitted to recruit amongst the well disciplined ranks of the army and to skim off as it were the cream in conduct and education of the European non-commissioned officers and men for their services, while the same boon is refused to the Medical Service is more than I can understand. I maintain it is essential for the efficiency of the Medical Service of the Army that the English and Indian systems in the hospitals should be practically the same. The two systems are now so divergent that it takes fully one year before a Medical Officer new to the country can untangle the threads of our confused Indian system.

I propose to simplify it in a great degree. The main outline of my scheme would be to recruit the ranks of the Sub-Medical Department from the non-commissioned officers and men of the Army, to diminish to some extent the number of warrant officers while increasing their pay, and to develop a class of trustworthy non-commissioned officers who would carry out all the subordinate hospital duties including those of the Purveyor; whose post I would abolish, to the great comfort of the Commissariat Department and to the certain increase and efficiency of the hospital working.

Let us glance in the first instance at the existing subordinate staff of an ordinary Infantry hospital in India; in the first place there is the Apothecary a well paid Warrant Officer on whose shoulders I would lay a far heavier burden of non-professional responsibility. Then there is the Assistant Apothecary, now without any responsibility, also a Warrant Officer to whom I would allot a further defined responsibility of a certain nature. Then there comes the Hospital Sergeant that extraordinary remains of an extinct period, who exists only in India, who, the moment a corps embarks for England is deprived at once of his rank and pay as Staff Sergeant, and returns to his duty in the ranks, who while wholly untrained professionally is the responsible compiler of abstruse medical statistics to which is combined the charge of the hospital furniture; why I know not. There is then the hospital European writer, to whom under my scheme I would assign very clear duties. There is then the Purveyor or Hospital Gomashta, a non-descript creature owning a double allegiance to the Medical and Commissariat Departments and equally unloved by both, whom I propose to abolish altogether, utilizing his pay to increase the attractions of the sub-medical Department as a field of service for the rank and file of the army.

38. Then there come three hospital apprentices called by Sir William Muir "lads of tender years" on whose boyish and undeveloped shoulders the strain of discipline rests uneasily, who have neither power

nor influence over the British soldier in hospital and who are physically unfit for the hardships of a campaign, and whom I would supersede by European soldiers. Last but not least come those two or three European Orderlies wholly unsanctioned by Regulation to whose devotion and kindly assistance the sick English Soldier in India owes so much, and without whom the responsibilities and the cares of the Medical Officer for his sick men would be largely increased. I will now state a plan which I claim to be more rational as well as economical and far more easily understood than the present cloudy system. Before proceeding one step further I would say that the three years now spent in the medical College is, considering the average duties we require of our medical subordinates, practically wasted time. I think all medical officers will agree with me that we do not want pseudo physicians, pseudo surgeons serving under us in our hospitals. A certain amount of medical training is needed, doubtless, for all hospital subordinates, but practically what we want is, devoted nurses, intelligent clerks and trustworthy storekeepers. The medical knowledge I would limit to a thoroughly practical training in the compounding of drugs a duty learned in six months by the corporals of the Army Hospital Corps in England, the application of tourniquets and dressings to wounded men in the field, such as is given to the privates, corporals and sergeants of the Army Hospital Corps in England, and finally as a qualification for promotion to the warrant grade a special course, not exceeding one year's duration, in the early treatment of sunstroke, epleptic seizures, and those malarious affections so common in the East. This granted, I would deal in the first instance with the recruiting of the Department.

39. I would cease to recruit from the children of the Martiniere or such institutions.

I would legitimize the employment which must now be winked at, of three European Orderlies in a hospital of the same size as an existing Infantry hospital, to be increased in proportion for field or station hospitals of larger size. I would point out that if, as seems to me very necessary, two men per company, as in England and Germany, are trained to assist the wounded in the battle field, the medical officer carrying out such instruction would often be able to single out intelligent men who seemed to take a fancy to such work and might induce them to volunteer for the Subordinate Medical Department. In addition, we are every day chancing on really good and steady men who come to us as casual nurses in our army hospitals to look after those special cases which humanity forbids us trusting to our present indifferent, and untrained, and ill paid native servants. These sources of recruiting the Subordinate Medical Department from the ranks of the army, would also be supplemented by many men now in the ranks of the army with some experience of chemists work in civil life whom the daily routine of monotonous parades and ever recuring guard duty renders the victims of *ennui*. Such men, whether privates or Non-Commissioned Officers, I would train in the wards for the posts of Ward Masters and Assistant Ward Masters, their duties being not the origination of fresh medical

treatment, but the careful carrying out of the Medical officers clear orders and the nursing of the sick in the strict sense of that term, a duty now almost wholly in abeyance throughout a great part of India. These men full of sympathy with the soldier, bound to him by the ties of comradeship and duty, respected by him as the agents of the authority they have always been accustomed to obey, not too full of prejudices to descend to nurses work would bring into the wards of our army hospitals in India, literally a new life. The medical officers of the army, free from that terrible weight of anxiety that now hangs over them could leave their hospitals in the intervals of their visits without any dread of neglect of duty, of orders ill obeyed or of their medical treatments being meddled with by the rash interference of partially trained men who may mar, by their theories and practice, the work of a physician.

40. These men would supersede the existing hospital apprentice class, a body of youths too full of prejudices and ideas of self importance to nurse the sick men, to take charge of the ward equipment, and too little thought of by the private soldier to be obeyed with alacrity. These Non-Commissioned officers and men I would charge with the custody of the equipment of their wards as is the case in England, they would also carry out all minor dressing and be responsible for the nursing and discipline of the patients. Their education in their duty would be carried out by weekly lectures such as we now give to the thoughtless boys who form the hospital apprentice class, and if we found that these men were indifferent, lazy or unsuited for hospital duties it would be possible without any trouble whatever to relegate them to their regiments and to their duty as soldiers of the line. This coercive measure alone would hang over the Non-Commissioned ward master throughout the whole period of his service, and no false theory of humanity would interfere, as it now so often does, with the subordinate Medical Department in getting a man dismised from the service, dreading lest without employment the man so dismissed should sink into a poverty stricken condition. These ward masters would not compound medicines, they would be simply issuers, as at Home, of medicines already compounded by one responsible compounder on whose shoulders, as I would explain hereafter, the whole custody of drugs and instruments would rest. From time to time such ward masters, already taught the theoretical principles of compounding, would be placed in the dispensary and carefully taught under the supervision of the compounder who would still be wholly responsible for the accurate compounding of the medicines. This, accurate defining of the responsibility, for the compounding would set at rest the irregular existing custom by which the apothecary, the assistant apothecary, the three hospital apprentices and perhaps at times the so-called native compounders and dressers all take a share in the compounding work, rendering it most difficult to individualize the responsibility, when any error is made. We thus supersede the apprentices by soldiers from the ranks.

We now advance to the assistant apothecary whom I propose to charge with the compounding duties, the custody of the drug

and instruments, the training of other compounders and the responsibility, of detaining until the arrival of the Medical Officer such urgent cases of illness as might arrive at the hospital in the intervals of the medical officers visits, a duty he would share in turn with the apothecary or passed non-commissioned ward masters of the hospital. To qualify for this warrant grade and its increased responsibilities a special course of instruction and, an examination would be essential for the non-commissioned ward masters ; but I think that at the very utmost, one year would be ample for such a course.

42. The warrant grade would under this system of a longer pause in the Non-Commissioned ranks be given to men of greater age and more accustomed to responsibility than under the existing system, by which a number of men still quite young are thrust rapidly into the warrant grade, a rank which renders it almost impossible for them, in view of their warrant position, to take part in the nursing details of the sick, and which they accordingly do not share in. I believe it would be perfectly possible for the Assistant Apothecary to be placed in entire charge of the Dispensary and its medical stores and also for him to give orders to the ward masters for the temporary application of remedies to urgent cases arriving at hospital during the time that elapses till the medical officer is called. The Assistant Apothecary has now no responsibility of any kind save compounding for a ward or two, and taking alternate duty, but by this proposed system he would advance from the charge of a ward as a ward master to that of the charge of the drugs, and instruments as Assistant Apothecary. By this localization of responsibility for drugs and all documents belonging to them on the Assistant Apothecary, I relieve the Apothecary from his existing charge of those materials, freeing the ground for the imposal of new responsibilities with which I propose to invest him. We will now leave for a time the purely medical side of the administration and turn to the consideration of the Hospital Sergeant, the writer, and the Purveyor. The Hospital soldier writer and the Hospital Sergeant now work as a rule in the one office, but I propose to separate their duties thoroughly. My desire is to transfer the preparation of the diet rolls, the transport documents, the muster rolls, ration returns and superintendence of cooking from being the direct work of the apothecary and writer, to the Hospital Sergeant in addition to the new duties I propose for the latter, which I may say amount to making him, (the Hospital Sergeant,) practically the Steward or Quarter-Master Sergeant of the Hospital under the Apothecary. I would make the Apothecary responsible for the Medical statistics of the hospital, giving him as an assistant for this duty the hospital soldier writer, who by existing rules may be a non-commissioned officer of the army, and whom I would admit into the Sub-Medical Department. It is essential to point out that the preparation of statistical returns, dealing as they do with the classification of abstruse diseases, needs a certain amount of professional training, and medical officers must be daily struck by the incongruity of the system which hands over to the apothecary, supposed to be a professional man, the preparation

of the very simple rationing documents, while to the hospital sergeant, a man fresh from the parade ground and under existing rules, guiltless of all professional knowledge, is entrusted the preparation of documents bristling with abstruse and classic names of which he never heard before.

43. Indeed we may ask how did this extraordinary anomaly arise that the hospital sergeant should be entrusted with duties so wholly professional in their nature, while the apothecary, a man of more or less professional position, busies himself all the long day with totalling up the number of ounces of mutton and beef in the hospital diets. It is a survival of the far off past in India, when the Honorable East India Company existed and hired from the Crown so many battalions of English soldiers. They thought little, it would seem, of statistics, of sickness or of death. The soldier might come or go, might live or die, it mattered little by comparison to them. They demanded no statistical returns of his living or dying, but they dwelt with astonishing eagerness on the ounces of butter or pints of lime juice he drank while sick in hospital. As is well known, no inspecting officers of the Army Medical Department, bar one, only served in Bengal in the old days. To him as a King's, or Queen's, officer the statistical returns of the health of the Army were sent for the information of the Home Authorities and as they were called "Queens returns" the duty of preparing them devolved on the Queen's Medical officers and the Hospital Sergeant who formed the Royal administration of the hospitals in India. The Company had inspecting medical officers of their own in every division and circle in the country, these officers although they were powerless to interfere in the medical treatments or duties of the Queen's Hospitals reigned with a despotic sway over the lemons and the butter, and stories still linger in the traditions of hospitals, of scenes that used to occur when an inspecting Medical Officer of the Indian Army came annually to total up the expenditure of these valuable items. The subordinate Medical Department being in those by gone days "Companys Servants" took neither hand nor part in the preparation of these "Queens Returns" which were solely for the Royal Authorities in London; and today twenty years after the extinction of the Company and the abolition of its rule the custom still survives to puzzle every Queen's Medical Officer landing in the country, who strives in vain to discover why the apothecary with three years of College training and encouraged to think himself almost a physician, totals up the weights of beef and mutton in the diets, while the Hospital Sergeant fresh from the parade ground blunders every Friday over the Statistical Medical papers, thinking whether "Psoriasis" means sore eyes and what is the meaning of anœmia or Impetigo. Common sense would seem to say that a sergeant accustomed to the ration returns of his company could turn far more readily to the totalling up of hospital diets than the preparation of abstruse Medical Returns. The existence of this anomaly seems indefensible, and might be changed tomorrow, with great comfort to every body.

44. I maintain that by placing the existing soldier writer under the Apothecary and making the Apothecary responsible for the classification of disease documents, great trouble would be saved to the medical officers. The existing writer simply would become the clerk of the hospital, dealing, under the Apothecary and Medical Officers with that quite inconsiderable amount of correspondence and writing which would remain to be transacted when all documents connected with the pay, muster rolls, ration returns, furniture and equipment, transport and conservancy were transferred *en masse* as allied subjects to the Hospital Sergeant in the new sphere I allot to him as Steward or Quarter-Master Sergeant of the Hospital, subordinate in every way to the responsible official the future apothecary will become. The apothecary would be freed also from the preparing of papers about the medecine expenditure, by the assistant apothecary.

Up to the year 1868 a system of employing the Medical Subordinates as hospital stewards obtained in our hospitals in India. They were of warrant grade, often senior to the apothecary, and were responsible to the Officer in Medical Charge of the Regiment only. The fault of such a system was that their rank was too high and they were supposed to be well trained Medical Subordinates, while the work they performed was wholly unprofessional and they were not subordinate to the apothecary. I maintain that the duties of a hospital steward do not require any warrant rank and only a very slight medical training, and that many trustworthy steady men in the non-commissioned ranks of the army who did not care much for nursing duties in the wards, would enter the Subordinate Medical Department and be glad to put in their service as stewards in the Hospital store-room.

45. To my mind one marked defect of the old steward system in India was in not thoroughly subordinating the steward to the apothecary, and in not forcing on the Apothecary a supervising responsibility for the safe custody of the stores. The Apothecary, with very ample leisure, residing as he does on the premises of the hospital, visiting every part of it daily as he is required to do, would have been far better able to supervise the safe custody of the stores than the Medical Officer who lives away from the Hospital premises and who only visits it at stated periods. We see every day in India in other Departments of the public service, non-commissioned and warrant officers not so well paid as the Sub-Medical Department, occupying positions of far greater trust and responsibility as regards the custody of public property than any Hospital Sergeant or Apothecary, under my system, will ever be required to undertake. I suppose equally trustworthy men can be developed in the Sub-Medical Department of the future. Advancing a step beyond the hospital sergeant we come to the existing Native Gomashta, called the Purveyor, perhaps the most inefficient servant in any Department of the public service. I have never heard any Medical Officer or Commissariat Officer speak well of these officials. Their continued blunderings, their constant mistakes, their apathy in

the discharge of their duties, and their want of discipline, all render them dead weights and not assistance in hospital working. They cause us infinite bother. I maintain that we can abolish these men altogether thus saving some 50 rupees a month in every battery and regimental hospital in India, and that the Hospital Sergeant now employed in statistics can take their place. The hospital sergeant although the actual store keeper, would not be the solely responsible person for the stores, but would be in every way subordinate to the Apothecary, who has good pay, ample leisure for the work, and who being constantly on the spot in the hospital I would make responsible for all stores and equipments save, only and except, the medical appliances and instruments, which as we have before pointed out would become the charge of the assistant Apothecary. That the apothecary will have ample leisure for this work can easily be shown. In the first place we transfer to the Hospital Sergeant, as the steward of the future, the whole task of the preparation of the dieting, transport, pay and muster rolls of the hospital, now the apothecary's work; secondly, we transfer to the Assistant Apothecary the duty of preparing all documents connected with the medical stores, expenditure of medicines and custody of instruments also the apothecary work. To the writer we have given the statistical duties under the apothecary, who, at a word, becomes a supervising officer of all sub-departments of the hospital. I do not require him to actually prepare any documents, he simply examines them when prepared. I do not ask him to have actual custody of any stores, but give him a subordinate store-keeper, the correct discharge of whose duties he must supervise. I do not ask him to compound any medicine but to exercise under the Medical Officer the supervision of its compounding. When we remember that every ward master should be reponsible for the custody of all furniture and equipment actually in his ward, that the compounder would be responsible for all equipment in the dispensary, that the writer or clerk would be reponsible for all equipment in the office, and that to guard the unissued stores in the hospital store room we give him a non-commissioned officer as his executive, the responsibility which at first might seem something, dwindles down into a very mild affair. It would be possible also from the money saved to the state, by the abolition of the existing Purveyors to rise the charge pay of apothecaries from the existing 30 rupees to 50 rupees per mensem or even a larger sum. I believe further that if a garrison organisation is given to the medical department in India the total number of apothecaries might with advantage be diminished to one per garrison, and the money devoted to the payment of a small number of eight Senior Apothecaries, one of whom I would attach to the office of every Deputy Surgeon General of a circle in India.

46. These officers would occupy a highly respectable position, would be the Quarter Masters and Circle Store Inspectors of all hospital equipment and could also be the channel of communication between the station apothecaries and the commissariat department and assist the P. M. O's. of Circle in statistical work. We thus free the

officers of the Medical Department in India as in England from all responsibility for the custody of hospital equipment, developing for such duties the officials of the Sub-Medical Department. The Apothecary of the Garrison Hospital would still be required to afford medical aid to cases reported sick on emergencies, pending the arrival of the Medical Officer on duty. If we read over a list of duties required of the existing apothecaries in hospitals we find much room for criticism.

47. In the first place he is ordered to be present when the Medical Officer in Charge inspects the fresh sick in the morning and take down in the prescription book the orders issued for their treatment. This duty which is performed in the wards by junior hospital apothecaries and in England by non-commissioned ward masters does not, we may be quite certain, require high professional training. It is simply and solely a matter of writing and routine, when the sick go to the dispensary for the medicine thus ordered, the medicines are rarely if ever compounded by the apothecary himself, nor need they be so under my system as we have already placed a compounder in the dispensary for that purpose. He is then directed to accompany the Medical Officer in his visit to the wards and should presumably act as ward master of the Senior Doctor's ward; yet for this ward I have rarely seen him compound physic, and he generally delegates this duty to some of the boy apprentices. He is further directed to have a knowledge of all the cases in hospital, a duty it seems to me to be hopeless to expect of him, considering that he does not visit the wards with each individual Medical Officer, that he has no access to their case books or medical records, that he has not the leisure to examine the cases thoroughly on his own account, that his daily routine of blindly carrying out orders for the treatment of disease without having explained to him the principles that guide the Medical Officer in his treatment of the cases, paralyses his medical knowledge. I think that it is open to comment whether an Apothecary should have any authority to interfere in the treatment of any ward sick, save only on the rarest emergencies, when the Medical Officer on duty cannot be obtained and time admits of no delay. Such cases occur once in a series of years in Army Hospitals.

48. Considering that the medical officers see all their cases in the morning, again in the evening and that during the day it is the custom in serious cases for the Medical Officer to visit them frequently, it is perfectly plain that occasions when benefit can be derived from any outside medical action on the apothecary's part will be few and far between; and two men rarely treat a case in the same manner. He should no doubt have a general surveillance of the Hospital, take a certain share of remaining on duty with the assistant apothecary, so as to be able to afford simple treatment to cases arriving at the hospital, pending the arrival of the Medical Officer on duty. Of course in such tiny hospitals, as that of a Battery of Artillery, if they remain, these fine distinctions of duty would not be required. The assistant apothecary himself would compound the five or six prescriptions which

form the daily routine of these petty hospitals. The existing hospital sergeant of a battery hospital would be changed to an Assistant Steward, subordinate to and in every way under the assistant apothecary, who would be practically the ward master of a detached ward which is about all a battery hospital really is. The Assistant Apothecary freed from the diet rolls would be responsible for the Statistics. And the hospital sergeant admitted into the subordinate Department and converted into a steward would supersede and abolish the existing purveyor, whose pay would be a credit in the accounts of the Medical Department. The assistant apothecary of such a little hospital would be responsible for the stores.

49. It would be of great advantage to put the subordinate Medical Department through a course of bearer drill, the handling of stretchers, caçolets, litters, Ambulance wagons, the formation of dressing stations, the arrangement of a field hospital; in all of which duties it is not too much to say, they are far behind in point of efficiency to even a corporal of the English Army Hospital Corps. Whether that instruction should be given in a Central Garrison in India which might at the same time he utilized as a training school for the native servants is a question to be discussed.

50. The dress of the subordinate medical department should be assimilated in every way to that of the English Army Hospital Corps to which they will be in every way similar. There is one point which may be noticed in the interior economy of hospitals in India, there is no provision made for the custody of men's kits in the hospital. They remain with their companies, but in any field or general hospital it should not be forgotten that a pack store keeper as in England would have to be provided for. A Non-Commissioned Officer serving under the Steward would be suitable for the duty. At present a certain number of the senior officials of the Subordinate Medical Department take medical charge of small civil stations. With the separation that must eventually take place between the Civil and Military Medical Services in India, this field of promotion will be cut off from the Sub-Medical Department which will become a wholly military body, which seems to me to be an argument against the long College Course now given and in favor of the development of the grade of divisional apothecaries attached with good pay and position to the Deputy-Surgeon General's Offices of each circle.

51. Whether these views about the recruiting of the Subordinate Medical Department be acceptable or not, there is no doubt the subject needs to be dealt with. No Non-Commissioned Officer will now accept the perfectly hopeless position of hospital sergeant. He is quite ruined by doing so, for this rank exists only in India, leads to no promotion, and he is at once reduced to a platoon sergeant on going home. He can never become Sergeant Major, or ever get a commission.

He thus loses all chance of a good pension because the English pension rules do not include hospital sergeants who at home of course

are all embodied in the Hospital Corps. Observe further the moment a regiment arrives in India one has to strive to coax and induce a man to accept a very injurious billet, where he is quite stranded as regards promotion, and then one has to commence to teach him medical statistics of which he is wholly ignorant, while an apothecary is engaged totalling up the diets. This may well be changed. Up to 1873 when regimental hospitals were abolished, Hospital Sergeants existed in England and India, now they are purely an Indian Institution and not recognized in England either in pension rules or in any way.

52. By my system the Subordinate Medical Department would open its ranks to these unhappy men, and become an opening for intelligent men from the ranks to rise to good positions. Many of the old regimental hospital sergeants were thoroughly intelligent respectable men.

To-day we are without any reserve for our Subordinate Medical Department. Great numbers of them are quite half grown boys. They would never do in the hardships of a field, and organized as the Medical service must be in a future campaign these lads would be no use to us but be in the way. We want disciplined men of physique and with physical strength to stand fatigue.

We want such men to work under us in the bearer companies, and the young lads will not do for this toilsome duty.

53. Further it is painful but necessary to draw attention to the defective discipline of our present young lads.

Every Gazette shews how they go to grief. They are dismissed they resign, or are dispensed with in no small numbers yearly. I have little doubt that their misdemeanours are often condoned by medical officers who hate to drive them out into the world friendless and homeless. If they were soldiers they would simply be remanded to the battalions for duty.

But if we want efficiency we must avoid all this. We can secure men well disciplined and men who can keep the soldier in order thoroughly, from the ranks of the army, and why not use them. I know how many good men were in the old Subordinate Department but there is a falling off now a days. I fear that three years of a Calcutta life does injury to the young lad's *morale*, and I cannot see what the gain to the service is from it. We want discipline in our subordinates. Ready obedience, the habits of regularity and order and we can get all these things from the pick of the Regiments. Why not let us try the experiment.

By this scheme we would as Doctors be saved much trouble and be far better able for field service than we now are.

54. We are continually being told we are to be kept untramelled from non professional work. It is in point of fact quite the reverse.

How many hours must we spend striving to drill into a new hospital sergeant's head the difficult subject of medical statistics while an apothecary with most ample leisure is wholly independent of them, and never takes any trouble in the matter. Again we are responsible for the furniture through the Hospital Sergeant, while the whole of the Subordinate Medical Department are carefully guarded against any responsibility for it.

Again we are engaged in constant correspondence with the Commissariat about the purveyors duties and his short-comings, while none of these things effect our Medical Subordinates. They are carefully guarded, and in the end we, the doctors, are kept occupied hours every week by such questions.

If we are to have aids in our work let these be aids not mere dead weights.

Again it is necessary to point out that we are continually called upon to teach and instruct our young apprentices, to keep them from going astray, and in fact to discipline them.

55. Why waste us thus. We can draw from the ranks of the army well disciplined *men*, not boys, by re-casting the duties in the way proposed, we can become far more professional than we now are, and be, I am sure far more certain of real good work being done in our hospitals.

I take it that the argument that we must find employ for the Eurasian community is a very good idea. But I don't think our army hospitals should be the place to experiment in; where the life and comfort of the English soldier is at stake we need trustworthy help and that help we can get from the soldiers comrades and not from men wholly out of sympathy with the soldier. Had we an Eurasian battalion, and were the young men enlisted and drilled there, then they could find in the Barrack Department or Commissariat Department employment where absolute daily contact with the sick soldier would be quite rare. It would save the young men from many painful scenes which must occur when rude young soldiers from England, full of race prejudices first come in contact with them.

Section X.

Native Servants.

56. It is to be hoped that no delay will take place in carrying out the scheme for reorganising the Native Servants of the hospitals. No terms can be too strong to express their present inefficiency. Sir W. Muir the present Director General, has publicly stated, in an official memorandum that they are the worst in any army. Vide Circular Memo. Medical Department British Forces 70 and 71—18 September 1871, since that day no improvement has taken place. I would bear testimony to the good classification of servants made by Her Majesty's Committee, and to the great advantages that would accrue from the abolition of the misleading title of Compounder given under the existing system to an ignorant servant, while the same title is borne in our English hospitals by a trained Non-Commissioned Officer.

Section XI.

The Station Staff Surgeons.

57. Having been Station Staff Surgeon in several garrisons in India, I would point out a curious anomaly that exists owing to our working the Medical Department regimentally. No statistical record of illness amongst the garrison staff of the station goes to any Superior Medical Authority. It any officer or Non-Commissioned Officer of the general, divisional, brigade or garrison staff, or of the Commissariat, or Barrack Department gets ill or dies, he is not shown in any Garrison Medical record. The slightest illness of a private soldier in a regiment is carefully tabulated, but even the death of non-commissioned officers or officers in extra regimental appointments is not recorded in any medical return. By unifying the Garrison Medical Staff, the Staff Surgeon now an independent unit, will come under the Principal Medical Officer of the Garrison. Illnesses or deaths amongst the garrison staff would appear in the garrison return, garrison dispensaries would supersede the existing staff dispensaries, and a regiment when marching out of a garrison instead of dragging with them as they now do a great quantity of medicine and bottles liable to injury, would be supplied with compact medicine chests made as for field service which would accompany them; all heavy and cumbersome articles being left in the garrison dispensary attached to the Station Hospital.

One word may be added on the question of amalgamation between the Indian and British Medical Services; so long as the Regimental Hospital System goes on, I think officers of the Army Medical Department would rightly object to allow the young officers of their department to lead a life perfectly free from control, in petty Native Hospitals in the same cantonment with British troops. With the garrison system however it would be perfectly possible. The routine of a native hospital and the due discharge of its trivial duties would not be the sole occupation of an officer. He would also be compelled to bear his share in the duties of the European garrison hospitals, and in this way would escape the danger which might waylay an indolent man if his sole charge consisted of the ordinary sick list of a native corps In the same way by a proper disposition of officers it would be possible to place all existing medical officers of the Indian service who are in military employ, in stations where they would not at first be senior medical officers, and thus prevent any confusion that might at first arise from medical officers of the local service taking over the charge of the European Hospitals; gradually after a few months, when they had mastered the routine, they could be placed in the positions their *status* demanded. But there seems to me to be no difficulty in unifying the military medical services in India, provided that the duty is handed over to the army Medical Department as part of its *Garrison* routine, and that the native hospitals became simply detached native wards of one garrison hospital.

But there would be cause to complain if junior officers were given regimental charge of native hospitals, and were not part and

parcel of the garrison staff of doctors, and their hospitals and their work thoroughly open to the direction and inspection of the Senior Medical Officers.

In Ceylon I remember that the Army Medical Officers took charge of the native Ceylon Rifles without any difficulty. But the Civil and Military Medical Department should be completely seperate so that no man once in civil employ would return to military Duty, and all future entries should be for the Army Medical Department. By making the native Regimental Hospitals part of the garrison Hospital, all native servants, followers and establishment could be sent there for treatment thus abolishing all station staff hospitals. Thus sick Europeans could be admitted into the British Hospitals, and sick natives of every class admitted into the native Hospitals.

By handing over the medical charge of the native troops to the Army Medical Department all entries into the military service would be through the Army Medical Department, and the Civil Medical Service a separate organization would recruit its own officers. To it the natives of India would took for employment, for it would be impossible to admit them to the Army Medical Service. The English soldier is full of prejudices against the native races, and even with the Eurasian Medical Subordinates friction takes place. They are wholly without prestige amongst the private men, and it is one of the main reasons that should urge on the recruiting of the Subordinate Medical Department from the rank and file of European troops. To place a Eurasian warrant officer over European soldiers is a grave error, and particularly in a hospital where contact is hourly necessary, and where excited and drunken men are often brought in.

If the Eurasian element need employment the Barrack Department, and others with less friction with the soldier should be their field.

So many officers of the Army Medical Department have now passed the lower standard, that there would be little difficulty in getting the work of the native hospitals done by them as part of a garrison duty.

But to allow, except for a very short time, two different services to do the same work in a garrison and to draw different pay rates for that work would lead to friction.

No difficulty would exist in treating the native troops hospitals as simply native wards of the garrison hospital and working them as such by the garrison staff. No special medical officer would be detailed for them, and the European officers would be treated, as all officers in a garrison would be under a garrison system, by an officer corresponding to the existing Staff Surgeon. In detached native garrisons, of which there are some thirty in Bengal, a Medical Officer would be needed who would be limited of course to native troops only, men whom such positions would suit would always be forthcoming. But to seclude a

young officer of the Army Medical Department from inspection and direct garrison medical control, by putting him in independent charge of a native hospital under the Regimental system would be objectionable, and indeed should not be needed. It would be perfectly possible to lay down a rule that no officer would be senior Medical Officer of a garrison or force who had not passed the Lower Standard, or taken charge of a Native Corps as part of his work for three months. Clearer and more defined codes for working the native hospitals would perhaps be needed, and the system would be assimilated as far as possible to our English Hospitals. The question of cooking, rationing, and equipment no doubt can be dealt with more clearly than at present without any interference with caste prejudice, and I think nothing but good would come of amalgamation.

The existing dual system of Medical Military Organization in India is quite indefensible and leads to divisions and friction, which weaken the efficiency of the whole Medical Corps.

G. J. H. EVATT, M.D. *Surgeon-Major,*
A. M. D.

FYZABAD, July 1878.

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ON THE

MEDICAL ORGANIZATION

OF THE

BASE OF OPERATIONS IN WAR TIME.

BY

SURGEON-MAJOR G. J. H. EVATT, M.D.,

ARMY MEDICAL STAFF.

WOOLWICH:
F. J. CATTERMOLE, ARTILLERY PLACE.

1885.

TO THE MEMORY OF

THE LATE

DEPUTY-SURGEON-GENERAL

OLIVER BARNETT, C.I.E.,

PRINCIPAL MEDICAL OFFICER SUAKIM EXPEDITIONARY FORCE,

Who Died from the effects of the Soudan Climate, on July 24th, 1885,

THESE PAGES ARE INSCRIBED.

G. J. H. EVATT, M.D., Surg.-Major,

Army Medical Staff.

Royal Military Academy,
Woolwich,
August, 1885.

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ON THE MEDICAL ORGANIZATION

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BASE OF OPERATIONS IN WAR TIME:

BY

SURGEON-MAJOR G. J. H. EVATT, M.D.,

ARMY MEDICAL STAFF,

INTRODUCTION.

I PROPOSE in the following brief paper to deal with the question of the organization needed at the base of operations by the Medical Corps of an Army in the field to enable the Medical Service to do its duty with efficiency, and according to the demands of modern ideas as to the working of a Medical Corps in the field.

We are now going through the constructive stage of Military Medical Organization. We have really no tradition of the past to copy implicitly as a guide for our work. We have to day to originate, to lay down first principles, so that those coming after us may have easier work to do and more to guide them in doing it than has been our lot.

We should take courage in this matter from the enormous progress made in military medical organization between the years 1882 and 1885, and should remember that between

these few years the *personnel* of the field hospitals was practically doubled. We have now to deal calmly and accurately with the subject of medical organization at the base of operations in war time. Its efficient working is of paramount importance to the success of the army, and that efficiency can only be achieved by thoughtful forecasting of its needs in peace, and laying down a definite scale of officers, men, and material for its due working.

In foreign armies fighting on the mainland of Europe, and starting from their garrisons for the field, practically their whole country is for them a base of operations, and the German army can draw supplies of men and equipment from the whole extent of the German Empire in war time.

With us it is quite different. Our armies are flung down on a hostile coast; they have to land all their supplies often at a single and perhaps indifferent port, and all the vast converging mass of men and materiel coming from England have to pass through the narrow funnel of the base of operations before they again expand into the army in the field. The base is like the narrow construction in the centre of an hour-glass, the upper division of which may represent England pouring out her supplies with a lavish hand from her shores, every particle of which must run through the base before it again expands into the lower division which represents the army spread out in the field. For the Medical Service the highly important fact has to be borne in mind that in addition to landing all its *personnel* and *materiel* from England at the base, through that base must also re-pass the whole of the sick and wounded returning from the field to England; and further, that large accumulations of sick and wounded are likely to be collected for treatment in and about the base itself.

We should now in peace time quietly think out what machinery is needed at the base of operations to discharge

this duty, and openly submit the demands to English public opinion so that every one in the nation may know what the medical service of the army needs for its successful administration in war.

We must put on one side altogether the idea that the nation will not grant the men needed, or that it will refuse the extra cost the needful establishment will entail in the war estimate. This is not the case. It is quite certain that if we can calmly and accurately show the need of the special aid we require it will certainly be granted. This labour of accurately studying our needs in peace for war is one only beginning in every branch of our army, but it is certain that without this preliminary study successful war cannot be made. The whole history of the past in the medical service has been the highest, fullest, and most excellent aspirations on the part of the medical officers to succeed in war, and with this a complete absence of the means of reducing these aspirations to the level of practical work.

It is no use theorizing as to what we are to dream of in a future campaign; the true course is to frame a clear demand for so many officers, men, materiel and transport, and say definitely that without these success cannot come. All happy-go-lucky makeshift endeavours are not organization. Organization is above all things accurate definite forethought applied in peace to the study of the national needs in the field.

Up to the present I cannot find that any single military leader has ever thoroughly gone into the question of medical field organization, however ready they may have been in the field to blame all short comings. To-day we are doing this work for ourselves, and endeavouring to educate public opinion on this matter so important for the well being of the army, particularly in its lower grades.

The subject of the Medical Organization at the base of

operations may be considered under the following heads :

Section.
- I. The Principal Medical Officer at the base. His staff, &c.
- II. The Sanitary Officer at the base.
- III. The Medical Transport Officer at the base.
- IV. The Medical charge of the base military and general staff.
- V. The Medical store depôt at the base.
- VI. The Base Hospital.
- VII. The Hospital Ship.
- VIII. The Sick Transport Ship for England.
- IX. Medical staff corps depôt at base.
- X. Reserve hospitals parked at the base.
- XI. The Statistical Officer to the Army Corps.

Section I.—The Principal Medical Officer at the Base.

The principal medical officer of the base is one of the most important officials needed in the medical corps of an army in the field, for on his energy depends much of the successful working of the whole medical field system. He should be active, of good physical health, and able to endure fatigue. It is a question of the existing age of retirement for deputy-surgeons general, viz. : 60 years is not much too high, and that an officer who has to undergo the physical labour now demanded of a deputy-surgeon-general should not retire at 55 years of age. These last five years from 55 to 60 years are the last straws on the camel's back, and officers full of tropical service, and who have seen several campaigns are not well fitted when over 55 for such active work. With surgeons-general it may be different—but for deputies, 55 should probably be the age of retirement.

The P.M.O. on leaving England should take with him, in the same vessel his secretary, who should be a surgeon-major. This officer should be the office assistant, and representative of his chief, and should sign all routine letters, returns and orders " by order " for him. No secretary is

allowed to the P.M.O. at the base by the existing field service regulations, and anything more painful than the result of this absence of a secretary cannot be imagined. It is painful beyond measure to see old and experienced officers filling this post wearied and tired out with petty routine details.

To send a P.M.O. to work the base, and to give him no secretary is to run the risk of failure in war with our eyes open. If the P.M.O. goes from his office to a board, or to visit the base hospital, or to inspect the hospital ship, a constant and important duty, one finds his office empty and some sergeant in charge. This is completely wrong. We cannot do our duty or speak with sergeants on important confidential subjects such as medical matters are. Even if we in the medical service did discuss matters with sergeant clerks, other officers of other branches will certainly not do so, and thus hitches, misunderstandings and failures occur. The secretary should be always on the spot in the absence of his chief, and should be fully aware of all the various lines of work at the base, so that if the P.M.O. goes sick, or is invalided, the whole working may not collapse, but the new P.M.O. will find the office work going on fairly under the secretary when he takes charge. We cannot dwell too strongly on the need of this officer. He may cost £500 a year for his pay, but in the war charges this is nothing, and without him a P.M.O. cannot do his work, and failure is quite certain to occur. This should be clearly understood, and none will deny it. There is no doubt whatever that our P.M.O.'s are to day completely overburdened with petty details in the field, owing to the absence of secretaries.

During the whole of the voyage out the P.M.O. should discuss matters with his secretary and lay down his system of work, and if others of the base staff be on board with him he should call them together frequently and regularly drill

them by lecture and explanations into what his system of work may be.

There is no great difficulty in working the base if this be done, but if all the base staff land ignorant of their work and have to learn it there, confusion will result.

Doubtless this base organization routine should form part of the senior examination now introduced into the department.

The P.M.O. of the base is, of course, subordinate to the P.M.O. of the communications line, but within the base itself he has a free hand and full power to act. The P.M.O. of the communications is really a travelling Inspector-general, whose power extends from the immediate rear of the army in front to the extremest point of the base towards England. This communications P.M.O., should probably be perpetually on the move up and down this line, and he really is the vivifying influence along the whole line. It is difficult to overestimate the importance, the efficient working of the line of communication bears to the medical service. It is the very basis of good medical war work that the communication be well organized. To-day, of course, we deal merely with that section of the communication called the base of operations. In addition to his secretary the base P.M.O. needs a junior officer of active habits and good address as his orderly officer. There are a great number of points which come under the P.M.O. of the base which can be settled at once by a personal interview, or by a personally delivered message, and for this purpose an orderly officer is of great importance. Practically all P.M.O.'s in the field strive to develop such an officer, but he is only to be obtained by filching him from one of the medical field units, which unit is thereby injured in its efficiency. The true method is openly and boldly to say to the nation that such aid is needed to ensure the efficient working of the base. Tradition gives us

no aid in this matter. The chaos of Scutari teaches us not what to copy, but rather what to avoid. Deficiency of staff is the thing we must avoid.

So far as I have seen of army life the shorthandedness of the medical corps in its war work receives not the slightest sympathy from the army generally. They rightly think that it is is entirely our own fault in not openly stating our needs, and referring the matter to those who know what labour war really is. If England desires her soldiers to be cared for when ill she must grant the staff needed for the work, and I have in every case found that the military officers simply wondered at our going into the field shorthanded. The need of secretaries is of paramount importance to us, not only at the base but at the divisional head quarters where the P.M.O's. are entirely devoid of secretarial help, being in this way far worse off than any other commanding officer of a corps. The very life of the P.M.O.'s are at stake in this question of continuous overwork from petty details which should fall on secretaries.

The P.M.O. of the base takes out with him in the same vessel his sergeant and private clerks. These are trained disciplined men of the Medical Staff Corps, and there should be a sufficiency of them. On the voyage out the P.M.O. explains to them his line of work, and allows them to attend any lectures he gives to the medical officers on the subject.

In addition to these, and quite apart from them are his messengers, of which he needs probably three. There are also M.S.C. men who know the meaning of the medical unit, designation of officers, &c., &c.

These men are lodged in the tents with the clerks, and are rationed and looked after by the orderly officer of the P.M.O., who also rations the servants, looks after the horses, and attends to all the minor details of the P.M.O.'s camp in addition to his other duties.

Mounted orderlies are also needed, and should be supplied from the mounted corps at the base, or the Transport depôt should supply ponies or horses for the messenger orderlies which probably is the simplest way of arranging matters.

The loss of time in using foot messengers over a large base is considerable.

Great advantage results from joining the base hospital and the hospital ship to the P.M.O's office by telephone, or by flag signals, and by laying down a few simple signals referring to transfer of wounded to the ship, &c.

The P.M.O.'s offices are, of course, near the base commandant's office, and ought to be distinguished by a red cross flag, and by a large conspicuous notice board, painted in white on black with the words P.M.O. of Base Office. In war camps, label everything, so that he who runs may read.

In addition to the flag and the notice board, at night a lantern should be used, as constant messages at night may arrive, and the P.M.O. office should be easily found. One of the messengers should always be on the *qui vive* to receive messengers arriving and show them the office where one of the clerks sleep as if on guard there.

When the P.M.O. goes out on inspections, his orderly officer should accompany him with all note books and documents needed, and the secretary should remain in the office. It should be the rule that either the P.M.O. or his secretary should at all times be in the P.M.O's office. If both are away the public service is distinctly injured, and this is intolerable and means failure in war. The delay of half-an-hour in carrying out an order may entail great loss to the nation.

The P.M.O. of the base is now responsible for the clothing accounts and for the pay documents of all the Medical Staff

Corps employed in the campaign. This is a frightful trouble, and one from which the P.M.O. should be completely freed.

During one of my campaigns I could not get a pair of shoes for one of my men without the countersignature of the base P.M.O., an overworked official who lived thirty miles away from my post. All this clothing and document work should be handed over to the officer commanding Medical Staff Corps Depôt at the base, who should be completely responsible. Of this officer and depôt we shall speak presently.

Wherever the ordinary landing place of the troops may be, a printed notice board should be fixed there stating where the P.M.O. of the base has his office. This is very useful, and constant care is needed to distinguish the base P.M.O. from the *chief medical officer of the base hospital*. These two officials are constantly confused with one another by the uninitiated, and even by the rank and file of Medical Staff Corps who should know better.

In referring again to the need of secretaries for the different higher medical officials, we must remember that the secretaries learn an immense deal by their appointments, and this knowledge so learned while young, fit them as they grow old for the filling of the higher posts themselves. In fact a tradition is formed.

In all these attempts to free senior officers from overwork, and to develop new officials where needed, the aim is, of course, a double one. First to do absolute justice to the individual by freeing him from overwork, which may be, beyond the limits of human endurance, and which if persisted in, may permanently injure the health of the officer, but still more to paralyze and to remove altogether all excuses for work ill done. This has to be guarded against with the whole official class. They remain silent before the strain comes upon them, although they must know if they study their wants that failure is inevitable, then when they

fail they trot out the excuse of overwork. The aim of the nation is to remove all reasonable hindrance to good work, to place ample means ready to do the duty, and in case of failure to demand full enquiries, and insist on punishment.

Section II.—The Sanitary Officer at the Base of Operations.

Whoever may be appointed as sanitary officer at the base of operations of an army in the field has certainly his work cut out for him. He has before him arduous, unceasing and unpleasant work, which will as a rule bring him into contact with everybody at the base, and he needs much strength of character to carry out his duties.

So fully will he be occupied, that all idea of his fulfilling any other duty save sanitary work is completely out of the question. Under existing rules he is to combine the duties of sanitary officer, with superintendence of the embarkation of sick and wounded. It may safely be said that no one officer can carry out accurately such duties.

The base of operations is the most difficult place to keep in a sanitary condition.

Thousands of soldiers pass through it, staying only for a few days—and all the time in such confusion that sanitary neglects are certain to occur. To the base come crowds of contractors, sutlers, and the rabble which follow an army. Such persons are completely undisciplined in sanitary routine, and set at defiance all orders on the subject. To the base come hundreds of animals of every kind for transport purposes, as well as for the food of the army. These alone create enormous trouble from a sanitary point of view.

Epidemic disease is more likely to develop at the base than elsewhere, because ships arrive with men and animals from all points of the compass, and disease loves to revel in such agglomerations.

At the base are landed vast supplies of food for the army, all needing to be watched so that the rascality of contractors may be checked.

Every ship arriving in the harbour has to be inspected to see if infectious disease exists.

All this is for one officer a heavy task, and it is simply impossible for him to take over the sick transport duties of an army corps if he is to do his duty fully. That duty is in itself most onerous.

The brigade-surgeon appointed as sanitary officer is of course simply the staff officer of the P.M.O. of the base, who is finally responsible in all sanitary matters, but who uses the sanitary officer as his agent and executive officer.

The sanitary officer has his office close beside the P.M.O.'s office, with whom he is in constant communication.

His office is labelled with a signboard, clearly and distinctly, with his official designation so largely printed as to be visible at a distance.

If at all possible he plainly posts up that at a certain hour in the morning, and a certain hour in the evening he will be found at his office, so arranging as not to interfere with his out-door work, which is of the chief importance.

He sets up near his office a set of meteorological instruments, which should be supplied to him before leaving England, and he causes a correct observation to be made of the conditions of the weather by one of his clerks.

He arranges with the medical store depôt at the base to form either at the depot, or near his own office, a temporary laboratory where a more accurate analysis of water or food may be made than is possible in the front of the army.

Samples of water are frequently sent back to the base for examination, and samples of the food and drink for the army may be tested there also.

He needs a quartermaster, or other officer of the quarter-

master-general's department to be placed under his orders as an executive officer for the carrying out of the general sanitary work.

He needs a certain number of sergeants, either from the medical staff corps depot at the base, or from the troops or police at the base, as assistant inspectors, to report to him daily as to their districts.

He, in conjunction with the base commandant and P.M.O. of the base, decentralizes the sanitary responsibility to the various corps and departments, marking off accurately the space of ground for the sanitary care of which they are each responsible, and arranges with each unit that a certain number of their men are told off specially as sanitary fatigue men, or pioneers to keep the place in order.

He keeps under the central authority such portions of the camp or town as cannot be conveniently told off to special corps—and for the cleansing of these portions he arranges with the Q.M.G.'s department that a company of the regiment doing duty at the base is regularly handed over complete as sanitary police. If it be a tropical country he utilizes these men, not as workers, but as inspectors and district chiefs over native labourers, causing them to report daily to him of any defects.

He arranges for the construction of latrines and urinals in all public thoroughfares where crowds of men pass, and which can hardly be handed over to corps or departments to keep in order.

He moves the Q.M.G.'s people to provide such transport, either cart, or pack, or human, as will be sufficient to remove the filth from the collecting places in the camp or town.

He arranges for the formation of a quarantine depot for all suspected or infectious disease cases, and he obtains a detachment of medical staff corps to look after it.

He visits all butcheries and cattle yards, and sees that all cattle landed are in healthy condition and fit for food.

He visits the great bakeries at the base and sees that the flour is good, the water supply suitable, and the workers themselves clean and healthy, and that no sewage pollution exists.

He inspects the sutler's stores and condemns all bad supplies; and reports to the commandant all liquor shops existing against orders. In those shops where liquor is sold he sees that it is good.

He watches the brothels and the vagrant prostitutes that follow in the train of all armies, and if needful arranges for their registration and inspection.

He watches most carefully the condition of the shipping in the harbour, and either by himself, or by a naval surgeon told off as his assistant, has frequent inspections of the crews.

He notes the condition of the harbour, often loaded with floating sewage matter; and if needed he forms a marine sanitary corps to keep it clean. If on the sea coast he needs sewage boats to convey the filth of the camp outside the harbour, and there throw it into the sea.

He needs so many steam launches with crews told off by the naval transport officer to tow out the filth boats to the sea to be emptied.

He inspects every vessel arriving, especially vessels with native labourers, or men from the Levant.

He notes that the transport department tell off from their own corps a permanent burying party to inter all dead transport animals; and that the commissariat, slaughtering subordinate have the means of removing entrails and offal for burying outside the camp.

He notes the water supply, and marks off the wells, &c. for washing and drinking purposes.

He receives weekly from the medical officer of the base hospital, or the medical officer in charge of the staff at the base, reports of prevailing sickness, and keep himself *au courant* with the statistical condition of the army as regards diseases which may be preventable.

He frequently inspects the cemetery or burial ground chosen for the base, and he sees that the graves are dug of a sufficient depth, and that an engineer N.C.O. is told off by the engineer officer at the base to look after it, to keep a plan of the ground and the graves, and that the place is securely fenced in and protected from wild animals.

In his capacity as a staff officer of the P.M.O. of the base, he has the full right to visit and inspect and report upon the sanitary condition of the base hospital, its grounds, latrines, and every sanitary detail—even though the medical officer in charge be his senior. He submits his report to the P.M.O. of the base, who moves the medical officer of the hospital to make any needful changes. He visits the hospital ship in the same way, reporting on all overcrowding, or on any unsanitary condition which may be prejudicial to the welfare of the sick. Being the staff offcer of the P.M.O. of the base he passes freely through every place, as on "inspection duty."

He forwards to the P.M.O. of the base for record weekly, a statement that during the week he performed certain duties, viz. ;—

That he inspected the Camp or Town, and finds it—
" " Bakeries .....
" " Butcheries .....
" " Transport Lines .....
" " Quarantine Depot .....
" " Water Supply .....
" " Burial Grounds.....
" " Base Hospital .....
" " Hospital Ship .....
" " Sutler's Stores .....

That he inspected the Commissariat Cattle Depot .....
" " Brothels and Licensed Houses .....
" " Drinking Canteens .....
" " Harbour Sanitation .....
" " Filth Boats .....
" " Conservancy Transport .....
" " Sanitary Laboratory .....
" " Meteorological Instruments .....

Section III.—The Medical Transport Officer at Base.

It is to be borne in mind that the whole of the sick and wounded of the army, amounting in every campaign to thousands of men, have to pass through the base either to reach the base hospital, or to go to the hospital ship, or to be placed on transport ships for England. I maintain that this transport duty is highly important, and that it should be well and thoroughly done is only possible by making definite arrangements before-hand. Say that the railway station from the front is one mile from the base hospital, that the base hospital is two miles from the hospital ship, who is responsible for this conveyance of sick and wounded to both or either of these institutions.

To expect the sanitary officer of whom we have just treated, to do this work is to ask for an impossibility, unless he completely neglects his sanitary work.

The sick transport at the base needs not only a special officer, but it needs special men under his command. No officer and no man is to day specially told off to this duty, save only the sanitary officer who is already overworked, and who has no time for this trying duty. Can the base hospital staff do it ? I say no, certainly not. Their duty ends at the hospital, and they should not leave its enclosure. Can the hospital ship staff do it ? Certainly not again. Has the base P.M.O. then no one to do this work ? The answer is he has no one whatever.

I maintain that if this duty is to be done well we need a bearer company at the base, and we need all the officers of its staff for duty with the Medical Staff Corps depot.

In addition to all existing medical staff at the base, I would add on one bearer company, and make it not only the transport company, but also make it and its officers and men the depot of the Medical Staff Corps in the campaign. To day the P.M.O. of the base is responsible for the pay, clothing, and equipment documents of the whole of the M.S.C. men in the army corps. I maintain that by this rule we overload the P.M.O. with a mass of entirely petty detail, and that he could not possibly do the work of the army corps and the base, and not break down. Further, the registrar of the base hospital is ordered to take over all other documents of the M.S.C. men in the army corps. We then have the documents divided between two different people, and in the end both would be overworked. We must simplify all this, and how? By posting a bearer company to the base, and utilizing it and its officers and men as a depot for the M.S.C., as well as for the transport duties. The need of a M.S.C. depot at the base is at once admitted. Men of the corps and officers arriving out have now no place to be posted to except the base hospital. I say that to post all these officers and men to the base hospital is to entail a great amount of disturbing work of the base hospital staff, and that it is unfair on them to do this. The true way is to give this duty over to the medical officer commanding the bearer company proposed for the base. He can act as transport officer for the base, one of his officers in the company can assist him in this onerous duty, and the other act as adjutant and caretaker of all documents belonging to the M.S.C. of the army corps, while the quartermaster would be in charge of all the clothing, documents, and of the whole of the M.S.C. in the field. To

this depot also the paymaster M.S.C. would be attached, and all would work very easily. It would free the base P.M.O., free the base hospital registrar, provide for all the sick transport at the base, furnish fatigue parties for the medical store depot, and the medical department generally. From it all men going to England would embark. To it all M.S.C. men arriving out would be posted. To it all men arriving from the front would be attached. With it would remain all the heavy kit of the M.S.C. in the field, and to it all young officers would be posted for food and shelter before going up country. Every one says that this company will fill up a want, and we know well that the transport work at the base is heavy, important, and now completely unprovided for. The medical transport officer then, whoever he may be, is absolutely needed. He is responsible for two things, viz., the receiving over of all sick and wounded at the railway terminus of the line from the front, the conveying them and handing them over to the base hospital, and further, the careful embarkation of the sick and wounded on board the hospital ships and sick transport ships for England. This work I call onerous in the last degree.

The officer needs to have at the Railway terminus an office labelled "medical transport office." Here he keeps any needful papers some stimulants, some medicines for urgent cases, and here he posts a sergeant's party who are always on the spot to receive news of sick arrivals, and to afford aid to small parties arriving. This N.C.O. and his three or four men are to be detached from the bearer company at the base just referred to. One of them acting as cook has coffee and hot soup ready for all sick convoys arriving from the front. When a train is expected a messenger is despatched to the bearer company camp to call up the fatigue parties and their waggons. The sick are then handed over from the waggons to the base hospital.

If needed, the bearer company at the base mans the ambulance train as far as the first etappen post up the line.

For the removal of sick from the base hospital to the ships, a like provision is needed. An office near the pier, distinguished by a red cross flag and labelled with a large sign board "medical transport office" is needed. Tents do very well for this purpose. A sergeant and a stretcher party of four men are always on duty here, one man acting as cook to have soup and hot coffee ready for the sick.

If possible a special pier is built for the embarkation of sick and wounded. This is most desirable, and will one day be the rule.

On the pier or near the office should be painted up clearly the hours at which sick will be embarked, generally every morning and every evening. This can be arranged by reference to the M.O. of the base hospital and the hospital ship.

Special shelter is needed near the pier to shelter the sick and wounded from sun and rain. Tents will do for this until a shed is built. Coffee, soup, and urgent medicines may be needed at this place. Stretchers should be ready, as at any time sick may arrive who need such help.

A code of signals to the Hospital ship are needed, referring to sick being ready to embark, convalescents to disembark, &c. Steam launch wanted, and such like.

If the ship lies any distance out a flag staff and a signal book are needed, also signalling flags. A telephone to the ship is very useful.

To every hospital ship at least two steam launches are needed to tow off the sick boats.

The P.M.O. of the base generally needs a steam launch in addition to do his duty thoroughly.

We still need special boats to convey sick men to the ship. Horse boats as now used are comfortless and shelterless. These boats should be part of the hospital ships equipment. A pattern boat is to be found in use between Haslar hospital and the men of war in Portsmouth harbour. At the ship's side a pontoon is needed for use as a floating pier beside the ship. The sick are lifted on to it and then carried in through a large receiving port.

Specially good stairs or companion ladders, wide enough to allow a sick man to be carried up are needed for the hospital ship.

The duty of the medical transport officer and his men ends when he hands over the sick to the medical officer of the hospital ship. When the boats are returning to the shore they take back all convalescents to the base. By definite hours fixed with regard to all concerned and published in orders, comfort is secured. The ten ambulance waggons of the 1st line of the bearer company with transport complete are needed with the company at the base. These waggons can be utilised for carrying medical stores at the base when not otherwise needed.

I think that no person who has studied this subject but will agree that if to day we have no unit allowed for this base transport work it is a distinct weakness in our war system. The plan I propose here is simple, and it would, I claim be a distinct gain to the sick and wounded.

Section IV.—The Medical Officer in Charge of the Base Staff.

This officer is not allowed for in the existing scheme of medical arrangements at the base of operations, but I do not see how the work there is to be done without him. The happy-go-lucky system is to say, Oh, anybody who is sick must get help from the base hospital, or from the hospital ship. To both these proposals I say no. In the first place the base hospital may be a mile or more away from

the base offices and camps. Again, there is no allowance made in the base hospital staff for an officer to be detached for this purpose, and if he is detached either he will complain of the double work, or the senior officer of the hospital will complain, and in the end the sick staff at the base will be unattended to.

There are a great mass of unorganized details of sorts always hanging about the base. The staff itself is very numerous, the clerks are very numerous, the correspondents, the contractors, the sutlers, the "travelling gentlemen," the transport employèes, and a crowd of others all need to be provided with medical aid and medicines. For this purpose a medical officer is needed. He should be sent out from England for this work, and it should be a special appointment. He pitches his tent in the base commandant's camp. He puts up a sign board. He fixes an hour when he can be seen in the forenoon and in the afternoon. He is the adviser of the whole of the people before mentioned, and if they be slightly sick he attends them in their tents. If it be merely an illness for the day he detains them in their own tent; if they be seriously ill he arranges for their removal to the base hospital. He has a compounder from the medical staff corps who is ever ready with medicines to treat any diarrhœa or sudden illness occurring round the camp. He has also an orderly who assists the sergeant. This officer is quite essential. It is very unfair on the base staff not to give them a definite unchanging medical adviser, and to allow them to run the chance of being seen by a doctor from the base hospital is very unfair. A medical officer is allowed to take medical care of the divisional staff, but the base staff is more numerous and more important than is the divisional staff. We require then a medical officer to be posted to the base as in medical charge of staff at the base.

Section V.—The Medical Store Depot at the Base.

The supply of medicine to an army in the field is of great importance, and the means at our disposal for carrying out the work are worthy of study. We must, I think, look on the medical store staff at the base, and the advanced store depot in front, as the germ of a medical store branch.

The regulations allow a surgeon-major as in charge of medical store depot, and under him is a quarter-master who is the medical storekeeper. Probably *chief* medical storekeeper would be a suitable title for the surgeon-major whose position in reference to the quarter-master would be more defined, and the medical officer in charge of the advanced store depot who is now allowed, would also be a medical storekeeper under the chief storekeeper. Compounders, clerks, and packers are allowed by the regulations for the subordinate store work. Here again the shipment of the unit from England could take place together, and the two medical officers and the quartermaster and the men could all go out together in the same vessel. The junior medical officer assisting his chief at the base until the army advanced.

If the campaign is to be with wheeled transport, there is no reason why the waggon or waggons that are to carry the advanced stores should not be packed on board with the stores, so as to be ready when landing in the enemy's country needing only transport animals. Continental armies have a fuller medical store staff than we are allowed, and probably each division needs a medical storekeeper with his own waggon and transport keeping his division supplied.

The store depot should be on shore, and not on a ship in the harbour. Delay is occasioned by such a system, and messengers who cannot hire a boat have to lose time waiting on the shore. A red cross flag should be flown over the depot, and a large signboard put up to show people the way

to it, and the hours when it is open. It should be open almost always.

Several compounders seem to be needed at the base to make up pills and portable medicines for those in front with the army. We need to copy more and more the cartridge system of the army, and to issue all field medicines in the smallest possible unit. Constant difficulty is experienced in getting bottles in the field, and probably all dry drugs should be in tinfoiled card board, or tin boxes of a very small size.

All fluid drugs should be packed in very tiny units, say from two to four ounces, but highly concentrated.

All loose quinine in bottles is of course much in the way. Every ounce should be compressed, packed in tinfoil in card board cases, enclosed in tin match box like covers. This principle applies to all drugs. Great rolls of lint should be abolished, and square compressed patches of certain definite sizes used. Probably all antiseptic dressings can be compressed very much in bulk.

The most untractable and unmanageable article of equipment we now retain, is the ship medicine chest, supplied for stationary field hospitals. It is impossible to carry it in anything but a cart, and as carts cannot always travel, it is an encumbrance.

The panniers should supply enough drugs for all war purposes, save at the base of operations. But the medicine chest is an extraordinary heavy contrivance, and might be broken up into two panniers with advantage.

Great advantage would result from handing over the surgical haversacks at once to the bearer companies on mobilization. They would be familiarized with them before the campaign began. Eight seem hardly sufficient for a company. One is needed for each medical officer, and one for each N.C.O. of the company, in addition to the existing

eight, so that sixteen is more like the real number needed.

If once the medical store depot worked well, the various field panniers of comforts and equipment might gradually be handed over to it, instead of being in the hands of the ordnance department.

The more the medical service does for itself the more likely is it to be efficient.

It seems a very great waste of energy that to obtain any supply, however small, from the store the countersignature of the P.M.O. is needed. In war, all this countersigning should be diminished or abolished. Thefts of medicine are unlikely in war, and a certificate from the senior officer of a hospital that supplies are needed should be sufficient for the storekeeper, and, unless the demand be outrageous, he should meet it. To wait for the P.M.O's signature often entails long delay.

It would probably, tend to efficiency if the chief medical storekeeper at the base was placed in direct communication with a director of medical stores in the Medical Department of the War Office at home, certainly in so far as filling up to a defined standard. Having to report through P.M.O's. of the base, and communications to the surgeon-general in the front is a long way round, and delay is entailed. If a trusted officer held this post, there seems to be no reason why he should not communicate with the chief medical authority on stores at the war office.

I do not think that any of us in the rank and file of the medical corps have given sufficient study to this branch of medical service, nor have we, as in India, a body of medical storekeepers. Had we paid more attention to it, we should long since have developed a system of portable drugs compressed, easily distributed, and really fit for war. Until

quite lately we went to war as if we had the Apothecaries' Hall next door to us.

Just as we have a sanitary head and a medical head of Sub-departments in the Director-General's office, so probably a director of medical stores should be developed and known as head of a Sub-department, in the medical office at the War Office. On him would fall the responsibility for the preparation of stores for the field and for garrison, and by thus specializing him, doubtless progress would occur. He would free the director-general from some of his existing heavy responsibility, while still remaining completely subordinate to him. He should be an officer with war experience and knowing war needs. Under him the chief medical storekeeper at the base, and the medical storekeeper at the advanced depot would serve, and without further countersignatures, all reserve stores should be kept up to a defined standard.

As a means of familiarizing us with our war medical material, probably a pair of mule panniers should be at all times with a regiment in peace, and from it all drugs for the treatment of ordinary sick be taken. We would thus be familiarized with our medicines available in war time.

Gradually we might take over into our charge all special medical field equipments, such as stretchers, cacolets, and litters, and articles of hospital equipment. To-day centralization is the curse of our army, and it is painful to see the intense overwork this centralization causes in war time, to the ordnance store department. We should free them from as much of this as we could, by taking into our own custody in peace, as much of our special war equipment as we possibly could. To keep all our stores concentrated in Woolwich arsenal is to leave us ignorant of their use in war, and to entail immense labour in drawing them out for mobilization. Why do we not localize our stores

at the head quarters of every district, and so free the central arsenal from the enormous strain every war entails on it. We need in the army three things: 1st, *Decentralization*; 2nd, *decentralization*; 3rd, *decentralization*.

Section VI.—The Base Hospital.

One of the great developments made since the 1882 Egyptian campaign, is the laying down of a definite base hospital for location at or near the base of operations.

We all know bitterly how much the medical corps as a body, suffered from the tremendous strain placed on the Ismailia so-called base hospital—a hospital which was in truth simply a 200-bed, non hospital-dieted field hospital doing duty *pro tem*.

To-day we are in an infinitely better position for we have now given to us a defined base hospital for 500 beds.

The hospital care of 500 sick and wounded at the base hospital of an army in the field is the gravest, heaviest responsibility that can fall on any medical officer, and the officer who in our future wars successfully *runs* such a vast undertaking will stand forward as one of our best men. For not only will he have to deal with the 500 patients in hospital as in a great civil institution, but perpetually, day by day, nay hour by hour, the sick population will be changing by the arrival of wounded from the front, and the departure of sick and wounded to England and the hospital ships. It will be onerous in an enormous degree, and no reward will be too great for the officer and the staff who make it a success. Five hundred sick in any hospital are a great mass to care for, even with all the resources of civilization and years of defined working behind one as an aid, but to care for 500 gravely wounded soldiers or men broken down from typhoid or dysentery, hastily flung together on some savage shore,

removed from all civilized outside aid, and with no long continued tradition to aid in the work is a truly herculean task.

There is a road to success, and one only in dealing with such an institution—it is summed up in one word and that is *decentralization*.

I maintain that to successfully work any base hospital of 500 beds the most absolute, the most complete, the most extreme decentralization is needed. With decentralization success may come; without it chaos is certain.

And first of all it is needful to define the responsibility of the staff of that great hospital. Their duty is, I take it, bounded entirely by the hospital enclosure and grounds. Beyond that boundary they have no responsibility. And the reason for this definiteness is that we want to fix all responsibility for the carriage of wounded to the hospital, and from it on somebody else besides the hospital staff told off for nursing duties. I am aware of course that in the first few days of war, confusion of duties is liable to occur, and all must work for the good of the national forces; but I refer now to the weeks and months during which a campaign goes on, and through all of which the base hospital works at high pressure.

The duty then of sick convoys, either to or from the base hospital, is no part of the work of the base hospital staff. That duty falls upon the P.M.O. of the base, who can only provide for it by fatigue parties from the bearer company forming the Medical Staff Corps Depot at the base. The nursing orderlies cannot do this duty; if they do they cannot nurse the sick, and the sick will die, and the responsible officer of the hospital will have the power to plead the overwork of his men as an excuse for the breakdown of his hospital. No such ground of excuse should be left in his power; but the way to cut away all complaints is to provide otherwise for all outside duties.

Having thus limited the responsibility of the chief officer to the enclosure of his hospital, we have cleared the road for a definite fixation of responsibility.

Within the limits of his hospital he is entirely responsible, and it is his duty to make the machine work. But he cannot do impossibilities, and he cannot succeed without the means of success. Success means men to do the work.

The book of the army system of organization lies open for us to read if we care to do so. The method by which, say a force of thirty guns of artillery is built up, is by first taking the six guns of a single battery and making them a working unit, and then taking five such batteries, each individually complete, and joining them together, and adding a chief commander and an adjutant to the already complete individual units.

To apply this system to our hospital organization is to copy a successful system, and one which has stood the test of war. If we decide on massing 500 beds as a base hospital in war, the only sure way of building up a successful institution is by resolving it into decentralized completely self-contained units, and joining them together.

Measured by this standard the 500 bed base hospital resolves itself at once into two stationary field hospitals as now sanctioned, each containing 200 beds, and one field hospital for 100 beds, as now sanctioned. If we can develop officers who can accurately work 200 bed stationary hospitals, and 100 bed field hospitals, we have simply to add to these three units a centralizing, co-ordinating and inspecting staff to make the whole machine work.

It may be stated at once that to work any central cooking system for 500 patients, and the heavy staff (some 150 men) needed for their care, is quite impossible. A centralized cooking place could never possibly work without utter confusion and impossibility of success. To keep 500 sick in

one place may be needful in war, but to avoid the outbreak of disease amongst such an agglomeration of ailing men, the units must be separated far apart and ample space intervening allowed. The very space paralyses all central cooking. But apart from that if you do not make the chief doctors of divisions responsible for the cooking in their own divisions you will never have really good cooking. Each division needs its own special cooks, its own special cooking tent or shed, and for its efficient working the divisional doctor is responsible, and it is to him the chief doctor of the whole hospital looks if any error or neglect is made in his division.

In the same way the 150 orderlies and Medical Staff Corps men need their own separate cook house, quite apart from the the hospital divisional cook houses, so as to diminish all chance of confusion by overcrowding. In the same way the washing of the clothes and bedding of the sick needs decentralization. The washing for 200 sick is in itself a large matter, but if we are to have it well done we must make each divisional group do its own, and blame the doctor in charge if it be badly done. The chief medical officer of the hospital is not a man to do work himself, rather is he there to see that others do it.

If we built up the base hospital on these lines it would at once increase the staff of medical officers of divisions by four, viz. :—from eighteen now laid down for the base hospital to 22, which would be arrived at by the building up principle. Of course the P.M.O. of the hospital, and his secretary should not count as workers in the ward. They are administrative staff quite surplus to the ward workers.

Four extra medical men would be given in addition to the existing detailed strength.

If we then examine the quartermasters allowed, we find that if we built up our unit we would have a quarter-master for each 200 beds, and one for the 100 beds in addition,

and one would be needed as chief quarter-master, or a total of four quartermasters for the 500 bed base hospital. The work at a 500 bed hospital of this kind would be almost as heavy, and certainly more exhausting, than at Netley, and the risk of the one officer breaking down would be infinitely greater.

I do not think that the presence of warrant officers as laid down in the scale for the hospital, take away from the need for the quartermasters. Two of the three warrant officers are chief wardmasters, that is to say, nursing superintendents and not storekeepers, and the third warrant officer is steward or under storekeeper, so that they in no way share the quartermaster's responsibility. If quarter-masters in ample sufficiency are not allowed for these great masses of sick called base hospitals, it is certain that the medical officers will be called on to act as quartermasters, and will thereby be taken away from their more important skilled duty. It seems to me difficult to overrate the heavy work needed of a quartermaster in a hospital. In a base hospital the work for one officer will be simply stupendous, and the financial responsibility and the enormous mass of accounts needed of him will be an intense labour. Of course under the new rulings the P.M.O. of the hospital is financially responsible for all stores and equipment, but the executive charge still falls on the one quartermaster. So far as I have seen in the field, the work is too heavy for any one man to accomplish.

I take it that the building up system of organization would well come into force here, and that to each of the 200 bed sections a quartermaster would be allowed, one also being allowed to the extra 100 bed section, and one senior or chief quartermaster allotted to the whole to serve with the P.M.O. and the secretary, and to be a responsible head of the storekeeping department.

I would dread the loss of money and stores that would result if the one really responsible financial officer should fall sick.

Carrying out the same principle of building up a hospital by perfectly complete units joined together, we come to the subject of compounders. In a stationary hospital of 200 beds, probably two compounders are sufficient, and as the base hospital has 500 sick we would need in the same proportion at least five compounders, or one per 100 sick. One per 100 seems by no means overmuch, and this is allowed on the hospital ship where 200 sick are accommodated. The very custody of the medical stores for a hospital of 500 beds is not a little thing, and probably five compounders—that is two for each 200 beds, and one for the 100 beds extra are really needed. There must be a night compounder on duty in so large a hospital, and where wounded arrive at all kinds of irregular hours, and the danger is that one of the compounders would fall sick from overwork. In this case, as in others, the building up the unit by completely defined minor units is probably the true system.

The washing of the clothes of the sick and of the attendants in a large 500 bed base hospital is all important.

While we talk of antiseptic treatment of disease we must ever remember that the first great antiseptic agent in a hospital is the washing machine and the laundry staff. It is in vain to attempt antisepticism unless this be provided for.

The regulations allow two washermen per 100 sick in the field hospitals, and the same proportion in the stationary hospitals, viz., four for 200 sick.

On the building up principle this would give ten washermen for a 500 bed hospital, and this is barely sufficient with machines and every other aid.

Nothing is more degrading than to have our sick men covered with lice as they were at Scutari. The only

true lice killer is the laundry boiler, and the constant change of bed and personal linen. The experiences of Ismalia in 1882 are completely to the point in this matter. The soiled clothes of the sick were sent on a regular wild goose chase from Ismalia to Cyprus, and thence to Alexandria, and were finally washed by the marines there. What marines can do, our own hospital attendants can do, if regulary told off for the purpose. We need then at least ten washermen for the base hospital, and if we take these ten men away from the existing ten supernumeraries allowed to the base hospital it only allows two men to do all the water supply, and all the conservancy, *the all important burning question of the conservancy* for the 500 sick men. Sir Edward Morris in his evidence before Lord Morley's committee distinctly throws the responsibility for the washing on our own hands, and all questions on this subject are at rest by this declaration.

One has little or no faith in contractors supposed to be found for us in war time. If we take out washermen with us the clothes will be washed. If we do not take them out the clothes will not be washed. This is after all the final result.

We have said just now that if we take away ten washermen from the supernumeraries now allowed to the base hospital we have only two men left for all water supply and conservancy work. On the building up principle we should have twenty-five men allowed us for this purpose, that is to say five men per 100 sick are allowed in the field hospitals, and as the base hospital is for 500 sick, five times as many at least are needed.

We would require thus at least 23 men added to the base hospital staff for water supply and conservancy purposes. Nothing can be more terrible than defective conservancy arrangements near a hospital, and the only way to deal with the subject is by allowing men definitely for the purpose.

To employ a nursing orderly who is tending the wounds of the soldier to be utilized in any way as a conservancy man would be a fatal step, but if a definite supply of men are not available, such a proceeding will be necessary.

One has the greatest dread of these subsidiary services being undernamed, because it is quite certain that if they be undernamed the nursing orderlies must needs be fallen back upon for the performance of a work, fatal to their fitness for nursing duties.

Section VII.—Hospital Ships at the Base.

On this I have but a few words to say. We have now reached, I think a high pitch of efficiency in this direction, and there is no reason why a hospital ship should not be a very perfect machine. One certainly seems disappointed at the small sick space the hospital ships really allow, and the engines and coal bunkers occupy much room in all these vessels.

Great advantage results from the hospital ship being connected with the shore by telephone. This idea was carried out at Suakim by Deputy-Surgeon-General Hinds's orders.

A brief code of signals by flags between the ship and the shore is very useful. This also I learned at Suakim. Two or three steam launches are needed for the Hospital ship to tow the sick boats from the shore.

A special sick transport boat is needed to take off the sick and wounded from the shore to the ship. Such a boat is to be seen at Haslar hospital working in Portsmouth harbour. There is need of a boat to take patients out for airing in the harbour, and to get them free from the hospital ship for a time.

The companion ladders of the ship should be very wide and well balustraded to admit sick men being carried up in a

carrying chair. A carrying chair is very useful on board ship to give invalids an airing. A pontoon stage might be used beside the ship on which the sick could be lifted before going on board.

A painted sign board is needed on the pier showing the hours that steam launches run between the shore and the ship with sick, and the visiting days and hours on board the ship.

Section VIII.—The "Sick Transport Ships" for England.

Great advantage results from the special sick transport ships regularly fitted up as hospitals being utilized between the seat of war and England. It is really impossible to care for sick and wounded men in the ordinary transport vessel, and it seems unfair to take a man out of a highly organized hospital ship and send him to England in a transport vessel not specially fitted as a hospital. The suffering entailed by the want of water closet accommodation alone is excessive.

But where the evil is very marked is in getting together a scratch team of doctors and medical corps for these scratch sick transport ships. If no definite ship is fitted out from England, when wounded leave to go home the P.M.O. must gather together any doctors he can lay hands on, and thereby must weaken the definitely equipped field units. If no medical corps men are specially provided in England for nurses we must draw men from some unit where they can ill be spared, and where, through want of men, the sick will be uncared for. In every war then the specially fitted and manned sick transport ships are needed as well for the well-being of the sick, as to prevent the doctors and staff originally detailed for the field being utilized for the return journey. It should always be remembered that a ship specially built for a hospital ship can

always be utilized as an ordinary military transport, but the reverse is not the case.

There will always be a dangerous gap in our line of communications until the sick transport vessels are as sure to be found present as is the base hospital. Two at least are needed to be perpetually going back and forward during the campaign between England and the base.

Section IX.—The Medical Staff Corps Depot at the Base.

We have dealt with this subject very fully in the paragraphs about a transport medical officer at the base. The Medical Corps of an army corps in the field must be looked upon as a regiment whose head-quarters is at the base, and whose companies in the shape of field hospitals and bearer companies are scattered along the communications and on the fighting front. But if it be a regiment it needs a definite depot at the base with a commanding officer, an adjutant, a quartermaster, and a paymaster.

I propose that the bearer company at the base fulfils these two functions, viz., that of depot and transport company. A bearer company has three medical officers and one quartermaster and some 57 men. The senior officer to be transport officer and to command the depot. The second senior officer to be adjutant, the third officer to assist in the transport work. The quartermaster to keep the clothing and equipment documents of the whole corps, and a paymaster of the Army Pay Department to be attached as corps paymaster.

This will free the base P.M.O. from all responsibility, and the documents now sent to the registrar of the base hospital will be kept together in the hands of the adjutant. A certain number of the men of the company to be given to the sanitary officer for his police duty, fatigue parties for the

medical store depot to be supplied, and from the depot company any casualties in the hospitals in the front to be filled up, and all small parties arriving in the country to be attached for duty.

All medical officers landing in the country to find here the needful shelter for the first day or two.

The letters for the officers and men of the Medical Corps to be taken care of and forwarded by this company who would tell off a trustworthy N.C.O. as postmaster for the M.S.C.

This depot seems to me to be absolutely needed, and without the transport company at the base I do not see how the transport work is to be done. Many officers to whom I have mentioned this idea consider it would be a great advantage.

Section X.—Reserve Hospitals Parked at the Base.

Whenever the army lands in an enemy's country the reserve hospitals needed for the Army corps should be landed and their *personnel* and *materiel* kept together in camp at the base. If this is not done and their personnel is utilized for other purposes, a day of reckoning is sure to come.

We must learn to see hospitals standing ready and idle, waiting to be employed; just as we see batteries of artillery standing idle waiting for use. Up to the present day we have so rarely seen medical units waiting ready to be employed, that we look upon it as quite wrong when we do see them, while we see a whole army quietly at rest waiting for the day of battle, that comes for a few hours once in every ten years.

At once when a field hospital and its personnel and materiel arrive at the base, they should be disembarked and pitched in some suitable place, and equipped with their transport and special local field equipment. Officers and men should be practised at the pitching and striking of their camp, and

every box and package examined and made ready for instant marching. Allowing the equipment to lie in the Ordnance depot unsorted and unchecked, or allowing the personnel to be drafted hither and thither is certain in war to lead to confusion.

When once the hospital has been found complete, and its commanding officer reports it as ready, then various duties may be assigned to its officers and men, always providing that they return to their camp at night and remain under the discipline of their own officers. Nothing so delights bad idle orderlies as to be moved from under their officers frequently. The good and the bad are then confused together, and discipline is powerless for good. Besides it must always be remembered that if the officers and men are moved about, the responsible commanding officer may any day allege it as a course of failure in the after working of the hospital. This complaining must always be borne in mind in every official organisation.

Section XI.—The Statistical Officer to the Army Corps.

A most valuable step was taken in the recent Suakim expedition in attaching a special statistical medical officer to the force, for the purpose of assisting the P.M.O. of the troops in the field by compiling the sick returns of the army. It is, of course, a moot question where such an officer with his clerks and office establishment should be located. He is without doubt the staff officer of the P.M.O. of the entire force, and in theory is one of his official assistants and should be with him in the field in camp. But in the recent expedition the officer was located at the base, and doubtless this precedent will govern future action.

At the base, commodious office accommodation is obtainable, and this is not possible at a camp in the front, and bulky returns cannot be easily carried with the marching force.

At the base all is possible, and statistics can be accurately kept. Nothing could be more painful than the former system of work, when a P.M.O. without any secretary and overburdened with executive functions, had in addition to compile the statistics of the force for the English home authorities.

This trouble will now pass away from the P.M.O., and a distinct statistical specialist will be found in all armies in the field. The statistical function of the P.M.O. in front should be merely to compile a general statement, not classified in any detail of the number of men sick in the hospitals of the army. This is a very simple matter but the compilation of accurate medical statistics dealing with each individual illness or wound, is a laborious task and needs time and special office accommodation.

Doubtless the statistical officer at the base should be bound to submit to the P.M.O. of the force immediate information of any excessive existence of special disease, and should also communicate freely with the sanitary officer of the army and of the base.

To facilitate returns of sickness, advantage would accrue from having very simple sick return forms for war, and reducing them to a minimum. All our returns, like all our drugs, were until recently based on the customs of peace hospitals, where paper and time are of no importance. For war the most portable forms, simple as A.B.C. are needed, and in this respect we have much to learn. The Swiss Medical service have a pocket book for Medical officers which contains in a singularly portable form the various returns needed in the field. We need to copy this system in many ways.

We are gradually changing from an elaborate peace system, to a really workable war system of work.

Conclusion.

In the preceding pages I have dealt with the various points which seem to need examination in the medical working of the base of operations. There are, no doubt, many other heads in the same subject which have escaped my attention, and which those who have fuller experience will at once detect. It is absolutely essential that we should all contribute to the building up of the war efficiency of our own branch of the service for the sake of the nation. I do not know where to-day to turn to find a record of what the doctors needed at Scutari or why in the past the medical side of campaigns have been such infinite labour to the officers concerned.

Military history has up to to-day been a history of the battle only. We need very much a history of the means by which the army was placed in position for the fight, and how the wounded and the sick were cared for. The daily increasing value of the individual soldier as he rises to the status of a citizen, renders it essential that every effort be made for his proper care in the field if wounded, and we must study calmly in peace what is needed for war. Thus only can success attend our efforts.

We are military specialists dealing with a special side of military work, but up to recent years the subject has not attracted much attention. As the soldier rises in the scale of citizenship, the means needed to care for him must also be developed. It is as a contribution to that development these paragraphs have been written.

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No.

NOTES ON THE MEDICAL CORPS OF THE SWISS ARMY.

By G. J. H. EVATT, M.D., Surgeon-Major, Army Medical Staff.

I had an opportunity, some time ago, of being present at the mobilisation of a large body of medical officers of the Swiss Medical Service, and seeing something of their system of organisation; and it seems to me worthy of study by the medical officers of our regular army, as well as by the militia and volunteer surgeons.

1. *The Army generally.*—The Swiss army is really a compulsory national militia, in which all males must serve for a certain number of years, and it is called out annually for training by districts, as our militia is called out by battalions. It is, however, infinitely more complete than is our militia, which is in no sense an army, but simply consists of a number of battalions of infantry, some garrison-artillery, and two or three battalions of engineer-militia. Our militia has no cavalry, is entirely devoid of a transport-corps, has no commissariat units of any kind, and the medical service of the militia is practically non-existent.

From Switzerland, we may learn how, in some measure, to combine a completely localised and popular national army with many elements of military efficiency. Until our militia is the result of universal military service, and until it has a defined commissariat, transport, and medical service, it cannot compare to the Swiss national service.

2. *The Medical Officers.*—In common with all males in the country, all medical men practising in Switzerland are liable for service in the national army between certain ages.

If I had to-morrow to choose from amongst the various European armies, except England, a most workmanlike, well organised, and completely contented medical corps, I would choose the Swiss service. After seeing something of the medical services of several foreign armies, the Swiss medical men seem to me to be men of great self-reliance, full of confidence in themselves, full of belief in the dignity of their work, and have, from their army-rules, complete and absolute equality in the national service. With such men, and under such rules, success is always possible. Without these conditions, however great the substantive advantages may be, failure is inevitable, and initiative impossible.

I attribute the high *morale* of the Swiss Medical Service to the dignity of manhood produced by the free government under which they live, and to the importance attached to the soldier's life in a country where, for long years, a wide popular suffrage has obtained.

The Swiss Medical Corps officers are really civil physicians called in annually, at certain centres, for compulsory drill and training in hospital-administration by permanent instructors. Every autumn, such local mobilisations occur in the district, and one may see the medical officers and the non-commissioned officers of the medical corps, at the appointed town, on the parade-ground, practising the "goose-step," and brushing themselves up in their military drill, before the rank and file of the medical corps join a few days later.

When these men join, they are posted to the various units of field-hospitals which compose the companies of the mobilised medical regiment; they are drilled and lectured, and finally take part in the autumn manœuvres with the mobilised army corps to which they may belong. The men were lodged in various houses in the town, and the officers lived at the hotels, all dining together at noon daily, in the chief hotel of the town. The principal medical officer, Colonel Goldlein, presided, and I had the honour of dining with the sixty medical officers on one occasion.

The medical officers wear a special light blue uniform, and a shako like the remainder of the army, having on its plate a Geneva Cross. The men wear similar shakos similarly distinguished.

Only educated and completely trustworthy private men are allowed to serve in the medical corps, and I should think them the most reliable and trustworthy of any rank and file in Europe so employed, for there is still much to look for in the development of such men in every European army.

The quartermasters of the Medical Corps wear the dress of the quartermasters of the Army Quartermaster Corps, and are apparently attached for duty. There are also a small separate body of apothecaries belonging to the Medical Corps.

3. *Rank and Grading.*—The Swiss Medical Corps, like the medical services of the American, Italian, Turkish, Dutch, and other armies, is graded into military ranks with military titles, from colonel, the highest title in use in the army, downwards through lieutenant-colonel, major, and captain, to lieutenant. These titles are used on duty, and the officer commanding the medical mobilisation was always spoken to and of as Colonel Goldlein. This rank seemed equal to the average army-rank of the remainder of the national service, lieutenants of the Medical Corps being graded with average lieutenants, captains with captains, and so on.

In a medical corps working as a disciplined body, there must be defined ranks and gradings, and they must be more or less equal to the average of the army in which the medical officers serve. The drawback of relative rank is its want of definiteness, and its want of recognition, and, worse than all, its tendency to be showered in too great a quantity on its recipients. The result of such systems is that rank is cheapened, and discipline suffers. If we were to abolish the lieutenants' grade to-morrow, and make all our young men captains, their position would not be practically improved, for somebody must still be junior, and do the junior duties; but by abolishing the junior grade, discipline would be injured by abolishing a check over which men should pass either by selection or examination. The Swiss say that, as a rule, rank should be equal for all corps and classes in the army for length of service, and that social intercourse between corps is destroyed by confining high nominal rank on any special corps, and thereby throwing it out of gear with the remainder of the army. As to the military title, they say it produces a feeling of equality in an army, which is entirely absent in those which do not have it. They say it paralyses the attempts of any class in the army to degrade those who do not have it; and it brings into the fold of the national army those lost sheep who without it are, officially, mere camp-followers. They deem it a protection against personal rudeness, and

they consider that it teaches to the whole army the fact that the central government of the State recognises in its service no depressed class. For them it is the true test between a national and a caste or class-army. But, say they, it acts in an entirely opposite direction, in being an agent of discipline in a corps of specialists, who, presuming on the supposed value of their specialism, would claim high nominal rank, and thereby derange from another side altogether the equipoise of the military machine. Military organisation demands that, however high or important the specialism may be, the specialist shall enter the national service just on the same footing as any other officer, and rise in his corps by steps equal to the average ranks of the other classes in the army. It is practically equality by discipline and organisation; and in the end the officers of the special corps do not lose, for their reputation does not depend on their mere army-rank so much as on the good name and high *morale* of the corps. The mere fact of being a lieutenant is not important, for we all know that a lieutenant in a very special *corps d'élite* has ever more consideration shown him than the same rank in some unimportant regiment; but officially, and for discipline purposes, they are alike, and in the eyes of the national administration there should be no difference in treatment.

Officers of every branch of the Swiss army have military titles, and, on meeting or passing each other, salute as a matter of discipline, the junior taking the initiative. This salute may be regarded as a good outward test of internal discipline in any army, and it is thoroughly carried out in Switzerland.

4. *Technical Training of the Officers and Men of the Medical Corps.*—The officers and men are trained in infantry-drill; and on it is grafted the special technical ambulance-drill, including the pitching and administration of field-hospitals. If we could imagine that, for fifteen or twenty days every year, the whole of the medical officers of the regular army, militia, and volunteers, with the rank and file of the medical staff corps, militia medical reserve, and volunteer ambulance companies, were mobilised at Aldershot, and at every division head-quarters through the country, for training, it would rather resemble the Swiss system. I was struck very much by seeing Colonel Goldlein, Principal Medical Officer of the Divisional Mobilisation, lecturing his officers on field-routine and administration, and on antiseptic surgery. The whole mobilised corps of officers were collected in a large room at the medical head-quarters, and were daily lectured in the forenoon by the principal medical officer. It was a sight I had never before seen in any army, and it struck me as an admirable practice.

But, to make a principal medical officer thus free to be in truth the commander and instructor of his corps, the Swiss Code frees him from all petty detail, while making him completely responsible. How do the Swiss achieve this? Nothing is more easy; they give him a staff. He has a secretary, an adjutant, and two permanent mounted orderlies. This is, of course, an enormous help, and frees the principal medical officer from the drudgery of detail for nobler aims. But, far more than this, they place between the principal medical officer and the medical corps of hospitals and transport columns an executive commander of the medical corps—a medical officer who acts as a *catchment basin*, and saves the principal medical officer from a mass of detail. Of this officer, more by-and-bye.

The advantage of this personal and corps staff is, that the principal medical officer—this most important officer—has suitable assistance to do his work thoroughly; so that, if he fail, he may be figuratively hanged. The excuses of deficient assistance, absence of suitable staff, and too heavy a burden of routine details, are not available to hide personal inefficiency; and the nation and the army can isolate facts, and place the finger accurately on the weak individual.

Colonel Goldlein could not be free to teach and to superintend if he were burdened with a mass of detail, important, it is true, but only important in its proper place.

The medical officers have complete military command of themselves and their men, and the transport of the medical corps is entirely under their control. I was particularly struck by Colonel Goldlein sending word to a large board-school near the town that, at two o'clock in the afternoon, he would turn it into a field-hospital. That afternoon, the corps marched to the place, and regularly unpacked their *fourgons*, and fitted it up as a hospital. This is a highly instructive parade, which I have never seen in any other army.

The sergeants of the medical corps have small trumpets, very tiny and neat, which they use as signals for calling together scattered ambulance-detachments on the field.

Regular cooking-cars on wheels are supplied to each unit of the field-hospital. Medicines are reduced to a minimum, the principle being plenty of needful drugs.

Curiously enough, though belonging to a mountainous country, it is only in two districts that mule-equipment is supplied to the medical corps; elsewhere, ordinary wheeled carriages are used.

4. *Detail of the Staff of the Medical Corps.*—The staff of a Surgeon-General, or *Médecin-en-chef*, of an army corps, consists of (1) chief of the staff, really a medical assistant adjutant-general, dealing with personal correspondence, and the right hand man of the surgeon-general; (2) chief of the transport, a medical officer dealing with the movement of the sick, convoys, and all correspondence as to transport; (3) chief of the field-hospital service; this officer would be assistant quartermaster-general, dealing with the location and administration of the war-hospitals, a most needful and highly important officer; (4) chief medical storekeeper, responsible for the special medical stores of all kinds needed by the army corps; (5) delegate of the Red Cross societies, a most needful official to curb and restrain, and endeavour to keep in order, the undisciplined levies who often rally under the Red Cross in war-time.

Is this a sufficient or too large a staff? Doubtless it is barely enough. If the surgeon-general of an army corps is to survive at all in a long campaign, he must have at least such assistance.

B. *Divisional Medical Staff.*—This consists of one principal medical officer (lieutenant-colonel), one adjutant, one secretary.

C. *The Battalion Staff* consists of two mounted medical officers, one warrant medical officer, two orderlies, one ambulance sergeant of bearers, twelve bearers, one hospital-orderly per company in addition.

D. *Cavalry Staff* consists of one medical officer, one orderly per squadron mounted.

E. *A Battery Staff* consists of one medical officer, one hospital-orderly, two stretcher-bearers.

F. *Staff-Surgeon for the Staff.* One medical officer, two hospital-orderlies.

It is important to note that a medical officer by himself is never seen; trained subordinates are ever with him; and, at the medical mobilisation, all these regimental orderlies, etc., attend for instruction.

5. *The Field-Hospitals.*—Let us understand clearly this section. In all continental armies, the term "field-hospital" is used for a much larger unit than with us. Our field-hospitals would by them be called "ambulances," or sections of a field-hospital. I think, however, we are right, and that a 100 bed-unit, if it be complete, self-contained, and fit to work perfectly by itself, is worthy of the name "field-hospital."

With this explanation, I say the Swiss Division has but one field-hospital. But what is that field hospital? It consists of many subdivisions, namely:

G. The headquarters staff of the field-hospital, corresponding to what we would call the headquarters staff of an infantry battalion;

H. Five sections of the field-hospital called "ambulances," or, as we would call them, "field-hospitals," like five companies in an infantry battalion;

I. Five columns of carriages, like our bearer-companies, with a difference;

K. The reserve of medical material, for the division only.

Let us glance at these subdivisions.

G. *The Staff of the Field-hospital* consists of one chief surgeon, one adjutant, one quartermaster, one apothecary, one sergeant-major. These five officials practically co-ordinate and combine into a medical battalion the five sections, or "ambulances," of the division; through them all correspondence reaches the principal medical officer, and they inspect and keep touch between the sections. They must save the principal medical officer immense trouble.

To understand this system, let us apply it to our own army. We are, it is said, to have two bearer companies, and four field-hospitals in each of our divisions; that is to say, six medical corps units; and there are, in a division, at least twelve military fighting units, or a total of eighteen different units. The principal medical officer, therefore, receives, every morning, at least eighteen reports, which he must combine and co-ordinate, and to which he must reply. The Swiss system protects the principal medical officer from these eighteen reports; firstly, by giving him a secretary and an adjutant, an enormous help; secondly, by making all the medical corps units subordinate to a chief surgeon, who also has an adjutant, quartermaster, and apothecary. Our principal medical officer is really like an assistant adjutant-general of a division, dealing with the companies of a battalion separately, while the Swiss principal medical officer deals not with the companies, but with a battalion-commander who really co-ordinates the companies; that is to say, the divisional medical corps of the Swiss army is really a divisional regiment under its own chief, subordinate to the principal medical officer, while ours are a series of independent companies, each dealing directly with the principal medical officer.

Divisional Medical Arrangements.

ENGLISH.

A. General commanding Division.
B. Principal Medical Officer of Division.

M. Fighting Division, 12 Units. — — — — — — — — —
I. Field-Hospitals, 4 Units. — — — —
K. Bearer-Companies, 2 Units. — —

SWISS.

A. General commanding Division.
B. Principal Medical Officer of Division.
C. Principal Medical Officer's Secretary.
D. " " " Adjutant.

M. Fighting Division, 12 Units. — — — — — — — — —
E. Chief of Medical Corps.
F. Apothecary. H. Adjutant. G. Quartermaster.
I. Five Field-Hospitals. | | | | |
K. Five Transport Columns. | | | | |
L. Reserve Material. |

This diagram shows the intense personal centralisation of our divisional system, and shows that a divisional principal medical officer falling sick or getting wounded would be a great blow to the efficiency of the medical corps of the division.

With the Swiss system, principal medical officers might come and go, but the corps would still survive, because decentralisation, the one great secret of German efficiency, has been very thoroughly carried out.

Let us remember that Switzerland, placed between France, Germany, and Italy, has had great advantages of seeing varying systems at work; and, to my mind, she has accepted the lessons.

H. *The Sections of the Field-hospital called "Ambulances."*—Just as if a battalion had five companies, so the Swiss field-hospital has five "sections," each called "ambulances," or, as we would call them, "field-hospitals." Each section has four medical officers, one quartermaster, one apothecary, and thirty-four non-commissioned officers and men of the medical corps.

This is a very neat unit; but as it is intended only for European warfare, it is not an accurate guide for us, who can find no assistance whatever in a New Zealand fern-thicket, on the plains of Egypt, on the Crimean steppes, or in the jungles of Ashantee. We must embark with the means of being efficient, or we shall never be efficient at all.

I. *The Column of Sick Transport Carriages.*—So far as I understand it, there are no definite units, called "bearer-companies," in the Swiss service. They separate all the sick transport-wagons into units by themselves, and call them "transport-columns," assigning to each two medical officers and ten rank and file, and thirty-two wagons. These act as convoys; and by adding a column of carriages to the *personnel* of an ambulance (field-hospital) a bearer-company is made *pro tempore*.

It seems to me that it will always be a drawback in our service to think that, however efficient the medical officers and men of a bearer-company may be at work, the declaration of peace extinguishes them as an unit, and their good or bad tradition perishes. The Swiss system abolishes this, for it separates the main body of the *personnel* into a field-hospital, and leaves but two officers and ten men with the thirty-two wagons. It is this small body alone which perishes as an unit. If we ever did this, we could once and for all break up the medical service into field-hospital units, permanent alike in war and in peace; and simply add on a transport-column to a field-hospital unit, and call it a bearer-company, and use it as a chief dressing-station on the field; just as the battery is the artillery unit, so the field-hospital would be the medical unit; three, four, or five such units forming hospitals for 300, 400, or 500 men. The permanency of the unit, in war and in peace, is the keystone of the arch of efficiency as far as the care of the sick is concerned.

K. *The Reserve of Medical Material for the Division.*—This is a very essential element of field efficiency. To ask an officer commanding a field-hospital to act also as medical storekeeper, and issue medicine for the division, is to handicap very much the working power of the hospital as a nursing agency. The Swiss avoid this by attaching to each division a reserve of medical material under the apothecary of the headquarters of the field-hospital, for divisional supply only. A couple of wagon-loads of such material, under an apothecary, with a sergeant and a couple of men, would be a great help in all our wars. The surgeon-general has, as I pointed out, an officer dealing specially with the army corps medicine-supply on his staff.

Limits as to space prevent me from dealing with other important points in the medical organisation of this interesting army—an army, I feel certain, we shall one day copy in many of its points of organisation. I may summarise the points of interest as follows:

1. The staff of the surgeon-general of the Army Corps, its number, and its adaptability for work.
2. The staff of the divisional principal medical officer, enabling that officer to be the teacher and real commander of his corps, and freeing him from unimportant detail.
3. The large battalion aid on mobilisation.
4. The bearers allowed to each artillery-battery.
5. The practical formation of a divisional medical regiment, by interpolating a chief surgeon between the divisional principal medical officer and the "sections" of the field-hospitals, thus co-ordinating their work, securing the all important daily and hourly inspection, while freeing the principal medical officer of the division from perpetual trivial detail matters connected with them.
6. The abolition of the bearer-company as a separate unit, and the utilisation of the *personnel* of unoccupied field-hospitals as such, aided by the "transport-columns."
7. Lying under all, yet towering over all, and permeating all, the absolute equality in rank, status, and consideration afforded to the Swiss Medical Corps by their army rules.

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III.

NOTES ON THE TURKISH TROOPS IN TURKISH ARABIA,

By Doctor Evatt, Army Medical Department.

In the spring of the year 1873, while travelling in the valley of the Euphrates and Tigris, we were enabled to make some notes on the condition of the Turkish soldiers in the various garrisons of that country. We saw during our journey something of the soldiers in garrison at Bassora, Bagdad, Kerbela, Nejf or Meshed Ali, and at Hillah. As these notes may contain a few points of interest to officers of the Indian Army, we submit them for publication.

2. Every one is aware that although the Turkish race was in the olden time merely a Tartar horde in the pay of the Arabian caliphs, who then held sway in Bagdad times are much changed. The Tartar servants have become the rulers and the Sultan of Turkey, although Turanian in origin, claims all the power of a Suzerain over the entire Mahometan world and particularly over the dwellers in Arabia. However to claim sovereign rights over the Arabs is an easy matter, to enforce authority is quite the reverse. Despite the numerous garrisons above mentioned in Mesopotamia and Arabia Proper, Turkish authority hardly extends beyond rifle range from the walls of the garrisons, and the Arab freebooters to-day carry on their depredations within sight of the minarets of Bagdad, and close up to the very centre and head-quarters of Turkish power in the East of the Ottoman Empire.

The Arab, possessed of little real property, and very rarely condescending to cultivate the earth, is a foe very difficult to subdue or to capture, for packing up their rude tents, and driving their herds before them they seek the shelter of the desert and laugh at pursuit. A constant warfare of more or less severity has been waged between the rulers and the ruled for centuries, and even now, although there are signs of settlement and peace, at any moment the Arab people may take fire and endeavour to abolish every sign of conquest. To maintain the possessions she already occupies and to carry on expeditions against more distant Arab regions, Turkey holds these garrisons, some of which viewed apart from mere Turkish and Arab politics, may one day occupy a prominent place in public affairs.

3. A few words on the situation of these towns may not be out of place. Coming from India the first met with is Bassora, a town of capital situation and considerable importance to-day, but the merest shadow of the once magnificent city where, in ancient Assyrian days, all the wealth and commerce of India and of Babylonia met. It is built on the banks of the Shatt-el-Arab or conjoined stream of the Tigris and Euphrates, a splendid body of water which falls into the upper extremity of the Persian gulf. Heavy freight vessels and frigates of 40

guns lie with ease off the town. Close by Bassora is the Arab town of Kowet on the Arabian shore of the gulf, destined one day to be the Gulf terminus of the Euphrates valley railway, if ever that much talked of construction is made. At Bassora there are several Turkish frigates stationed and from that garrison they now and then despatch little expeditions against the Arab settlements that can be reached from the Persian gulf shores. While we were there in 1873 troops were returning from an expedition against El-Hassa.

The town is much exposed to marsh poison from the swamps of the Euphrates, and the numerous canals that are here used for irrigation. The date gardens of Bassora are famous in the East, Moore in Lalla Rookh also mentions them.

4. Proceeding up the Shatt-el-Arab one comes to Koorna the traditional site of the Semitic paradise at the junction of the Tigris and Euphrates. Here entering the former river one proceeds against the stream which runs through a wide and howling desert to Bagdad.

There has always, since the very dawn of History, been a great city about this part of Mesopotamia, whether it be Babylon, Sellucia, Ctesiphon or Bagdad, but Bagdad is by far the least important city that ever occupied this central site.

Turkish misrule and Arab wildness have turned this land, the very mother of abundance, into a desert, but it cannot destroy the great strategic importance of Bagdad. This city commands the valley of the Tigris and of the Euphrates, it stand opposite the passes into Persia via Khanakin and Hamadan, it is the centre of what might be the most fertile district of the world, it is a capital base for the support of the outlying garrisons of Eastern Arabia, and troops required for operations in the Gulf can easily reach Bassora in a few days by water transport. When the day comes, as come it must, that Russia and Turkey meet for the final settlement of the latter's condition, it will surprise us very much if Bagdad be not the point of most importance in the question. Russia strong in such a place, and with the Persian Gulf open to her ships and trade, seems to be a far more important subject for us to think of than the more unlikely dangers of direct Indian invasion. One thing strikes an Englishman coming from India while travelling here, and that is what might not this land become if ruled by Anglo-Indian administrators and Anglo-Indian laws. If England had a garrison at Bagdad, the old glories of this once splendid *Doab* might again revive.

5. Fifty miles from Bagdad, across the desert of Mesopotamia lies Hillah on the actual site of ancient Babylon, and on the bank of the Euphrates, here a wide and noble river. This garrison connects the outlying forces at Kerbela and Nejf with the centre at Bagdad.

6. Kerbela and Nejf may be treated under one head. They are the advanced post of the semi-civilized Turkish rule on the boundaries of the Arabian desert and the outlying pickets of the Turkish arms against

the independent Arab tribes. In addition to this they are sacred cities in the eyes of the Shiah Mohametan sectaries.

Year by year amid great troubles and difficulties tens of thousands of pilgrims from the far off Persian interior, traverse their wild and rugged country, and descend into the burning plains of the desert to visit the burial places of the beloved Ali and of his murdered son Hoossein. Ali died at Kufa a few miles from Nejf where the religious fervour of the Shiahs have reared over his remains a noble mausoleum whose golden dome glistens for thirty miles on the plains, and at Kerbela in the midst of luxurious date gardens, and in the centre of a fertile oasis in the surrounding desert, Houssein sleeps. To be buried near these holy sites is the one aim of the Shiahs, and the most familiar picture in the desert is the long caravan of camels and horses carrying the corpses of the dead Persians for burial near the beloved ones of their sect. Few Christians have visited these holy cities, but we were lucky enough to be able to do so.

7. Whatever rottenness or mala-lministration may exist in the civil affairs of the Turkish, or as it should be more correctly called the Ottoman empire, and there is very much, that rottenness does not extend as far as we could see to matters military. Turkey may be dead as an Empire viewed from the civil side, she is far from being dead as a military power, and now after the lapse of two years since we saw her soldiers, we still believe them to be very efficient, thoroughly well cared for, and in many ways worthy of being copied by the Indian native army.

8. The Civil and Military authority in Irak Arabi, (Turkish Arabia) centres in a *Mushir* or Field Marshal located in Bagdad, and who is called "Viceroy." During our stay in those parts Raouf Pacha was the officer holding this post, and to his kindness, and to the hospitality and attentions of Colonel Herbert, the late British Resident in Bagdad, we were much indebted for opportunities of seeing the military institutions of the Province. From what we saw of Raouf Pacha, he was as little like the old conventional type of Turkish Pacha described by Kinglake and others as anything could be.

9. He was an accomplished and agreeable gentleman, had visited all the European courts, was covered with decorations, was well informed apparently on all European questions, spoke French well, knew the system by which France was trying to civilize and to settle the Arab Tribes of Algeria, a duty very kindred to his own, and took much interest in enquiring into our condition in India and spoke of visiting this country. He personally explained the details of some rifled guns to us, discussed various questions and in numerous little ways showed himself quite up to the average of European officers in our opinion. It is strange, however, to think that while the Governor is lucidly dilating on the affairs of Europe in his cabinet, the caravans are being rifled within gunshot of his walls. Yet so it is here, everything in the civil adminis-

tration is in theory admirable and reads to perfection, but there the matter ends. In practical life nothing is done save to peculate and probably to oppress. But certainly, as far as I could see, it was not so in military affairs.

9. Some one has said, "The Turkish army is one in which the private men are excellent, the company officers passable, and the seniors contemptible," and probably there is some truth in the saying. Certainly if the officers in the higher army grades were as efficient in their positions as the rank and file are in theirs, the army would be a fine organization.

The Turkish soldier in the ranks seems quite a good fellow. Robust and hardy in physique, accustomed to the hardest fare in civil life, very probably drawn from the agricultural peasantry, always a good nursery for soldiers, strictly sober and imbued with a religious devotion to his country and the Padishah, he seems to be a man who in the hands of Anglo-Indian officers of the old Indian irregular cavalry type, might be made to do anything. They seem more intelligent by far than the average sepoy, and remind one more of the Goorkha type of soldier, some of whose Turanian blood indeed flows in the Turkish veins. They have more animation and energy, more fire and enthusiasm, than any Poorbeah soldier ever had, and we think they would take kindly to the right stamp of English officers.

The company officers are men who as a rule have passed through the ranks, and who are devoid of any high professional education. Without influence a man does not reach any high grade in the Turkie service, and the friendless captain rarely advances beyond that post. The weak point in the whole service is the frightful amount of corruption and backstairs influence that is said to be at work in the disposal of all high commands or even regimental appointments. Mere favourites, knowing little of their duties, succeed to these posts and the whole military machine is paralyzed by inefficient leaders. Had Turkey a class of higher military officials as true to her interests and as devoted to their country as is the private man in the ranks, she would be much stronger than she is to-day.

We will notice such points as seem of interest under separate headings.

10. *Physique.* The men in all the garrisons we visited were robust, stout, and hardy looking. At Bassora only, where there were many invalids returned from the expedition against El Hassa, did we see any delicate men, and here too the climate is very bad, being thoroughly saturated with marsh poison from the swamps and overflowings of the Euphrates.

The Turkish soldier walks better than the sepoy, he has more spring and elasticity in his tread, and an easier gait. At Bagdad while we were there a guard of Bombay sepoys was on duty at the Residency.

They did not, in our opinion, compare well with the Turkish soldiery. Their English pattern red tunics were too tight and constrained, their blue serge trousers far behind the easy fitting knickerbockers of the Turk, and an English Kilmarnock cap is inferior in appearance to a tasselled fez. The sepoy was more of a soldier according to the views of a bigoted drill sergeant, but in no other way. At Bagdad we noticed that a great number of the soldiers had the horrid scar of the Bagdad boil on their faces. This disease resembles the Delhi boil of India and is supposed to be induced by the water. It is most disfiguring and no one escapes it if they live in the city for any time.

In every garrison, as I will remark further on, the men were stout and well nourished; with reference to Mahometan prejudices it may be mentioned that the rank and file wear neither beard nor whiskers, their faces except the upper lip being clean-shaven.

11. *Clothing.*—The Turkish soldier is well and sensibly dressed. His uniform suits his work, and that sums up the best opinions on a soldier's dress. All ranks without exception wear the fez. It is light, portable, easy and becoming. It is worn alike by the Pacha and the private soldier, and is never removed whether at meals or on any other occasion. It is probably the last remains of the turban reduced to suit modern ideas. During the hot season, which is a severe time in these desert garrisons, the men wind a turban round the fez, and the officers adopt the Arab *Keffiya*, a striped kerchief worn open over the head and shoulders, and bound round the brows with an *agae* or coil of camel's hair rope. This head dress forms a well known feature in all pictures of Arab life. The men wear blue serge jackets cut in what we call Zouave pattern, collarless, open in front and showing the vest. The trousers are loose and easy, and end half way between the knee and the ankle, where a stocking covers the leg. In the hot season they all wear white drill uniforms, well cut, clean, and as good as what our soldiers wear when in India. The officers wear in ordinary single breasted frock coats of good cloth surprisingly well cut, and the grades are shewn by increasing bands of gold lace on the sleeve. In the summer they wear white frock coats which are becoming. No officer wore either cross belt or sash the chest being perfectly free. In the summer the men carry a white canvas pack instead of the ordinary knapsack. The men are well shod. I noted this particularly as no one can deny that the shoeing of the sepoy is still a weak point. The Turkish soldier wears broad soled very easily fitting boots of soft unblacked leather, like our Indian sambhur skin; they come high up over the ankle and lace along the side. We enquired about footsoreness and it is almost unknown. To any one who has seen the sepoy painfully walking along in ammunition boot, or on a march carrying them on the end of his musket, this is a great improvement.

The Turkish Government have established a Government clothing factory at Bagdad, and there all the uniforms and boots are made up.

We visited the establishments. The machinery is rude, but the work turned out is substantial and good. The manager, a military official, had been trained in the French factories.

12. *Arms.* We visited these garrisons in 1873. The men in all of them were armed with snider breechloaders. This surprised us, as at that time the local Indian army was armed with smooth-bore muskets and the English garrison alone had breech-loaders. The arms were we think English made. They were clean and well cared for. They were neither blued nor browned, which seems strange to English eyes; and its omission is a mistake, as a bright metallic gun barrel attracts the attention of an enemy in the field, and in the sunlight interferes with a steady aim from its dazzling effects.

Many of the men were armed with sword bayonets. They used the Snider with dexterity, and maintained a rapid fire with it, but there was no attention paid to steady aiming. The Cavalry, who are very constantly engaged with mounted Arab marauders, are armed with Remington American breechloading magazine carbines holding 14 cartridges in reserve in a magazine under the barrel. Raouf Pasha, in explaining this arm to us, stated that they stood the wear and tear of the desert life well and did not go to grief. They are imported from America.

The officers were armed with swords of the European pattern. We saw nothing of the Artillery. There are no guns on the ruined bastions of the Bagdad wall, there are none at Bassora or Hillah, but there were some small pieces on the walls of Kerbela. Any heavy artillery would, we imagine have to be conveyed from Constantinople by sea via the Suez canal and the Persian Gulf, any attempt to convey it across the rugged country that lies on the overland route from Constantinople via Diarbekir would be very tedious.

13. *Food.*—The Turkish troops in those garrisons are very well fed. Even by comparison with our Commissariat arrangements for the European troops in this country they need not be ashamed. Any person looking at the men would easily see they were well cared for in this particular. We have now before us the ration table of the Turkish soldiery. The peculiarity of it is that every grade in the service from field marshal down to private man, receives rations in kind according to a sliding scale, which gives one unit to a private and thirty units to a field-marshal.

Each unit represents a day's complete ration for a single man, and consists of bread, meat, rice, ghee, onions, salt, firewood, oil, candles and soap. Officers of the Indian Army are doubtless aware that although the Turkish soldiers are Mahomedans they are of a very different stamp from the so-called Mussulmans of India, who in many ways are mere Hindoos. In India owing to contact with Hindooism, Mahometanism, Christianity and Buddhism have all more or less become tainted with its narrow views.

All Arab and Turkish Musalmans, following the true rules of their creed eat freely with Christians, and with each other. Rationing the soldiers is thus freed from the many difficulties which attend the feeding of an army like the Indian, containing in its ranks Hindoos of various castes, Mahometans, Christians and Sikhs. Messes can be organized, any comrade can cook for any other comrade, and they have no more scruples about times and places of eating than the English soldier has. The prejudice against the hog of course exists, and in this prejudice all sensible men agree with the ideas of Moses and Mahomet as far as the East is concerned. We have constantly eaten at the same table and from the same dish with both Arabs and Turks, and no question was ever raised. We noticed that few of the Turkish officers were teetotallers. They all drank wine.

The ration bread of the troops is made in the European fashion and is excellent. It is made in Government factories. The cattle that supply the meat ration come from the pasture lands that lie on the hilly country along the Persian frontier. Amongst the civil population the date in these regions occupies a very important place as a food.

14. *Pay.*—We have shewn that these soldiers are well dressed and very well fed. They are wretchedly paid. Pay day is an event of wondrous race occurrence in a Turkish garrison. The continual drain of money from the outlying provinces to Constantinople to be squandered in the intrigues of the Seraglio renders it almost impossible to pay the lower officials. The Civil authorities doubtless do not suffer, as they "squeeze" the people they govern a little more and make ends meet.

We do not see how the soldiery can do this; of course when a man is well fed, clothed and lodged, the great pressure of life is removed from him, and the higher ranks can secure money by selling their surplus rations. Thus a Captain, who draws four sets of rations, can probably sell three of them. Stories, which if not true are very well found, are told of pashas who determined their men should receive some payment. One accordingly divided the city walls into portions and handed them over to the garrison in lieu of payment

The soldiers soon turned the bricks into cash, and the walls nearly disappeared. Another story states that one month the entire army was paid in soap, of which commodity many tons were in store. The following are the titles and monthly pay rates of the service :—

Title.	English rank.	Pay Beshliks.	Ration units.
Netair ...	Private ...	5	1
Onbashi ...	Corporal ...	6	1
Choush ...	Sergeant ...	12	1
Mulazam ...	Ensign ...	44	1
Yuzbashi ...	Lieutenant ...	80	2
Bimbashi ...	Captain ...	200	4
Kaimakam ...	Major ...	300	6
Mirali ...	Colonel ...	600	8
Lira Pasha ...	Brigadier ...	1500	16
Ferik Pasha ...	Division General ...	3500	20
Mushir ...	Marshal ...	10000	30

A Beshlik =20 Piastres. 44 Piastres make a rupee.

15. *Drill.*—The general character of the Turkish drill resembles that of the French army before the war of 1870. This is true, although the Turkish army was modernized by German officers, Moltke himself having taken part in the work forty years ago. There is not a vestige to be seen of that wonderful smartness at his exercises which marks the German soldier. On parade and on guard the men have all the *degagé* manner that before the late war characterized the French soldiery. They drill, it not with English accuracy with twice the English rapidity; everything seems to be done at the double. They do not wheel like a gate nor march like a wall, but they deployed into line and performed various manœuvres with extreme rapidity. Both at Bagdad and Hillah they had military bands organized on the European fashion.

The soldiers salute by placing the open hand on the heart, and raising it to the head. The Turkish garrisons in these districts lead a hard life from the constant flying column duties either against hostile Arab tribes or against Arab freebooters. More wearying or less glorious expeditions a soldier cannot be employed on. To catch an Arab tribe when in full flight is impossible, and from the midst of the wide spreading desert these merciless robbers laugh at pursuit. Law and order have to-day little existence in those uncared lands. Turkish rule is so grinding, so unfeeling that it seems to desolate every spot it touches. One constant thought in this dreary land is what might it not become if under English rule and administered by Anglo-Indian officials. The old glories of that *Doab* which was once the garden of the world, might revive again. We could not, Kafirs though we might be, endure more hatred than the Arab Mussulman gives to his orthodox oppressor. It is more than a creed hatred, it is a race hatred aggravated by constant tyranny in the ruler. When going over the Euphrates to Kerbela, a man said to us,

"If any one insults you it will be because they may mistake you for a Turkish officer;" a mistake quite possible, for they are as a race undistinguishable from Europeans.

It is quite a question, whether had we in India been of the same creed as the people we rule there, we would have inherited any less hatred than we now do. European History has shewn that Roman Catholic Austria ruling Roman Catholic Italy did not mean any love between the two peoples.

Probably no nation could rule these people so well, certainly none so justly, as we could. Did we own the land of Mesopotamia and the Shiah shrines in Arabia we would have great influence over our Indian Musalmans, and there is a boundless field for emigration in the plains between the rivers Euphrates and Tigris. All that is wanting is order and irrigation. When owing to the internal commotions, the elaborate Assyrian canal system of the land began to fall into decay, it was certain the country would become a desert, and now we have the extra, ordinary example of two splendid streams rushing down to the ocean and passing almost the whole of their course between desolate desert-plains. Once let the waters enter these plains, and an extraordinary fertility must be developed. Turkish rule will never do this, to the English or perhaps some more ambitious race this task remains.

16. *Hospitals.*—The Army hospitals in the Turkish service, following the example of France, Germany, Russia, Austria, and America, are organized on the general system as opposed to the regimental system, that formerly obtained in the English service. The Garrison hospital at Bagdad was excellent, a fine double-storied, well ventilated modern structure of the banks on the Tigris. It is true that it was built by private charity for the use of the sick poor of the city, the authorities have however annexed it for military purposes, as "a temporary measure." When we with several Turkish officers visited the hospital the senior medical Officer in charge of it requested the whole party to remove their swords and leave them in an ante-chamber. It is an army custom and prevents the disturbance caused by thoughtless visitors, who come clanking through the wards disturbing every one. Of the wards there is little to say. They were quite satisfactory and the whole edifice, by comparison with the rude structures often used for the sick sepoy, was quite a palace. The sick consisted principally of fever and dysentery cases.

The medical officers were intelligent men, principally Greek and Armenian Christians. There is an imperial school of medicine at Constantinople for training these officers. Their position is good and their pay, when they get it, liberal.

17. *Barracks.*—The barracks are in every garrison substantial and fair. At Bagdad they are quite modern and very good. Large, substantially built, double-storied, deep verandahed, well-ventilated buildings,

enclosing a large square in the centre, and capable of accommodating 2000 men easily. The verandahs are particularly deep; wider than the Bengal standard pattern for European barracks. The soldiers have no bedsteads. A sloping guard bed runs along either side of the rooms, and here the men sleep. Every soldier has a locker of his own, a capital regulation, and one much wanting in our English barrack rooms.

As we entered the rooms, the men were called to attention and stood to their places. No fault could be found with the construction of the buildings, but they were not as clean as is the general custom of the English service.

18. *Conclusion.*—We think the general verdict on the points we have considered with the exception of the efficiency of the senior grades of officers and the pay question, must be favourable. There is no doubt that an observer coming fresh from English parade grounds and English barracks, would find much fault. But coming from India and knowing how difficult it is to maintain perfect order and regularity of detail amongst Asiatics, one takes a fairer view of these Turkish soldiers.

The greatest good will seems to be borne towards the English people by all the military. At Hillah, and at Nejf as well as at Bagdad they were very civil indeed.

While sitting one evening on the Esplanade that runs beside the Euphrates at Hillah; and listening to the Turkish band playing, an old man came up to us and recognizing us as English essayed to converse. He could not say much, but placing his two forefingers together along side each other, he said "English and Turks;" then placing them like crossed swords against one another, he said "English and Russians."

The same sentiment seemed to be very general. No nation has done more for Turkey than we have, perhaps we might have fought for a better cause.

GEORGE J. H. EVATT, *M. D.*, SURGEON,
Army Medical Department.

Umballa, *July* 1875.

I

Audi alteram partem.

A PLEA

FOR THE

General Hospital System,

BY

J. M. GRANT, M.D.
Deputy Surgeon General, Principal Medical Officer, Curragh District.

BEING A REPLY

TO THE FIRST PART OF A PAMPHLET

ENTITLED

"THE PRESENT STATE OF THE ARMY MEDICAL SERVICE AS A LIFE CAREER FOR THE SURGEON,

BY

EDWARD HAMILTON, A.B., M.D.," ETC.

Printed for Private Circulation.

A PLEA FOR THE GENERAL HOSPITAL SYSTEM.

WHILE the officers of the Army Medical Department must ever feel grateful to Doctor Hamilton for his powerful advocacy of their claims on the consideration of government, there are many of them who will find themselves unable to accept his sweeping condemnation of a system which has not yet been tested, inasmuch as it has not yet been introduced.

I have heard all his arguments in favor of the Regimental System before; but I have not seen them so ably treated of collectively, and I am induced to answer him, because he is entirely misinformed as to the nature and scope of a General Hospital System, and represents it in such a light that it must contrast unfavourably with the other, in the estimation of all who have not had the opportunity or the inclination to study the subject attentively for themselves.

When the two systems are considered side by side, as I now propose to consider them, I have no fear for the ultimate result; for, although the Regimental System was a cherished military institution, and the army is a very conservative body, I think that its advocates must change their views on more mature reflection. I propose to confine my remarks to the strictures which Dr. Hamilton has made on the general system, proceeding *seriatim* with my replies, and indicating the subject, and the page of Dr. Hamilton's pamphlet to which they refer.

EFFECTS OF BREAKING UP REGIMENTAL ESTABLISHMENTS.

Page 2, Par. 3.

The Regimental System was unquestionably very attractive to many Medical Officers, and afforded them social advantages which it would be difficult to over-rate; but in all great reforms, individual interests must suffer more or less. I fully admit the hardship to which Regimental Medical Officers have been subjected by their sudden eviction from their regiments. If more time had been given, and it had been notified that after a certain date no further regimental appointments would be made, and that those existing would be cancelled in there

or five years, many Medical Officers would have left their regiments as their turn for foreign service came round, and such of them as might have preferred to stay out the prescribed period, would have had no just ground of complaint. All the other changes connected with the contemplated reorganization, such as recruiting the Army Hospital Corps, transfer of stores, and buildings, etc., might have been made in the meantime, the Medical Officers alone remaining with their regiments and attending as far as possible their own sick—the only representatives of a system that would then have been virtually discontinued. That this was the original intention, would appear from the late Director General's letter, referred to at page 39 of the pamphlet before me, and I apprehend that there must have been some very strong reason for departing from it.

I do not see that a system of General Hospitals, considered *per se*, lowers the status of the Medical Officers or the prestige of the medical profession. The difference between the two systems is only one of detail. The duties and responsibilities of Medical Officers are the same; but they are under the command of military officers of higher rank than formerly, so that, of anything, their military status is rather raised than lowered.

It is quite true that their position in regiments is much more unsatisfactory than it was before the Warrant of March, 1873; but that Warrant appears to be a compromise made professedly in their favour, and in deference to the opinion of those who were unwilling that the regimental tie should be severed altogether.

EXTRAVAGANCE AND INEFFICIENCY.

Page 2, Par. 4.

There can be no doubt, that the allotment of a certain hospital space to each regiment at a station, where there are more than one, is an extravagant arrangement as rendering necessary the erection and maintenance of larger hospital buildings than would be required if the accommodation were generally available. Imagine such an arrangement adopted in our city hospitals—one set of wards being exclusively set apart to one street or district, and another to another—and the extra outlay in buildings, fuel, and attendants, that would follow, will be more apparent than it seems to be to our brethren in civil life. The maintenance of a staff of attendants for one regiment is also extravagant, because one Hospital Sergeant could do the duties of three or four regiments combined, and the orderlies may sometimes be unemployed. The moving about

of heavy hospital stores, and the frequent damage of very expensive medicines during transit, each time that a regiment moves, is a further cause of outlay; and it is also a source of inefficiency in war when a regiment moving rapidly would outstrip its hospital supplies. Another instance of inefficiency is, that, under the most favourable circumstances, a regiment changing its quarters could not move with its sick, at least not all of them. The worst cases had always to be transferred to another hospital, and such of them as did accompany the regiment did so at the cost of much discomfort, and very considerable risk. Contrast this with the General Hospital System, under which a regiment moves from one station to another unhampered with hospital stores, and without its sick, all of whom remain in hospital, and probably under the care of the same doctor till they are perfectly cured and able to travel, when they are sent to join their regiment—and it does not require a medical man to determine on which side the balance of advantage to the sick soldier, and to the country, lies.

Soldiers are expensive articles, and to expose them to needless wear and tear must be added to the other extravagances of the system, for there can be no doubt that they can obtain more fully the benefit of rest, and other requirements of treatment, in a stationary hospital, with a fixed medical establishment, than in one that is constantly on the move.

Again, a regiment when giving several detachments could only make the necessary medical arrangements for one of them. All the others had to be in charge of the Staff Medical Officers, depending for everything necessary on other sources of supply, so that from whatever point of view we regard it, we invariably find the Regimental Medical System unable to stand alone. The General Hospital, on the other hand, is calculated to meet all requirements; from those of the smallest detachment to those of a division of the army in camp or quarters.

REGIMENTAL UNITY AND *ESPRIT DE CORPS*.

Page 3, Pars. 2 *et seq*.

From what has been said above, it is apparent that a regiment can move with everything but its sick. It can also provide for all *except the medical duties* of as many detachments as it is possible to divide it into, and therefore the answer to the question, why it *should not* be self-supporting in regard to its medical as well as its other departments, is simply that it *cannot*.

Medical Officers not having any military command, never could have had any share in the military glory of their regi-

ments, and with them *esprit de corps* should take a much wider range. High professional attainments, and deeds of heroic self-devotion, are just as likely to be duly appreciated, and proudly chronicled by their professional brethren in the army and out of it, as by a comparatively small body of military officers who are not competent judges of the one, and (such is human nature) may grudge a civilian the public recognition of the other.

Surely unity is as desirable in the medical service as in any other; and it has always appeared to me that the separation of the department into two classes with different interests, and looking to different quarters for support, detracts from its strength and efficiency, and lowers its standing. We do not see anything of the kind in any other department of the army.

THE AMALGAMATION OF THE TWO SYSTEMS IN WAR.

Pages 5 and 6, Pars. 3, *et seq.*

The discontinuance of the regimental system during war is a generally admitted necessity; but it entails on the administrative chief a great deal of troublesome arrangement at a time when he should be spared it, and compels him to work with machinery not properly adapted to his purpose, and at the constant risk of a break down. The two systems cannot be amalgamated, the one must give place to the other; and accordingly we find that the smaller is absorbed into the greater, for it must be remembered that a regimental hospital "*shorn of all equipment impediments*," has lost its distinguishing characteristic, and in point of fact has ceased to exist. The Indian Mutiny formed no exception to the rule, that every requirement of medical service can be met by the General Hospital System. There was unquestionably, an urgent necessity that every regiment engaged in it should be accompanied by a sufficient number of surgeons; but there is no proof whatever of an equal necessity that these surgeons should be "ITS OWN," and it would be found on enquiry that a great many of them were not so.

If the principal Medical Officer of the Abyssinian expedition was able to maintain the regimental hospitals, it was probably owing to some particular features in that campaign, and his single testimony, however valuable, cannot be allowed to outweigh that of so many others of equal experience.

It is difficult to understand at first sight how the larger hospitals could have been made subsidiary to the smaller; but it is probable that in that short campaign, and with comparatively few casualties, there was not much occasion to use the larger hospitals in the rear.

DISTRIBUTION OF MEDICAL AID.

Page 4, Par. 3; Page 5, Par. 3.

The arrangements of administrative Medical Officers were liable to be questioned, and the service obstructed, owing to the unwillingness of regimental commanding officers to allow the Medical Officers of their regiments to be detached; and this very serious hindrance was provided against on one occasion, I have been told, by the principal Medical Officer charged with the medical arrangements of a campaign, obtaining a general order placing all Medical Officers, regimental as well as staff, entirely at his disposal before operations commenced. A similar obstacle might of course have been met with in peace, if the prevalence of an epidemic or other cause had rendered it necessary to employ regimental medical officers away from their regiments; and without entering into the merits of any particular case, I think it may be safely affirmed that both in peace and war, many circumstances may arise which call for a more general distribution of medical aid than is consistent with adherence to the regimental system.

GENERAL HOSPITALS.

Page 7, Pars. 3 and 4; Page 8, Pars. 2 to 4.

Such a scheme as is here promulgated would certainly merit universal condemnation; but fortunately it is not even an approximation to the principle on which a General Hospital System is based—that of affording the most efficient medical aid in all places and under all circumstances, with the least possible expenditure of time and money.

It is obvious that whatever nomenclature may be adopted to distinguish them, military hospitals must vary in size and capacity according to the requirements that they are intended to meet. Thus, on active service we have the hospital marquee pushed forward as near as possible to the scene of conflict, with an equipment barely sufficient to meet the immediate wants of the wounded, who are passed on to hospitals increasing in size and convenience, until they reach the general hospital at the base of operations, pouring its hundreds on board the transports waiting to receive them; and so in peace time we have the *non-dieted hospital*, with a very limited equipment, for small detachments without a Medical Officer, subsidised by the larger station hospital at the head-quarters of the corps. It must be remembered that neither the *field*, nor the *non-dieted hospital*, is intended for permanent occupation, except by very slight cases that will soon be fit to rejoin the ranks; and that

if a patient should at any time be unable to be removed from the latter in consequence of the suddenness or severity of his illness, the medical practitioner in charge might order him anything procurable in the market that he considered necessary. Such a case is very rare; but when it does occur, the sick soldier, although deprived of some of the comforts and conveniences of a larger hospital, is treated at a very great advantage, as compared with civilians of his own class in the neighbourhood. He is watched over and nursed by his comrades, or a nurse would be hired to attend him, if the necessity for such a measure were duly represented to the principal Medical Officer of the district. A Medical Officer in permanent charge of such a hospital would indeed have little opportunity of acquiring professional knowledge. I can only think of *one* condition under which he could be placed at such a disadvantage, and it is this: where a regiment is quartered at such a distance from a station hospital that regular communication with it more than once a day would be inconvenient, it becomes necessary to open a non-dieted hospital in the barracks, for the reception of cases occuring after hours; and by present arrangements, the Medical Officer attached to the regiment, probably a Surgeon Major, would have to remain in charge of it as being inseparable from "*his own men;*" whereas, under a general system, a junior Medical Officer would be put in charge, and relieved for duty in the station hospital as often as might be desirable.

I do not know what distance has been fixed upon as a maximum for station hospitals from barracks, nor for what minimum strength it is considered necessary to establish and equip hospitals with a Medical Officer in charge; but I believe that the head-quarters of a regiment will never be without one, and I know that it is not intended to place hospitals at inconvenient distances from barracks, because two hospitals only were provided for this district in the first instance. Both were in camp and it was contemplated that the sick of a regiment of cavalry and two batteries of artillery stationed at Newbridge, three miles distant, could be sent to one of the camp hospitals daily by ambulance. The arrangement, however, was found inconvenient, and on its being so represented to the Director-General, he at once sanctioned the establishment of a station hospital at Newbridge. It would not be difficult, if it were necessary, to show that hospitals placed at a moderate distance from the dwellings of the healthy soldiers are safer, and that there are many sanitary objections which counterbalance the convenience of the hospital "in the corner of the barrack-square," and in juxta position of the stables, ash-pits, and other ornaments of the rear.

As it is of importance that the two systems should be correctly estimated, now that the question has become one of so much public discussion, and by men in Dr. Hamilton's position, I will summarize them as concisely as I can, and endeavour to state fairly their relative advantages and disadvantages.

THE GENERAL SYSTEM provides for the embodiment of all the officers of the department into a corps, to be distributed throughout the *districts* at home and abroad, in which troops are stationed; the raising and maintaining in a state of efficiency a corps of trained hospital attendants; and the maintenance of hospitals with *fixed establishments* of Medical Officers and subordinates, in such number, and at such stations as the general wants of the military service may require; and its advantages to the public are, economy of hospital accommodation, fuel, and attendance; a more even distribution of medical aid to meet all contingencies during peace and war; a constant supply and sufficient reserve of trained hospital attendants, without drawing on "*the already too much attenuated British battalions*" for them; saving of money and trouble in carrying about heavy and perishable hospital stores each time that a regiment changes its quarters; and last, but not least, the sick remaining undisturbed in hospital when a regiment leaves a station, and their reception at all times into hospitals already in occupation, thoroughly warmed and aired, and with all necessary appliances fit for immediate use, where they can remain, and, with proper management, under the care of the same doctor, till they are cured and fit to rejoin their regiments.

The advantages to the Medical Officer are, a more even distribution of his home and foreign service, and less moving from station to station; because with a fixed medical establishment for each district, and a sufficient margin for casualties, there is no reason why a Medical Officer should be moved, except at his own request, from the station that he is sent to on his return from foreign service, until it comes to his turn to go abroad again. I believe that such an arrangement would be acceptable to nearly every officer in the department, and would be regarded by many of the late regimental Medical Officers as an improvement on their former position.

The disadvantages of this system to the public I cannot see—not that I desire to keep them in the background, but because it appears to me to provide most completely for all the medical requirements of the service.

The disadvantage to the Medical Officer is, that he is deprived of a pleasant home and a most agreeable companionship.

THE REGIMENTAL SYSTEM provides for the constant presence of one or more medical officers, and a fixed hospital accommodation and establishment of attendants for each regiment, irrespectively of the number of its sick.

I cannot see any advantage to the public that such an arrangement presents. The one most constantly adduced, viz., the acquaintance of regimental Medical Officers with the constitutions of their men, has, I cannot help thinking, been very much exaggerated. It takes a long time to acquire such a knowledge—longer, I imagine, than the average duration of a Medical Officer's service with any particular regiment used to be—and it appears to me that the medical history sheet which every man in the army now has, and which shows his temperament, habits, character, station where he has served, diseases from which he has suffered, and the medical treatment he has undergone, gives a Medical Officer of ordinary judgment and experience an equal, if not a better, opportunity of knowing the constitution of a soldier whom he sees for the first time, than was enjoyed by the regimental surgeon who had served for some years in the same regiment with him, before these very valuable documents were introduced. As to malingering, it is reduced to a minimum in these days of short service enlistment, and the "character" column of the medical history sheet enables any Medical Officer to form a pretty correct opinion regarding it.

I have already shown that the regimental surgeon must frequently leave his patients at the most critical period of their illness, when a change of medical attendants is most like to be injurious, and that a soldier has a better chance of being treated by the same doctor from the commencement to the end of his illness in a general than in a regimental hospital.

I do not think it was an advantage to the public, whatever it might have been to individuals, that regimental Medical Officers were able to advance their interests, and push themselves forward by means of the military friendships that they formed. Let there be prizes by all means, the more and the richer the better, but do not bestow them upon one set of officers to the prejudice of others of equal ability and merit. I advocate promotion by seniority, and special rewards for special services.

The disadvantages of the Regimental System are, extravagance in hospital buildings, fuel and attendants; drawing on the ranks for hospital subordinates who cannot be spared during war, or readily replaced during peace; expense and inconvenience of moving heavy and fragile hospital stores each time that a regiment changes its station; unequal distribution of

Medical Officers, and difficulty of providing medical aid where most needed during war or epidemics; and the removal of the sick from hospital before they are cured. I have already referred to the fatigue and exposure that they were subjected to on the journey, and their condition at the end of it was as miserable as it well could be; huddled together in cold, cheerless rooms without fires, or with fires just lighted, and obliged to hang about and shift for themselves as best they could amidst bustle and confusion, while the hospital equipment was handed over by one sergeant to another, and then tumbled into bed probably with unaired bedding in unaired wards. This is no exaggeration, it is exactly what occurred each time that a regiment marched into quarters. Medical Officers were of course very careful in the selection of cases to accompany the regiment; but it cannot be denied that in spite of all their care, much discomfort and frequent injury were occasioned. The sick that remained behind were transferred to the care of other doctors, an objection which has been most unreasonably urged against the new system, but which applied much more forcibly to the old.

What the counterbalancing advantages to the sick soldier were, I have never been able to determine. We hear a great deal about "*cries*" but they are raised by those whose private interests are affected, and who cannot believe that good can come of a change from which they have already suffered so much; the idea that administrative Medical Officers who advocate the general, or, as it has been called, the *unification* system are actuated by a thirst for military command, is too absurd to require serious notice, and Dr. Hamilton must have borrowed it from some very juvenile *authority*. Another of these cries is, that Military Officers are prevented from visiting their men in hospital. This is not the case. Such visits could never have been objected to; and they are provided for under suitable conditions, by the latest edition of the Queen's Orders and Regulations.

Such are the comparative merits of the two systems stated as fully and as fairly as I am able to state them. I have long formed my own opinion upon them, and must leave it to others to do the same.

ROTATION OF SERVICE.

Page 10, Par. 2.

Allowing for the longer time that regimental Medical Officers remained abroad, and admitting that in the long run they had an equal share of foreign service, it is still obvious that a

more equable distribution of home and foreign service would be securedby a general roster, including every officer in the department. Home service might then be reckoned at from three to four years ; and if, as I have endeavoured to show, a Medical Officer could remain for that length of time at one station, there would be a great addition to his comfort and a material saving of public money in his travelling expenses, The so-called permanent appointments to brigade depots, etc., for three, or five years, might also be done away with. They all interfere with the fairness of the roster, and I should be glad to see them abolished.

FREQUENT MOVES AND WANT OF QUARTERS.

Page 12, Par. 1.

Frequent moves and difficulty about quarters are not necessary accompaniments of the General System. When I received an order to provide for its introduction into this district, I included in my arrangements the allotment of suitable quarters for a sufficient number of Medical Officers not attached to regiments ; and the Brigadier-General commanding assembled a board of officers to report upon that and the other structural changes that I proposed. Medical Officers not attached to regiments are entitled to better quarters, and more fuel than others, but they must be applied for. It is impossible to think of everything at once, and at present it is rather difficult to know who are attached to regiments, and who are not. The frequent moves so justly complained of are, I believe, partly owing to a desire to keep those surgeons who formerly belonged to regiments as much as possible with their old corps ; but, as I have already said, neither of these inconveniences need exist under a thorough general system.

It is necessary for me to say in conclusion, that a General Hospital System has not yet been introduced, and that I have described it as it ought to be rather than as it is. Unless a fixed establishment of Medical Officers can be provided and maintained at every station, the general system cannot be worked ; and I think it would be better to abolish it in favor of the old arrangement, which I consider capable of giving more satisfactory results than can be obtained from any combination of the two.

While Medical Officers are moved about as they are at present, they cannot possibly know the cases they are treating or take any interest in them ; and the consequence may soon be a careless, inefficient discharge of duty, leading to overcrowding

of hospitals and prejudicing the sick, the service, and the department.

Many modifications of the General System might be suggested, and I have thought some of them over. The sick might be treated regimentally in general hospitals ; but that breaks down after a few changes of station, unless regiments carry their sick about with them as before. Junior instead of senior Medical Officers might be attached to regiments—thus performing the duties more properly belonging to them ; but this is open to the very serious objection that when the regiment is alone, it is under the charge of a young, and inexperienced Medical Officer ; and so on with regard to every modification that can be suggested, including that now in force, some serious objection at once presents itself. In fact the two systems are diametrically opposed in every particular of detail. They might perhaps have been dovetailed one into the other at the commencement ; but I fear that that opportunity is now lost, and I do not consider, as I have said before, that a permanent modification of either system is desirable.

I feel that I have undertaken an invidious office in replying to Dr. Hamilton. Much of his pamphlet is on a subject that I am not allowed to discuss ; but I trust that he will not attribute my silence to any disparagement of the disinterested effort that he has made to advance the welfare of the department, or suppose that I am not sensible of the obligation that he has laid us all under, by the bestowal of so much of his valuable time on a subject that must have cost him a good deal of thought.

J. M. GRANT, M.D.,
Deputy Surgeon-General.

Curragh Camp, 6th January, 1875.

P.S.—Since the above was written, I have seen an article in *The Lancet* of the 9th inst., on this subject, communicated by a correspondent. I certainly had no idea that the state of things therein described existed at any station ; but the difficulty about the senior Medical Officer would not arise under a general distribution ; and all outside duties, such as seeing prisoners, women and children, etc., could be provided for by detaching surgeons from the hospital to perform them, and recalling them for hospital duty on being relieved by others at suitable intervals. There is no need for dispensaries in barracks that are within a convenient distance from the hospital, as prescriptions for officers, women, and children could be com-

pounded there, and the regimental medical returns might perhaps be dispensed with. They add materially to clerical labour, while the number of clerks has been diminished.

I have not seen Dr. Mouat's pamphlet that is spoken of in this article. His plan of treating the sick of regiments regimentally in general hospitals had suggested itself to me; but there are difficulties in the way of it which I am curious to know how he provides for—for instance, there must be a Medical Officer in charge of every station hospital, and directly responsible to the principal Medical Officer, who might be junior to some of the regimental men. Moving the sick from one station to another would be objectionable, and it would complicate the station hospital returns; but if they were left behind, the regimental Surgeon-Major would soon weed his regiment of the weakly men, and leave himself with very few patients belonging to it. Then what is to become of those he leaves behind, or of those he finds left behind by the Surgeon-Major whom he relieves at another station? Neither set can be treated regimentally, and it appears to me that after a few moves the regimental distinction would be lost. It is, however, the only plan by which the systems can be made to coalesce without injustice to regimental Medical Officers, and it may perhaps be still possible to adopt it as a temporary measure, and a means to that most desirable end.

I may as well add that whatever may be done at Netley, Captains of orderlies have no authority to grant passes; they may command men in hospital, but they have no right to give leave of absence from quarters after hours. This is a matter of military discipline, and as such it should be submitted by the senior Medical Officer to the officer commanding the station, or his representative.

J. M. G.

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COLBURN'S
UNITED SERVICE MAGAZINE.

HISTORICAL SKETCH OF MILITARY PUNISHMENTS.

By Surgeon-Major A. Gore.

Military obedience has been enforced in all ages by more rigorous penalties than punishment by the civil law, which last may be embraced under two chief heads: 1. Offences against the person. 2. Offences against property. The classes of crime are distinct, "for a certain number and order are the result of the organization, discipline, usages, and service in the army" (Marshall), "passive obedience from grade to grade, being the condition essential to its existence" (Count de Vigny). It may be seriously questioned whether the term military crime is not altogether a misnomer. The first regulation on record which refers to punishments in the army is the Charter of Richard I., addressed to all his men going by sea and land to Jerusalem. It is dated Chinon, 1st Richard, 1189, and is evidently passed on the old mosaic law of retaliation, *lex talionis*. These regulations ordained:—

1. He who killed a man on shipboard should be bound to the dead body and thrown into the sea.

2 That the slayer of a man killed on shore should be bound to the dead body and buried with it.

3. That anyone convicted by lawful witnesses of having drawn his knife to stick another, or who draws blood of him, should lose his hand.

4. That if he had only struck with the palm of his hand, without drawing blood, he should be thrice ducked in the sea from the yard-arm.

5 That anyone reproaching, abusing or cursing his companion, should for every time he was convicted thereof, give so many ounces of silver.

6. And that any one convicted of theft should be shorn like a champion, have boiling pitch poured on to his head, and down of feathers shaken over it, that he might be known, and that he should be set on shore at the first land at which the ship touches.

In Ireland up to the reign of Edward III., and for long afterwards, following upon the ancient Irish custom of Bonaght or free quartering, the soldiers of the Pale were billetted on the inhabitants, who were obliged to supply them with "man's meat"

and "horse meat" in addition to their pay. This system of "coigne and livery" led to so much crime of various sorts amongst the soldiery that it became necessary to arrest it by severe enactments, some of which were embodied in the statutes of Kilkenny passed A.D. 1367. Before this, in 1346, Sir Thomas Rokeby published an ordinance denouncing the depredations committed by the kerns or light-armed troops, and in 1450 the Duke of York called a Parliament in Dublin which passed a number of laws restricting the number of idle and disorderly followers whom the Irish lords still persisted in retaining, and ordered that no lord should entertain more horsemen or footmen than he could support without burden to his neighbours, and that the names of all those who formed his retinue should be returned to the magistrates of his county or borough, and abolished all coign, cosherings, or other arbitrary exaction, ending by declaring that a violation of this statute in any part would be adjudged and punished as felony.

At the close of the fourteenth century, Robert III. drew up an order to regulate the movements of his combined French and Scottish forces. Pillage was forbidden under pain of death, and any soldier killing another was to be instantly executed; any soldier striking a gentleman was to lose his hand or his ears; any gentleman defying another was to be put under arrest. If knights rioted they were to be deprived of their horses and armour, and whoever unhorsed an Englishman was to have half his ransom. These regulations governed a force of between seven and ten thousand men, embarked for France under Sir John Stewart, Earl of Buchan in 1420. The pay of the knight was then 2s. 5d., the esquire 1s., the archer 6d. and the footman 4d. and 2d.

By the garrison regulations of Henry V. very severe laws were in force against prostitution. It was ordained "That if any common woman presume to come within the King's hoste, or nigh the same, by the space of three miles, if any so taken to be brent (branded) on the right cheek at first." If taken afterwards "To be put in the hand of the marshal, there to remain in prison so long as it shall please the marshal, and to have further punition as by him shall be thought convenient." Somewhat similar ordinances were enforced in the reign of Charles I. This is almost the earliest mention of the provost-marshall and a military place of confinement. The punishment of imprisonment and a diet of bread and water was however a very ancient mode of chastening soldiers, for according to Sutcliffe, "for as much as all camps and garrisons are much disordered, and many good men suffer for the abuse of lewd drunkards, therefore such are to be imprisoned and fedde with bread and water, so long as the qualitie of their offence shall deserve." In the *Lawes and Ordinances Militaire* of Robert, Earl of Leicester,

Captain-General of Queen Elizabeth's army in the Low Countries in 1579, the following were the lists of punishments. "Death with torments, death, loss of either life or limb, banished the army, fines, loss of place and wages, imprisonment." All vagrant women were whipped, and it was ordered that "no man shall quarrel, bawl, or make fray within the camp or town, or garrison, upon pain of loss of life or limb, at the discretion of the General or Marshal. The emoluments of the Earl Marshal depended in great measure upon the fines which were thus imposed.

In 1558 the English recruit, when enlisting, was immediately presented to the Muster Master-General or Commissary of Musters of the army, and took the following oath, "I do promise to do all loyal, true, and excellent service with the Queen of England, Her Most Excellent Majesty, and unto the provinces and cities united to these countries and their associates, under the charge of the Right Excellent the Earl of Leicester, Governor-General of the said provinces (Low Countries) and cities and their associates, and of Her Majesty's army and forces with the same, and all lawful and due obedience unto the said governor, and to any superior that shall have charge unto him for government in this army, and further I do promise to endeavour myself to fulfil and keep all such lawful ordinances as His Excellency hath or shall set forth and establish for the better ordering of this army, as much as concerns me so long as I shall serve under him, so help me God, by Jesus Christ." The captain then received a certificate that the recruit had been entered in the muster-master's roll, and this certificate entitled the captain to draw pay for him. Soldiers who enlisted with two captains at the same time, and who left one captain and enlisted with another, were liable to the punishment of death.

Sixty years previously, by enactment of the Parliament which met at Drogheda in December, 1495, under the Lord President, Sir Edward Poynings, measures were taken to remove the defence of the Pale from the irregular and irresponsible shoulders on which it had hitherto been allowed to rest, and when that defence required the quartering of soldiers, the rates of their remuneration were strictly defined; pillage and extortions and incentives to military crime were thus reduced to a minimum.

According to Markham in 1622, when any common soldier committed any slight offence savouring either of carelessness, slothfulness, or baseness, he had his sword taken away in consequence and was degraded to the duties of a pioneer, which punishment was then considered "so hateful and intolerable to any quick and understanding spirit, that he would with alacrity have run the rack, the bolts or strappado, nay, even to death itself rather than suffer the moral degradation." Non-commissioned officers were suspended, and during its continuance only

received the pay of private men. Soldiers who behaved ill, and from frequent delinquencies were deemed incorrigible were occasionally turned over to the press-gang, or given the choice between the continuance of a severe military punishment, and entering on board one of His Majesty's ships. Cobbing and booting in the Cavalry was inflicted by the comrades of the delinquent, as a company punishment. In 1649 it was ordered that the following punishment be inflicted upon two soldiers convicted of deer-stealing, viz, :

"That they be stripped naked from the waist upward, and a line be made by half of the Lord General's regiment of foot, and half of Colonel Pude's regiment, with every soldier a cudgel in his hand, and they to run through them in this position, every soldier having a strike at their naked breasts, backs, or arms, or where it shall light; and after they have run the gauntlet in this manner they are to be cashiered the regiment." On the descent of the British forces in Jamaica in 1665, General Venables issued orders, that if any man be found to run away, the next man to him should put him to death, which if he failed to do, he would be liable to the severest punishment by court-martial.

The idea of a military mark on enrollment is a very ancient one. When a recruit was found fit for service in the Roman army, after some months of probation, he joined one of the legions, and received the military mark, the initial letter of the name of his General, which was indellibly impressed upon the hand at the moment that he took the solemn oath, "I swear by God, by Christ, and by the holy spirit, and the Majesty of the Emperor which I worship, that I will do all things that he commands me, and that I shall never desert his service, nor refuse to die for the Roman Commonwealth."

By the ordinances of 1558, blasphemy or profane swearing had been punished in the army by loss of 5s. to the relief of the poor, for the first offence; for the second, five days' imprisonment; and for the third, loss of the soldier's place and wages. In the reign of George II. a soldier was still liable to a fine for profane swearing, 1s. for the first offence, doubled on the second, and trebled on the third offence, or in default ten days' imprisonment.

In 1548 Robert Cowley, the First Master of the Rolls, in a letter to the Duke of Norfolk, animadverts upon the want of discipline in the Irish army, and necessity of some immediate reform in this respeat. That instead of expending the King's revenue in supporting his soldiers in garrison, the castles should be committed to the gentlemen of the country who had lands in the neighbourhood, and that the army could thus be better disciplined and made available in its whole force, and at any place, where the needs of the Government might require it," this army he says, "ought to consist of picked, clean, honest men,

hardy, well horsed and harnessed, and diligent, and they should have sufficient wages to live upon honestly, and no need to complain or oppress the country."

In olden times the provost-marshal or scout-master was the prime mover in all military punishments. According to Markham, who published his "Epistles of Warre" in 1622, he had "the charge of all manner of of tortures, argyves, shackles, bolts, chains, bilboes, manacles, whips, and the like and might by his ministers use them, either in case of judgment or commendment from a marshal court, or otherwise, upon marauders at his own discretion; he was to see by his officers all places of execution prepared and furnished with engines fitted to the judgment, whether it be gallows, gybbets, pillories, stocks or stappedoes, or any other engine which was set up for the terror and affright of such as beheld it. The provost had an allowance for many attendants of all sorts and conditions to dispatch any execution how suddenly soever commanded; and to that end it was not lawful for the provost to go at any time without halters, strangling cords, or match ever about him. Simes who published his "Military Course" a century later, tells us that the "Provost-marshal was allowed a guard of a sergeant and eighteen men; but that when he had prisoners there was added a subaltern and thirty men, and that his duties then were to receive deserters, spies and all other criminals." Up to 1640, the provost-marshal appeared to be both judge and executioner.

By the laws and ordinances of warre promulgated by the Earl of Northumberland who commanded the Royal army in 1640, it was directed that "No man shall resist, draw, lift or offer to draw, his weapon against an officer arresting him orderly for his offence, upon pain of death." The same article is found in the ordinances of war established by the Earl of Essex for the Parliamentary army. Two years afterwards in 1642, the Earl of Essex, who commanded the Parliamentarians published a *Code of Lawes and Ordinances of Warre*, which were the foundation of our present articles. This code enumerated certain crimes which were punished with death; all other offences being left to the discretion of courts of war. There were from forty to fifty delinquents punished with death, the secondary punishments enumerated being the "burning the tongue with a hot iron, loss of pay, confinement in prison with only bread and water, riding the wooden horse, and degradation to serve as pioneers and scavengers." Running the gantlope was also in vogue.

It was considered a great disgrace to be turned out of the army by the hangman, or have the delinquent's "ears cut off," or to be whipped by the same individual. Sir James Turner writes in 1683, "after an officer or soldier is put in the hangman's hands he should serve no more in the army."

The inadequacy of the common law to deal with military

offences after a fashion to secure discipline or order, induced Parliament, immediately after the accession of William III., to pass an act for the punishment of mutiny and desertion. Its provisions were simple, and have been adhered to with little deviation in principle, but with considerable expansion in detail, to the present hour. The first "Mutiny Act" provided that the army might be continued, and that the King might levy more troops; that every officer or soldier who should excite, cause, or join in any mutiny or sedition, should suffer death "or such other punishment as a court-martial might award." It gave power to the King or to the General of his army to grant commissions to lieutenant-generals and other officers, not under the rank of colonel, to hold courts-martial, but enacted that no such courts should consist of fewer than thirteen officers, none of whom should be under the rank of captain. That field-officers should be tried by field-officers only, and that no sentence of death should be passed unless borne out by the signature of the thirteen officers who assented to the decree. Finally, the act provided that courts-martial should be held between eight o'clock a.m. and one p.m. Military offences were subsequently arranged under the following classes. Mutiny, desertion, violence to a superior, or insubordination, disobedience and neglect of duty, quitting or sleeping on a post, habitual drunkenness, disgraceful conduct, absence without leave, making away with necessaries, drunk under arms, miscellaneous crimes.

The punishment of all crimes being left absolutely at the discretion of courts-martial, with the restriction only that the members were not entitled to adjudge the loss of life or limb as the punishment of any crimes, but those enumerated in the Act the Sovereign being allowed to regulate in any way she might think fit the direction of courts-martial, which regulations are known as the "Articles of War." The sentences pronounced by courts-martial were also subject to the revision of the confirming general officer or commander, who could remit a portion of the punishment awarded.

Down to the reign of Queen Anne the punishment of burning the tongue with a hot iron for blasphemy, remained on the statute book. In his "Pallas Armata," a work already referred to, and which was published in 1783, Sir James Turner described "our modern military punishments and rewards." He goes on to say "The fairest and justest way of punishment is by courts-martial, or courts of war, if the case do not require a present animadversion. As to capital punishments, the most honourable death for a delinquent soldier is beheading, the next to that shooting—if he be a horseman, by pistols, if a foot soldier, with muskets. But the punishments of several crimes was left by martial law to the arbitrament of a court of war, and some of them are made capital, though in themselves they were not such,

of which if demurring to give present obedience if an enemy be conceived to be near is one, and this falls frequently out." He enumerates the secondary military punishments of this date as the strappado, hanging up by the thumbs, so that the delinquent's toes can only touch the ground; laying muskets on their shoulders, more or fewer, for a longer or shorter time, according to the quality of the fault; to be kept in prison so many days or weeks, with irons on them, and sometimes to be fed only with bread and water in prison; riding the wooden horse; turned out of the army by the hangman; having the ears cut off by the hangman; whipped by the hangman; he writes: "I have known some who thought that soldiers who are whipped at gantlope should be turned out of the army, which is a great mistake, for they are appointed to be whipped by their comrades, that they may be kept in the army; for after an officer or soldier is put into the hangman's hands he should serve no more in the army." So that it would appear that the transfer of the execution of this mode of punishment to the soldiers themselves, was to prevent the disgrace which would otherwise have attached to it."

The use of the gantlope was first begun by Gustavus Adolphus of Sweden, in imitation of the custom of the Roman Centurians to whip their soldiers.

According to Sir James Turner, it was then lawful for an officer to strike, wound, or kill, without committing the delinquent to prison, or calling them before a court of war, in cases of obduracy in not doing what they were commanded, or not doing it in the manner commanded, for undutiful language in the presence of a superior, speaking after silence is commanded to march or go. In any one of these, and many other cases, a sergeant might make use of his halbert, and a commissioned officer of his battoon, if the party offending was either an inferior officer or private soldier. Officers might cut, wound, or kill in a mutiny, in cases where soldiers be plundering and would not forbear when commanded, or when brawling or fighting and not leaving off; but killing was not to be used by an officer except when the service of the Prince, or the vindication of just authority made it necessary.

In the reign of William III. the duty of carrying the sentence of a court-martial into effect belonged to the Provost-marshal, who made out a contingent bill to defray expenses for execution, including his fees. The contingent expenses of a Dutchman who was Provost-marshal General in Ireland under William III. amounted in one campaign to £307 10s. This gentleman charged 6d. per diem for the prisoner's diet, for reading of the sentence 2s. 6d., for "whipping" 5s., for "locking and unlocking" 2s. 6d. In Ireland the office of Provost-marshal General continued in existence until the opening of the first Military Prison in Dublin in 1848, after which date it was abolished. The late Captain

Speedy was the last officer who held the rank of Provost-marshal in Ireland. Grose in his Military Antiquities gives the following curious bill of particulars of the execution of two rapparees.

"Kilkenny, 9th June, 1691, have been in arrest by order of His Excellency the Lord of Sgravencore, two persons named Thomas Trassi and Philips Woli, being both rapperees; and remained in arrest until 11th February, when the same in pursuance of the sentence and approbation of the Lord of Sgravencore, in Kilkenny, have been punished with the rope to death."

	£	s.	d.
For thirty-three days diet at 6d. each a day . .	1	13	0
For extraordinary trials after the sentence of the patients, as others were, each 6s.	0	12	0
Paid to the three servants that hath set up with, and served the patients after the sentence of death, according to custom, 2s. 6d. a day, for two days and a night	0	15	0
For reading the sentences	0	2	6
Unto the executioner for hanging and taking down, as others were, 10s. a piece, is altogether . .	1	0	0
For the ladder, ropes, and bolts	0	3	0
For the locking and unlocking of each 2s. 6d. . .	0	5	0
For assisting in the execution, according to custom, per man	0	10	0
For the Lieutenant	0	4	0
Paid for burying, unto the servants, 2s. 6d. each .	0	5	0

The sentence is now read by the Adjutant. The Provost-marshal was present at the execution of every sentence; and when a soldier was to run the gantlope he gave the first lash. When a considerable body of men were guilty of a crime for which the established punishment was death, a few were generally selected to suffer for the sake of example; the whole were ordered to cast dice on the drum-head, and the requisite number who threw lowest were doomed to death or other severe punishment. This method of casting dice was practised in Ireland so late as the reign of William III. Until a comparatively recent period almost every important case was left to be decided by the discretion of the Commander-in-Chief of an army. "The High Marshal shall make choice of a good Provost to whom he may commit the handling of smaller matters, always retaining the greater causes and such as concern life to be heard by himself." (Digges).

Flogging, stick-beating, the bastinado, in the early part of the last century, was inflicted by means of rods, and by hired executioners. Before 1759 the cat might be used without the formality of a court-martial. According to Furnivel the origin of this mode of punishment was due to the fact that while "the military ranks were in remoter periods filled by men of some substance and generally of landed property who had ability to

make atonements for slight offences by pecuniary mulcts—a composition comformable to ancient usage. When the pursuit of the camp was afterwards preferred as a profession, a pecuniary expiation of crimes could not be countenanced in a military code; and hence from altered circumstances, corporal punishment was instituted in its stead. Towards the close of the last century, the execution of sentences of death by shooting was carried into effect by a party selected from hardened deserters, or persons guilty of the same offences for which the party was to suffer; or if there were no men under these punishments, the party was taken from the men next for duty, and a steady non-commissioned officer was selected to command them. The gantlope was chiefly used in cases of theft or some offences that affected the character or interest of the corps.

Bruce in his "Institutions of Military Law," published in 1717, gives the then allowed military punishments as death, which might be awarded for a great number of delinquencies, the secondary punishments being branding on the forehead, cutting off the ears, forfeiture of three months' pay, degradation to the quality of a pioneer or scavenger, and riding the wooden-horse.

In 1748 the Duke of Cumberland issued the following orders during the campaign in Flanders.

"All men who are found gathering pease or beans, or under the pretence of rooting, to be hanged as marauders without trial.

"Any sutlers that refuse to change the men's money, or demand a reward, or oblige them to drink in order to get their money changed, shall be plundered and turned out of camp.

"The first officer who sends his baggage before the march of the army, or out of its proper place, shall have it plundered, and the said officer shall be brought before a court-martial and tried for disobedience of orders."

The ceremony of discharging with ignominy was conducted in the presence of the regiment, the buttons, facings, lace, and other distinctions being stripped from the clothing of the soldier, who was trumpeted or drummed down the ranks and out of the barracks or quarters; the names of all soldiers dismissed with disgrace, or who had forfeited their pension for misconduct being notified to the parishes to which they belonged, such notification being fixed to the door of the church or chapel on the Sunday next succeeding the notification.

At this time sutlers and camp-followers were liable to the punishment of the whirlgig, a circular wooden cage turning on a pivot, which when set in motion whirled round with such amazing velocity that the delinquent became extremely sick, and commonly emptied his or her body with every aperture. (Grose).

An old work on "Military Discipline," printed in London in 1754, gives the following abstract of the code of minor punish-

ments at that time observed in the regiment of Foot Guards:—"When any man is returned on parade for dirty appearance of any kind, he is to be ordered for the first offence, six days drill; for the second fourteen days' drill; for the third a court-martial. If any article shall be lost or spoiled in charge of any guard, the whole guard shall pay for it, and the loser or spoiler receive a month's drill. When any man is absent from parade the morning he is for guard, for the first offence he shall go for forty-eight hours to the Savoy on bread and water, and receive fourteen days' drill; for the second he shall be brought to a court-martial, except in case of sickness, when he shall be sent to hospital. If he comes late for guard, he shall receive six days' drill for each offence. When any man is ordered drill and misses it, he shall go for twenty-four hours to the black-hole for every day he misses, and if it be the day before his guard he shall go for forty-eight hours."

Previous to the 14th of November, 1759, the formality of a court-martial does not appear to have been essentially necessary in order to allow of a soldier receiving corporal punishment, for in a General Order issued in Canada, on the 14th of November of that year, and noted by Captain Dix in his Historical Journal of the campaign in that country, it was announced that any soldier who was found drunk might receive it to the extent of twenty-five strokes per day, until he owned where he got the liquor, and that his allowance of rum would be stopped for six weeks.

Lieutenant-Colonel Dalrymple, who published a military work in 1761, writes, "It is very difficult from the kind of men that we get to avoid frequent and severe punishments, especially in time of war, when, from the scarcity of men, we are not to whip out of a regiment perhaps a good but vicious soldier." From a work published in the same year, "Cautions and Advice to officers of the Army," by an old officer. It was to be inferred that soldiers were still very liable to receive "manual correction" from officers without any previous legal investigation, and that it was completely sanctioned by custom, if not by law; in other words writes Marshall, "Officers executed their own sentences, and could in addition inflict such punishments as tying neck and heels, riding the wooden horse, and picketing. These punishments appeared to have been inflicted for petty offences, as they were called, such as coming to the field of exercise late by five minutes, or over-staying as many minutes the leave given him by his officer when on guard. Running the gauntlet was still used as a punishment.

In a work published in 1762, entitled "Essay on the Art of War," the following were the punishments in vogue in our Army, "To be hanged, shot, sent to the galleys, chained to a wheel-barrow, or run the gantlope, the wooden horse, the picket, imprisonment, chains, bread and water," were the punishments of

faults according to the author. Until 1836 there was no limitation to the sentence of court-martial.

In the commencement of this century appeared to have been built in Ireland one of the first places of confinement for soldiers. The Royal Barracks were erected in the reign of Queen Anne (1705) for six regiments of foot, and five troops of horse, and at the same date the Military Provost immediately in rear of Palatine square, now used as a coal store This provost was, however, for the custody of deserters rather than for the enforcement of prison discipline of a correctionary character; and was also used for the reception of the United Irishmen, in 1798, convicted of treasonable offences before courts-martial. It was in charge of the Provost-marshal-General. In distant parts of the country these deserters were confined in the civil gaols with ordinary offenders, or received in military hospitals when sick, the charge for their subsistence sixpence a day, being defrayed by the Provost-marshal. When Captain Grose published his work on Military Antiquities in 1786, the punishments then in use were *corporal* and *pecuniary*. As late as 1787 running the gauntlet was still customary, but in 1805, when Major James published the recent edition of his Dictionary, it had disappeared. The picket was in use as late as 1820. Men were confined by the sentence of a court-martial for a short time in the black-hole or "bread and water house."

The principal punishments inflicted upon soldiers subsequently to 1790, by military law and usage, was death and corporal punishment. In minor offences, commanding officers usually confined the soldiers in the black-hole, in which case bread and water was the usual diet; they also gave extra duties. Corporal punishment, to a considerable amount, was a common sentence for desertion. When the Mutiny Act was brought before Parliament in 1811, a new clause was introduced which empowered courts-martial to imprison, instead of inflicting the punishment of flogging. Confinement up to that time was not the established usage, but for some time before solitary confinement had been tried by a few commanding officers in lieu of the usual infliction of flogging, and with advantage. Subsequently solitary confinement, combined with punishment drill, was adopted in many stations as a commutation of sentence instead of corporal punishment, and with the happiest results, (Sir George Nugent). Confinement in the black-hole (a cell with scarcely any light) upon bread and water for periods from forty-eight hours to seven days was not unfrequent. The custom of restricting the diet of prisoners was a very ancient one. One of the orders of the Earl of Essex in 1642, was as follows, "He that absents himself when the sign is given to set the watch shall be punished at discretion, either with bread and water in prison, or with the wooden horse."

On the 25th of March, 1812, a Horse Guards' order decided that the award of a regimental court-martial should hereafter on

no pretence whatever exceed 300, and calling attention to the fact that sufficient attention had not been paid to the prevention of crime. Urging the timely interference of the officer, his personal intercourse and acquaintance with his men (which was sure to be repaid by the soldier's confidence and attachment) and, above all things, his personal example, as the only efficacious means of preventing military offences; and His Royal Highness the Commanner-in-Chief had no hesitation in declaring, that the maintenance of strict discipline, without severity of punishment, and the support and encouragement of an ardent military spirit in a corps, without licentiousness, were possible under such circumstances. At this time there was no limit to the extent of the sentence of imprisonment, soldiers having been confined from seven to 1,826 days.

Deserters were at this date and before collected in depots and transferred as recruits to the penal regiments in the West Indies and West Coast of Africa, and by the regulations and orders of the Army for 1822, men were permitted, upon application, to commute for sentence abroad without limitation, the punishment awarded by court-martial.

With the gradual extinction of corporal punishment a new system in course of time sprung up in the Army, and it became the general practice of commanding officers to check the offences of soldiers in a great degree, by the infliction of what are called *minor* punishments, namely punishments inflicted on their own authority, such as extra drills, heavy marching drills, additional parades, extra guards, confinement to barrack or guard-room, gagging, wearing the jacket inside out, drinking salt water, bread and water diet, stopping a man's ration of grog, or diluting it with an additional portion of water, trotting round in a circle, standing fully equipped in heavy marching order with their face to a wall, parading at the guard-room fully equipped every hour during the day, the stocks, the log, the dry room, the black-hole. The term dry room, an East Indian punishment, arose from the men being kept in a state of confinement while deprived of their ration of spirits.

By a letter from the Adjutant-General, dated Horse Guards, 24th of June, 1830, these minor punishments were put upon a more regular and proper footing. Commanding officers being authorized to place a soldier in close confinement, not preparatory to a court-martial, for forty-eight hours, of their own authority. Confinement to the defaulter's room for a period not exceeding seven days, the delinquents taking all duties and drills during that time, and confinement to barracks for a period not exceeding two months; and officers commanding regiments might, at their option, delegate to officers commanding troops or companies and to the adjutant the power of ordering minor punishments not exceeding three days' drill with confinement to barracks; desertion

and absence without leave, were the most common and prevalent crimes among the troops in the United Kingdom. In 1839, no fewer than 2,110, being nearly equal to one-fifth of the number of recruits annually raised, were convicted and punished for these offences (Marshall).

By a Horse Guards order, dated 24th of August, 1833, corporal punishment was confined to the following offences, 1. mutiny, insubordination and violence, or using or offering violence to superior officers; 2. drunkenness on duty; 3. sale or making away with arms, accoutrements, ammunition or necessaries, stealing from comrades, or other disgraceful conduct.

In March, 1835, a Royal Commission was appointed to inquire whether it would be practicable to dispense with corporal punishment, and as to what changes might be made with advantage. According to the subsequent Report, it appeared that all officers examined spoke of this form of punishment as an evil rendered necessary by the description of recruits received into the Service, the then prevailing habits of soldiers, but more especially the vice of drunkenness to which they were liable, but that it was better to stimulate men's minds, by holding out other great advantages for good and regular behaviour, and so making it their interest to conduct themselves with propriety. The conclusions were against the abolition of corporal punishment except in a very gradual manner, and "That, in order to give full effect to the punishments then in use as substitutes for it, considerable alterations should be made in the means of rendering solitary confinement in the several barracks more effective; and that a certain number of prisons exclusively for military offenders, should be provided as soon as possible," in order "to endeavour to make its infliction less frequent." The Commissioners also recommended "that encouragement should be given, in the way of honorary reward, and destined both to the gallant and well-conducted soldiers. That no consideration of expense within reasonable bounds should be allowed to stand in the way of attending to the comforts of the soldier while in the Service, and of a sufficient pension for the good and deserving man after that service had been performed." Frequent references was made by the officers who gave evidence before the Commissioners in regard to the difficulty of getting rid of "hardened and unmanageable descriptions of men," and the Royal Commissioners suggested in their Report that if a measure were adopted by which these men of "confirmed bad habits" might be discharged, they thought it would "greatly tend to diminish the frequency of corporal punishment," which, in 1836, by a General Order was further reduced, the maximum award of a general court-martial, being limited to 200.

The following table from Marshall shews the number of men tried by court-martial from 1825 to 1834 inclusive, in the British Army:—

Year.	Establishment.	Numbers tried by court-martial.	Proportion to Establishment.
1825	98,946	4,708	1 in 21
1826	111,058	5,524	1 „ 20
1827	111,107	5,340	1 „ 21
1828	110,918	5,314	1 „ 21
1829	103,747	4,782	1 „ 22
1830	103,374	5,946	1 „ 17
1831	103,413	7,438	1 „ 14
1832	103,572	8,780	1 „ 12
1833	103,527	9,628	1 „ 11
1834	103,063	10,212	1 „ 10

This shows that the mean number of soldiers who were annually accused and tried during the above period was 1 in 16, the lowest proportion being 1 in 22, the highest 1 in 10. The rates of corporal punishments had decreased about one-half in ten years, from 20 per 1000, to 9.

During part of the year 1821, the whole of 1822 and 1823, and part of 1824, the garrison of Bermuda was principally composed of the wing of the 2nd Bat. 60th, then a disciplinary corps, and to which delinquents from other regiments were transferred. Though the meau strength did not exceed 260, the annual rates of punishment greatly exceeded the strength. The Royal African corps, another disciplinary battalion, had a similar history. Inveterate delinquents were also frequently condemned to remain for life in the West Indies, in which many of them served more than twenty years. Previous to 1838, a medical officer did not necessarily know that a man was to be punished. In that year a regulation was issued that before a soldier was brought to trial by court-martial, he was to be examined by a medical officer who was to sign the following certificate: "I certify that number —— of the — Regiment is in a good state of health, and fit, or unfit to undergo corporal punishment or imprisonment; solitary or other wise, and with or without hard labour," and the General Regulations of the Army directed "That no punishment was to be inflicted but in the presence of a medical officer." In his address to the jury on the trial of Governor Wall, 20th January, 1802, the late Lord Chief Baron Macdonald stated "The medical officer is, it would appear, to guard the life of a delinquent under punishment, so that the army may not lose the services of a man by death, or by being prematurely disabled. In the execution of this highly important duty he must be guided by a knowledge of the physiology and the pathology of the human body, the habits and duties of soldiers, and an acquaintance with the regulations and usages of the army. A medical officer is presumed to divest himself of every opinion he may entertain in regard to the delinquency a man has committed, or the sentence which has been awarded him; his duty being, in the first place to prevent the man from escaping punishment by feigning indisposition; and secondly, to see that he does not receive such a degree of injury as may endanger his life, or disable him permanently from the duties of a soldier. While a surgeon should invariably lean to the side of safety, duty requires that he ought to be scrupulously careful not to unnecessarily obstruct the course of military law, the rules and usages adopted to establish and sustain military discipline."

According to the old Articles of War, "Any soldier who shall be convicted of malingering, feigning or producing disease, or infirmity shall be liable, in addition to corporal punishment, to any other punishment which the Court might be competent to award."

In 1844 a clause was introduced introduced into the Mutiny Act authorising the Secretary at War "To set apart any forts, barracks, or other buildings, now erected, or which might hereafter be erected, or any part or parts thereof, as places where the sentences of courts-martial may be carried into execution and as military prisons." And to appoint and remove the officers, and also to appoint visitors who were to be invested with the same power as visiting justices. Under this authority military prisons were established at Fort Clarence, Southsea Castle, Devonport, Weedon, and subsequently in Dublin, Cork, Athlone, Limerick, Aldershot, Malta, &c. By which means the desirable object of not as a general rule mixing soldiers in association with civil criminals was obtained. Cells of approved construction were also erected in many barracks, and it was left to the discretion of commanding officers to confine prisoners in them, if under sentence for any period not exceeding twenty-eight days; but in all cases where the time awarded was beyond that, they were to be sent to the district prison, subsequently men might be sent to cells for a period not exceeding forty-two days. A code of regulations was at the same time issued by the Secretary at War, so that a greater uniformity in the treatment and discipline of military prisoners should be carried out. At this time the mean age of the infantry varied from twenty-six to twenty-nine years, a large proportion of each regiment being under twenty-three years of age.

The members of the Committee to investigate the subject of military imprisonment were nominated by His Grace the Duke of Wellington, and had consisted of the following: Lieutenant-General Earl Cathcart, President; Colonel T. Grant, commanding Grenadier Guards; Colonel Henry Godwin, late commanding 41st Regiment; Major J. Jebb, R.E., Surveyor General of Prisons; Mr. Rogers, Deputy Judge Advocate-General; and Rev. D. Nihill, late Governor of Millbank Penitentiary, members. To them had been issued a memorandum for their guidance by the Duke of Wellington, which concluded as follows: "It appears

to me that justice, fairness, and common humanity towards the good, the subordinate, and the orderly soldier, as well as a regard for the discipline, good order, and efficiency of the army should induce the Government to make every exertion to establish for the army some system of real punishment of offences, which shall have the effect of deterring soldiers from the commission thereof." They were further instructed by the Secretary of War (Lieutenant-General Sir Henry Hardinge) that it was of the utmost importance that means should be adopted to relieve the pressure upon the civil gaols in Hampshire, and in Middlesex, and Kent. "The Committee will understand that they are required to attempt to lay down a system which will adopt itself to the greater portion of the cases of soldiers sentenced to military imprisonment, substituting sharp drill, breaking stones, or other work, for the usual modes in which sentences of hard labour are enforced in civil gaols, and in the superintending of which the military authorities may be able to dispense with the difficult machinery which is applied in civil gaols to carry on the more complicated system entailed by separate confinement. It should be also borne in mind, that the object of military punishment consists not only in the repression of crime, but in effecting that object in the shortest possible space of time. . . . With regard to the expense of the proposed establishments, I am of opinion that exclusive of the expenditure for building, the stoppage from the soldiers' pay, whilst in confinement, will cover all the expense attending the system adverted to, if it should be proved practicable." Colonel Mansel, the Assistant Adjutant-General at Limerick, who had taken a great interest in the military prison at that place, was amongst the witnesses directed to be examined by Sir James Graham.

The cells in barracks for regimental purposes of confinement were then mere black holes; small, badly ventilated, and with little light. In England by the provisions of the 28th clause of the Mutiny Act, prisoners might be committed directly to the general Penitentiary of Millbank, and other civil gaols, in which the prisoner was marched under an escort and non-commissioned officer, who was furnished with a written order, addressed to the Governor, for delivering the prisoner into his charge; and the non-commissioned officer paid over the full amount of the subsistence from the date of the prisoner's reception to the day previous to his release inclusive. Absence without leave appears to have been very common. In a Horse Guards Circular letter dated 16th June, 1836, Lord Hill calls attention to the necessity of enforcing the 48th clause of the Mutiny Act, which empowered commanding officers to deprive the soldier of his pay for absence without leave, for any number of days not exceeding five, and was persuaded that by these means it might be effectually checked. The warrant for granting a reward of additional pay for good

conduct was just coming into operation. It was issued on the 18th August, 1836. A revised warrant was promulgated on the 9th June, 1839, and the following instructions as a necessary sequel.

The regimental records of conduct was henceforth to consist of two only, viz.: the troop or company defaulter book, and the regimental defaulter book. In the former, all offences of every shade and denomination which the soldier committed were to be regularly and distinctly recorded, whatever the punishment might have been, and in the latter only those more serious offences as those extending over six days' drill, or a week's confinement to barracks, with the understanding that, "according to the usage of the service," the prisoner should, during such confinement, be drilled with the squad to which he belonged. Soldiers undergoing confinement to barracks were to be drilled without their packs; but when undergoing six days' drill without confinement to barracks, they were to be drilled with their packs. No punishment drill was to exceed one hour at a time. The most important relaxation in the new warrant was the 13th article, giving to commanding officers the power of inflicting minor punishments without necessarily depriving the soldier of his right to the good conduct pay, and Lord Hill laid especial stress against recording in the regimental defaulter book, "any of those trivial errors or faults which even man of good character may sometimes commit, and which, although necessarily subjecting him to some punishment, should not deprive him of the advantages he would otherwise derive from his general good conduct."

"It will readily occur to commanding officers, that some of the minor punishments, which by the General Regulations and Orders of the Army, (pages 109 and 110), they are empowered to award such as,

"Confinement to the black hole for forty-eight hours.

"Confinement to the defaulter's room for a period not exceeding two months, taking all drills and duties during that time, at the discretion of the commanding officer"—

were not affected by these instructions, except when these punishments were inflicted to an extent that would exceed those specified in the warrant, when such infliction would carry with it the disadvantage to the culprit of being transferred to the regimental defaulter book. It was thought by the Adjutant-General that in estimating the degree of severity which these respective punishments carry with them, three days' confinement in the defaulter's room, with its accompanying drills, was more severe than six days ordinary confinement to barracks with drill, &c., and that even twenty-four hours confinement in the black hole carried with it more severity, because more disgrace.

Shortly after the promulgation of the Military Prison Regula-

tions of 1844, a circular was issued from the Horse Guards, directing the marking of deserters from the army to be practised in a uniform manner by means of an instrument then but recently invented, but which was shortly afterwards found not to be as efficient as the older method of tattooing. As late as the reign of George I. "stigmatizing in the forehead" was an ordinary punishment for this serious crime, unless the greatness of the number of desertions required some example to be made for the better of others. In 1841, on an average, almost twenty per cent of the troops serving in the colonies and foreign dependencies were annually punished by sentence of court-martial; about two-fifths of the whole number were for habitual drunkenness and desertion, and absence without leave were the most prominent crimes among the troops employed in Great Britain and Ireland. In 1839, no fewer than 2,110, very nearly one-fifth of the recruits annually raised, were convicted and punished for these two offences. In his Report for 1876, Major-General Wilmore, Inspector-General of Recruiting, deplores the loss to the army caused by desertion from its ranks, still unfortunately prevailing to a considerable degree, 4878, a little over a sixth of the recruits raised (29,370) having deserted, 2063 of the deserters were recovered, leaving a net loss of 2815. "The evil," General Wilmore writes, "is a most serious one, and without a safe-guard of some kind, such as that in force in former years, appears to baffle all efforts to check it." Between 1825 and 1834 the proportion of men tried to the establishment varied from one in twenty-two, to one in ten. In 1835 the number of soldiers belonging to regiments and depots in Great Britain and Ireland, who suffered imprisonment are shown in the following table, with the nature of their offences (Marshall).

Mutiny	3
Desertion	401
Violence to superiors and insubordination	221
Disobedience	96
Quitting or sleeping on a post	87
Drunkenness on duty	333
Habitual drunkenness	518
Disgraceful conduct	84
Absence without leave	740
Making away with necessaries	235
Miscellaneous	526

With regard to the ordinary punishment, the Committee of 1844, without contesting the merits of what is actually called the separate system, did not consider it called for in the case of soldiers, by the same reasens which formed its clear ground of recommendation in civil gaols, but adopted a system of associated labour, under a rule of silence, and the classification of prisoners in confinement, not by determining each prisoner to a particular

class from the sole and exclusive consideration of the character of the offence of which he happened to be convicted, which would lead to such practical error; but by a system of persecution and degradation of prisoners according to their behaviour, so that by operating on their hopes and fears, a beneficial tendency in the way both of example and encouragement would arise, and so far as the conduct of men under confinement is concerned, the results of experience from a long series of years has fully justified the correctness of their opinion. On the subject of diet, the general view of the Committee was, that the diet should be such as would maintain the prisoner in perfect health, so that on rejoining his corps he would be fit for immediate duty, and that only such comfort as might be actually required for promoting his health should be allowed; and that a prisoner should be made to feel during the whole period of his confinement that his state and condition in prison was, in all respects, much worse than when he was doing his duty with his regiment.

With a view to diminishing the necessity of commitment to district Military Prisons as much as possible, and the establishing some efficacious means of repressing by prompt salutary punishment those minor offences which, for want of due coercion, proved in numerous instances, the precursors and parents of more serious delinquency, they were of opinion that one uniform system of regimental imprisonment, by the erection of barrack cells wherever required should be carried out, and they were persuaded that the general adoption of such a principle would be conducive to discipline, and prove highly advantageous to the Service; but that such cells should only be considered available for short periods of confinement not exceeding twenty-eight days, that it was essential that the powers of commanding officers, in awarding periods of confinement, should be extended to seven days, and that stoppage of pay should accompany the order of confinement, and that the regulations for all cells and prisons should emanate from the Secretary at War. That in large garrisons a provost-sergeant should be appointed with an assistant or two from the non-commissioned officers, and that the provost non-commissioned officers should also perform the duties of military police. "Being actively employed in keeping bad characters away from barracks, in preventing irregularities throughout the garrison, and frequently visiting the canteen to prevent drunkenness and irregularities."

With regard to length of imprisonment, the Committee reported "It is generally admitted, that the punishment of imprisonment, if too long protracted, loses much of its moral effect, from the prisoner becoming callous to his situation, and therefore that no sufficient advantage is gained to compensate for the evil of his being so long absent from his regiment." They therefore recommended that the actual detention of a prisoner should not

exceed six months, except by sentence of a general court-martial. "Encouragement of the the well-conducted soldier is no less conducive to the good order of the Service than the punishment of the bad."

They conclude their observations in the following terms, "That to entertain the idea of totally abolishing military or other offences by mere human means would be a groundless and visionary expectation. Nevertheless they trust that they have been instrumental in framing a system which may prove, in an important degree, a remedy for many evils which have of late years been the the subject of complaint, and at the same time of promoting the comfort and improvement of the non-commissioned officers and privates, as well as the general advantage of the Service." The foregoing were the general views of Lord Cathcart's Committee of which they stated time and experience would suggest "the best practical amendments." We have next to see what that time and experience has taught us.

THE ROYAL NAVAL COLLEGE; AS IT WAS AND AS IT IS. (*Conclusion.*)

We will now examine in detail the constitution of the Division of "compulsory" students. The regulations laid down for the course of training by which they qualify for their [illegible] are as follows. Before commencing their studies they must serve one year at sea. If they have not served afloat in that rank at the time they apply, they are, with the approval of their Lordships, appointed at once to a sea-going ship to complete their year's seatime. They then proceed to Greenwich for one term, which is devoted to theoretical instruction before commencing their practical course in gunnery on board the 'Excellent,' on which ship's books they are borne.

Next in order come the acting sub-lieutenants, and acting navigating sub-lieutenants. The course of study in their case is a somewhat extensive one, and embraces the following subjects:—

1. [illegible]; 2. Geometry; 3. [illegible]gnometry; 4. Mechanics; 5. Physics; 6. Steam [illegible]; 7. [illegible]reach; 8. Winds and Currents; 9. Navigation and Nautical Astronomy, Practical and Theoretical; 10. Nautical Surveying; 11. Practical [illegible]amination in the use of Instruments.

The total number of [illegible] for these subjects is 2500, of which 1,250, 1,000 and 750 are required for the 2nd and 3rd Class certificates respectively. Any officer [illegible] 750 when examined after six months re-exa[illegible] a month; failure in which las[illegible] the Service.

In order to encourage the [illegible]ng sub-[illegible]nants and acting

HISTORICAL SKETCH OF MILITARY PUNISHMENTS.

By SURGEON-MAJOR A. GORE.

(*Conclusion.*)

On the 28th of June, 1853, the Military Prisons erected in compliance with the recommendations of Lord Cathcart's Committee, had been some years in operation, and Lieutenant-Colonel Jebb, C.B., the then Inspector-General, takes the opportunity in his Report for that year, of publishing a first series of statistics, carefully drawn up by Mr. Drewry, with a view of arriving at an opinion as to the results attained. The Military Prisons in operation on the 1st of January, 1853, were the following, Chatham, Gosport, Weedon, Devonport, Greenlaw, Dublin, Cork, Limerick, Athlone; and abroad, Gibraltar, Montreal, Quebec, Kingston, Halifax, Bermuda, Vido, St. Elmo, Mauritius and Barbados, making a total of nineteen, nine in the United Kingdom and ten at different foreign stations, capable of accommodating about 1,400 prisoners.

The following are the principal statistics of the nine Military Prisons at home, for the previous six years 1847 to 1852 inclusive:

Average numbers of prisoners admitted . .	3,587
Average per cent of admissions to the force . .	5·05
Daily average number in confinement . . .	659
Per centage of average numbers in confinement to force	·92
Average length of sentences in days . . .	100

The punishments inflicted by visitors for serious offences within the prisons had recently diminished, the number requiring corporal punishment, from thirteen to six, sentenced to solitary confinement, from fifty-seven to eight; to separate confinement, from forty-five to nine; sentenced to be put in irons, from six to one. While there were 516 men in prison classed as bad characters in 1847, there were only eighty-four; the number of punishments inflicted by governors for minor offences, had fallen from 4,348 in 1849 to 2,739 in 1852; and deserters who had been gradually diminishing, were not more than half the number of 1847. On an average, the number of serious offences calling for the interference of visitors was about one for every 160 prisoners, an exceedingly small number, considering, as Colonel Jebb reported, that "among the inmates of these establishments were some of the worst characters of the army."

Ages of prisoners admitted.

	1847	1852
Under 20 years	1,126	350
From 20 to 30 years	2,277	2,344
„ 30 to 40 years	410	580
Above 40 years	37	39

The great majority of the prisoners were over two and under seven years' service in the army.

The crime of desertion had been gradually diminishing, but with a corresponding increase in the heading, "absence without leave." Drunkenness was 8 per cent higher; and next to absence without leave, which was believed to be closely connected with it in almost all cases, was the prevailing crime leading to committals and re-committals. The proportion which the separate crimes bore to the whole in 1852, as compared with 1847, was as follows:—

	1847	1852
Deserters	39	22
Absence without leave	21	30
Drunkenness	19	27
Disgraceful conduct	4	4
Other crimes	17	17
	100	100

While the committals for all crimes had diminished 1·18 per cent. since 1847, those for drunkenness had increased 0·21 per cent. The largest per centages occurred in Scotland and Ireland, while there was a decrease in England, especially in 1852, when the ratios were in England 0·71 per cent., Scotland, 2·05 per cent., Ireland 2·10 per cent. In 1851 and in 1852, the prison expenditure exceeded the amount of the full pay and beer money of the prisoners confined; this arose, to a certain extent, to a decreased number of prisoners and a somewhat increased coast of the prison staff by the grant of additional pay.

Expenses incurred.

	1847	1852
Total charge	£13,741	12,598
Pay, &c., of prisoners	13,310	11,390

The prison staff would be more or less permanent, as the same number of warders could generally superintend one hundred prisoners as well as ninety, and a reduction of the establishment could not therefore be effected without detriment to the discipline required to be maintained. In 1848, 49 and 50, the full pay and beer money of the prisoners in confinement and not issued to them, considerably exceeded the total charge for the pay, allowances and subsistence in prison.

The following table affords a complete view of the state of military offences in the United Kingdom, 1847 to 1852 inclusive:

	Average No. of prisoners.	Per cent. to force.	Average No. in barrack cells.	Per cent. to force.	Total average in the prisons and cells.	Proportion per 1000 to force.
1847	672	1·00	242	0·44	914	14·4
1848	784	0·96	334	0·59	1,118	14·6
1849	750	1·13	275	0·42	1,023	15·5
1850	659	0·93	277	0·45	936	13·8
1851	550	0·78	249	0·43	799	12·1
1852	542	0·74	347	0·59	889	13·3

From returns furnished to the Committee on Military Prisons from different districts of the number of men undergoing imprisonment by sentence of court-martial in civil prisons, it appeared that in 1843 the average number at any one time was 20 per 1000, whilst by the foregoing statement it is shown that in 1852 it was only 13 per 1000. The average number of re-committals in 1852 was much below that of 1849 and 1850.

Average of re-committals to the same prisons to the number of prisoners:—1849, 3·32 per cent.; 1850, 2·74 per cent.; 1851, 1·60 per cent.; 1852, 1·68 per cent.

Average of total re-committals to number of prisoners:—1850, 6·06 per cent.; 1851, 4·98 per cent.; 1852, 5·17 per cent.; 1853, 4·25 per cent.; 1854, 2·65 per cent.; 1855, 2·04 per cent.; 1856, 3·24 per cent.

The main object of inquiry up to this date was whether the discipline was sufficiently severe to deter from crime, or whether it would be safely relaxed in favor of instruction and moral training. On these questions there was considerable difference of opinion. On the one hand it was contended that positive hard labour, as distinguished from simple employment, should be exacted in order to render imprisonment more irksome and distasteful, which, if attained, it was assumed that a sentence might operate widely in the way of example, by inspiring a salutary dread of a prison in the minds of the population out of doors, and at the same time deter individuals from again committing crime from fear of punishment. On the other hand it was contended, and with great justice, that the infliction of penal labour will not generally conduce to the reformation of prisoners, nor be calculated to promote habits of industry, which of course is very desirable to inculcate, and, therefore, that useful employment and instruction should be substituted for hard labour. Such a system would also render prisons self-supporting, and a prison population no longer a burden to the well conducted community.

In the routine of discipline lately established, the prisoners were under strict superintendence and control from 6 a.m. to 8 p.m., and had a fair share of hard labour to perform, consisting of shot exercise, drill, picking oakum, breaking stones, &c., and in those prisons where seperate cells were provided each prisoner took his meals alone, and slept in his cell. Compared with the ordinary routine of a civil prison at this time, the hard labour was of a less degrading character, though fully as severe, and "if all the objects to be obtained in the case of a soldier was to be considered, it was perhaps, questionable," wrote Colonel Jebb, "whether any much greater amount of penal labour could be advantageously introduced." With reference to the operation of the system, several extracts from the half-yearly reports of officers commanding regiments on its effects in repressing crime in the Army, were introduced into his Annual Report to illustrate this. These extracts are most interesting, and of great practical value.

The Colonel of the 1*st Battalion Scots Fusilier Guards*, wrote as follows:—"I consider that the treatment, as at present carried out, with strict discipline in separate cells, and the silent system rigidly enforced, the most deterring from the commission of crime for the majority of soldiers; and if a system of better religious instruction could be introduced into regiments, much would be effected towards the prevention of crime. But when from natural disposition or other causes, the soldier has been frequently imprisoned, and has become hardened, then the dread of punishment loses its influence; and should corporal punishment in such cases not be resorted to, dismissal becomes necessary for the good discipline of the regiment; and could the power to mark for 'incorrigible conduct' be obtained, it would prevent re-enlistment."

2*nd Dragoon Guards* "Has no effect in deterring the old soldiers of bad character from the commission of crime; younger soldiers in many cases behave better after undergoing a term of imprisonment.

3*rd Dragoon Guards*, "Have no effect on confirmed drunkards."

2*nd Battalion of Coldstream Guards*, "Confinement in cells in barracks has tended much towards deterring men from the commission of offences which would subject them to that punishment."

1*st Battalion* 1*st Foot*, "The discharge of some of the most incorrigible, without pension, would be the only likely means to deter their comrades from the commission of crime."

11*th Foot*, "A careless, wild, and irregular soldier (but not of depraved bad character) comes out a better man; but a bad and hardened man derives no moral improvement."

19*th Foot*, "It deters men until they become hardened, when it loses its effect (as all punishments will). Men should then be turned out of the service."

35*th Foot*, "Further beneficial results would follow if commanding officers had the power of inflicting fines for drunkenness, which vice is the origin of the great proportion of crimes requiring confinement in military prisons."

40*th Foot*, "The system works very well. It is generally one particular set of men who are constantly undergoing prison discipline."

Royal Artillery, "The best hitherto devised for the reformation of defaulters, and the maintenance of discipline."

4*th Dragoon Guards*, "I consider that a short but severe punishment has a better effect upon the individual than a lengthened imprisonment, and is also more beneficial to the service."

5*th Dragoon Guards*, "There are two classes of men on whom the effect is doubtful—those who are confirmed drunkards, and those who are destitute of energy and activity, and are content with moderate labour, warmth, and insufficient food."

6th Dragoon Guards, "Since prisoners have been deprived of their beds at stated periods, imprisonment has had a most benefical effect."

13th Light Dragoons, "The conduct and character of those imprisoned, have, in my opinion, improved subsequent to release."

Other commanding officers "Conduce to the upholding of discipline in regiments on home service, and obviate the necessity of recurring to corporal punishments." "Has been a great benefit to the army in preventing the necessity of sending men to country gaols." "Advantageous to the Service from the facility they afford commanding officers in carrying into effect the minor punishments." "Although several men confined have occasionally returned to the military prison, many of intemperate habits and irregularly conducted, still I consider the confinement has generally had a very beneficial effect in deterring the soldiers of the regiment from committing themselves, so as to render themselves liable to court-martial and imprisonment."

Colonel Jebb briefly noticed these leading points in the following remarks:—

"1st. Among soldiers, as in all other bodies of men, there are to be found reckless and incorrigible characters, who can neither be subdued by punishment, nor encouraged to good conduct by kindness or forbearance, and it is very generally admitted that repeated and lengthened terms of imprisonment fail in their effect with such men, from their becoming habituated to confinement, and thus ceasing to have any dread of it. During long periods of confinement there is also a great loss of service, a constant additional duty is thrown on the well-conducted soldier, and discredit is brought upon a regiment by the misconduct of, it may be, a very few men. Such characters are more than useless in the Service, and it is the opinion of many officers that, after repeated trials, they should be tattooed so as to prevent re-enlistment, and then be discharged. On the other hand, however, it must not be forgotten, that if the discharge of all such men were to become an established practice, and that great facilities were afforded in getting rid of them, it might operate with some as an inducement to commit crime with a view to obtain a discharge."

2nd. Several officers express their opinion that the discipline of Military Prisons is not even yet sufficiently stringent and severe. This question is of paramount importance, in considering it, however, it is necessary to keep in mind the different objects which are to be attained, in order that we may not lose sight of their relative proportions, with the one idea of either punishment or reformation."

"The repression of crime by corrective discipline depends mainly on the punishment operating widely as *an example*, and thus exercising a deterring influence on others, and in a minor degree by the individual himself being deterred from future offence

from fear of the consequences, or by his being so reformed that he ceases to commit crime from a better motive than that of fear."

"The first of these objects will be promoted by carrying into effect a system of discipline known to be of a severe and stringent character, such as will make men prudently resolve to keep clear of it if they can;" and the second, "by an endeavour to reform the individual."

"With the few hardened reckless characters that are to be found in every regiment, reformation is a very hopeless task, but with young soldiers, under two years' service, and with many under sentence for 'desertion,' and 'absence without leave,' (and these constitute the great majority), such a course cannot fail to have its effects."

"All officers of experience agree that the sentence on military offenders should be short, and if the punishment is to have a deterring influnce on others, or on the individual himself, the discipline during periods which do not average more than three or four months must be of a severe character. During long periods some relaxation in favour of instruction may, perhaps, be safely admitted, and at all times efforts at reform must be made; but I am satisfied of the necessity of preserving, under all circumstances, the general prestige of a severe punishment, either by the *length of the period of confinement or the stringency of the discipline*."

"The wide-spread evils and extensive demoralization proceeding from drunkenness are very generally admitted, not only as regards the army, but by every officer of experience, and by all who are in any way brought into contact with the poor or criminal population.

"One of the most important agencies in encouraging prisoners to conduct themselves in an orderly and becoming manner during their imprisonment, and which is calculated to operate favourably after their release, is that of a system of classification according to character, to which the Committee on Military Imprisonment justly attached great importance. Prisoners in the first or second class being liable to be removed to a lower class for misconduct. The distinction between the classes may appear trifling, but the endeavour that is generally made by the men to attain the advantage of promotion to a higher class, proves that they possess the required influence."

In 1856 Colonel Jebb writes:—"To whatever extent, however, the discipline may be perfected, and have its share in diminishing crime, there can be no doubt that the *preventive measures* now in progress for raising the moral standard of the army, and improving its efficiency, will be found of infinitely higher importance to the Service than the best-devised scheme of punishment." "The greater the comfort of the soldier in his barrack-room, the greater the attention to his learning every part of his duty in the field, the more fully his time is applied *usefully* and

profitably to himself and the public, and the greater the amount of instruction bestowed upon him, the better will be the class of recruits who present themselves for enlistment, the less will be the crime, and the higher will be the general character of the Army." It is, I am persuaded, no impossible or wild theory to seek the object of making the British soldier as much respected in his quarters as he is admired for his surpassing bravery and endurance in the field.

"My view of the means of carrying out such a plan would be to attach to each barrack, workshops for the different trades, in which a selection from among the men occupying each barracks could be employed in the necessary repairs, or in the execution of the smaller class of works; the working parties for the performance of labourers' work being taken by roster. This system was in full operation in 1812, when the fortifications on the heights of Dover were in progress, and the result was alike beneficial to the soldier and the public. A vast amount of work was done at a comparatively small cost, and instead of habits of idleness being induced by the ordinary life of a soldier, habits of industry took their place. The shorter terms of service and occasional embodiment of the Militia will cause a far greater proportion of those who have spent some yeaas in the Army to be mixed up with the population of every town and village in the country. Hence the importance of not losing so excellent an opportunity of training them to habits that will render them as useful as possible."

The effect of the measures for the improvement of the condition of the soldier then in progress, and the discharge of many of the worst characters in the Army with a more humane and systematic course of prison discipline, was shown conducively in the following figures, which afforded a very favourable indication of the change that had taken place.

In 1843 the number of soldiers imprisoned at at any one time under sentence by court-martial, in civil prisons, exclusive of those who might be in confinement by order of commanding officers, was, as we have seen before in a ratio of 20 in 1000, and at the same time the number of corporal punishments amounted annually to about 5·2, making 25·2 per 1000. In the three years from 1851 to 1854 the number of imprisonments was considerably reduced, the average number of corporeal punishments to 2·5 per 1000, being a little more than half in both cases, and making a total of 13·5 as compared with 25·2. During 1856, the average number undergoing imprisonment at any one time in the Military Prisons and barrack cells, amounted to 11·04 per 1000, and the total corporal punishments in the year to 1·4, making a total of 12·44 per 1000 for 1856 as compared with 25·2 in 1843. Such was the condition of affairs at the close of the Crimean war, when an entire change had taken place in the rank and file of the

British Army, the old soldier having almost entirely disappeared. We have seen the effects of military punishments upon him, why were these a necessity?

In the Reports of the Governors of Military Prisons, 1852-56 inclusive, are to be found many interesting observations on this head. Fines for drunkenness had not been as yet introduced, although strongly recommended by many commanding officers. "Serious crime prevails most amongst a certain set of hardened offenders, callous to any amount of punishment."—(Curtin). "Of 158 recommittals no less than 100 were for drunkenness or habitual drunkenness, a class of men which it is impossible to keep out of prison."—(Barnham). "Until effectual arrangements can be made for weeding out men who pass their whole time in and out of prison, our list of recommittals must continue to increase."—(Manners). "The dread of punishment alone is not sufficient to keep soldiers from falling into temptation; the grand object should be to afford them every possible means of passing their spare hours comfortably and profitably in barracks."—(Curtin.) "The hope of advance and the fear of degradation have been, I consider, very effective in the prevention of prison offences."—(Boyle.) "A confirmed *drunkard* or *deserter* should not be recommitted to a military prison more than a third time, if sentenced a fourth time to imprisonment for either of the above crimes, his sentence should be carried out in a civil prison, and at the expiration of the same, he should be discharged as unworthy of belonging to the British army."—(Campbell.) "With respect to reckless and incorrigible characters, it appears to be the decided opinion of everyone connected with the army, that retaining such men inflicts the greatest injury."—(Dillon.) "Some of the cases of admission are evidently for the purpose of evading embarkation for foreign service. I cannot help thinking such an evil might in some degree be checked, if not remedied, by sending out a proportion of the prisoners, including all suspicious cases, with each draft, instead of leaving them month after month in prison."—(Manners.) "A steady course in carrying out the required discipline is most essential; the worst soon soften down to the routine of duty. Nothing is more necessary in a prison officer than a quiet steady mode of enforcing orders, without roughness of manner or driving, which only induces outbreaks of insubordination, and perhaps violence. The quiet even-tempered non-commissioned officer, accustomed to obedience himself as well as the commanding of others, makes the best prison officer. Daily experience in prison discipline shows the value of reward for good conduct over fear of punishment for the contrary."—(Curtin.) "For the most part, the prison offences consist of idleness and inattention at drill, and neglecting to pick the required amount of oakum."—(Campbell.) "It is a most important fact to notice that, in the case of very young

soldiers, military prisons have special advantages, which would be sought in vain in other places of imprisonment."—(Edwards.) "Bad soldiers are almost always lazy, indolent men, who value their bed and pipe beyond all earthly gratifications, the sudden withdrawal of them is no doubt a vigorous punishment."—(Manners.) "To an able bodied soldier the work in these establishments is nothing; but the rule of silence, scanty diet, and privation of bed, when combined with want of liberty, make the stoutest man feel he is really under punishment."—(Manners.) "With regard to the general working of the system, I do not think it possible to estimate too highly the advantage of refractory soldiers under punishment from civilians and carrying out the discipline in a purely military form."—(Boyle.) The latter officer concludes his Report for 1855 with the following remarks. "It has been frequently urged that the superiority of a prison to a barrack room in point of cleanliness and order operates against the dread of confinement. This objection may be silenced by the simple statement, that the excessive cleanliness and extreme neatness, so attractive to the eyes of those who see the interior of a prison, are, in fact, a punishment, or, if a luxury, one purchased at the expense of so much toil that the prisoner would gladly dispense with it."

The baneful effects of war are, even within the walls of a military prison, quite perceptible, as unquestionably the 'raw material,' is both morally and physically inferior to that which was previously obtained. Of these young prisoners, 261 in number, only 106 were nominally able to read, to say nothing of the manifold other indications of previous neglect.

In 1863 Sir Joshua Jebb (to whose able management the present system of military punishment had been entrusted from the period of Lord Cathcart's Committee) died. "The services of that distinguished officer," wrote Lieutenant-Colonel Henderson, who succeeded him, "are so well known to your Lordships, that I feel it would be superfluous in me to do more than record the zeal and earnestnss with which he, for many years devoted himself to the discharge of his duties in connection with this important branch of the military service."

The average force of the Army in Great Britain and Ireland, which in 1847, when the accommodation for military prisoners was settled, amounted to 67,000 men, during the last five years had reached the following strength:—

In 1858, 100,169. In 1859, 105,248. In 1860, 105,157. In 1861, 93,467. In 1862, 85,393.

The erection of a Central Prison at Reigate had been proposed for the accommodation of prisoners from Aldershot and the adjacent districts. This was urgently required to meet the increasing pressure for accommodation, and for want of which the discipline of the Army was stated to have been unquestionably prejudiced.

A statement apparently corroborated by the following figures:—

Total average of Prisoners in Military Prisons and Barrack Cells:—

	Rates per 1,000.
1855	6·9
1856	11·04
1857	11·3
1858	11·9
1859	10·3
1860	12·4
1861	14·4
1862	13·7
1863	15·7

Many of the reports for the latter year refer to "the very bad character of the men who now enlist for soldiers." It was now the established practice to send to convict prisons soldiers sentenced by court-martial to penal servitude, but as a rule they were discharged from the Army before the expiration of th e sentences. "This question," writes Colonel Henderson, "has been the subject of much discussion, and I have given it due consideration, but great difficulties have arisen in maturing any feasible scheme by which these men, after undergoing their sentences, should be returned to the Army without having been subject to the contamination of the ordinary convicts. The difficulty is to find any public work, on which so small a number of men can be employed for a considerable number of years, such as to justify the construction and expense of a separate Public Works Prison."

Colonel Henderson was of opinion, that "all *penal servitude* prisoners should undergo the first portion of their time in convict prisons, in separate confinement, as at present;" that such "men as it might be desirable to bring back to the Army at the expiration of their sentences," should be brought back to some central military prison, and employed on public military works until the expiration of their sentences, and that "men who were intended to be discharged" should be sent to the ordinary Public Works Convict Prisons, "as was then the practice." He says, "The employment of soldiers sentenced to imprisonment, in another matter which has been carefully discussed, and it seems to me, as a rule, that all first-class prisoners should be employed at some useful labour." . . . "It should be, as far as possible, work that can be measured, as otherwise unpaid labour is very liable to be ineffectually enforced." "The injurious custom of passing an unnecessary time in bed," writes Colonel Henderson, "appears to prevail in military prisons."

The largest of all the Military Prisons was at this time at Aldershot. It was opened in March, 1856, soon after the camp was formed, and consisted merely of a number of wooden huts in

D lines—disposed in a similar manner to all the rest of the camp—to which were added three brick buildings, capable of accommodating 133 men in association. It was surrounded by a boarded fence twelve feet high. Each of the original wooden huts held nineteen men, all in association, numbering $13 \times 19 = 247$; and a warder occupied a bunk in the corner of each hut to preserve order and silence. One hut was used as an infirmary, in which six men were accommodated. There were the usual accessories, such as chapel, stores, cookhouses, workshops. washhouse, &c., formed from wooden huts. The men of the first-class were employed in doing various works about the camp, and the amount of labour they performed was most favourably reported on by the Commanding Royal Engineer. The remainder of the men were occupied chiefly at shot drill. This prison has been established under the superintendence of Major Miller, who had been superintendent of Military Prisons in Canada. The whole of the men were in association, "a system of prison management," says Captain Du Cane, in his Report for 1863, "which is well known to be subversive of all proper discipline, and which has therefore been so repeatedly condemned by all authorities, that there are very few prisons in this country in which the separate system has not been substituted."

Southwark, formerly the Queen's Bench Prison for debtors, was opened as a Military Prison in 1863.

In Aldershot at this time, the daily proportion per cent. in confinement of soldiers belonging to the division, was 1·07 for court-martial prisoners, and 0·12 summary, or commanding officer's award; both averages confirming the opinion, repeatedly expressed by competent authority, that the amount of military crime in Aldershot was limited. The Governor of this prison, Major Miller, makes the following remarks:—"The system of employing prisoners in useful labour, has now been sufficiently long in operation to convince me that at a station like this, where the present arrangements are so complete, and where there is abundance of useful labour peculiarly suitable for military prisoners, by a slight amplification of the authority already granted to this prison, discipline could be enforced, and an amount of useful labour exacted, during a limited portion of the imprisonment of each prisoner." In some of the Irish Military Prisons, the men were associated in large rooms as at Athlone, the chief-warder-in-charge reports on this:—"It is a pity to place the young and hitherto well-conducted lad by the side of the old, hardened, mischievous offender, for evil communications corrupt good manners. Let the prison officials be ever so vigilant, the good will be corrupted by the bad." . . . "From my experience in military prison discipline, I am persuaded that the associated sytem is defective to a great degree. Soldiers differ very much when in associated confinement from civilians. When several men of the same corps,

garrison, or camp meet, and are acquainted with each other, they feel a desire to communicate, and frequently do so at all hazards."

In 1864 the Military Prison at Vido was closed, owing to the cession of the island to Greece. The prison at Athlone was closed and Limerick re-opened this year, and several of the associated rooms converted into seperate cells in many of the establishments. The diminished number of punishments for offences against prison rules, showed that the complaints on their head was well founded. Gibraltar prison was enlarged, so as to accommodate 144 inmates, and the principle of employing first-class priseners in public works outside the prison, has been adopted in places where it was suitable, with manifest advantage to health, and it was found that the skill acquired was likely often to conduce to the soldier's usefulness in his profession. A re-arrangement of the employment of the offenders in military prisons, was made with a view to make the punishment more deterrent. A greater amount of hard labour was enforced, and time frittered away in parade was diminished, as well as the excessive number of hours passed in bed. The prisoners in summer rose at 5.30 a.m., and lights were extinguished in the cells at 9.30 p.m.—nine hours forty-five minutes hard labour, (of which three hours were employed in shot drill) was enforced, and three hours light labour or instruction in separate cells. All cleaning, emptying of slops, was done by prisoners selected for the purpose. As it was understood that in future trials by general courts-martial would only be resorted to in very gross cases, the number of men likely to be sentenced to penal servitude would in future be smaller than hitherto, consequently no further steps became necessary for establishing a special prison for this class of offenders, and it was hoped that the increased stringency introduced into the military prisons, would render incarceration in them a sufficient punishment for all offences committed by soldiers, and that all men who by the heinousness of their offences incurred lengthened sentences of penal servitude, to which they became liable under the Penal Servitude Amendment Act of 1864, might never again be considered eligible to re-enter Her Majesty's Service.

In Aldershot in 1864, the value of the labour of the first-class prisoners employed by the Royal Engineers department during the year, amounted to £425 17s., being at the rate of sixpence per diem for each man. In Devenport, £140 15s., when the average strength of the first-class was only nine men; here it was found that after two or three weeks practice, they were able to do "a good day's work." On the 8th of October, the prison buildings in Dublin received a supply of soft water from the Water Company. Much useful work was also done at Southwark entirely by the prisoners, under the immediate superintendence of the chief warder, at a great saving of expense to the public. The total

charges for Military Prisons at home and abroad, have been reduced from £48,370 in 1865-6, to £46,986 in 1866-7; and £44,100 in 1867-8. The Estimates for the year 1867-8, provided for the following number of prisoners:—

In Great Britain, 1,050; at foreign stations, 490; number of warders, 275. Estimate of subsistence at home, £9,000; abroad, £4,000.

The increased stringency of the punishment for drunkenness, partly accounted for the increase in the number of committals to military prisons, as well as the diminution in the punishment of penal servitude. "Nevertheless the population of military prisons," writes Colonel Henderson, "is swelled by a class of men who are repeatedly committing offences which lead to their trial by court-martial, and who pass a considerable portion of their service in prison; and in the same way the offenders against prison laws consist mainly of a small body of men, whose removal in the one case from the prison, and in the other from the Army, would give an entirely different aspect to the statistics of crime in the one and in the other."

"Drunkenness," he goes on to say, "is, perhaps, the most fertile source of military crime. The actual number of committals for this offence has increased in 1866, and the per centage also; as soldiers who formerly were summarily convicted, and sentenced to short periods of imprisonment in regimental cells by their commanding officers for drunkenness, are now tried by court-martial and sentenced to be imprisoned in a military prison." Commenting on this offence, Colonel Wellesley writes from Gosport, "I am confirmed in an opinion long entertained, that imprisonment has no restraining influence on the habitual drunkard; the habit of tippling once confirmed, the penalties attached to the offence are unheeded. The retrenchment of his daily pay only leads to the sale of his regimental necessaries, for the indulgence of the vice is purchased at any price. In many instances absence is only a cloak for the other misconduct, and the absentee returns when he is sober. A summary fine would have more effect than imprisonment. The sale of necessaries could be prevented by all clothing and necessaries being indelibly marked with the broad arrow or other stamp, or a peculiar coloured thread worked into all articles of linen or woollen texture."

Out of sixty-one reports from officers commanding depôts and battalions in 1866, as to the effects of military imprisonment in deterring soldiers from the commission of crime, twenty-nine expressed a favourable opinion on its effect, twenty-three being infantry officers and six cavalry; twelve, of whom nine were infantry and six cavalry officers, expressed an opinion generally favourable, though qualified as to its efficacy on men who frequently incur that punishment, or are habitual drunkards; eleven, of whom seven are infantry officers and four cavalry,

express an unfavourable opinion, and it is remarkable," writes Colonel Henderson, "that these opinions, as well as many of the qualified ones, come principally from officers whose regiments are at Aldershot and Shorncliffe. The remaining nine officers give no opinion at all. Of the whole Military Prison accommodation in the country, one half was still on the very defective associated system, while the thorough efficiency of military prisons was more than ever a matter of importance, now that the terror of corporal punishment no longer existed, as a deterring influence to act on men whose disposition led them to commit acts of violence, aggravated insubordination, or disgraceful conduct. By recent changes in the Mutiny Act, corporal punishment had been abolished. It will be interesting," Colonel Henderson says, "to observe how far the military prisons have hitherto served their purpose of preserving the discipline of the army, in connection with the decrease in the number of cases of corporal punishment since the year 1840, which was some years before they were established. In that year the strength of the army being 112,653, 874 men suffered corporal punishment, or seventy-seven per cent.; in 1867, there were only 148 corporal punishments in a strength of 189,781, or ·07 per cent. The decrease was very considerable, and had been most marked since 1860. The number of convictions in 1840, was 10,804, or 9·59 per cent. of the streugth of the army; in 1867, it was 22,988, or 12·1 per cent. The increase being due to the following disturbing causes:—

1. The trial of men for "habitual" drunkenness, after being four times guilty of drunkenness in the year.

2. The decrease in the number of men sentenced to penal servitude.

3. The increase in the pay of the army, in many cases the source of an increase in the crime of drunkenness.

Colonel Henderson thought that it was for many reasons not desirable that soldiers should for military crimes receive sentences of penal servitude, but that it was a better course to institute a system of imprisonment of somewhat longer duration, in which the discipline and irksomeness should be analagous to the more severe stages of a sentence of penal servitude, and that it would be advisable to have a special prison set apart for these sentences, which should only be passed on men committing certain specified crimes hitherto punishable by flogging. That a concentration of some of the military prisons would likewise lead to greater efficiency in their management. The average cost per prisoner for the year in the Military Prisons at home, was £24 6s. 2½d., of which his pay and allowances contributed £15 8s. 7d. The average cost of messing included in the above sum, was £8 13s. 7d., contingencies 4s.

A remarkable illustration is given in the Report, showing that the majority of crimes, both in and out of prison, are frequently

committed by a small number of men repeatedly misconducting themselves. It was shown that out of seventy-eight punishments inflicted in one prison during the first quarter of the year, forty-one, or more than one-half, *were inflicted on four men only*, out of 104; a fact fully bearing out the remarks of Major Edwardes:—"The men who generally enlist in the Army have not practical restraint, good habits must therefore commence and grow in the Service; and looking to the non-commissioned officers and great majority of private soldiers, the training is a success. *It fails with those who are inately vicious or too weak to resist temptation*, and judging from the fact, that out of 660 men admitted into this establishment (Fort Clarence) in 1867, there were only fifty-two punished for misconduct, it may, I think, be fairly assumed that the latter greatly outnumber the former. . . . It is much to be regretted that such chronic evil-doers are allowed to remain in the Service; it is impossible to overrate the mischief they do in a corps, and I may add in prison; they are a costly incumbrance to the Service, and entail upon the well-conducted soldiers much additional duty."—(Colonel Wellesley.)

In 1868, Captain Du Cane succeeded Colonel Henderson as Inspector-General of Military Prisons. Since the publication of the Report for 1867, a Royal Commission had considered and reported on the subject of military punishment, and recommended considerable changes in the practice then in vogue. The system of associated imprisonment, which has been rather the rule than the exception in military prisons, was emphatically condemned, and the Commissioners recommended the formation of a central military prison built on the cellular system, and in which a system of punishment could be carried out in accordance with that found most effective in the best managed civil prisons in the country, and the offence of drunkenness, which had hitherto contributed, directly or indirectly, a very large proportion to the number of military prisoners, was henceforward, in accordance with the recommendation of the Royal Commission, to be punished by fine, at the discretion of the commanding officer, in the same way as that offence was dealt with in civil life. Prominent among the military offences stood that of desertion, for which 1,776 sentences were passed in 1868, out of a total of 7,553—and for which there were two considerable causes—one being in connection with drunkenness, where a man got drunk, was absent without leave, deserted to escape the consequences and then sold his necessaries; the other, deliberate desertion for the sake re-enlisting to get the bounty—a remedy for which Captain Du Cane thought would be the abolition of the bounty altogether. "The more a soldier is made to see that the army may be a stepping-stone to future remunerative employment, the more likely it is that dismissal would be a sufficient punishment, and the cases in which it is necessary to resort to military imprisonment diminished."

In order to institute an exact comparison between the systems of imprisonment, as carried on in the military and civil prisons respectively, the Royal Commissioners inspected first a well-conducted civil prison, and afterwards some of the former. In the civil prison which they inspected, a separate cell was provided for every prisoner, in which he worked, had his meals, and slept, and when he left his cell for exercise in the open air, it was so arranged that he could not hold any communication with his fellow-prisoners, and as required by the Penal Servitude Act of 1865, a daily task of real hard labour was enforced upon every able-bodied prisoner sentenced to that punishment. In Military Prisons, they go on to say, "the only kind of hard labour in use was shot drill, at which the prisoners worked in association and which was entirely unremunerative, and did not admit of being graduated according to a prisoner's strength, many prisoners were exempted from it."

The Commissioners were further of opinion, that it would be advantageous that the Military Prisons should be placed directly under the superintendence of the Board of Directors of Government Prisons. "Such a course would ensure uniformity of discipline and treatment in all military prisons, and would bring to bear upon their management the wide experience of those whose whole time is given up to the administration of prison affairs. . . . That those military prisons, where there is not separate cell accommodation for the prisoners should be closed, as soon as the Government can enter into contracts with the authorities of any well-regulated civil prisons, for the reception of the requisite number of military prisoners, due regard being had to the situation of such civil prison. That as a rule, hard labour should form a part of the sentence of every soldier sent to a military prison. If not physically fit for it, it can hardly be desirable to retain him in the Army. The substitution of fines in cases of drunkenness instead of imprisonment, and the giving of greater facilities for the discharge of bad characters from the Army, would, they thought, tend to diminish the amount of punishment by imprisonment, and the habitual inmates of military prisons." The recommendation of the Commissioners as to the collecting the military prisoners in a central prison, to be placed under the Director of Convict Prisons, was at once carried into effect; the Home Office having consented to permit military prisoners being conveyed to Millbank, where the hard labour of the first or lower class consisted of the treadwheel, shot drill, the crank, capstan, stone-breaking, pumping, rope and oakum beating and picking, if certified medically unfit for heavier work mat-making, now discontinued. On gaining admittance into the second or higher class, the hard labour consisted of oakum picking, work at trades or manufactures, or employment in the service of the prison—as cleaning, washing, cooking, &c. All labour was tasked, the scale

and marks being as follows:—Eight marks per diem for steady hard labour, and the full performance of the allotted task; seven marks for steady hard labour, and a less degree of industry; six marks for steady hard labour, and a fair but moderate day's work. Ten hours of hard labour were enforced.

The Military Prisons at Fort Clarence, Weedon, Aldershot, Devonport, Shorncliffe, and Southwark were closed on the opening of Millbank, and at Aldershot, a cell building for 200 prisoners was to be appropriated as a provost prison for the use of men under short sentences. During the first year, Millbank received 1,352 military prisoners. The immediate result of these changes showed a decrease of forty-five per cent. in the sentences of courts martial, and of twelve per cent. in minor punishments, for the three years ending 31st of December, 1870, and a progressive diminution in the number of soldiers in prisons in Great Britain. The statistics of the Military Prisons had not hitherto shown the whole state of crime in the Army, because no account had been taken of those prisoners who passed their sentences in civil goals. These are included in Colonel Du Cane's Report for 1870 for the first time.

The large increase which took place in the Army during 1870 (100,970 as against 84,848, the average of the previous year in Great Britain and Ireland), and the introduction of paying soldiers weekly instead of daily, was generally believed to have led to the increase of military crimes which took place at this period. The bounty system having been abolished, the inducement to fraudulent enlistments had been to a considerable extent removed, and the practice of marking with the letter D. was thought to be no longer necessary. A return presented to the House of Lords the 13th of July, 1870, showed that whereas about half the men in the Service were between twenty and thirty years of age, about two-thirds of those sentented by court-martial to a military prison were between those ages.

We have, in 1870, a full and characteristic report from the Governor of Millbank (Mr. Morrish) on his new arrivals. "Their industry, has not been specially conspicuous, and a considerable number of reports has been recorded for failing to complete the allotted task; punishments for idleness have been in consequence numerous. Their general conduct has been good; they have been, as might be expected from their previous training, obedient to the rules, conforming to them, if not cheerfully yet submissively, seldom or never calling in question the rightfulness of the charge alleged against them." Pentagons 1, 5, and 6, 180 cells each, were set apart for their reception. The sentences varied from forty-two to 1,008 days. The Rev. J. B. de Renzi, the Chaplain, who appears to have always evinced a great personal interest in his military congregation, writes also:—"As regards the soldier prisoners, I may say that we have had little to discourage, but, on the contrary, much to encourage and render us hopeful. I must

own that my anticipations respecting them were anything but cheerful. From conversation with those who seemed in a position to know, I expected to find them a most ill-conditioned and intractable class. So far, however, from these anticipations being realized, there is no part of our charge which affords us so much satisfaction in every way. It is not to be expected that religion has had much of their thoughts, or has exercised any important practical effect on their lives, but as a class they exhibit no lack of good feeling, and are as open as other men to religious impressions. . . . With reference to the more immediate object sought to be obtained by the discipline, I believe that the great majority of the men leave the prison better than they came, and with a determination to be good soldiers for the future. There is a certain proportion, very small, however, upon whom imprisonment, or any other punishment, will produce no effect. An incurable dislike to military life has taken hold of them, and except for the prejudicial effect it might have on others, the sooner the Army rids itself of them the better."

"In enlisting a large number of men," writes Colonel Du Cane, in 1871, "it is impossible to avoid taking many who turn out afterwards to be worthless characters, but even among the better class of the young soldiers, there are many who do not adopt themselves to the requirements of military discipline until they have received many stern lessons in the punishment they incur by breaches of military law." This view is proved by the Return of the services of the prisoners who were received at Millbank during 1871, which showed that out of 2,239 prisoners received into that prison, 788 had served less than one year. "These men appear to be under an antagonism to accept the constraint of military discipline, they admit, having enlisted because times were bad, others that drink and a general neglect of work, to which they had been brought up, had induced them to enlist to secure them from poverty and misery. It is difficult to state definitely what class of punishment will successfully meet the case of military prisoners under a short term of imprisonment; time is inadequate either for reformation or intimidation, and I think it will be found 'that hard labour, a hard bed, and hard fare in separation,' may prove the most effective means of repression (Morrish). The number of men discharged from the Army as incorrigible and worthless characters from the 1st of April, 1863, to the 31st of March, 1871, amounted to 2,842, a practice which it was thought would do much to raise the tone of the service and its estimation among the respectable classes. From the Return of Desertions in the Army since 1867, it did not seem that there was any material difference under the new and old system of enlistment in this respect.

Further experience was showing that the extension to the Military Prisons of the system of employing prisoners at hard

penal labour in strict separation had been a considerable improvement, as a mode of increasing the deterrent effect of punishment over the system of labour in association. Crank labour was introduced into many prisons for the above purpose. The only change made in the treatment of military prisoners at Millbank in 1871, was the introduction of shot drill, as the number had increased beyond that originally intended to be sent there. As a hard labour test, it seemed to Mr. Morrish a doubtful means of producing any beneficial results, because giving "the prisoner open air exercise for three hours a day in the association of those whose society he most covets, is a great relaxation from confinement in a separate cell." "My own opinion, based upon the experience I have gathered from daily intercourse with the prisoners, is that nothing is dreaded so much as the complete isolation of separate confinement, broken only by the short attendance at chapel, and the necessary daily exercise."—(Idem.)

In 1872 the proportion of sentences by court-martial to the strength of the Army, was the same as the previous year, 9·2 per cent., and the number of minor punishments by commanding officers had decreased from 179,754 to 156,979. Of 4,723 sentences, 2,636 were passed on men who had been tried previously. The crime of desertion sent the largest number of men into military prisons. "Men who desire to desert not only have in many cases a great deal to gain by doing so, but the chances of their succeeding in escaping detection are very considerable, speaking roughly, out of every three men who desert two succeed in escaping re-capture. No amount of punishment will prevent the commission of offences unless there is a considerable certainty that the offenders will be detected, a motive for desertion, which will apply to a large number of men in the Army, is also apparent in comparing the wages of the soldier with the wages earned by the class of artizans from whom a considerable proportion of the recruits are obtained. To many men also there can be no doubt that the Army proves very distasteful on account of the restraint, the discipline, and the minute regulations they are subject to." (Du Cane.)

"A large proportion of the offences are committed by men in the earliest part of their service whilst they are being broken into the restraints of military discipline, which undoubtedly requires of those subjected to it a higher standard of conduct and behaviour than is customary among the class from which recruits are principally drawn, and which on this account, as well as on the account of the necessity for enforcing strict and unquestioning obedience is likely to be very trying and irksome, most especially to those unsettled characters the recruiting sergeant is likely to pick up. No doubt considerable tact is necessary in managing these young soldiers, and the want of it may often cause the irritation which leads to the commission of crime. In this essential quality young non-commissioned officers are likely to be deficient, being sometimes too conscious of their authority, and too ready to rely on reports and punishments, in order to exercise the necessary control." (Du Cane.)

Colonel du Cane writes in 1874, "I venture to think that any expenditure which would be required to make desertion more difficult or recapture more likely, such as relieving counties and other public bodies of all expense in respect to the capture of deserters, increasing the rewards for recapture, attaching to each garrison a special body of men to act in concert with the civil and military authorities, and to be charged *solely* with the duty of preventing desertion, would be well laid out, and would sooner or later, if not at once, result in checking their crime. If it be remembered the average number of soldiers who were non-effective from being in prison for military offences is 1,169, and that half of these are for desertion, that by reason of desertion we have to incur the expense of raising one-fifth more recruits than we want, it is clear a considerable saving would be effected by checking military crime, and desertion in particular. Possibly, also, some plan might be adopted for giving the men an interest in checking desertion by making it a pecuniary interest to a regiment to retain, and a disadvantage to lose, men by desertion. The feeling which led to the abandonment of the old practice of marking deserters and bad characters, was founded on the reasonable idea that it was not just to affix to a man for his whole life a stigma which would remain with him, however much his character might improve, would not apply to a mark voluntarily placed on every man who formed the Army, and indicating merely that he was a member of an honourable profession." (Du Cane). The importance of settling this question is evident from the following remarks of the Governor of Gosport Military Prison, viz., "In several instances of recommittal that have come under my notice, I could trace the object of the individual in coming into prison time after time, and the eventual announcement of his discharge from the Service at the expiration of his sentence has been received with ill-disguised satisfaction. No longer marked with the letters B. C., the delinquent is free to enlist again. Should he fail to get employment after a few months of idleness, dissipation, or destitution, he again becomes a soldier." Only let it be seen that sooner or later the offender will be brought to justice, and a considerable step will have been taken towards the reduction of this offence (desertion) within such narrow limits that it will be no longer the source of anxiety and apprehension that it is at present. "An easy way to effect this would seem to be to give all persons in the community a direct interest in the apprehension of deserters by letting it be understood that a reward, say of 20s., awaited the person who was instrumental in bringing back to his regiment any such offender."—(De Renzi.)

Of 769 deserters individually spoken to by the Chaplain of Millbank, in 1874, and who were distributed according to trades under two general heads of "skilled" and "unskilled" labourers, the result showed that of the former there were 58 per cent., of the latter, 37 per cent. From the last recruiting returns it appeared that the class of skilled labourers constituted but 34 per cent. of the Army, yet they are found contributing 58 per cent. of the deserters, or an excess of 24 per cent. beyond their proper number; 216 of these men were earning wages varying from 30s. a week to 40s. and upwards, previous to enlistment, equal to 23 per cent., and almost identical with the excess of deserters from the class of skilled labourers. "It would be for the interest of the Army in every way, I believe, to guard as much as possible against the introduction of such men into its ranks, they not only will never take to soldiering themselves, but they will prove apostles of mischief by fermenting discontent amongst their comrades, by these representations of the much better position of men in civil employments." "Next in importance to making the punishment of desertion certain, is the making a soldier's position a sufficient attraction to the classes from whom the most likely recruits are drawn, a selection, to some extent, might then be drawn, and the mischief avoided of enlisting men of whom it is antecedently improbable that they will ever settle down to soldiering." In the Report for 1875 Mr. de Renzi gives the following interesting table of prisoner's reasons for deserting:—

Annoyances from comrades or non-commissioned officers	48 or	8 per cent.
Married without leave, or love affairs	1 „	2 „
Drink	114 „	18·5 „
Dislike of Army	161 „	26·0 „
Persuaded by comrades or bad company	72 „	11·7 „
Refusal of leave	12 „	1·9 „
To better themselves	100 „	16·2 „
On the spree, stopped over time, did not like to return	51 „	8·3 „
Absent, but did not mean to desert	41 „	6·7 „
In debt	16 „	2·6 „
Total	616	100

In his last Report Colonel Du Cane expresses the opinion that as the bulk of the offenders who become military prisoners are in the early stage of their military service, and not yet broken into military discipline, it may reasonably be expected that as the proportion of short-service men in the Army increases, the number of men who become amenable to punishment will increase also. In some degree this result may be prevented if the conditions of service are found to be such that a steadier class of men find inducements

to enlist; and I venture to think it would much conduce to the object, if passing creditably through the ranks of the Army were found to give a reasonable expectation of leading to employment in suitable situations under other departments of the Government, by which a man could find himself permanently provided for on leaving the Army. It is worthy of remark that a very large proportion of the soldiers who pass into the prisons are unable to read or write. Considering the facilities and inducements offered in the Army for acquiring this knowledge, the failure of these men to make any progress may be taken to indicate the inferior type of men who form a large proportion of the offenders against military discipline, and corroborates opinions expressed in former reports to the same effect, founded upon different data."

Between 1868, the year before any action had been taken to carry out the recommendations of the Royal Commission on Court-Martial and Military Punishments, and 1875, the date of the last Annual Report on Military Prisons, the percentage of punishments in the Army was as follows:—

Year.	Per centage of sentences by courts-martial.	Per centage of minor punishments by commanding officers.
1868	14·7	177·4
1869	10·3	159·9
1870	8·1	154·3
1871	9·2	178·2
1872	9·2	158·1
1873	8·7	154·6
1874	9·7	174·5
1875	9·7	176·5

The number of soldiers under punishment on December 31, 1875, including men confined in provost prisons, was distributed thus:—average strength of the Army at home, 92,802; in District Military Prisons, 480; in Millbank, 557; in Country and Borough Prisons, 486; in Barrack Cells, 369; Total, 1,892. Proportion to strength of Army, 1 in 49. There was a total accommodated in Great Britain and Ireland in separation for 1,159 prisoners, in association 52; in the Colonies in separation 287, in association, 129; grand total, 1,628. The aggregate number of prisoners received during the year amounted to 4,839, at home and abroad. The prisons now open for military offenders are those of Cork, Dublin, Gosport, Greenlaw, Limerick, Millbank, Barbadoes, Bermuda, Gibraltar, Halifax and Malta.

I 8
Miscellaneous

A BRIEF HISTORICAL MEMOIR OF THE ARMY MEDICAL SERVICE,

BY

ALBERT A. GORE, M.D.,

SURGEON, 34TH REGIMENT.

1346 — 1871.

"Success in war depends on preserving military forces in health and vigour;—disarmed by sickness, the most intrepid warriors become a prey to the most pusillanimous adversary."—MILLAR.

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BRIEF
HISTORICAL MEMOIR
OF THE
ARMY MEDICAL SERVICE.

Of the means adopted for the care of the sick and wounded, prior to the time of the Romans, little is known. Surgeons who were military captains, accompanied the armies of Greece to the siege of Troy. Xenophon, in his history of Cyrus, mentions, among his other qualifications for a general, that previous to a war, he wisely chose able physicians, for the management of the sick, and dismissed them afterwards with honors, as well as with the rewards earned by their services. The Roman conquests had spread wide before the medical art, as practised by men of science, was admitted into the Roman State. Undervalued at the beginning, as calculated for the effeminate and feeble, when temperance of living and perseverance in regular and impressive discipline—which had hitherto kept the Roman legions in the greatest state of efficiency and health—had given place to ease and effeminacy, it was found necessary, to correct these evils—inseparable from such a state of society as existed at the period of the decline of the Roman Empire. The sick of a legion then appear to have been collected under one tent, constituting what in modern times would be termed a field hospital; the inspection and good order

of which, as well as of all the economical concerns of the encampment, were placed under the immediate superintendence of an officer denominated 'Prefect of the Camp.' From a passage in the annals of Tacitus, it would seem that the greater part of the care in these earlier times, fell as a tax upon the neighbouring people; or as a duty assumed by the patriotic and humane of the Roman State. Tacitus relates, that after the accident at Fidenæ, the houses of the chiefs were laid open, medicines and medical assistance everywhere provided; the Romans maintaining with liberality and nursing with care, those who had been wounded in the great battles of the country. About this period, Vegetus, in his work *De re Militari*, embodies a chapter containing directions how to preserve the health of soldiers; and speaks of physicians attending the Roman camps.

The Saracens, who succeeded the Romans in power and reputation, collected their sick and wounded in the rear of their armies, or in places of security, where they were provided with medical and surgical assistance in regular form—perhaps the first examples of military hospitals.

In feudal Europe, concerns of health were little regarded on general grounds. When the work was finished, the instrument, the soldier, was thrown aside. The mass of the people were destitute of medical help; and when sick and wounded, had to seek relief from the charity of the religious orders; the members of which then combined the physician's science with the duty of administering the consolations of religion. All others who professed the practice of surgery were mere charlatans, whose attainments and usefulness were as low as their position was degraded. The anomalus and inferior status they occupied was entirely due to these facts. Only at the court of the sovereign were those who knew anything of the healing art, or had attempted to study it scientifically. They were occasionally directed to inspect and

report upon the health of the army, or search into the cause of any outbreak of sickness, of which, in these days, many occurred.

Thus military surgery—rude and imperfect though it may have been—if not then the very first, was at least among the earliest of the arts which the follies and infirmities of mankind forced them to cultivate.

If we now turn to our own country, we find that when Henry the V. carried on war with France, in 1415, Nicholas Colnet was appointed field surgeon for a year, under the condition that he was to carry with him three archers, on horseback, and to accompany the king wherever he went. His pay consisted of ten *merks* every quarter, and twelve pennies a day as subsistence money; each of his archers had twenty merks a year, and six pennies daily for subsistence. Morstede was appointed chief army surgeon, with fifteen men, three of whom were to be archers, and the remaining twelve, surgeons. In addition to the regulated pay, Colnet and Morstede were permitted to receive prisoners and plunder; but if the latter amounted to twenty pounds sterling in value, a third part was to be given to the king. This account, given in Rymer's *Fœdera*, is the first authentic instance of the employment of army surgeons with the English forces. The arrangement then appears to have consisted of the employment of a chief surgeon, having the inspection of the field surgeons, barbers, and their servants; the duty of the latter being to drag the wounded from the heaps of slain, and convey them to the former for treatment. The field surgeons who then accompanied the English army, in the beginning of the fifteenth century, were few in number, and destined more for the use of the commanders and principal officers, than for service with the private soldiers; and as they were authorised by their commissions to receive prisoners and booty, and, like the knights, had to bring with them archers, it is more than probable that fighting entered into

the detail of their duty.

In the reign of EDWARD III., army surgeons appear again to have served with the English forces, then in France. They were engaged to attend upon the troops, the engagement being limited to the period of the duration of hostilities, or for a particular day's service. Fourpence per diem was allowed as the rate of pay, with the *privilege* of shaving the men, and receiving monthly, from each soldier, two pence in the shape of "regards." JOHN ARDERN was the only medical officer of note present at the siege of Calais, and battle of Crecy, in 1346 and 1347.

From these early dates may be traced the rise and progress of the English Medical Service to the responsible position which it now occupies in the councils of the army.

Shortly before this period, in 1305, the surgeons of Edinburgh had, for the first time, become incorporated, under the denomination of surgeons and barbers; it being required of them "to be able to read and write, to know anatomie, nature, and the complexion of every part of the human bodie; and likeways to know all vagaries of the surgeon, that he made *flewebothomie* in due time, together with a perfect knowledge of shaving beards." The science of healing, then in its infancy, was only just beginning to break forth from the relics of barbarism and superstition which surrounded it.

In 1554, THOMAS GALE served in the army of HENRY VIII. at Montrieul, and afterwards at St. Quintin, in 1557, under Philip, King Consort of England. In his works are found "numerous complaints of the intrusion of illiterate pretenders and empirics into the practice of medicine and surgery." The following extract gives an idea of the lower class of military surgeons of his day:—"When I was at the wars of Muttrel, in the days of that most famous prince, King HENRY VIII., there was a great rabblement there that took upon them to be surgeons: some were boar-gelders

and horse-gelders, with tinkers and cobblers. This noble set did such great cures that they got themselves a perpetual name; for in two dressings they did commonly make their cures whole and sound *for ever*, so that they neither felt heat or cold, nor no manner of pain after. But when the DUKE OF NORFOLK, who was then general, understood how the people did die, and that of small wounds, he sent for me, and certain other surgeons; and we, according to our commandment, made search how these men came by their death—whether it were by the grievousness of their wounds, or by the lack of knowledge of the surgeons. And we, according to our commandment, made search through all the camp, and found many of the same good fellows, which took upon them the name of surgeons—not only the name, but the wages also. We asking them whether they were surgeons or no, they said they were. We demanded with whom they were brought up; and they, with shamefaces, would answer, either with one wellknown man or another, who was dead. Then we demanded of them what chirurgery staff they had to cure men withal; and they would shew us a pot or a box, which they had in a budget, wherein was such trumpery as they did use to grease horses' heels, and laid upon scabbed horses' backs; and others that were cobblers and tinkers, they used shoemakers' wax, with the rust of old pans, and made them withal a noble salve, as they did term it. But in the end, this worthy rabblement was committed to the Marshalsea, and threatened by the Duke's grace to be hanged for their worthy deeds, unless they would disclose what they were, and of what occupation; and in the end they did confess as I have declared to you before."

In 1586, WILLIAM CLOWES, surgeon to St. Bartholomew's and Christ's Hospitals, and WILLIAM GODDARUS, Sergeant Surgeon to QUEEN ELIZABETH, were sent on application from the EARL OF LEICESTER, general of the English forces in the low countries, to

take care of his wounded. He laments the number of empirical pretenders who were still allowed to practice surgery, to the great detriment of the service. Shortly after this, JOHN WOODALL, a distinguished military surgeon, served in 1589 with the troops sent by QUEEN ELIZABETH to the assistance of HENRY IV., under LORD WILLOUGHBY. It is related by HENNEN, that in this reign, the majority of the army surgeons were classed with sergeants, drummers and fifers; having the same pay, and otherwise on a similar footing in the public service. Even so late as the reign of CHARLES II., their knowledge does not appear to have been very profound, or deserving of a better position. RICHARD WISEMAN, who had served in the armies of JAMES I., and that monarch, as surgeon, about the year 1665, advocated the efficacy of the following *interesting* prescription for the cure of gun-shot wounds:—"2 lbs. oil of aloes, 2 *new whelped puppies*, till the flesh fall off their bones; add some earthworms in wine; strain, and to the strained liquor, add 2 oz. of turpentine, and 1 oz. of spirit of wine." AMBROSE PARÉ had long since banished this decoction from French military practice.

WISEMAN was Sergeant Surgeon to King CHARLES II., having served throughout the civil wars. He first advocated the advantage of primary amputation immediately after the receipt of the injury, and the possibility of preserving the wounded limbs. In the previous reign, the King had augmented the pay of the naval surgeons, and granted a bounty towards furnishing their medicine chests. MUNRO, on his expedition with Mc'Kay's Scots regiment, raised in 1626, graphically describes the deadly effects of Artillery —then only coming into general use—and the appalling effect of the wounds inflicted, and the consternation it occasioned among the troops.

Under the great MARLBOROUGH, the soldiers' health was little cared for; the wounded and maimed unpensioned, and left to

gain a livelihood either by entrapping others, by every disreputable means, into the service from which they had been ejected as no longer useful, or on the highways as footpads and robbers; the sides of which they often graced in a higher position than they ever had contemplated in their palmier days. They were still uncared for, unthought of, and unknown; as well as the greater number of those who shared their privations and dangers in the hope of succouring them when wounded, or of alleviating their sufferings when tortured by the agonies of disease. It was not until 1670, that JAMES II. commenced the hospital for invalid soldiers at Chelsea, the first institution of the kind in England. Until the middle of the 18th century, we have no writings wherewith to trace the further progress of the English Military Surgeon. In 1744, RANBY, principal Sergeant Surgeon to GEORGE II, attended that monarch during the wars in Germany. MUNRO, who wrote in 1761, says—"In times of war, when the regiment is ordered on actual service, the surgeon and his mate always go with it; and their duty is to take care of the sick and hurt in their own *regimental hospitals*. And in spring and summer, when the regiment takes the field, they encamp with it, and generally have some tents pitched in rear of the regiment, for the reception of such as may fall sick, till an opportunity offers of sending those ill of fevers, fluxes, and other dangerous disorders, or who received bad wounds, to the nearest *general* hospital." BROCKLESBY, who published his treatise eight years afterwards, describes the then regimental infirmary as "a cottage stuffed with forty, fifty, sixty, nay, with seventy or eighty poor sick soldiers, all lying heel to head, and so closely confined together with own stinking clothes, foul linen, etc., that it was enough to suffocate the patients, as well as others who were obliged to approach them." At this period, HAMILTON wrote his excellent treatise, entitled, *The Regimental Surgeon*. From it may be gathered some idea of the

position and emoluments of the medical officers in the middle of the last century. The surgeon then received a commision, signed by the Secretary of State for War, or, if abroad, by the Commander in Chief of the station, who had authority to grant it; the mate only a warrant signed by the colonel of the regiment into which he was about to enter. Medical officers appear then to have held double commissions in some instances, but were exempted from all combatant duty, such as "mounting guard, attending courts martial, and such like." They ranked as staff officers, in line of actual subordination, the surgeon ranking below the youngest ensign. Each regiment of militia and regulars were allowed a surgeon and surgeon's mate. Once having entered the service, they, as a rule, appeared to have had little opportunity of studying works relating to the progress of their profession. Regiments were then quartered in 'billets': the head quarters and mess room in some public house, in which it was customary for every guest, of whatever rank, to meet in the same room, surrounded with a crowd, drinking, smoking, and conversing promiscuously together. In such dilemnas, study was impossible, and given up as hopeless. All officers under the rank of captain, with only their pay to support them, suffered many and great inconveniences; being poorly accomodated by the innkeepers of the period, who looked with the greatest dislike upon the military, who were then a great tax upon them, the magistrates being frequently obliged to interfere in the officers' behalf. The surgeon, only ranking at this time as a subaltern, had his share of these misfortunes.

At this period, medicine and surgery were distinct professions in the army; but a physician or surgeon might hold a regimental appointment. The department was then governed by a Physician and Surgeon General in London; the general hospitals being principally under the supervision of the former, the regimental

infirmaries under the latter. No system of regular inspection appears to have been carried out; nor any medical journals, or other important documents kept by the medical officers—an improvement first suggested by HAMILTON, as necessary to prevent unqualified persons from regimental practice. The general style of practice then, appears to have been a beaten track of bleeding, blistering, vomiting, and purging indiscriminately, from habit, the morning examination of the sick list—consisting of nothing more than in calling over the patients' names—the giving of some insignificant advice, or the ordering of something which the men were totally unable to procure from the small pittance of their subsistence. When a patient was sent to a regimental hospital, half-a-crown a week was the allowance while he continued in it. This was put in the hands of the hospital sergeant, and expended in the mess, or as the surgeon pointed out. In addition, the privates paid for their medicines.

The surgeon's mate then not unfrequently performed the greater portion of the duties—the surgeon only making occasional visits. When divided, the mate was usually in charge of some of the detachments. The mate, in this situation, was altogether dependent upon the surgeon for medicines; and as the general rule with most of the latter was to save as much as possible out of the money allotted for this purpose, he had little opportunity of prescribing for his patients; and if particularly active in the discharge of his duties, never failed to get an *admonition* from head quarters, "to beware of expence in medicines." They consequently became careless and indolent, from observing "that their greatest efforts to merit attention, and their most diligent application to their profession, could not attract notice." This indifference settled into a habit, and they lost all relish for their profession.

Their promotion to the rank of surgeon was very problematical, only occurring after a long time, or by some lucky chance. No

inducements were, at this epoch, held out to men of regular education, to induce them to enter the service, or continue in it—the mates then performing the duties of assistant surgeon not being required to pass an examination previous to admission. The naval medical officers were then in advance of those of the sister service; for after passing the examination in "Surgeons' Hall," they were sent to a physician appointed for the purpose, to be examined in medicine.

Brocklesby, in 1764, then practising as a regimental surgeon, insisted upon the necessity of applying a similar test to military surgeons, as a "requisite physical qualification for men who presume to superintend the lives and health of nine hundred soldiers"—then the complement of a regiment of infantry. At this period, the surgeon's appointment was bought and sold like the military commission; the surgeon-general—who was the ostensible or acting chief of the department—having no great power of patronage or gift. At the reconstruction of the department in 1783, the sale of medical commissions was suppressed. The surgeon only required a certificate from a private medical teacher, that he was qualified to practice surgery; a university degree, or certificate from the 'Surgeons' Hall,' not being absolutely necessary.

The pay, at this period, was a miserable pittance. The surgeon received the munificent sum of *four shillings* a day; the surgeon's mate *three shillings and sixpence*. Medicines were supplied from the public stores in times of war, or in foreign service; and the surgeon was liable to be charged with the expenses of recruiting parties in every part of the United Kingdom—an expense which pressed very hard upon his funds, then so limited in amount. In addition to this, a daily stoppage of a shilling in the case of the surgeon, and sixpence in that of the mate, was deducted; thus making their subsistence equal. Hamilton piteously complains of the sum, showing in the following table how inadequate it was

Mate's full pay, at 3s. 6d. a day, for 365 days, is	£	s.	d.	£63	17s.	6d.
Subsistence issued at 3s. per day is	54	15	0			
Poundage stopped by Government, 1s. per £ is	3	3	10½			
Chelsea Hospital, one day's full pay, is		3	6			
Warrants and contingencies, two day's pay is		7	0			
Agency, 2d per £, is		10	7½			
	£59	0	0			
Remains of 365 days, or one year's arrears, at 6d per day, is	4	17	6			
	£63	17	6			

"Or, he loses of his full pay, every year, no less than £4 5s. 6d, while the annual arrears, or neat clearings, viz: £4 17s. 6d., are so irregularly paid, that they may be said likewise to be almost lost." In addition, the hospital mates at this time were entitled to no pension, and might be at last dismissed without anything to support them in their old age. The surgeon, on the other hand, once appointed, if reduced, was entitled to his half pay. Physicians were in a similar predicament as the private soldier—dismissed without a penny when the wars ceased, or their services were no longer required. The private then had to serve twenty-three years; after which he was entitled to discharge, and allowed a small pension. The hospital mate was then liable to the humiliating circumstance of being liable to confinement in the same ignominous manner as the private soldier, even at the pleasure or caprice of the youngest ensign of the corps. In reality, by the then military laws—outrageous as it may appear to the present generation of medical officers—he was liable to be tried by court martial, and flogged as a common soldier, merely because his warrant, instead of being signed by a Commander in Chief or Secretary at War, was only granted him and signed by the colonel of his regiment.

Of the then establishment of a regiment, viz: 764, two companies called 'additionals,' were always on the recruiting service,

then left to the judgment of the quarter-master. The hospital contingent now amounted to £7 10s. a month—enough to defray the expense of sufficient accommodation. The surgeon was, during encampment, confined to the precincts of the camp; no system of orderly medical officer being then in vogue. In some regiments it was then the custom to allow the surgeon a guinea a year from each subaltern, two from each captain, three from each major, five from the lieutenant-colonel, and ten from the colonel; and for every soldier inoculated with the small-pox, government allowed a guinea. The steps of preferment for the regimental surgeons, were few and far between; he could therefore hope for little advancement in his career. He had permission to sell his appointment, when wishing to retire from the service; the only retirement, except upon reduction of establishment, he was entitled to. At a later period, this was forbidden, notwithstanding that he might have purchased the appointment. He consequently had no provision when superannuated and so infirm as to be no longer capable of performing his duty. To these causes may be attributed the inferior status which, even at this period, the surgeon had. It is related by HAMILTON, that when in the year 1778, the King reviewed the camps, no surgeon was allowed to kiss his hand—a permission granted on that day to every officer down to the chaplain—except the surgeons of militia who were present, and as bearing in addition, commissions as combatant officers, did so in virtue of these. This distinction was not given to any lower than the chaplain, below whom the surgeon ranked in matter of precedence.

The busy interference of interest contributed more than anything else to bring into the contempt with which it was then held, the regimental practice of that day; real merit rarely leading to an appointment of so much consequence to a regiment, and in the aggregate, to the service generally. Indeed, so low was the character of men so appointed held, that the celebrated JOHN HUNTER writes in his essay on gun-shot wounds, that "it was hardly necessary for a man to be a surgeon, to practice in the army."[1] This opinion is confirmed by HAMILTON, who gives an anecdote referring to a regimental mate, who had served seventeen years in that position, during eight of which, he had sole care of his regiment; but, on a vacancy occurring, he was unable at the Surgeons' Hall, to qualify for promotion to the superior rank. This could be hardly otherwise, as his duties, or ordinary business of a mate, were described as consisting in "spreading plasters, dressing small sores and punishment men's backs, making unguents boiling poultices, and many things of this nature. Regiments then on the peace establishment, and stationed in Ireland, had only twenty-seven men in a company, or 270 the number composing the regiment; so that the duties on that station, could not have been particularly onerous. Only when encamped, was the surgeon allowed forage for a horse, at the rate of £15 a year The then gradations of rank, were Regimental Mate,—Hospital Mate,—Regimental Surgeon—Apothecary to a General Hospital—Surgeon to a Hospital—Surgeon General; surgeons to general hospitals being selected from the apothecaries, and from the regimental surgeons. The former appointment was worth about £200 a year; a regimental surgeon's including all allowances, not more than £100. The pay of the apothecary was 10s. per diem.

BROCKLESBY, who wrote in 1764, pointed out how necessary it then was that military surgeons should be educated as physicians. As a proof of the value of his assertions, he quotes the opinion of one who had been seven years surgeon to a regiment in the then late war; "during which the corps had been two campaigns in very hard service; and had also sustained the severe shocks and losses attending the tedious siege of Havannah. Yet in the seven years, not more than a hundred properly surgical cases were met

with in the whole regiment; though in the course of that time, nearly two thousand men had gone through the regimental registers."

The Surgeon General, who then presided over the affairs of the regimental infirmaries, appears rarely to have visited them. In summer he paid a formal visit to each encampment, and in each regimental hospital—if there was no general one— he remained a few minutes. Occasionally, during the war, surgeons were raised by the Commander in Chief, to the rank of physician; which at that time, was considered an unwarrantable encroachment on the rights of the regular bred physician, or prerogative of the Universities.

John Bell, then surgeon of the 26th regiment, introduced the system of dieting men in military hospitals. Previous to this reform, patients under treatment were obliged to subsist upon the ordinary ration of beef, or salt pork, quite irrespective of the nature of their diseases.

If we now turn to the writings of Sir John Pringle, Physician General to the Forces, published in 1753, we find, *inter alia*, an interesting account of the constitution of the Army Medical Service while abroad, and under active services in the field. In 1742, 16,000 British troops landed in Flanders. During the progress of hostilities, the medical arrangements were chiefly regimental, supplemented by the addition of temporary general hospitals. One of these was established at Ghent. In the garrison the care of the sick was committed to surgeons of their respective regiments. A complete battalion then consisted of 813, including commissioned officers. The medical officer was only required to forward a weekly sick return to the commanding officer. This return included all accidents unfitting a soldier for the performance of his duty. With some few exceptions, the highest return of sick did not exceed 70 for a battalion; 40 for a regiment of

dragoons, excluding epidemics. The surgeons attached to the corps, appear to have had little experience in the cure of diseases incidental to a moist and malarious climate. This is given as a reason why that at first the fevers were less successfully treated than was afterwards the case. The General Hospital at Ghent contained about 600 of the sick and wounded, collected from all the surrounding garrisons. Other hospitals were subsequently opened: one at Feikenheim, after the battle of Dettengen, received 1,500 sick,—besides the wounded after the battle—the greater part ill of dysentery, arising from exposure. In a short time, the air of this establishment became so vitiated, that the disease spread to the other patients, apothecaries, nurses, and other attendants, as well as to most of the inhabitants of the village. Those who were unavoidably detained in the regimental hospitals in the camps, escaped.

The system then in practice during war, was to treat the milder cases in the regimental or field hospitals, sending the more seriously sick, and greater part of the wounded, to the general hospitals in the rear; the regimental surgeons getting an allowance of medicines and all other necessaries, at the public expense. In each of the garrisons was a physician, to whom the surgeons were directed to apply occasionally, for assistance. Immediately after a battle, a general hospital was opened for the reception of the wounded;—as after Fontenoy, 11th May, 1745, at Ath, which took in some six hundred wounded.

During the then war in the Low Countries, a convention was entered into between the Earl of Stair, commanding the forces in the Netherlands, and the humane Duc de Noales, to alleviate the sufferings of the sick and wounded—arising from the necessity of their being constantly shifted for greater security—that the hospitals on both sides should be considered sanctuaries for the sick, and mutually protected; which agreement was strictly ob-

served on both sides, during the campaign of 1743. When the troops subsequently returned to England, in the advance on Carlisle, in 1745, the sick who fell ill *en route*, were left in the towns on the road, to the care of the civil surgeons and apothecaries; by whom, PRINGLE states, they were well treated—two pieces of organisation now presented to us as entirely new. At that time, the regimental surgeons had orders to provide quarters for the men as they were taken ill; with liberty to send to the general hospital such a proportion of the worst cases as might be necessary to lessen their labour, and avoid crowding the houses. By this dispersion of the sick, and preservation of pure air in the wards, it was hoped that contagion might be isolated, if not prevented. Cleanliness was also strictly enforced.

In the campaign of 1748, the regimental infirmaries were situated in the cottages near the line, from which they were constantly emptied to the general hospitals. After peace had been concluded, a general hospital was established at Ipswich, for the reception of the sick brought over in the transports from Holland. SIR JOHN PRINGLE directed the medical officers not to send the sick in such numbers to the general hospitals, as would vitiate the air; but to treat the slighter cases in the camp, the rest in the regimental hospitals. All that could be moved, were to accompany their regiments. He insisted upon two rules, now generally acknowledged, that the more fresh air there was let into the hospitals, the less danger there would be of breeding distempers; and that the regimental hospitals should be scattered, and the sick dispersed as much as possible.

The number of physicians appointed to the general hospitals, appears to have been too few; one occasionally having the nominal treatment of 700 cases at a time. In consequence, their practice was so little successful, that at the most moderate computation, one in ten died. These hospitals, during that war, were

of two kinds, viz: the flying hospital, attending the camps at some convenient distance in the rear, and the stationary hospitals fixed in one place: the last were generally in large towns. Owing to the fact that the convalescents were scarcely ever, after having suffered from a severe disease, able to return to their duty during the same campaign, it was arranged that they should be employed in the several garrisons, in preference to service in the field.

In 1786, the celebrated JOHN HUNTER was made Deputy Surgeon General, and in 1791, Surgeon General of the Army Medical Department, corresponding to the present rank of Director General. He had previously served on the staff in the expedition to Bellisle in 1760, where he was designated Surgeon General, Deputy Purveyor, Inspector and Director of General Hospitals; and in Portugal in 1763. He shortly discovered the importance of the office of regimental surgeon, for it is quite evident by his subsequent regulations, that he considered regimental hospitals as the genuine school for the army physician. He ceased to hold office shortly before the peace of Amiens. The office of Surgeon General, at his death, was converted into a board, denominated the Army Medical Board; consisting of a Physician General, a Surgeon General, and an Inspector General of Regimental Infirmaries. The Physician General was a civilian; so also was the Surgeon General. The Inspector General was a surgeon of foot guards; and the surgeons and physicians had for the most part, never served in the junior ranks. The joint duty of the board embraced the consideration of all the means which related to the health of the army. The Physician General ranked first, but could not control by authority, as all the members were of equal power. The Physician General, in virtue of his office, was empowered to select and recommend physicians for service in the army. His labours here ended, for he neither allotted to them their duty, or superintended their official conduct. The hospital regulations, at

this time, expressly stated that no one who had acted, or was acting, as an army surgeon, could attain the better post and easier berth of physician to the forces. On the other hand, the Surgeon General allotted the physician's duty; and could delegate his superintending and controlling power to superior surgeons, apothecaries, hospital mates, or persons officially bearing the commission of purveyor—an anomaly severely commented upon by JACKSON. The officers to whom he delegated his controlling power, were then first termed "Principal Medical Officers of th e Hospitals." At this date, a purveyor performed the duty at Plymouth Hospital.

The Surgeon General then selected and recommended the whole of the class of surgeons, whether staff-surgeons, surgeons of the line, or surgeon's assistants. The staff-surgeon remained under the Surgeon General's jurisdiction during the whole of his after course; for he was then supposed to act in general hospitals only, under officers of the general staff. The surgeon of the line, and his assistant, were recommended by the Surgeon-General for appointment, but placed under the immediate control of the Inspector General, in virtue of his commission, extending to the control of regimental infirmaries; but he had no authority to recommend those who deserved well for promotion to the rank of surgeon. He was, however, furnished with a counterbalance of difficulties, in being empowered to select and recommend apothecaries, purveyors, and hospital mates. Such was the then composition of the Army Medical Board, instituted in 1793.

The physician was then considered a person of a superior order; and selected from among the physicians of the college of London, or graduates of Oxford or Cambridge, and entirely a novice to everything military, or concerning the diseases of soldiers. The inefficiency arising from such a heterogeneous combination, gave rise to the creation of a new class of officers, or

order of inspectors, generally appointed from surgeons of the line; as best acquainted with the military hospitals, and the military duties necessary for the just conduct of the medical establishments in armies. The army physician thus became destined to remain in the position to which he was originally appointed, without, as heretofore, hope of further promotion.

The general expenditure of the hospital was then under the control of the surgeon, who was responsible for the due appropriation of the fund allotted for its support; as well as the general conduct of the hospital, and of the servants attached to it. On home service, it was the duty of the surgeon to provide every article of diet required for the sick at the market price, and of the best possible quality; the price being ascertained and verified by the commanding officer of the regiment, whose approving signature was necessary to authenticate the surgeon's accounts. On foreign service, the more bulky articles of provisions were supplied by the commissary; the especial duty of the surgeon being to see that they were of the best quality procurable, and to make an immediate report to his commanding officer if he should find them otherwise. Previous to 1803, the stoppage from the soldier's pay, on account of hospital subsistence, was sixpence per diem; in that year, new regulations were published, detailing the management of British regimental hospitals, annulling the discretional allowance for contingencies, and increasing the hospital stoppage to tenpence. This was an advantage; as the large saving of money, accruing to the soldier after a long confinement in hospital, was spent in dissipation on his discharge; and so served again to fill the hospital. The aggregate sum arising from these stoppages, was then found, under ordinary circumstances and judicious management, fully adequate to the necessary hospital expenses. By some strange oversight, patients then treated in general hospitals were not subject to any hospital stoppage from their daily pay. This incon-

gruity was subsequently remedied.

The gradation in rank, and amount of pay received in 1793, by military medical officers, was as follows :—

BRIGADE OF THREE REGIMENTS, OR 3,000 MEN.

Allowed 3 Regimental or Battalion Surgeons, and 6 Assistants. The battalion surgeon received 15s. per diem, with 5s. allowances; the assistant 7s. 6d. per diem, and 2s. 6d. allowances.

The following additional hospital staff was attached to each brigade, for war or foreign service :—

	£	s.	d.		£	s.	d.	
1 Inspector or Chief, at	1	10	0	and		10	0	allowances.
2 Physicians, ,,	1	0	0	each, and		6	8	,,
3 Surgeons, ,,		10	0	,, ,,		3	6	,,
2 Apothecaries ,,		10	0	,, ,,		3	6	,,
10 Hospital Mates, ,,		7	6	,, ,,		2	6	,,

To a division of 5 Brigades, or 15,000 Men, was allowed, in war or foreign service :—

	£	s.	d.		£	s.	d.	
1 Chief Inspector, at	3	0	0	and	1	0	0	allowances.
2 Second Do. ,,	2	0	0	each, and	13	4		,,
7 Physicians, ,,	1	0	0	,, ,,	6	8		,,
9 Surgeons, ,,		10	0	,, ,,	3	4		,,
5 Apothecaries, ,,		10	0	,, ,,	3	4		,,
20 Hospital Mates ,,		7	6	,, ,,	2	6		,,

The total regimental pay and allowance of the first, during home service, amounted to £2,190 annually; the additional war or foreign service establishments, to £4,745. The regimental pay and allowances of a division, was £11,093 6s. 8d. per annum. The war and foreign service establishment to £22,995. Thus, during foreign service, or the operation of hostilities, the regimental and staff medical services of a brigade of three regiments, or 3,000 men, was £6,935 per annum; of a division of fifteen regiments, or 15,000 men, £34,188 6s. 8d., at the end of the last century.

The Principal Inspector General did not then rank as a Major General.

In 1803, the gradius of rank appears to have been as follows :— Hospital Mate; Battalion Assistant Surgeon; Battalion Surgeon, commencing on twelve shillings per diem, chargeable with the expense of keeping a horse, increasing progressively to fifteen shillings, and twenty shillings a day. The additional pay was issued by warrant, upon certificates of a defined number of years service. This pay was drawn monthly, that for length of service, quarterly; while that of the hospital staff, particularly that of the physicians, was rarely made until a year or fifteen months after it had become due. It was also subject to some deductions.

In the field, the brigade was furnished with ten medical officers, viz: three battalion surgeons, and three battalion assistant surgeons; with the addition of one brigade surgeon in chief, and three brigade assistant surgeons. They were supposed to be immediately present in the field in the time of actual combat. The brigade surgeon, and battalion medical officers, were stationed in the rear, beyond the range of the enemy's direct fire, covered by position from the effect of cannon shot; but stationed as near to the scene of action as was consistent with safety. The quarter-master of the brigade or battalion, assumed the charge of conducting to the brigade field depot, such of the wounded soldiers as were in want of surgical assistance, by means of the pioneers and musicians entrusted to his command. The depot in the rear was rendered conspicuous by a flag as signal. Ordinary stretchers were the only means of conveyance. After the first operations were performed, and dressings applied, the wounded were sent off by divisions, in spring waggons, or other suitable conveyances, to the brigade hospital, under charge of one of the brigade assistants. The field hospital advanced with the army. However, as the case actually then stood, soldiers were seen, according to JACKSON, to retire from the ranks in great numbers, some really, others pretendedly assisting their wounded comrades or officers—

a practice commented upon in our own day, by TROCHU, as a dangerous example, and resulting from the want of a sufficiently trained and adequate ambulance service.

The sick returns of the military general hospitals, then comprehended nothing more than a list of general terms—"*acute, chronic, wounds, ulcers, venereals, punished, itch, convalescents*; with the gross number admitted, cured, and buried in a given time." Shortly after the commencement of the present century, a regimental form of sick return was constructed, of a better form and comprehending many points of useful notice; the proportion of sick to strength being for the first time shewn on the face of the return.

In the year 1793, the date of the formation of general hospitals for the first time in England, was also that of the introduction of staff surgeons into the service; who were then supposed to be surgeons of the composite class, and entirely distinct from the regimental surgeons. They were principally employed in the general hospitals. In 1813, 'hospital mates' ceased to be warrant officers, and had then, for the first time, the honour of holding a Royal Commission. Thus, in the words of MR. LONGMORE, "as general knowledge increased, and the medical art itself became more worthy of the name of a science, the importance of obtaining well-educated surgeons for the army, was gradually, *pari passi*, appreciated Men prominent for their abilities were sought for to fill the higher appointments. The qualifications of regimental surgeons were more enquired into, and their position was proportionately improved."

We now come to the period of the Peninsular War, and find from what SIR JAMES MCGREGOR,—who had joined the Army of the Peninsula, as Principal Medical Officer, under LORD WELLINGTON, in 1812—writes, that the divisions of the army, composed of from eight to fifteen or sixteen regiments, under the command of a lieutenant-general, were each of them under the

medical superintendence of an inspectorial officer, to whom the surgeons reported, and who regulated all the medical concerns of the division. It was his duty to see that, however short a battalion or a corps rested in one place, a regimental hospital was established; indeed, as they carried with them medicines, bedding, stores, and all materials of an hospital, a regiment might be said to have its hospital constantly established—even on the march. It was frequently established in the face of an enemy, and nearly within reach of his guns. When a regiment halted, after getting the men under cover in some building, and constructing chimnies, the first object was to make bedsteads, getting at the same time, additional mattresses of straw, rushes, etc. It was really surprising to see with what rapidity this was done; so much were regiments in the habit of it, that latterly, I found the hospitals complete in everything, and the men most comfortably lodged, in a few days after the regiment had halted. In short, by making every corps constantly keep up an establishment for itself, we could prevent the general hospitals being crowded; much severe and acute disease was treated in its early and only curable stage, and no slight wounds or ailments were ever sent off from the regiments; by which means, the effective force of the army was kept up, or perhaps increased by several thousand men; and this was effected by the joint exertions of the medical officers who served in the Peninsula; the result of medical science, and their experience of soldiers, their habits, and their aptitude to particular diseases." As a proof of the zeal and ability which then directed the medical concerns of the army, the following fact is in proof:—"During the ten months from the siege of Burgos, to the battle of Vittoria, inclusive, the total number of sick and wounded which passed through the hospitals, was 95,348. By the unremitting exertions of SIR JAMES M'GREGOR, and the medical staff under his orders, the army took the field preparatory to the battle, with

a sick list under 5,000. For twenty successive days it marched towards the enemy, and in less than one month after it had defeated him, mustered within thirty men as strong as before the action;—and this, too, without re-inforcements from England, the ranks having been recruited by convalescents." Subsequently, the plan of carrying the slighter cases with their corps, was adopted; the advantage of which system was generally acknowledged during the campaign of the Peninsula.

In 1793, Dr. Reide, surgeon of the 60th Regiment, introduced the first registers of statistical returns and nomenclature of diseases. These were subsequently adopted by Mr. Adair, who was then at the head of the Army Medical Department. On assuming the appointment of Director General, Sir James M'Gregor carried out the improvements which, prior to that date, he had powerfully advocated, viz:—that each soldier should be supplied with a separate bed, and patients not discharged from hospital until they were sufficiently advanced in convalescence to perform their duty; he also introduced separate wards for convalescents. Sir James M'Gregor, by the manner in which he conducted the duties with his subordinates, appears to have had the peculiar good fortune of securing their personal good feeling, and willing co-operation, without which, his great and undoubted administrative talents would have been neutralized; and he would never have had the gratification of knowing that, by his and their exertions 5,000 men were added to the effective strength of the Peninsular army, at a moment, as related by Napier, when their absence would have rendered very doubtful, the success of the brilliant and decisive victory of Vittoria.

After the conclusion of the war with France, in 1815, Guthrie and Hennen published their celebrated work on Military Surgery. Sir James M'Gregor was now Director General—a new office, constituted upon the abolition of the Army Medical Board.

Millingen, in 1819, published his "Army Medical Officer's Manual," a work of much merit. Of our medical system, he wrote—"Regimental Hospitals hold out advantages which will in vain be sought for in general ones. Conducted under the eyes of the commanding officers of corps, they form part of the regimental economy. The surgeon can acquaint himself with every individual's character, habits, and description,—circumstances which must most materially tend to assist him in the execution of his duties. The men indeed, assembled in these establishments, are bound by ties of regimental discipline and economy, which constitute the superiority of battalion hospitals. Here misconduct is more thoroughly repressed, and malingering more easily detected; an *esprit de corps* is kept up, which promiscuous intercourse tends always to destroy." Or, in the eloquent language of Jackson, "As the connection of the officer and soldier is constitutionally intimate, and as brilliant actions in war are the offspring of their mutual attachments, it is implied among the provisions of a just military arrangement, that this bond of union, instead of being weakened or dissevered by the interposition of foreign things, be strengthened by accession from all the conditions which the varieties of military service present. There is no act of man's endeavour, which gives so much satisfaction, and conveys an impression of so much consequence to a thinking mind, as that of rais'ng the invalid from the bed of sickness to the vigour of health. It is a species of creation, and an important source of pleasure in itself. This is felt in all situations; but it is felt most strongly in armies. The renovation is there strong, and the act generates a train of movement in animal organism, which rivets the affection of the soldiers to the beneficent officer more strongly perhaps, than the effect of other causes which act upon men." As Ballingall afterwards remarked—"If our medical arrangements in the field have not yet attained that degree of perfection, and

rapidity of action which distinguish the hospital ambulance of continental powers, yet we have excelled all other armies in the 'establishment and administration of our regimental hospitals,' and the efficiency and organization of these important establishments."

Shortly after his appointment as Director General, Sir James M'Gregor "organized a system of returns and reports, by which he was kept informed periodically, not only of the extent of sickness and mortality prevailing in the army, both at home and abroad, but also of the diseases by which these were occasioned;" as well as "detailed information as to the sites of the barracks and cantonments, the physical geography of the surrounding country, the rations and diet of the troops, and such other circumstances as might be deemed likely to exert any influence upon their health; with remarks upon the diseases, and abstracts of the more interesting cases; from which an opinion could be formed, whether the professional duties of the department were conducted in a satisfactory manner." No staff was, however, available to prepare a digest of these important documents.

In 1806—chiefly resulting from the forcible representation as to its necessity, by Bell, in 1798—a chair of military surgery was instituted at Edinburgh, in 1806; first occupied by Dr. Thompson, afterwards by Sir George Ballingall. Jackson had previously advocated the establishment of an Army Medical School, in connection with the invalid depot, in the Isle of Wight. In 1830, increased remuneration and advantages were conceded to medical officers; and again in 1840. In 1846, Surgeon-Major Tufnell began his course of lectures in Ireland, at the Royal College of Surgeons, in Dublin—subsequently endowed by a grant from Parliament. At this period, and up to 1859, the canditates for commissions into the Army Medical Service, were required to have either a Medical or Surgical qualification; and

prior to admission into the services, underwent an examination at the Army Medical Board, conducted by one of its members.

In 1835, Mr. Marshall, Deputy Inspector General of Hospitals, was appointed by Lord Howick, in conjunction with Lieutenant Tullock, 45th Regiment, to prepare a report on the sickness and mortality among the troops in the West Indies. In the following year, Dr. Balfour, now Head of the Statistical Branch, was associated with Mr. Tullock, and by 1841, had completed a statistical report, in four volumes, upon the health of the army, at home and abroad, exclusive of that portion serving in India and Australia.

In 1848, Sir A. Tulloch and Dr Balfour, prepared a second series of reports upon the health of the British Army; and in 1853 they were presented to Parliament by command of Her Majesty.

By the terms of the Royal Warrant of the 1st July, 1848 the pay of Medical Officers was regulated as follows:— Assistant Surgeon 7s. 6d., after ten years' service 10s.; Regimental or second class Staff Surgeon 13s., above 10, but under 20 years' service 15s.; above 20, but under 25 years' service 19s.; over 25 years' service £1 2s. per diem. Staff Surgeon, first class under 20 years' full pay service, 19s.; above 20, but under 25 years', £1 2s.; above 25 years' £1 4s. Deputy Inspector General, under 20 years' service in full pay, £1 4s.; above 20, but under 25, £1 8s.; over 25 years' service £1 10s. Inspector General, under 20 years' service £1 16s.; above 20, but under 25 £1 18s.; above 25 years' service, £2 per diem.

The relative rank then was:—Inspector General *as* Brigadier General; Deputy Inspector General *as* Lieutenant Colonel; Staff Surgeon, first class, *as* Major; Regimental Surgeon and staff Surgeon, second class, *as* Captain; Apothecary *as* Captain, but junior of that rank; Assistant Surgeon *as* Lieutenant; Deputy

Purveyor *as* Lieutenant; Medical Clerk on the Establishment *as* Ensign.

Sir Andrew Smith, who had succeeded Sir James M'Gregor, was now Director General. At the outbreak of the Russian war, in 1853, important changes were made in the constitution of the Army Medical Department. Shortly after landing in Turkey, disease caused severe losses amongst the troops, while quartered in Bulgaria. At the battle of the Alma, surgical appliances, and means of conveying the wounded from the field, were altogether deficient; and during the subsequent siege operations at Sevastopole, in 1854-55, the mortality was very great. Forty years of peace had dissipated the learning and experience acquired during the Peninsular war; and the Medical Department had become wholly inadequate for the performance of its duties. All the available officers in the United Kingdom, were sent to the Crimea, with a large staff of civilian surgeons, who knew nothing of military surgery, and a number of dressers, apothecaries, and nurses. In England, all the available officers were called in from half-pay; and acting assistant surgeons commissioned for military duty in different parts of the kingdom. In the Crimea, each of the divisions had at its head, a Principal Medical Officer; the whole under the supervision of Sir J. Hall, Inspector General of Hospitals. Consequent upon this break-down in the medical arrangements made for the army then fighting in the Crimea, was the issuing of a Royal Commission, which enquired into the regulations affecting the sanitary condition of the army generally, and the organization of military hospitals. The result of their deliberations, was the conferring of great benefits upon the officers of the medical department, and a verdict of acquittal in favour of the great body of British surgeons. The amount of sickness and loss of life, was shewn to have been, in the main, caused by extrinsic influences, and limited resources, over which the Army Medical

Officers had no control. This was principally due to a want of a responsible status upon the part of the surgeons. The ultimate result was a complete re-organization of the department.

The office of Director General, then a purely administrative office, was subdivided into three distinct branches—medical, sanitary, and statistical, each under a separate head, but the whole responsible to the Director General, and under his direction, as the sole responsible administrative head. The second fundamental change was the organization of an Army Medical School, to teach the specialities of military medicine, surgery, hygiene, and sanitary science. In addition to the treatment of diseases and injuries incidental to the service, the Royal Commission recommended what was subsequently carried out, that the important practice of advising commanding officers in all matters affecting the health of the troops—whether as regards garrisons, stations, camps, and barracks, or diet, clothing, drills, duties or exercises, should be committed to the Medical Officers of the army. The advantage of having done so, has since been apparent to all, in the increased health, lessened mortality, and efficiency of the British Army. In time of war, also, power was given to the Director General, to appoint medical officers, with special sanitary requirements, as sanitary officers, attached to the Quarter-Master-General's department, as well as in all general hospitals in time of peace; and lastly, in order to give efficiency to the whole sanitary administration of the army, periodical statistical returns and sanitary reports were to be sent to the Medical Office, to the Director General, and the Inspector General; and their deputies were to make sanitary inspections at stated times, throughout the year.

The next important change was the organization and administration of General Hospitals, which had hitherto been always unsuccessfully administered, as although—as reported by the

commission—The whole hospital system of the British Army is essentially regimental; a system which it is most important to preserve, but which should not exclude every other"—as it usually happens during the progress of hostilities, the Regimental Hospital alone proves insufficient for the number of sick; and requires to be supplemented by General Hospitals, in order that they may follow up with rapidity the movements of the Army in the field, to which they are attached. A limited number of general hospitals were now organized in the United Kingdom, in time of peace, for the two-fold purpose of training officers for a service indispensible in war, and for enabling the whole staff, if must be, to be removed to any place where a general hospital may be required, in the event of hostilities. The regimental medical officers were liberated, as much as possible, from all duties not strictly professional—"a change indispensibly necessary for the efficiency of the medical officers, in order to enable them to devote more time to the higher duties of their profession; and the better to perform the sanitary duties, with which they were now charged.' The purveyory branch was largely increased, and obliged to obey the requisitions of the medical officers in charge of the different regimental hospitals; thus relieving the latter of all the duties of hospital supply, hitherto under their supervision. Fixed scales of transport for sick and wounded were laid down in the regulations, and obtainable on requisition, by the Director General. Before this, "in a case where humanity would suggest that the greatest prudence and foresight should be exercised in alleviating human suffering, the necessities of the sick and wounded were left subject to the ordinary accidents and contingencies of the field."

Candidates for commissions in the Army Medical Service, were now required to hold both a surgical and medical qualification or university degree. If of the proper age, and found physically

eligible, they were permitted to compete for commissions at Chelsea Hospital, subject to a subsequent course of study at the Army Medical School, then established at Fort Pitt, and second competition in the subjects taught at the school, after which, if successful, they were gazetted as Staff Assistant Surgeons.

On the 1st October, 1858, a Royal Warrant was issued, granting increased status and emoluments to the Army Medical Officers. The ranks then constituted were as follows:—Inspector General of Hospitals; Deputy Inspector General of Hospitals; Staff, or Regimental Surgeon, who, after 20 years' full-pay service, was styled Surgeon Major; Staff or Regimental Assistant Surgeon: ranking respectively, as Lieutenant, after six years' service as Captain, on promotion as Major, after 20 years' service as Lieutenant Colonel, but junior of that rank; in the administrative ranks as Colonel, Brigadier and Major General. The rate of pay commenced at ten shillings per diem, increased, *pari passu*, with service and promotion, to 11s. 6d.; 15s.; £1 2s.; £1 5s.; £1 10s. £1 14s.; and £2 5s., the maximum pay of an Inspector General. The retirements graduated from six shillings to £1 17s. 6d. per diem. A daily scale of field allowance was also granted, ranging from one to fifteen shillings a day, while employed on active service.

The relative rank now granted to medical officers was to carry with it "all precedence and advantages attaching to the rank with which it corresponds, except as regards the presidency of courts-martial"; and was to "regulate the choice of quarters, rates of lodging money, servants, forage, fuel and light, or allowances in their stead, detention, and prize-money." Medical officers were to be "entitled to all allowances granted on account of wounds or injuries received in actions as combatant officers holding the same relative ranks"; and "their families to the allowances granted to the families of combatant officers on their decease." Surgeons

and surgeon majors of infantry regiments, were allowed forage, at the public expense; and medical officers were to be entitled to the same honors as other officers of the army, of equal relative rank. On retirement, they were eligible, if recommended by the Director General, to a step of honorary rank; and six of the most meritorious medical officers of the army, were to be named Her Majesty's Honorary Physicians, and six Her Majesty's Honorary Surgeons. Good service pensions were also granted to a limited number of deserving officers.

An assistant surgeon was obliged to serve at least five years before being eligible for promotion, prior to receiving which, he was to be obliged to pass another examination, and transmit with his answer to the Director General, a topographical account of the station in which he was serving; or, failing that, a medico-statistical report of his regiment, for a period of at least twelve months. These regulations—conceived in a liberal spirit, for the benefit of the medical officers, and indirectly through them, of the soldier—at once attracted a large number of eligible candidates, thirty-nine competing for the first twenty-nine vacancies into the Army Medical School, during its first session.

After the termination of the Crimean war, MR. ALEXANDER succeeded SIR ANDREW SMITH. In compliance with one of his early circulars, dated 10th December, 1859, "Weekly Sick Returns" were, for the first time, required from all troops serving in the United Kingdom; and at the same time, he informed the medical officers under his supervision that "reports of cases of disease or of injury, and papers upon any scientific subject that may be thought useful to the service, or interesting to the profession," were to be published annually; and inviting 'Medical Officers' to forward reports or papers with their Annual Returns, in order that a selection might be made for publication. To MR. ALEXANDER, as one of the

members of the Royal Commission under whose recommendation the warrant of 1858 was issued, the medical officers owe much of their present advantages, to obtain which for them, he worked earnestly and sincerely.

The first session of the Army Medical School, was opened at Fort Pitt, on the 2nd October, 1860, in the presence of the Right Honble. the Secretary of State for War, Mr., afterwards Lord, HERBERT, Dr. GIBSON, C.B., Director General, Major-Genl. EYRE, then commanding at Chatham. The introductory lecture was delivered by Mr. LONGMORE, Professor of Military Surgery, to an audience of forty-three gentlemen intended for the Royal and Indian Armies. The whole of his eloquent lecture will be found in the first volume of the Army Medical Reports. He concluded in hoping that each candidate, in his subsequent career, would in his particular sphere, contribute to solve the great problem of lessening the rates of sickness and mortality in Her Majesty's forces; and by such means repay the country for its increased outlay in the medical establishment, and justify and gratify the feelings of those who had laboured in the cause of their improvement. LORD HERBERT afterwards spoke, and said he hoped that those who had for the first time to study at the School, would, as medical officers, do their utmost to support the dignity of their profession; and by their example and conduct, direct the tendency of their younger companions into a more useful sphere of action and concluded in wishing them every success and happiness in their new career. The Director General finally remarked that to those who paid most attention to the subjects taught, and profited most by their studies, he meant to give the first and best appointments, as well as the most popular stations and regiments.

The war with China, then going on, was the first opportunity of testing the new organization of the Army Medical Department. The medical arrangements were under the supervision of Dr. MUIR,

Inspector General of Hospitals, and Dr. Rutherford, first Sanitary Officer to a British Army in the Field. "No ancient or modern campaign," in the words of Dr. Muir, "could justly be compared with it as regards distance from the Seat of Government, the resources of the empire to be invaded, or the previous uncertainty about the salubrity of the country." The Expedition, under the able superintendence of those entrusted with its carrying out, and with the cheerful aid rendered by the medical officers, ended in a result "highly satisfactory to the state," as the "army actively engaged in the field," and "exposed to temperatures passing rapidly from that of the torrid to that of the arctic zone, suffered but a small amount of mortality and sickness from disease; the debility and impaired health which protracted sea-voyages produce, were in a great measure avoided; the marches under a tropical sun were so managed that none died from sun stroke; the cholera, which hovered over the camp, never obtained a permanent lodgement; and the men who worked in the trenches, and stood sentry at Pekin, when the wind blew from the snowy range at 4 degrees below freezing point, did so without being frost-bitten; and no sick or wounded soldiers were ever more rapidly conveyed from the front to comfortable hospitals in the rear."

The country consequently gained, as it ever will, when liberally treating a department upon whose efficiency so much depends. The experience of the subsequent New Zealand War, and the last expedition to Abyssinia, showed the advantage of such a policy. To the British portion of this force, consisting of 4,200 Europeans, with a large proportion of native followers, was attached one Inspector General, with a secretary, a Sanitary Officer, three Staff Surgeons Major, three Staff Surgeons, ten Staff Assistant Surgeons; and three Staff Surgeons, and three staff Assistant Surgeons, in the hospital ships, in addition to the Regimental

Medical Officers. Of it, Dr. Currie writes—"The regimental hospital system, which is so much in favour in one service, was maintained in all its efficiency; the other arrangements for the sick in the general hospital place, being considered subsidiary to it." And "In reviewing our experience of the arrangements made for the sick and wounded in the field, it is satisfactory to be able to state, that by the regimental, field, and supplementary depot hospitals established, sufficient provision was made for the care and accommodation of every soldier and camp follower who fell sick on the long line of country travelled over by the expedition; and notwithstanding the scarcity of transport, which, from the first, formed our greatest difficulty, no instances, I believe, occurred of deficiency of medical stores or comforts, even as far as Magdala itself; from the coast," a distance of 400 miles.

Towards the close of the civil war in America, Dr. Muir, Inspector General of Hospitals, then Principal Medical Officer in Canada, visited the camps of the United States Army. Shortly afterwards was published a sketch, illustrative of American Field Service.

Early in 1864, Professor Longmore, and Dr. Rutherford, Deputy Inspector General, proceeded to Geneva, as representatives of the English Government, and on 22nd August in that year, signed the articles of the Geneva Convention, for the amelioration of the condition of the wounded in armies in the field. This was acceded to by the British Government, on the 11th February, 1865.

Early in 1866, Dr. Paynter, proceeded to Algeria, and published in the Army Medical Reports, an interesting account of the French Military Medical Service and health of the troops quartered in that province. Later in the year, Surgeon Major Bostock was accredited to the Head Quarters of the Prussian army, then in Bohemia, with the object of reporting upon the field

hospitals and sanitary service in the Prussian Army. The whole of his report will be found in Volume VII of the departmental Blue Books.

On the 1st August, 1864, His Royal Highness the PRINCE OF WALES laid at Netley the foundation-stone of a monument to the memory of the officers of the Army Medical Department who died while serving with the army of the East, during the Crimean War, and which was erected by their brother officers and friends; and in the following year, a bust of the late MR. ALEXANDER was placed in Royal Victoria Hospital at Netley, and an Alexander Medal and Prize founded to perpetuate his memory. During the present year, a memorial stall will be placed in the Cathedral Church at Portsmouth, to the memory of SIR JAMES M'GREGOR, first Director General of the Army Medical Department, and the medical officers who served with him during the Peninsular War.

On the 1st April, 1867, was published, a new warrant, revising and amending the regulations for the pay and half-pay of the Medical Officers; slightly increasing these, and granting to Medical Officers the right of retiring upon half-pay after twenty years' service. This resulted from the report of a Royal Commission, which had shortly before inquired into the constitution of the department. In compliance with its recommendations, Medical Officers were also exempted from serving as members of all but medical boards; those having the rank of field officer directed to provide themselves with chargers and horse furniture, and appear mounted on parades.

On the 5th February, 1868, a Medico-Chirgical Society was formed at Portsmouth, under the presidency of Deputy Inspector General Dr. GORDON, C.B., Principal Medical Officer, with the sanction of the Director General SIR GALBRAITH LOGAN, who contributed a valuable donation of books. On March 11th, the inaugural meeting was held, in the presence of Sir GEORGE BULLER, commanding the South Western District, the inaugural address being read by Dr. GORDON; since which time the society has had several interesting meetings, reported in the Army Medical Volumes.

During the progress of the Franco-Prussian war, 1870-71, two Army Medical Officers were sent to the respective head-quarters of the belligerents: Dr. GORDON, C.B., Deputy Inspector General, and Surgeon Major WYATT to Paris, throughout the siege of which they remained in the French capital, and Dr. INNES and Staff Surgeon FITZGERALD, to the German head-quarters, then at Versailles. Dr. FITZGERALD afterwards went from there to inspect the military and other hospitals located in different parts of Germany. It is generally understood that the result of their observations was, that in no way can the foreign infirmaries compare with the regularity, cleanliness, personal comfort, and varied dieting which at present exists in the regimental and other hospitals of the British Army. Towards the close of the war, a contingent, consisting of twelve Medical Officers, under the command of DR. GUY, Deputy Inspector General, served under the auspices of the National Society, in aid of the sick and wounded in France.

In September of this year, manœuvres on the Continental plan, were carried out at Aldershot, with a combined force of 30,000 men. The medical arrangements were under the supervision of Dr. LAWSON, as Principal Medical Officer. To each of the three divisions into which the army was divided, in addition to the Regimental Medical establishment, were attached, three "field hospitals," each consisting of a Surgeon and two Assistant Surgeons, who were under the immediate orders of the senior medical officer of the division, as Principal Medical Officer, in imitation of the plan pursued in some of the Continental Services.

Such, then, is a brief, but I am afraid very imperfect historical outline of the rise and progress of the Army Medical Service, from 1846 to the present time. Co-eval with the formation of the English Army, it has been bound to it by every tie of humanity and honour; and during more than five hundred years, shared in its dangers and vicissitudes of fortune. It is to be hoped it will ever continue to progress in knowledge and usefulness.

SUGGESTIONS

AS TO THE

Reorganization of the Army Medical Department.

BY

A STAFF SURGEON-MAJOR.

(Printed for Private Circulation.)

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SUGGESTIONS

AS TO THE

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NOTWITHSTANDING the decided improvement which has taken place in the general condition, and, it may be hoped, in the efficiency, of the Army Medical Department within the last thirty years, it is nevertheless too true that much yet remains to be done before it is placed on a really satisfactory footing. This those best acquainted with the subject, and most competent to form an opinion on it, will probably pretty generally admit, and in present circumstances, while a great war—pregnant with lessons and warnings to this country—is still unterminated in Continental Europe, and while all the great institutions of the country may be said to be on their trial at home, a few suggestions on the organization of this important branch of the public service may not be deemed inopportune.

It is unnecessary to go into any minute detail as to the present organization of the British Army Medical Department. Those anxious for more precise information on this point may find it in the Army Medical Regulations, published under authority, and to some extent in the Queen's Regulations and Orders for the Army. I would rather indicate briefly in these remarks what I conceive, under present circumstances, the organization of the department *ought to be*, and readers who are acquainted with its state now will understand in what respects the proposed differs from the existing organization.

In a general way, however, I may just state that at present the Army Medical Department is divided, as regards its *executive* officers, into two great branches—viz., the *regimental* and the *staff*. On the former devolve the ordinary regimental duties, including both attendance on sick and wounded in *regimental* hospitals, and

medical sanitary details, and on the latter the ordinary medical duties at *general* hospitals—the medical recruiting district duties, and the affording of medical aid to what may be called the *non-regimental* military. Staff medical officers are likewise employed in certain special appointments, and on detachment duties. The exigencies of the service at times require certain staff duties to be performed by regimental medical officers, and *vice versa;* but the above may be regarded, in a general way, as the more special duties of each branch.

With many there has been an opinion that the distinction which now exists between staff and regimental medical officers should be done away with, and this opinion, being entertained by some entitled from their knowledge of the subject to respect, and being one which, if carried out, would probably lead eventually to large pecuniary saving to the public, is doubtless worthy of mature consideration.

On the other hand, many still cling to the regimental system, not only probably from pleasant associations, but likewise from a feeling that it is intimately connected with the efficiency of the department. Indeed I have heard a distinguished inspectorial medical officer, whose opinion on the subject is entitled to consideration, talk as if he believed the department would in any great emergency collapse if the regimental system were abolished.

With these conflicting views of the subject, it is most desirable that the matter should be maturely considered in carrying out those changes which, in present circumstances, seem to be urgently required.

On the one hand, it is absolutely necessary that a department so important to the army as the medical should be placed on a thoroughly efficient footing, ready to bear the sudden and violent strains with which, in these days, it may be overtaken; while, on the other, it is of course only fair to the public, considering that the expenses of the Army Medical Department form so large an *item* in the Military Estimates, that any suitable change which would be likely to cause increased efficiency, at diminished cost, should be carried out.

The question is—How can the two ends of *increased efficiency* and *decreased cost* be best attained?

Looking at the matter from one point of view, no doubt the total number of medical officers in the army during a time of peace may seem, at first sight, to a civilian, or to one unacquainted with its organization and the duties which devolve on it, large in proportion to the actual number of sick under hospital treatment.

Any one, however, properly acquainted with the duties devolving on *regimental* medical officers, and the manner in which these duties have to be performed, knows well that two medical officers for each regiment is not at all too large a number for its requirements. Indeed any one who supposes that, under present organization, this number could be safely permanently decreased, must be very ignorant of what these duties consist in, and how they are required to be performed.

Under a different organization, however, I confess that it appears to me the medical duties of the army might be much more efficiently performed than at present, and at greatly less expense to the public, than under existing arrangements.

And what change could be effected which would realise increased efficiency at decreased cost?

The change must be somewhat of a decided one, and yet I do not consider it ought to be so radical as those who would entirely abolish the regimental system advocate. On the contrary, I conceive that the efficiency of the British Military Service is so intimately connected with the regimental system that it would be, I venture to add, a great mistake to do away entirely with the special link which attaches regiments, as such, to the Medical Department of the Army.

Leaving India in these remarks to a certain extent out of the question, to be regulated under special arrangements adapted to the peculiar circumstances of its country, I would beg now in detail to offer suggestions for the re-organization of the Army Medical Department, which, if carried out, would tend, I conceive, to secure the two ends of increased efficiency at decreased cost; and perhaps my views on the subject may be more readily gathered by placing them under distinct headings.

I would therefore take the liberty of offering the following definite suggestions as to re-organization:—

CLASSIFICATION OF MILITARY HOSPITALS.

1. All *regimental* military hospitals to be abolished, and army hospitals be in future classified as follows, viz.:—

1st. GENERAL HOSPITALS *(including General Field and Station).*
2nd. GARRISON OR CAMP HOSPITALS.
3rd. DETACHMENT HOSPITALS.

2. The particular kind of hospital at a station, as well as the number of military hospitals in each station, to be determined by

the exigencies of the service under the authority of the Secretary of State for War. In the *Field* the number and kind to be determined by the officer commanding the troops, in consultation with the principal medical officer.

3. A medical officer to be specially appointed to the charge of each of the two 1*st-class* hospitals *(i.e., General and Garrison or Camp)*, to hold this special office for a period of *three years* under ordinary circumstances; and, in the larger hospitals, one or more medical officers be appointed as "*second in charge*," in the same way, for a similar period.

The number of *assistant executive* medical officers, in addition to the above, attached for duty to these hospitals to vary from time to time according to the exigencies and requirements of the service.

All the medical officers for such hospitals to be taken from the *Staff* branch of the Medical Service.

4. *Detachment Hospitals* to be established at small stations where the number of troops are few, or in particular localities in large stations where portions of the troops are located at an inconveniently great distance from the Garrison or General Hospital. A medical officer to be detailed, from time to time, to take charge of such small hospitals, by the senior medical officer of the district.

CONTROL OF HOSPITALS.

5. The medical officer in charge of an hospital to be responsible for its general management and discipline, and to be vested with such direct military command in his department as is necessary to enable him to carry out these properly.

6. All military hospitals to be directly under the general superintendence and control of the Inspectorial Medical Officer of the district in which they are located, and the Inspectorial Medical Officer to be himself responsible that each such hospital in his district is furnished with all requisite medicines, as well as surgical instruments and appliances; as, likewise, that the available bedding, cooking utensils, and hospital furniture are of good quality, and sufficient in quantity for requirements. He should likewise be responsible that the *system* carried out in the different hospitals under him is in general conformity to the regulations of the service.

7. The appointment of *Military Governor* of General Hospitals, *as distinct from the Chief Medical Officer*, to be abolished. In all large hospitals the chief medical officer in charge to be specially vested with the powers of Governor, and *when so vested*, his duties in connection with the hospital to be both *inspectorial* and *administrative*, but *not executive*.

8. The present military governors of hospitals being abolished, all military hospitals to be subject to the inspection of the senior military officer of the garrison in which they are located. A military officer—if possible not under the rank of Captain, and in the larger garrisons of Field Officer—to be detailed to visit *daily* the hospital and its wards, as a *garrison duty*, reporting any irregularities he may observe, or complaints he may receive, to the Garrison Commandant, and entering a note of the same in an officer's visiting book to be kept at the hospital. The General of the district to make a half-yearly inspection of all military hospitals, as is done in the case of regiments, forwarding a special and minute report of the result of the same, for the information of the Secretary of State for War and the Commander-in-Chief.

9. The position of a medical officer in charge of an hospital to vary according to the size and character of each particular establishment, but under ordinary circumstances,

	To be under charge of
A General Hospital, Field or Station,	A Deputy Inspector-General as Governor.
A Garrison or Camp Hospital,	Of a Senior Surgeon-Major or a Surgeon-Major.
A Detachment Hospital,	Of a Second Surgeon or Assistant Surgeon.

10. The Royal Victoria Hospital at *Netley* being one of peculiar importance, as what may be called the *Head-quarters Hospital* of the Army, and having a *military medical school* attached to it, to be under charge of an *Inspector-General*, as *Governor* of the establishment.

DISTRICT MEDICAL INSPECTORIAL OFFICERS.

11. Medical Inspectorial Officers to be, under ordinary circumstances, attached to each district, commanded by a Military General Officer. As a general rule, a *Deputy Inspector-General* of the Medical Staff to be appointed to the medical superintendence of a district commanded by a *Major-General*, and an Inspector-General of the medical staff to a district commanded by a military officer of higher rank than a Major-General. When considered advisable, Deputy Inspectors-General to be available for the medical charge (as Governor), of a Military General Hospital in their district, in addition to having the medical superintendence of the district.

REGIMENTAL MEDICAL OFFICERS.

12. On the abolition of regimental hospitals, the number of medical officers in cavalry and infantry regiments to be reduced from two to one, and Surgeons-Major and Surgeons of Artillery to be abolished.

13. The number of regimental medical officers being thus reduced, the ordinary routine *duties of all military hospitals*, under ordinary circumstances, to be performed as *garrison* duties by staff medical officers under the principal medical officer, independent of regimental interference; and the more special *medical duties of regiments* (as hereafter detailed) to be performed by regimental medical officers under the commanding officers of battalions and detachments.

REGIMENTAL DISPENSARIES.

14. In each regiment of cavalry and infantry, and each battery of artillery, a *regimental dispensary* to be established, where all the ordinary fresh sick, regimental prisoners, and regimental recruits should be inspected; and where the regimental medicine chest and medical records, as well as medical comforts for cases of emergency presenting themselves among the men, and for urgent cases among the women and children of the battalion, should be kept. At the regimental dispensary there should be half-a-dozen beds, where cases of emergency should be seen to, and trifling cases might be treated. All cases requiring *hospital* treatment should, under ordinary circumstances, be sent to the particular hospital detailed to receive the sick of the regiment, and no case should be kept longer than twenty-four hours at the dispensary. A stretcher should be available at the dispensary, and when necessary from the distance an ambulance, to convey serious cases unable to march to the military hospital.

DUTIES OF REGIMENTAL MEDICAL OFFICERS.

15. The regimental medical officer should have special charge of the dispensary, and of the details connected with it. He should see the fresh sick, prescribe what he considers necessary—sending off all cases requiring it to hospital. He should examine all prisoners and regimental recruits—attend on the sick among the officers and their families, and among the regimental women and children living in barracks. When required, he should assist at operations, or in consultation on serious cases shewing themselves at the military hospital of the station. He should prepare and

have special charge of the men's "medical history sheets," being responsible that each man in his regiment is furnished with one, and that all hospital admissions are carefully recorded in it.

He should keep a special register at the dispensary of all non-commissioned officers and men admitted into hospital, and of all officers admitted on the *sick list*—the particular diseases for which they were under treatment, and the length of time they were ineffective; and should likewise keep a "*case book*" for the registration of all serious cases of illness taking place among officers, women, and children. He should also have charge of the invaliding duties at the head-quarters of his regiment.

In addition to these duties, he should attend to the medical sanitary duties of the corps—holding medical inspections of the men weekly, as also of the rations, barracks, canteen, out-houses and guard-rooms, regimental prison cells, or places of confinement. All regimental prisoners should be daily inspected by him; and he should attend all parades (including ball practice and route marching), when his presence is considered necessary by the regimental commanding officer, and furnish the commanding officer with a medical opinion on such subjects connected with the regiment as he may require, and with such sanitary recommendations as appear requisite.

N.B.—The present double sort of government which applies to regimental medical officers is, I conceive, highly objectionable.

If regimental hospitals were abolished, and the number of regimental medical officers reduced as proposed, it appears to me it might be greatly modified to the comfort and advantage of the service. All *military hospitals* under the proposed system would be *taken away entirely from regimental control*, and this done and the number of regimental medical officers greatly reduced, I think it would be well that those of this class in cavalry and infantry should be rescued, as far as possible, from a rather anomalous position. With this view, I would suggest that these *regimental* medical officers should be considered more decidedly as forming portion of the regiments to which they belong, being, as it were, *lent* to them from the department; that they should be responsible for the performance of their duties, not to the Inspectorial Medical Officer of the district, but directly to the *Commanding Officer* of the regiment and to the *Director-General* of the Medical Department. At the same time, the P.M.O. should have the regimental dispensary and its records open for his inspection, and should report on its condition every six months. He should also be furnished with a weekly sick state and a monthly sanitary report

of the battalion by the regimental medical officer, who should accompany him in his stated medical inspection of the regimental quarters.

16. At small stations where a regiment of infantry is divided into wings, or where a cavalry regiment furnishes a detachment, and there is no general or garrison hospital, a *detachment* hospital to be opened at the head-quarters of the corps, and placed under the charge of the regimental medical officer, *but as a garrison duty distinct from his regimental work*,—the rule being that if the total number of troops at a station where there is no *general or garrison hospital* amount to the equivalent of *five full companies* of an infantry regiment (or under), both the *regimental* and the *military detachment hospital* duties should, under ordinary circumstances, be performed by one officer, while, if the number exceeds the equivalent of five companies, the regimental and military hospital duties should be performed by different officers.

ARMY HOSPITAL CORPS.

17. The "Army Hospital Corps" to be so far re-organized as that it should be able to furnish thoroughly-trained *orderlies* for all *military hospitals*. The present system of regimental hospital orderlies to be then abolished. Each military hospital to be furnished with a sufficient number of trained orderlies from the Army Hospital Corps, which should also furnish qualified non-commissioned officers to fill the necessary minor appointments in connection therewith, and to act as *dispensers of medicine*—the latter to undergo a distinct training, and to be classified according to their attainments as *sergeant dispensers* and *sergeant assistant-dispensers*. Each general and garrison hospital to have a proper number of duly qualified and passed dispensers attached to them, and each regiment of infantry and cavalry to have a sergeant assistant dispenser attached to it under the regimental medical officer to assist in the duties of the *regimental* dispensary, both as regards medicines, returns, and discipline, and to be furnished with quarters at the dispensary.

18. On the abolition of the Military Governor at Netley, a *Field Officer* be appointed as Commandant of the Army Hospital Corps, to be stationed at Netley, and to be responsible for the internal economy and general discipline of the corps. The appointment of "Captains of Orderlies" at General Hospitals to be abolished, and their duties performed by subalterns appointed to the Army Hospital Corps, one of whom should be detailed at Netley to act as its Adjutant and Quartermaster under the Field Officer

commanding. At the larger general hospitals, other than Netley, a captain or subaltern of the Army Hospital Corps to be appointed to command the detachment of the corps at the station, to be responsible for its discipline and interior economy. At the smaller hospitals the men of the corps to be directly under the medical officer in charge, assisted by one of its non-commissioned officers.

All officers of the Army Hospital Corps attached to Hospitals, to act in unison with the medical officer in charge in the performance of their special duties, but to be responsible for the general discipline and interior economy of the regiment to the Commandant of the Garrison and General of the District.

Distinct regulations to be issued as to the manner in which the duties between medical officers in charge of hospitals and officers attached to them belonging to the Army Hospital Corps are to be carried on.

For minor neglects of duty, men of the Army Hospital Corps to be liable to *fines* of fixed amount, and under stated regulations. Such fines to be only inflicted after formal investigation by the Medical Officer in charge of the hospital to which they are attached.

19. The general arrangements as to cooking, &c., for hospitals to be carried on under the Control Department, but special regulations to be introduced to prevent any clashing of authority between the Medical and Control Departments as regards hospital supplies, cooking arrangements, and hospital servants.

MILITARY HOSPITALS ON ACTIVE SERVICE.

20. On *Active Service* Military Hospitals to be organized in much the same way as in times of peace, *General Field, Camp*, and *Detachment* Hospitals being organized from time to time, and officered by the principal medical officer of the force, under authority of the military officer commanding, without any reference to the Secretary of War being required in the first instance. The number of Staff Medical Officers with a Field Force to be fixed by the Director-General, with the approval of the Secretary of State for War, and an Officer of the Army Hospital Corps always to accompany large Field Forces to assist in their Hospital discipline and organization.

GRADES OF MEDICAL OFFICERS, AND MORE SPECIAL DUTIES OF EACH GRADE.

21. The different grades of Army Medical Officers, and their more special duties, to be as follows, the whole departments being,

as at present, under the general administration and control of *the Director-General*, viz. :—

1st. Administrative and Inspectorial Officers.	*Inspector-General.* *Deputy Inspector-General.*	The present cumbrous and misleading addition "*of Hospitals*" to be omitted, and these officers to be merely designated as *Inspector-General* or *Deputy Inspector-General* of the *Medical Staff*.*
2nd. Executive Officers.	*Senior Surgeon-Major.* *Surgeon-Major.*	In place of present *Surgeon-Major* and *Surgeon.*
3rd. Assistant Executive Officers.	*Second Surgeon.* *Assistant Surgeon.*	In place of *Assistant-Surgeon* above Six Years' Service.

Inspectors-General to be placed in superintendence of large and important districts, or to hold important special offices. One of this class to be in charge as Governor of Netley General Hospital.

In time of war an *Inspector-General* to act as P.M.O. with an army commanded by a military officer *above* the rank of Major-General.

Deputy Inspectors-General to be in superintendence of districts, or field forces, commanded by a Major-General, and to be available as Governor for General Hospitals, or for Special Staff duties.

Senior Surgeons-Major to be employed in *medical charge* of garrison and camp hospitals, or as *second in charge* of general hospitals—as medical officers in charge of recruiting districts, or of military prisons, or as sanitary officers with large forces in the field, or at large camps. Also to be available for special staff appointments.

Surgeons-Major.—Available for same duties as senior surgeon-major, and in addition, available as regimental medical officers, and for *ordinary* duty at general, garrison, and detachment hospitals. Likewise available for duty with detachments of troops.

Second Surgeons.—Available to assist in *any class* of military hospitals. Also, for duty as regimental medical officers, or with detachments, and for duty as orderly officers in hospitals or camps. Likewise, to be available for such special duties as they may be told off to by the P. M. O., and for charge of smaller garrison or detachment hospitals.

Assistant-Surgeons.—Same general duties as second surgeons,

* It might indeed be more convenient to substitute the designations of *Surgeon-General* and *Deputy-Surgeon-General* for these.

and to be on same *roster* for orderly duties, and for foreign or home service; but not to be available for duty as regimental medical officers of a cavalry or infantry regiment, or for *charge* of any but *detachment* hospitals.

The above to be regarded as a general indication of the more *special* duties, under ordinary circumstances, devolving on each grade of medical officers; but it should be distinctly understood, that, in emergencies, medical officers of *one grade* are available for employment in the duties of *another grade*, when the exigencies of the service, or some special reason, renders this in the opinion of the Director-General, or of the P. M. O. and officer commanding the troops in which they are stationed, necessary.

As a general rule, all assistant surgeons to do duty for twelve months after first appointment, at a General or Garrison Hospital, and not to be available for charge of a Detachment Hospital, or of Batteries of Artillery, until after completing this service.

Medical officers attached to batteries of artillery to be available for ordinary duty at the military hospital nearest their quarters, but not to be placed on duty as Orderly Medical Officer of the day for the hospital at which they may be doing duty, excepting at Woolwich.

The following tabular form may serve to show more clearly the new organisation aimed at, so far as regards the distribution and particular duties of officers of the department :—

1st. The whole department, as at present, to be under the control and general administration of

THE DIRECTOR-GENERAL,

Assisted by the Heads of Departments, into which his Office is Divided.

2nd. Inspectors-General *and* Deputy Inspectors-General *of the Medical Staff.*	To carry out the District and Field administrative, and inspectorial duties of the department, under the Director-General; and their services to be available as Governors of General Military Hospitals and for *special Staff* appointments[1]

3rd. General Hospitals.

(*a*) *Netley Royal Victoria Hospital.*

To be considered as the *Headquarters Hospital* of the Army, and to be officered under special arrangements, referring both to the hospital itself and to the Army Medical School attached.

An Inspector-General, Medical Staff, as Governor.

(*b*) *Other General Hospitals.*

A Deputy Inspector-General, Medical Staff, as Governor.
A Senior Surgeon-Major and Surgeons-Major, as Second in charge.
Assistant Executive Medical Officer as required, according to size of Hospital and number of Sick.

4th. Garrison or Camp Hospitals.

(*a*) *Larger size.*

Senior Surgeon-Major, in Medical Charge.
Surgeon-Major, Second in Charge.
Assistant Executive Medical Officers as required.

(*b*) *Smaller size.*

Surgeon-Major or Second Surgeon, in Medical Charge.
Assistant Executive Medical Officer if required.

5th. Detachment Hospitals.

One Medical Officer, for Duty and in Charge.

6th. A Staff Medical Officer to be in Charge of each *Recruiting District*, and Staff Medical Officers to be available for such special duties and appointments as *Sanitary Officers, Charge of Military Prisons*, etc.

7th. Regimental Medical Officers, to be distributed as follows, viz.:—

For (*a*) *A Regiment of Cavalry*, { One Medical Officer. A Surgeon-Major or Second Surgeon.

(*b*) *A Regiment of Infantry*, same as Cavalry.

(*c*) *A Battery of Artillery*, { One Medical Officer. A Second Surgeon or Assistant Surgeon.

Senior Surgeon-Majors not to be available as regimental medical officers, and Assistant-Surgeons not to be appointed to regiments of Infantry or Cavalry.

Medical Officers of Artillery, in addition to their battery duties, to be available, when required, for ordinary duty at the military hospital nearest their quarters.

Medical Officers of Cavalry and Infantry, under ordinary circumstances, not to be available for duty at general or garrison hospitals; but, under special circumstances, at small stations where their regiments are divided, to be available for charge of a detachment hospital in addition to their regimental duties.

Such are a few suggestions which I would venture to offer on the re-organization of this important branch of the public service; and I feel confident that, if fairly carried out, three great ends would eventually be attained by their adoption, viz.:—

1st. The efficiency of the department would be greatly increased.

2nd. As one result of this, the comforts and requirements of the sick and wounded would be better cared for.

3rd. The cost to the public of the Army Medical Department would, under proper arrangements, be greatly decreased.

It would render these remarks, already somewhat lengthy, too diffuse to enter fully into the minor arrangements which would be requisite to carry out such an organization as is suggested in these pages, in a satisfactory manner; but, to illustrate shortly and practically, on a familiar and tolerably large scale, the proposed as compared with the existing medical organization of the Army, take the large Camp of Aldershott.

Under present arrangements, including staff and regimental medical officers, the total number on the strength of the camp during the season of the year when the number of regiments stationed at Aldershott is largest, may amount to from ninety to a hundred; and, large as this number may seem in proportion to the number of sick in the various hospitals, regimental surgeons of experience who have lately done duty there will be well aware in what an unsatisfactory manner the duties of a regiment may require to be carried on at times when from any cause one of *the regimental* medical officers happens to be absent.

I venture to say, however, that, were the organization of the Army Medical Department changed as proposed, a very different result might be attained. With the various *regimental* hospital establishments abolished, three camp hospitals formed—one for the *North Camp*, a second for the *South Camp*, and a third for the

Permanent Barracks—and with an energetic officer, gifted with good administrative abilities, acting as principal medical officer, I believe that the number of medical officers required might be reduced by upwards of one-third, and that while a very large pecuniary saving to the public would eventually arise from this arrangement, as well as from a corresponding decrease in the number of hospital attendants, the general efficiency of the service and comfort of the sick would be increased from its adoption in place of being diminished.

In concluding these remarks, I would only add that, whether any such suggestions as those brought forward are adopted or not, it seems hardly probable that the Army Medical Department will be long allowed to remain in its present state, and in carrying out any important changes which may be resolved on in view to its re-organization, it appears to me a matter of no small moment, in view to facilitating their success, that they should be inaugurated and fairly started during a period when an officer so able as an administrator, and so justly popular as its present Director-General, is at its head.

GLASGOW, *February*, 1871.

C, I
Sir G Logan
With Mrs Mackintosh's Compliments.
To Medical Staff Library.

PROPOSED SCHEME

FOR THE

RE-ORGANIZATION

OF THE

MEDICAL DEPARTMENT OF THE ARMY.

PROPOSED SCHEME

FOR THE

RE-ORGANIZATION

OF THE

MEDICAL DEPARTMENT OF THE ARMY,

WITH THE AVOWED PURPOSE OF

1stly. *Insuring a saving to the Country of between* £30,000 *and* £40,000 *per annum:*

2ndly. *Improving the efficiency of the Army Medical Department: and*

3rdly. *Creating a more healthy flow of Promotion to the Junior Ranks of the Army Medical Department.*

ADDRESSED TO THE

Right Honorable the Secretary of State for War

BY Dr WILLIAM HENRY MACKINTOSH

STAFF SURGEON MAJOR.

Sir,

Having served Her Majesty during the long period of Thirty One years, on full pay, as a Medical Officer of the Army, at Home, in Canada, in the West Indies, in India, and in the Mediterranean, and seeing the utter stagnancy of promotion, and the consequent discontent, and dissaffection which pervades the junior Ranks of the Medical Department of the Army, and taking into consideration the great annual increase of expense to the Public for this Department, and also the reckless expenditure of the public monies, without corresponding public benefit, I have felt myself compelled, as a Loyal Servant of my Country, to try, to the best of my ability, to lay my scheme in the simplest manner before you.

In Oct. 1858 a Royal Warrant was issued for the Medical Department of the Army with the hopes of rectifying the grievances of that Department, but instead of so doing, it brought two grand, and fundamental mistakes into action, which were not seen, or contemplated, at that period.

The first was, that remuneration was given for length of Service, to Surgeons Major, Surgeons, and Assistant-Surgeons, without making any corresponding outlet to save the Country from what in the end must prove an overwhelming debt.

I will give you in numbers, and in a tabulated form, what I mean by the above statement.

NUMBER OF MEDICAL OFFICERS IN EACH RANK, WITH PAY THEREOF ON THE 1ST OF MAY 1871.

No.	Rank	Pay per annum.
101	Surgeons-Majors	43,329 0 0
235	Surgeons	85,775 0 0
1	Assistant-Surgeon over 15 years	319 7 6
231	Assistant-Surgeons „ 10 „	63,236 5 0
241	Assistant-Surgeons „ 6 „	54,978 2 6
137	Assistant-Surgeons under 6 „	25,002 10 0
946		£ 272,640 5 0

NUMBER OF MEDICAL OFFICERS IN EACH RANK, WITH PAY THEREOF, AS WILL BE, ON MAY 1, 1876.

No.	Rank	Pay per annum.
212	Surgeon-Majors	92,856 0 0
124	Surgeons	44,895 0 0
117	Assistant-Surgeons over 15 years	37,366 17 6
229	Assistant-Surgeons „ 10 „	62,688 15 0
137	Assistant-Surgeons „ 6 „	31,253 2 6
127	Assistant-Surgeons under 6 „	23,177 10 0
946		£ 292,237 5 0
	Excess	£ 19,597 0 0

The foregoing figures distinctly prove that, at the present rate of promotion, the position of the component members of the Department must,

at the expiration of five years, be so altered by length of service, as to cause the gradually increasing outlay to have then reached an additional cost of nearly £20,000 per annum. In this calculation no count has been taken of the number of Surgeons-Major over twenty-five years' service, whose pay is consequently augmented by 3s. a day (viz., 27s.) The calculation is thus rendered perfectly incontestable, and a continuance of the investigation will also show, that each succeeding year must, by a process of reduplication, add immensely to the increasing price of the Army Medical Department; But this does not in any manner cover the actual expense accrueing to the Country from this warrant of 1858, because all the ranks from Director General downwards, had greatly increased allowances granted them, such as house allowance, forage, fuel, light, servants &c., which are also accumulating from year to year.

The second grand mistake was promotion by selection, without a proper guarantee, that the persons selected were actually the proper individuals deserving of that promotion.

Numerous instances have occurred, since the warrant of 1858, of Officers who were passed over as being incompetant, or unworthy of promotion, their junors having been promoted over

their heads, for no other reason than that the latter were personal friends of those in power at the time, since having been promoted for the exactly contrary reasons, viz: that they were now competant, and worthy of that identical promotion, for which they were found formerly to have been unworthy.

Later on, in this my scheme, I will state my opinion as to how selection, from the junior to the higher ranks, should be administered.

In looking over "Harts Army List" you will find that there are 42 Inspectors and Deputy Inspectors General in the Army, and I beg to draw your most serious attention to my following remarks.

Forty two Medical Officers of the greatest medical experience, and knowledge in the Army, after periods, ranging from sixteen to thirty three years service, in which they acquired all the practical knowledge that they possess in Medicine, and Surgery, are ruthlessly dragged from the practice of the most noble portion of the profession, at exactly that period when their services became of the utmost value to their Country as medical practicioners, and are transformed, at one fell swoop, into most indifferent clerks. I mean to say that every Medical Officer who is promoted from a Surgeon,

to be a Deputy Inspector General, leaves the practical knowledge of his profession behind him, and in a year, or two, actually knows nothing whatever about it. I have myself known them to say, that the thing that pleased them most in their promotion, was that they "never now would have to attend medically "upon a sick person, and that they had, no "more to do with the prescribing of a dose of "medicine, than a General Officer had with "the teaching of the "Goose Step."—!!

These forty two Officers, seeing that they have actually dropped their professional duties, and in a few years actually forgotten them, instead of being, what they ought to be, and would be, if they had continued to practice their profession; viz: the great shining lights of the Army, men like Syme, Simpson, Fergusson, Paget, Corrigan, Jenner, and other such famous men, who would be the consulting Surgeons, and Physicians of the Army. What are they now, I ask? They are nothing whatever, nor are they considered by the Surgeons, and Asssistant-Surgeons of the Army, to be anything else, but Clerks, and of clerks most indifferent ones; whose whole time is taken up, in their offices, counting up diets, how many pints of beer have been used, how many eggs, and ounces of tea have been expended as extras, and such

like duties; in fact they are the Purveyor's and Apothecarys' Assistants, and nothing more. I particularly call your attention to the fact, that these men ought to be, instead of Clerks, the great operating Surgeons of the Army, like Syme, Fergusson, and Paget, and the grand Physicians, like Simpson, Jenner, and Corrigan; these are the men, again, who swallow the lion's share of the Public money, as each of them receive the largest incomes for their rank in the Army.

I have constantly put the following question to the Surgeons of the Army: "If you "had a serious case of illness, on which you "wanted a consultation, would you apply to your "Inspector General, who has not practised his pro- "fession for many years, or would you apply to "a Surgeon, in full daily medical practice? The "answer has been invariably, "That he would "of course apply to the Surgeon, if he had the "good of the patient really at heart, and wanted "a sound opinion to guide him to the recovery "of that patient, but if he wanted the consulta- "tion, simply for show, or appearence, without "caring for the opinion, he would respectfully "beg for the opinion, of the Inspector General."

Having so far tried to explain the utter inefficency of the administrative portion of the Medical Department of the Army, being so totally seperated, as it is, from the executive, I

now state the first portion of my scheme for the "reorganization," which is:

That every administrative Officer in the Army should have a portion of "executive work," (that is daily medical practice,) attached to his position, and that portion should be as follows:

That in every military command, where a Inspector, or Deputy Inspector General is quartered, that he should have, as his portion of the duty, *the medical charge of the General Staff, and the Military Departments.*

This arrangement, at one single coup, would save to the country forty two times six hundred a year, as in each command it would save the necessity of a Staff Surgeon Major, (I say advisedly a "Surgeon Major"), as in a few years the Army will consist of Assistant Surgeons, and Surgeons Major only, the rank of Surgeon having been swallowed up at a large annual increase: This arrangement would save to the Country some where about, as I have above mentioned, £24,000 per annum, greatly increase the efficiency of the service, and give an absolute certainty to greater quickness of promotion in the junior ranks, as it is beyond a doubt, that the present holders of these sinecure appointments, in the Inspectoral ranks as they are at present constituted, would never willingly put their shoulders to the wheel again.

Having thus shown a saving of £24,000 per annum, I will now endeavour to show that I can save many thousands more in the re-arrangements of the Medical Department in every British command. To explain my meaning more thoroughly, and actually practically, I will give you a true and faithful insight into the lavish waste of public money in the medical arrangements of the Army in the command which I have the honour to be now serving viz: in Malta. I may premise by stating that I can save over four thousand a year in this command.

The Medical Establishment of Malta consists of:

1	Inspector General, salary	1,300
4	Surgeons Major do.	2,400
6	Surgeons do.	2,400
14	Assistant-Surgeon do.	4,200
1	Apothecary do.	300
1	Commandant of Città Vecchia Hospital do.	200
		£ 10,900

These salaries embrace pay, and allowances viz: what each Officer costs the Country.

Of this large sum of money I hope to be able clearly to show you, that I can annually save over £4000 pounds, with, I think, greater efficiency than at present exists.

viz:

1	Surgeon Major as P. M. O. difference of pay from an Inspector General	£676
2	Surgeons Major withdrawn	1,200
1	Staff Surgeon do.	400
2	Staff Assistant-Surgeons do.	600
1	Apothecary	300
	Convalt. Hospital at Città Vecchia Abolished... ...	610
1	Surgeon of Artillery withdrawn	400
1	Assistant-Surgeon Artillery do....	300
1	Assistant-Surgeon Engineer do.	300
	Total	£4,786

Further to elucidate the saving in Malta I beg to state, that I am the Senior Medical Officer of the executive rank. That for the first four months after my arrival here, I, to the best of my recollection, sat upon two medical boards. For the next six months I had medical charge of Pembroke Rifle Camp, and Forest Hospital, with the aid of an Assistant-Surgeon which duties might have been done, with proper arrangements, by the Assistant Surgeon alone; saving thereby, as one item, my salary as Surgeon Major of six hundred a year. For the next four months I was on what is called "general duty," which really means doing nothing. In June 1870 I was placed by "General Order" In my present position, as the Senior Medical Executive Officer here, in medical charge of the General Staff and Military Departments, and I beg to inform you that for the last fourteen months, up to this date I have received six hundred a year

for what I may call a simple sinecure. I have at the utmost one or two patients a week to attend; so much for my own actual position; my predecessor's position was exactly the same as I have described above, and he held that position for several years.

So entirely was I at a loss for some employment to occupy my mind, that I engaged in private practice, for the double purpose of keeping up my professional knowledge, and amusing my leisure hours in an ethical manner, and I made a considerable sum of money thereby last winter.

There is a convalescent Hospital situated in Città Vecchia seven miles distant from the General Hospital in Valletta. This Hospital many years ago was a very useful institution in Malta, but since the introduction of the great steam vessels, both P. and O. and Naval, this Hospital is a purely useless, and expensive establishment, and in my opinion, after very minute enquires, and grave consideration, I consider ought to be abolished, as it should have been three or four years ago. I will proceed to give you an account of the expenses of that Hospital: viz:

1 Surgeon Major, salary and allowance p. a.	...	...		600
1 Assistant-Surgeon do.	do.	...	...	300
1 Commandant	do.	do.	...	200
9 Hospital Servants	do.	do.	...	365
Value, in yearly rent of Hospital Buildings		...	...	150
			Total	£1,615

This I consider a very large sum to pay annually for what is an obsolete establishment, as the convalescents, who are sent out to this convalescent Hospital, end generally in being sent home to Netley, so that you have the expense, not only of the Hospital, but of the eventual passage home of these men, who should have been sent home at once, and not retained here uselessly, simply to keep up an unnecessary establishment. If sick men are well enough to be jogged in a mule waggon for seven miles, surely they are fit to be gently carried on a stretcher, constructed for that purpose, from their Regimental Hospital, to their comfortable berth on board one of these great steam-vessels. It is well known to all medical men, that a cruise at sea for ten days or a fortnight, is the best change that can be given to a sick patient.

The above is only a portion of the expense accruing from keeping up the above establishment, as every thing required in the shape of food, or drinks, have to be conveyed by mules, waggons, drivers, &c., from Valetta, a distance of seven miles. The convalescents themselves have to be also carried there, and back again.

If a convalescent Hospital is so absolutely necessary for Malta, with only 400 feet of elevation, why may I ask, is a convalescent

Hospital not required in Gibraltar, which can give 1500 feet of elevation, seeing that Gibraltar is a more unhealthy station than Malta (vide Blue Book). (Blue book shews quite the contrary

The next reduction that I would advise to be made here, is that of one Surgeon on the Staff, whose sole duty has been for the last six months to sit on an occasional Medical Board; surely this is another of the sinecures, and his salary and allowances of about four hundred per annum, is a useless, and unnecessary expense of the public money. He also has literally nothing to do.

From Oct^{r}. to Feb^{y}. a Rifle Camp is formed at Pembroke Camp. It consists of six companies of one Regt., with the addition of two companies of every other Regt. stationed in Malta; These companies take their turn in rotation, and the men are medically inspected, and reported fit to go through their Rifle-drill prior to being sent to the Camp.

The Medical Staff allotted to this Camp, during the cool weather, is a Staff Assistant-Surgeon, and a Staff Surgeon or Surgeon Major, the latter having charge of the Hospital, which is over a mile distance from the Camp. This Hospital is a hired building, most inconveniently situated, requiring mule carts to convey the sick too and fro, and a special guard

party for itself. Now, if three or four huts were built in the Camp, on the system recommended by the late Sir James Simpson, one Assistant-Surgeon would be ample to perform the Medical duties of that Camp, which would be a saving of the salary of the Surgeon Major, the rent of the present buildings used as an Hospital, and the expense of the mules, carts, and drivers at present required.

I have myself done the duties of this Camp for a Season, and can therefore speak with authority on the subject; One year's salary of the Surgeon Major would build the cottages required, and the site is there ready for them, beside the water tower, in the most eligible portion of the Camp.

The next abuse of the public money here, that I would call your attention to, is the Corradino Jail; This is the Jail for the soldiers, and sailors in Malta, who are awarded imprisonment for their crimes. It was formerly the Jail for the sailors alone, and they were under the Medical charge of the Staff Surgeon of the Navy, who received fifty pounds extra per annum for that particular duty.

About six months ago the military prisoners were also sent to that Jail, but instead of continuing the services of the Naval Staff Surgeon, with an increase to his salary of, per-

haps ten or twenty pounds per annum, a Staff Assistant-Surgeon of the Army, of fourteen years service, with an income of about £ 300 per annum, was sent to reside at that Jail, whose sole duty it is to look at 70 or 80 healthy men daily, at an over plus expense to Government of £230 annually.

I may inform you that there is a stringent regulation in all Government Jails, that if a prisoner, in the estimation of the visiting Medical Officer, is likely to remain ill for more than 24 hours, he must be immediately transferred to his own Regimental Hospital, so that the Country not only pays £ 230 pounds a year too much for the medical service of this Jail, but it runs the chance of letting a valuable Medical Officer forget his medical knowledge from sheer want of practice. This Assistant-Surgeons services could also be dispensed with from this command.

There is a force of Artillery, and Engineers here in Malta of about sixteen hundred men, giving an average of about 44 men sick in Hospital daily, and I can scarcely ask you to believe me, if it were not an absolute fact, that there are no less than six Medical Officers viz: two Surgeons and four Assistant-Surgeons to perform that duty, which one Surgeon, and two Assistant-Surgeons would

be ample, to do it in an effective manner; so that in this item also, one thousand pounds per annum could be saved to the Country: That is, the salaries of one Surgeon, and two Assistant-Surgeons.

The appointment of "Apothecary" is also a sinecure. He is a non-medical man receiving generally higher pay than an Assistant-Surgeon, as he has nine shillings a day on first appointment, and eighteen shillings a day after so many years service. His duties are a perfect trifle, which occupy his time for an hour or two of a morning, and although he is styled "Apothecary," he does not compound one grain of medicine, a "passed compounder" being employed for that duty. My idea, for the purpose of saving a large sum annually to the Country, is that Assistant-Surgeons should be employed as "acting medical store keepers" to do the duties of the present so called "Apothecaries," with the additional pay of two shillings, and sixpence per diem. They should do their own duties as Medical Officers of the Garrison as well. These Assistant-Surgeons would be an aid to the Principal Medical Officer in his performance of the executive duties allotted to him, and by this means a saving would accrue to Government of about £255 in this, aswell as in every other command where an Apothecary is

employed. This was the system followed for many years, with the most perfect success, in the Ordnance Medical Department.

Upon close investigation it would certainly be found that in every British Garrison similar reductions could be made, more or less, such as I have above shown can be made in Malta.

In the beginning of my pamphlet, I said that I would revert, in a more exhaustive manner to the subject of "promotion by selection."

When a vacancy occurs in the Inspectorial Ranks, a Surgeon Major, or Surgeon must be selected to fill that vacancy. If the Senior Medical Officer of these ranks is found unfitted for promotion, and a junior Officer is proposed to be passed over his head for that promotion, four things must necessarily take place. FIRSTLY: A mixed Committee must be convened in London, of persons unbiased in their opinions in every way, and their duty will be, thoroughly to sift all charges, or statements that may be brought forward to prove the incapacity for promotion of that Senior Officer, who is proposed to be passed over. SECONDLY: That officer should be present in "propria persona" to meet, explain, or rebut all such statements, and charges that maybe brought forward to try to stop his promotion, as in-

stances have occurred of many Officers having been irretrevably ruined by having been passed over without a sufficient cause. THIRDLY: That above all other attainments, or acquirements, great professional attainments and purely medical capabilities should hold the first place as a right to promotion in the Medical Service and, FOURTHLY: That if the Committee, or Board ordered to examine the Officer proposed to be passed over, find, on fair, and impartial trial that, that officer is unfit for promotion to the Inspectorial ranks, *that he obliged to retire from the service.*

In looking over "Harts" Army List you will find that, sixteen Inspectorial Officers have held their appointments, as such, for upwards of 10 years; nearly all of them for 13 years, and most of them can continue to hold their sinecure positions for 13 years to come, that is six and twenty years tenure of Office; truly this is not a very hopeful prospect for those below them. I append a tabulated form of these sixteen Officers, taken from the Army List.

INSPECTORS GENERAL.

Years Service.		Names.	Ranks.			
			Assit.-Surgeon	D.	J.	G.
29		W. Mure Muir	22nd Nov.	42	Dec.	58
32	$1\frac{6}{12}$	G. S. Beatson	13th July	38	Dec.	58
30	$3\frac{1}{12}$	J. Mouat	14th Dec.	38	Oct.	58
37		R. Lawson	May	35	Dec.	54
37	"	J. D. McIlllree	Feb.	35	Dec.	58
32	$\frac{6}{12}$	J. Paynter	Jan.	39	Dec.	58
36	$\frac{1}{12}$	R. Dane	July	35	Dec.	58
35	"	S. Currie	Oct.	36	Jan.	59

DEPUTY INSPECTORS GENERAL.

35	F. W. Innes	Feb.	37	Dec.	58
30	J. Fraser	Aug.	41	Dec.	58
30	J. H. K. Innes... ...	April	42	Dec.	58
29	T. Longmore	Feb.	43	Dec.	58
37	R. J. O'Flaherty ...	Jan.	35	July	59
36	T. G. Balfour	April	36	July	59
31	G. A. Gordon	June	41	May	60
30	W. Rutherford	July	41	Feb.	61

To obviate the slowness of promotion in the Department, or rather to mitigate the great evil that has arisen from the "Royal Warrant" of 1858, I would urgently suggest that another "Royal Warrant" should supercede that of 1858, the chief features of which would be

1stly. Compulsory retirement for all Inspectorial Officers after 10 years tenure of office.

2ndly. That there should be one Director General with two thousand pounds yearly salary, and a tenure of seven years in Office.

3rdly. That there should be six Inspectors General, and thirty six Deputy Inspectors General; all these Officers shall perform the medical duties of the General Staff and Military Department in the commands allotted to them, and that no Officer of the Inspectorial ranks shall receive more, pay and allowances included, than one thousand per annum.

4thly. That promotion to the Inspectorial ranks shall be by selection, but that every Officer proposed to be passed over shall positively be brought before a board of examiners to see that no injustice is done to that Officer. That he shall appear before that board to defend his position in person. That he shall have the right of "Challenge," as on Court-Martial, and, if he should be found unfit for promotion, he must. for that very reason, *be obliged to retire from the Service.*

5thly. That the class of Officers called "Apothecaries" shall be discontinued, and the duties performed by them at present, shall be carried out by Assistant-Surgeons, with an addition of two shillings and sixpence to their daily pay, while performing the extra duties.

The Inspectorial Officers can in no manner grumble, or consider themselves hardly used by the above compulsory retirement after ten years tenure, seeing that they all themselves obtained their promotion to their present ranks by a similar compulsory retirement of their Seniors, by the "Royal Warrant" of 1858.

The above five paragraphs if carried out in their integrity by a "Royal Warrant" would, I am fully convinced, after an experience of 31 years in the Medical Departmet of the Army, most certainly make a saving of between £30,000 and £40,000 per annum; Increase the efficiency of the service; Create a more healthy flow of promotion amongst the junior ranks; Would

stop all grumbling and disaffection among men growing old as Assistant-Surgeons in the Army, and give them that zeal and interest in their profession so necessary for the proper fulfillment of the duties required of them by their Country.

Trusting that my Scheme, for the benefit of the Country, and the Medical Service of the Army, may meet your approval.

I have the honor to remain

Sir,

Your Most Obedient Humble Servant

W. H. MACKINTOSH, M.D.

Staff Surgeon Major.

Malta

1st August 1871.

LIBRARY OF THE MEDICAL DEPARTMENT OF THE ARMY

A PROTEST

AGAINST

"THE ARMY MEDICAL SERVICE,

IN THE

PAST AND FUTURE."

BY

ZERO.

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It is most fortunate that the author of the "Expostulation" should have stated in his opening sentence that his subsequent remarks were intended to form "a brief examination of conflicting opinions," since, if not thus prepared, any ordinary reader might have fallen into the delusion that he was perusing the bigoted effusion of an uncompromising partisan.

A believer in the unanswerable superiority of the Staff scheme, he serves up anew the tattered arguments against the regimental system, and allowing his imagination to soar into the illimitable space afforded by contrasts between what has been and what will be, but which may never come to pass, he shows, to his own satisfaction, the utter despicableness of the works of his predecessors, and of all his contemporaries who differ in opinion from him, and the glories which will result from the development of his views.

Begging the question is the least offence of this extraordinary pamphlet, in which unfounded assumptions climax in obviously erroneous assertions.

The usual statement of the inequality of home and foreign service under the old regime is thus put:—"In the matter of foreign service, some officers, who could ill afford to pay for exchanges, were obliged to serve constantly abroad, while others were almost continuously at home," but it is not explained how the fact of one man becoming a substitute for another could possibly influence the disposal of a third.

In such an age as this the simplicity of one who devotes a paragraph to recount how the staff scheme "has created *most favorable impressions* on those officers who were *entrusted* with its birth and development, and who alone are qualified to pronounce on its success" is very refreshing, and the treasured opinion of the "one senior officer of a large hospital" placed in withering "contrast to the quasi oracular prophecies of the opponents of the system" cannot fail to provoke a smile, and bring to mind the parable of the ten lepers that were cleansed, of whom but one returned to give glory.

As to the assumption of the "elevation of the professional abilities of medical officers, resulting from the opportunities for consultation," and from the provision of the newest instruments, etc., there is no theoretical advantage claimed which would not be as likely to accrue from the formation of fixed station depots.

For the ingenuity of the hypothetical case of the extra regimental orderly required to attend a serious case and furnished by the Sergeant Major, in the person of the man next for fatigue duty, every credit should be given to the writer, but it is scarcely credible that he can have ever met with a regiment in which the reasonable wishes of the doctor would not be deferred to in such a case; and of the relative value of hospital orderlies regimentally trained, and of those of the Army Hospital Corps, furnished from Netley, we have never heard a second opinion, but of course the preference for the former by regimental surgeons arose from their own want of proper professional elevation.

Of the impracticability of regimental hospitals in time of war no confession has been made, beyond the admission that unless a proper evacuation system be organised these hospitals must always become glutted and paralysed.

That "the temporary disposition on active service of regimental surgeons for general duties would be certain to break down *through regimental scheming*," we must leave to the author to verify; hitherto it has been the boast of the medical officer that he was every ready to undertake his duties where the exigencies of war most demanded his services.

After this, what the expostulator is pleased to term, "impartial consideration," a verdict is demanded for the staff scheme, and in order that he may isolate his opponents for his grand attack the whole department is subdivided into 10ths and 4ths, till the dregs, "the socials," are laid bare with nothing but "badges and sabretasches," to screen them from the blasting contempt of their indignant castigator.

Of the three classes "the professional," "the social," and "the mixed," the proportionate per centage is stated to be 10, 20, and 70 respectively. The 10 "professionals" "animated by but one desire, love of their profession, are (of course) to a man, supporters of the general hospital system." Again all the thoughtful men of the mixed "numbering 3-4ths of the party, are in favour of unification," while the remaining 1-4th, and the 20 socials advocate the old state of things. Now all this elaborate calculation amounts to this simple statement, that out of the whole department 62.5 per cent. of the medical officers are in favour of the staff scheme, while only 37.5 desire to restore the regimental system.

That the author can have any grounds whatever for making this assertion, or that he can be unaware of the ficticious nature of his figures is perfectly inconceivable.

It is not surprising then, that his words should be as far removed from facts as his figures, and that we should find him accusing 20 per cent., or every fifth member of his department, of holding his profession and department secondary to his mess and regimental badges, and of greeting his professional brethren who belong to less expensively dressed corps than his own with insolent condescension.

Through the author's dissertation on the reason for social precedence, viz., wealth, family, authority, and intellect, we are not prepared to follow him, nor can we in the least comprehend how "the specific claims of the department on society are largely increased by unification," and still less when his views of the nature of "society" are expressed in the following peculiar definition, "but in the ball, concert, and drawing rooms, at scientific readings and theatricals, in the cricket field or racket court, at whist and billiards, etc., all of which constitutes "society" the accomplished medical officer will take his place as second to none in friendly emulation of all comers, bearing in mind with regard to the members of his own department whom he happens to meet in "society" that unity is indeed strength."

We would in conclusion remind A.M.D., that self praise is no praise, neither is invective argument, nor dogmatic assertion proof, and that while such unseemly disparagement of his own cloth is given forth to the world as a reason for a great departmental change, those who are called upon to make the move may well doubt the safety of such advisers; also that while such bad taste pervades what purposes to be a logical analysis of opinions, he cannot expect to secure that unity of the accomplished members of his own department either in or out of "society" for which he professes to be so solicitous.

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Proposals for the Re-Introduction

OF THE

REGIMENTAL SYSTEM,

IN A MODIFIED FORM,

AND

Suggestions for the Removal of some of the Grievances of Officers of the Army Medical Department.

BY

SURGEON-GENERAL MOUAT, C.B., V.C.

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Proposals for the re-introduction of the Regimental System in a modified form, and suggestions for the removal of some of the Grievances of the Army Medical Department.

THE changes effected by the Warrant of last year, in the internal economy of the Medical Department of the Army, have been productive of so much discontent, both among Medical Officers, Commanding Officers, and the rank and file of the Army in general, and press so heavily upon the Executive of the Department, that, as one of the oldest Administrative Officers in the Service, I trust I may be excused for presenting the enclosed scheme, planned with the view of removing some of the most reasonable complaints against the new system, while retaining those portions of it which are advantageous to the Service.

The principal grounds of discontent may be considered under three heads:—

1. Those referable to the introduction of the *new system, termed "Unification,"* by which the old Regimental Hospital System was abolished, and new duties of an unprofessional character, at variance with the recommendations of the late Lord Herbert, of Lea, were imposed on the Department. [1]

2. *The slowness of promotion*, due to the great increase in the numbers of the department rendered necessary during the Crimean War and Indian Mutiny, further increased by the insufficient inducements *to retire held out to the higher ranks.*

3. Grievances chiefly of a *professional and social character*, including the subject of dress, social *status*, forage and other allowances, to which may be added *invidious distinctions as to leave*, the inequality of home and foreign service, etc.

With regard to the first paragraph, admitting the unsuitability of the purely Regimental Hospital system in time of war, excellent as it always has been in peace, and assuming the objects of the new plan to have been, to assimilate the Hospitals and the service thereof in time of peace, to what they must necessarily become in time of war; the questions to be solved are: How to retain the advantages of General and Station Hospitals without altogether foregoing the advantages of the Regimental system? and, How to relieve Medical Officers from the charge of stores and other duties not strictly

[1] Vide Lord Herbert's letter, 9th July, 1858. Para. 7, Page 10. *Medical Regulations.*

professional, [1] without restoring the Purveyors' Department, the constitution of which was faulty?—I apprehend these changes can be effected without difficulty, and without materially altering the present plan, in fact, I believe such a system as I propose was carried on partially in China in 1859, and more extensively in New Zealand during the years 1860 to 1864; in the latter campaign so far satisfactorily, that I can with confidence appeal to the General Officers in command whether the Medical arrangements met the requirements of the sick and wounded of an army of 17,000 men, including Militia and Naval Brigade, scattered over a large area, necessitating no less than seventy Hospitals containing from ten to two hundred beds each, and designated *Detachment, Field*, or *General Hospitals*. The plan followed was simply to increase the Medical Staff and the Medical Officers of Regiments to a war footing, giving the P. M. O. full power to move Medical Officers wherever their services were required, and the only difficulties that arose during the Campaign were attributable to the circumstance that the Purveyors were independent of the Medical Department instead of being subordinate to it.

I would therefore suggest a reversion to the Regimental System, thus, give each Regiment at home a Surgeon-Major and Surgeon, and each Regiment abroad a Surgeon-Major and *two* Surgeons, in time of peace the juniors would perform the Barrack duty, examine prisoners, attend women and children; in time of war he would invariably accompany his Regiment into camp and into action; in time of peace the others would do duty in the Station Hospitals, but in time of war the second Medical Officer would do duty in the Field Hospital of the Brigade, the senior in the General Hospital of the Division. This plan would render every Division taking the Field complete in its Medical arrangements, as follows:—Supposing the Division to have four Brigades and each Brigade to be composed of six Regiments, (including Cavalry and Artillery) there would be

1. A Divisional General Hospital in the rear with twenty-four Regimental Surgeons—Major doing duty.

2. Four Field Hospitals, *i.e.*, one to each Brigade, six Regimental Surgeons doing duty in each.

[1] Dr. John Sutherland says (28th Nov., 1866) "The present Purveying System in its relation to the present Medical System, is the result of a long enquiry made in 1857, by a Royal Commission on which I had the honor to serve. Acting upon the recommendations of that commission, the S. S. for War directed that its decision should be embodied in separate regulations.—There are two codes of regulations, therefore, that bear upon this point; the one the Medical Regulations for the guidance of Army Medical Officers, and the other the Purveyors' regulations for the guidance of the Purveyor and his Officers. These were so arranged with regard to one another as to embody the great principle which was absolutely necessary, as he considered, for the future well-being of the Soldier, both at home and in the field, especially the latter, viz.—separating completely and distinctly the responsibilities of the Medical Officer from the responsibilities of the Purveying Officer, so that the Medical Officer should have nothing to do but to attend to the Medical or Surgical well-being of his sick, and that the Purveying Officer should furnish what was necessary according to fixed scales."—*Report of Committee on Transport*, 1867.

3. One Regimental Surgeon in the Field with each corps always.

This system, leaving the Administrative Medical Officers to be appointed by the Director General, would probably with some extra men at the base of operations to meet casualties, etc., meet all requirements, as well as or, better than any other plan. Medical Officers would again have all the advantages of Regimental life secured to them, permanently in time of peace, a temporary severance to no great distance in the rear being required on active service only.

The Soldiers now discontented at the loss of their tried and valued friends would again be satisfied, for whether they were admitted to the Station Hospital during peace, or the Hospital of the Brigade or Division in the field, they would always find one Regimental Doctor who knew their habits, character, constitution, and previous history, ready to interest himself in their welfare; benefits lost in the new system, under which, the constant change of Medical Attendants must be injurious.

Young Officers should as a rule be posted to Regiments where they would acquire habits of discipline and learn the routine duties of the Service under a Senior.

It would not be necessary to abrogate the late warrant or to restore to Regiments Hospitals, Hospital Sergeants or Orderlies, these with Compounders, etc., would belong to stations as at present and by having permanent Surgeries there would be no loss or destruction of property by conveyance from place to place of Medicine Chests, etc.

The Station Hospitals would continue to receive all the sick of *Garrisons*, but arrangements could easily be made to admit of Medical Officers treating and looking after their own men, in contiguous beds and wards, [1] as far as practicable and consistent with classification of diseases, but all under the superintendence of a Senior Medical Officer.

Now that the Purveyors' Department has been abolished, and the Army Hospital Corps raised, its strength should be increased, and arranged in *Two Branches*, the first an Hospital Store Branch, whose duty it should be to receive in gross from the Control Department the various supplies of provisions and stores necessary for an Hospital,

1 Sir George Ballingall says "Independently of the usual and most important "arrangement of patients according to the diseases under which they labour, it may "be useful to subdivide the sick according to the Divisions, Brigades, or Regiments, "to which they belong; so that Medical Officers, Divisions, and Brigades, when "serving in these General Hospitals, may have their respective charges concentrated "as much as possible; while by the mere juxtaposition of men belonging to the same "Regiment, the steady Soldier or Non-Commissioned-Officer who feels for the "character of his Corps, may have a vigilant and controlling eye over those who "may be disposed to irregularities, idleness, or malingering."—
Military Surgery. Page 84.

their issue in detail and the proper accounting for such issues. The ranks should be

1. Hospital Store-keeper.
2. Steward.
3. Assistant Steward.

The second branch charged with the personal care, feeding, and nursing of the sick, consisting of

1. Wardmasters.
2. Compounders.
3. Orderlies.
4. Cooks.

The Officers of the Army Hospital Corps should be Captains and Lieutenant of Orderlies, and Apothecaries, or better still, Quartermasters, and could be appointed in such proportions and at such stations as were deemed necessary, and they would be charged with the payment and dicipline of the Corps, and be responsible for all *stores and supplies* in use; leaving to the Apothecaries the duties they originally performed.

Privates for the Army Hospital Corps should not be enlisted direct, but should be taken from Regiments, after two years service in the ranks, when they have acquired habits of discipline. Old Soldiers of good character might also, if fit for Hospital duties, be allowed to complete their service as Hospital Orderlies at home instead of going abroad with their Regiments.

The Hospital Store-keepers or holders should not rank as Officers; but these appointments should be given as prizes to the Non-commissioned Officers of the Army Hospital Corps, with Warrant rank, in the ranks of which men perfectly qualified can be found. The appointment of these subordinates would relieve Medical Officers of much unprofessional labour, and leave them more time to devote to their strictly medical duties. All these branches, as well as the Medical Staff, would be under the P.M.O., who should be the supreme authority in an Hospital.

During war, an Officer of the Control Department should be detailed for the express purpose of supplying food and stores, in bulk,

2 Sir Charles E. Trevelyan says "This short summary of the French Hospital system clearly indicates the causes of our failure at Scutari. Our administrative staff was totally insufficient, the sick and wounded were attended by convalescent and other Soldiers, who were attached to the Hospitals because they were unfit for Military, not because they were fit for Hospital duty; and our Medical men were embarrased by having to add to the absorbing cares and anxieties of their own profession, the inconsistent duties of Steward and Purveyor. Two classes of functionaries must be combined to produce efficiency in a Military Hospital; the Medical men who prescribe medicines, and direct the mode of treatment and the description of food; and the intendants and their agents whose care it should be to see that all things necessary to carrying out the Medical prescriptions are punctually supplied."—
Report of Committee on Transport, 1867.

to each large Hospital, and another to the Hospital of each Division.

With regard to the second paragraph, which refers to the slowness of promotion, it is felt that some special measure is at the present time needed to remedy the stagnation complained of, such as has been necessary in the Royal Navy, the Royal Artillery, the Indian Army, etc.

A bonus should be offered to a certain number of the senior Officers, *annually*, to induce them to retire, the scale of retirement for all ranks should be revised, and the terms proposed by the British Medical Association for the Medical Officers of the Royal Navy might be extended to Army Medical Officers. This, with a limited number of permissive retirements, annually, in the executive ranks, where the Officers have become inefficient from ill health or age, at one shilling per diem for each year's service, would tap the top of the Department, secure a steady flow of promotion, and do much to restore the hopes and prospects of the juniors who are now despondent, and have little or no chance of promotion to the higher grades.

It may be urged that these schemes for retirement have failed in the Army and elsewhere, and have put a number of young men out of active employment; but I only propose to extend the bonuses and permissive retirements to old and worn-out Officers who have lost their health in the Service, so that the objections do not apply.

The ages of compulsory retirement might remain as at present, but a limit might be fixed for the tenure of office in the highest rank, so that no one officer should be able to hold a lucrative appointment three times.

With respect to paragraph three and the question of dress, Medical Officers should (I venture to think) wear the dress of the Corps to which they are appointed, with the distinctive professional dress belt, doing away with the useless cocked hat, which in the Cavalry and Artillery is ridiculous and inconvenient; it might however be retained for the administrative ranks *only*. In most Foreign Armies all ranks wear the same head dress, generally a Helmet. In the Indian Army this is universal, and no inconvenience results; but to dress 800 men in one way and the 801st in a different way makes a man conspicuous and ridiculous; and to this Medical Officers object. The distinctive stars and crowns worn by Medical Officers might be of black velvet, on scarlet coats, and of scarlet velvet, on blue coats, so that they should not be mistaken for other Officers.

In action, the red cross would sufficiently distinguish all.

In the matter of *status* the rank and position of Medical Officers should be more clearly defined, and they should have all the advantages of other Officers of corresponding rank, except of course, command. We were led to believe that the relative rank conferred upon us by the Royal Warrant of 1858, carried with it all the advantages of corresponding ranks such as social *status*, choice of quarters, and allowances,

instead of which on going to India the Warrant was found to be nul and void in the most important matter of pay, so that an Administrative Officer received only the pay of the rank below him, and the other advantages were abrogated one by one by illiberal interpretations. Medical Officers only ask that they shall be treated in all respects as other Officers are, and that they should pay mess and band subscriptions as other Officers do on appointment or exchange; but when removed from a Regiment for the convenience of the Service some remission might be made. Forage allowance should be given to every Officer possessing Field Officer's rank, every Regimental Surgeon-Major should be mounted, for Staff-Officers the forage allowance might be included in a consolidated pay. Deputy Surgeons-General should on appointment as P.M.O. rank with Colonels, promotion bringing no increase of rank. [1] The step of honorary rank given on retirement should carry with it Widow's pension and compassionate allowances; but no other pecuniary advantage. In the above sketch, I have endeavoured to reconcile the two systems, with the view of improving the position of the Department at little cost, while its efficiency is augmented by the recovery of such advantages as the old system possessed. In fact, all the proposed advantages and improvements could have been carried out without the hasty separation of Medical Officers from their Regiments: an ill judged measure which has produced more despair in the Department then anything I can remember.

In regard to leave, Regimental Medical Officers should be on the same footing as the other Officers of Regiments, one at a time should be allowed to go on long leave 2½ months after the General Inspection, as the other Officers do, provided he can be spared and no inconvenience results; of this the Commanding Officer, the principal Medical Officer, and the General should be the judge; but to limit one Officer of a Regiment to 60 days and to allow his brother Officers twice or thrice as much if they wish it is an invidious distinction which produces discontent, more especially as the Medical Officer has to make a private arrangement for the performance of his duties during his absence. When Medical Officers are serving at home they should be allowed every indulgence in the matter of leave; for when they go abroad leave to them is generally impossible, or if possible, useless, from the distance. Then as to sick leave, a Medical Officer returning from abroad is placed on half-pay or removed from his Regiment, if unable to rejoin in six months, while an Executive Officer who, perhaps comes home with him may have his sick leave extended to two years or more without being placed on half-pay or removed from his Regiment.

There are still some other points of considerable importance,

1 At present neither the Surgeon-General or Deputy Surgeon-General obtain their proper rank on promotion, this is contrary to the established usage of the Service both in the Army generally and in the Civil Departments.

which in the interests of the Department are worthy of consideration and which have been a source of much heart-burning and discontent: I allude to the unsatisfactory manner in which the roster for Foreign Service has been kept, by which a favoured few by renewal of appointment have been able to obtain an undue share of Home Service, of course at the expense of their less fortunate brethren, and this without losing any of the substantial advantages of the Service, on the contrary some have secured by their stay at home, promotion over the heads of their seniors serving abroad. On the subject of the Roster, I can speak feelingly, having been myself summarily placed on half-pay, shortly after my return home from a long tour of Service in the Field abroad, while temporarily indisposed; the reason assigned being that I was first on the Roster, while there was an Officer of my own rank who had not been out of London for nearly fifteen years whose proper turn it was to go. This is by no means a solitary case, but it is one of the abuses calling for redress. Complaints regarding the roster are so numerous, and the principles on which it is managed so little understood, that a wish exists in the Department that the list should be kept hung up in the Army Medical Office for every one's inspection and information, and that it should be rigidly enforced. As the average of Home Service for all ranks little exceeds three years, it seems to me only right that every Officer holding a Staff-appointment in Whitehall-Yard, Netley, or elsewhere, should be at once placed on the roster for Foreign Service and obliged to go abroad in their turn, or be placed on half-pay. Many would choose the latter alternative, but promotion would be accelerated in either case, for those who retired would give a step and the mortality among those who elected to go abroad would be greater than if they remained at home. In fact, according to Dr. De Chaumont's exhaustive statistical paper, the mortality in the Army Medical Department is more than double that of the same age at home, hence the more than unfairness of allowing Officers under any pretext a renewal of appointment and a comparative exemption from foreign service, as has too often been the case. A stroke of the pen would remedy this, give general satisfaction to the working members of the department, and do no injustice to any one. It is also felt that some limit should be fixed for the occupants of the professorial chairs (which are at present unlimited) and that the appointments should not be for life, unless seconded. The question of promotion should be placed on a more definite, and satisfactory footing; while long and faithful perhaps unobtrusive service, should always entitle to promotion by seniority,[1] there should be special promotion for distinguished service in the Field, which is one of the best tests of a Medical Officer's professional capacity and administrative ability; if such promotion were made supernumerary to the establishment, Officers would obtain their just

1 The late Sir J. Hall when asked his opinion as to promotion—by seniority or selection—replied if made by seniority, "God bless the department," if by selection, "God help the man who made the choice."

reward without detriment to their brother Officers.

For distinguished conduct or personal bravery in the Field, there are other rewards which could be given to those who deserve them, but it should not be promotion which ought as far as practicable to be given for good service, exceptional professional acquirements, zeal and proficiency. This would limit selection which is dangerous ground in such a department, it being almost an axiom in Medical Ethics that no one Medical man is competent to express an opinion as to the professional qualifications of any other. Good character and conduct are not alone sufficient to warrant selection.

I venture to think that it would be well were there on the part of the authorities a careful consideration for the feelings of men often highly educated for a learned and invaluable profession entering the service comparatively late in life, who should be placed on a footing similar to that of officers of the scientific branches of the service, if this were so, we should not see a Medical Officer holding the relative rank of a Major-General, with a Lieutenant-Colonel placed over him *in an Hospital* as Commandant, nor would the head of the largest department in the service be rewarded with a salary of £1,500 a year, which is £500 less than he received forty years ago when money was proportionately more valuable, and when the department was less than half its present size.

I have good authority for saying that some eminent men in the profession who are probably not aware of our difficulties, have asserted that we do as a rule keep up our knowledge, "*au courant de jour*," without however admitting this assertion which I feel confident a perusal of the records in the office of the Medical Department as well as of the Departmental Blue Book would go far to disprove, I would remark that it is well known, good men have for many years past been selected by the examiners for the Medical Department of the Army, and if they become after a long tour of Foreign Service somewhat behind their professional brethren in civil life in London, who have daily intercourse with each other and all the advantages of large Hospitals, Libraries, and good Schools, it is the conditions of the service to which they must submit their isolated position and wandering life, that is to blame more than the individual. Perhaps it is not generally known that Medical Officers have at their own expense established, and by means of monthly subscriptions among themselves, keep up Medical Libraries at all the large Stations both at home and abroad and I would suggest for the consideration of the Government, the advisability of encouraging and fostering so praiseworthy an effort by voting a small sum annually to supply these Libraries with the best Standard Medical Works as they are published, this is the more necessary as the quantity of Baggage allowed to each Officer is necessarily fixed at as low a scale as possible, and allows a very small margin for the carriage of professional Books or Instruments.

Although the Confidential Reports have been amended, they are

still somewhat inquisitorial in character, there is no good reason why the character and conduct of Medical Officers should not be reported on by Commanding and General Officers as other Officers are, this would relieve Medical Men from the unpleasant duty of periodically reporting upon each other, a duty which is exceedingly distasteful. When reports are prejudicial the Officer should be informed of the grounds of complaint that he may have an opportunity of explanation, which has not always been the case hitherto.

I am aware the advocates of the new system expect from it a considerable saving of expenditure, but I believe experience will prove these expectations to be fallacious, and that what is saved in one direction will probably be spent in another; for example, it will cost many thousand pounds to procure barrack accommodation for the men displaced, to give the Surgeon a waiting room and office in each barrack in Great Britain, not to estimate the enormous cost of providing such accommodation in the Colonies and India. However this may be, as it is not intended to go back to the system of giving each Regiment a separate Hospital, as was the case formerly, and as there is no increase in the strength of the Department, or its pay, the proposed changes involve no further expenditure over the present, beyond the trifling bonuses required to induce a few old worn-out Officers annually to retire; an expenditure in the right direction and essential to facilitate retirement and accelerate promotion.

But even were the expenditure greater, I would ask is economy to be preferred to the efficiency of the Service? is the welfare of the Soldier to be sacrificed for a few pounds? Would any man of sense when ill prefer a stranger to his family Physician because he saved a trifle thereby?

So far as the Southern District is concerned, the working of the new system has shewn a marked increase in the number of admissions into Hospital, and also an increase of the time each Soldier is under treatment. If this continues and is the case elsewhere, the expenditure of the Hospitals will be very materially increased, and the number of men in Barracks to a corresponding degree diminished. This was just what happened during the Peninsular War, when the Sick and Wounded are described as hurrying to the General Hospitals in the rear by hundreds and thousands. On this subject the late Commissary General Sir. E. P. Coffin says "Regimental Hospitals "were found to work so advantageously in the Peninsula, and were "consequently so much preferred and encouraged by the Duke of "Wellington during the latter years of that War that they ought not "to be kept out of sight. A Soldier sent to a General Hospital used "to be considered as nearly lost to the Army, while those capable of "being treated in the Ambulatory Hospitals moved with each "Regiment were for the most part speedily restored to the ranks, as "malingerers there could find no refuge, while good men were spared "the misery of the middle passage between the Army and the General

"Hospital, enough to make patients of even those who were sound, "and serving to aggravate slight cases into serious ones."

Sir James McGrigor says "By making every Corps keep up an "Establishment for itself, we could prevent the General Hospital from "being crowded. Much severe and acute disease was treated in its "early and only curable stage, and no slight wounds or ailments were "ever sent off from the Regiment; by which means the effective "force of the Army was kept up, or perhaps increased by several "thousand men."

This proves the necessity of the careful examination of men by experienced Regimental Surgeons before they are passed to the rear in an Army like ours, the strength of which is limited, and the reinforcements for which are not likely to be over abundant, and that however suitable General Hospitals may be for Nations possessing large Armies where any number of men can be procured by conscription to replace the Sick they are not wholly suitable for us who must keep every available man to the front and jealously watch those anxious to go to the rear.

The clerical labours of the Officers of the Department should be reduced as much as possible, the absurdity of the Surgeon being required to write the extras he prescribes for a patient, first on the man's diet sheet verified with his initials and signature on discharge, and again in the Medical Register is an unnecessary repetition without object, now that the Diet sheets are retained in the office of the P.M.O. where they can always be referred to, and do not go to the Control department as formerly.

The number of Medical books, forms, returns, etc., should be lessened—they are considerably increased by the new system. A weekly state of sick of each Regiment should suffice for all purposes. Four weekly states would then give the monthly sickness, and fifty-two weekly states would give the annual sickness if required, but this compilation should be made in the statistical branch of the Army Medical Department at Head Quarters.

The amount of irritation at present caused in the Department by the unnecessary returns which record little or nothing is immense, for Regimental Surgeons have been deprived of their Hospital Sergeants who used to assist in the preparation of these documents, but if the returns as at present are to be continued, then each Regimental Surgeon should be allowed a paid writer to prepare them.

The Medical Regulations should be carefully revised, all that is obsolete expunged, while any of the Purveyors' regulations which still apply should be extracted and embodied in one volume.

I have not gone into the question of the accumulation of disease in General Hospitals which is objectionable in principle, because diseases are aggravated and Pyœmia, Gangrene, and other contagions generated, and mortality, of course, multiplied, because I intend to

discuss this in another professional paper, it is sufficient for my present purpose to bear in mind that General Hospitals have always been necessary evils, in which men acquire slovenly, irregular, and unsoldier-like habits, where misconduct is not easily repressed, particularly in war time, and where malingerers find a refuge when their services are most required in the field.

The modified plan proposed by me will tend to remove some of these objections by securing as far as possible the treatment of each Soldier by a Doctor in whom he has confidence, and who knows all about him.

It is not contended that the above suggestions contain anything very novel or all that should be done to ameliorate the condition of the Department, but if they contribute in any degree to assist in removing the discontent now existing, by inducing the Government to look into the well founded grievances of the largest and not least important scientific Department in the service. I shall not regret having undertaken the unpleasant task of bringing the subject to notice, and in doing so I trust I have not in any way exceeded my duty.

J. MOUAT, Surgeon General.

Portsmouth, November, 1874.

Gardner, Printer, Portsea and Southsea.

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Proposals for the Re-Introduction

OF THE

REGIMENTAL SYSTEM,

IN A MODIFIED FORM,

AND

Suggestions for the Removal of some of the Grievances of Officers of the Army Medical Department.

BY

SURGEON-GENERAL MOUAT, C.B., V.C.

[PRINTED,—NOT PUBLISHED.]

Gardner, Printer, Portsea and Southsea.

Proposals for the re-introduction of the Regimental System, in a modified form, and suggestions for the removal of some of the Grievances of the Army Medical Department.

THE changes effected by the Warrant of last year, in the internal economy of the Medical Department of the Army, have been productive of so much discontent, both among Medical Officers, Commanding Officers, and the rank and file of the Army in general, and press so heavily upon the Executive of the Department, that, as one of the oldest Administrative Officers in the Service, I trust I may be excused for presenting the following scheme, planned with the view of removing some of the most reasonable complaints against the new system, while retaining those portions of it which are advantageous to the Service.

The principal grounds of discontent may be considered under three heads:—

1. Those referable to the introduction of the *new system, termed "Unification,"* by which the old Regimental Hospital System was abolished, and new duties of an unprofessional character, at variance with the recommendations of the late Lord Herbert, of Lea, were imposed on the Department. [1]

2. *The slowness of promotion*, due to the great increase in the numbers of the department rendered necessary during the Crimean War and Indian Mutiny, further increased by the insufficient inducements *to retire held out to the higher ranks.*

3. Grievances chiefly of a *professional and social character*, including the subject of dress, social *status*, forage and other allowances, to which may be added *invidious distinctions as to leave*, the inequality of home and foreign service, etc.

With regard to the first paragraph, admitting the unsuitability of the purely Regimental Hospital System in time of war, excellent as it always has been in peace, and assuming the objects of the new plan to have been, to assimilate the Hospitals and the Service thereof in time of peace, to what they must necessarily become in time of war; the questions to be solved are: How to retain the advantages of General and Station Hospitals without altogether foregoing the advantages of the Regimental System? and, How to relieve Medical Officers from the charge of stores and other duties not strictly

1 Vide Lord Herbert's letter, 9th July, 1858. Para. 7. Page 10. *Medical Regulations.*

professional, [1] without restoring the Purveyors' Department, the constitution of which was faulty? I apprehend these changes can be effected without difficulty, and without materially altering the present plan, in fact, I believe such a system as I propose was carried on partially in China in 1859, and more extensively in New Zealand during the years 1860 to 1864; in the latter campaign so far satisfactorily, that I can with confidence appeal to the General Officers in command, whether the Medical arrangements then made met the requirements of the sick and wounded of an army of 17,000 men, (including Militia and Naval Brigade) scattered over a large area, necessitating no less than seventy Hospitals, containing from ten to two hundred beds each, and designated *Detachment, Field* or *General Hospitals.* The plan followed was simply to increase the Medical Staff and the Medical Officers of Regiments to a war footing, giving the P. M. O. full power to move Medical Officers wherever their services were required, and the only difficulties that arose during the Campaign were attributable to the circumstance, that the Purveyors were independent of the Medical Department instead of being subordinate to it.

I would suggest a reversion to the Regimental System, so far as to give each Regiment at home a Surgeon-Major and Surgeon, and each Regiment abroad a Surgeon-Major and *two* Surgeons; in time of peace the juniors would perform the Barrack duty, examine prisoners, attend women and children; in time of war he would invariably accompany his Regiment into camp and into action; in time of peace the others would do duty in the Station Hospitals, but in time of war the second Medical Officer would do duty in the Field Hospital of the Brigade, the senior in the General Hospital of the Division. This plan would render every Division taking the Field, complete in its Medical arrangements, as follows:—Supposing the Division to have four Brigades, and each Brigade to be composed of six Regiments, (including Cavalry and Artillery) there would be

1. A Divisional General Hospital in the rear with twenty-four Regimental Surgeons Major doing duty.
2. Four Field Hospitals, *i.e.*, one to each Brigade, six Regimental Surgeons doing duty in each.

1 Dr. John Sutherland says,—(28th Nov., 1866)—"The present Purveying System in its relation to the present Medical System, is the result of a long enquiry, made in 1857, by a Royal Commission, on which I had the honour to serve. Acting upon the recommendations of that commission, the S.S. for War directed that its decision should be embodied in separate regulations.—There are two codes of regulations, therefore, that bear upon this point: the one, the Medical Regulations, for the guidance of Army Medical Officers, and the other the Purveyors' Regulations for the guidance of the Purveyor and his Officers. These were so arranged with regard to one another, as to embody the great principle which was absolutely necessary, as he considered, for the future well-being of the soldier, both at home and in the field, especially the latter, viz.—separating completely and distinctly the responsibilities of the Medical Officer from the responsibilities of the Purveying Officer, so that the Medical Officer should have nothing to do but to attend to the Medical or Surgical well-being of his sick, and that the Purveying Officer should furnish what was necessary, according to fixed scales."—*Report of Committee on Transport*, 1867.

3. One Regimental Surgeon in the Field with each corps always, *i.e.*, Six Surgeons with each Brigade in the Field.

Taking the number of Regiments to be provided for as 200, and allowing three Medical Officers to each Regiment abroad and two to each Regiment at home, would absorb about 500 out of the number now in the department, leaving 500 Staff Appointments for those who prefer Staff to Regimental life, so that Officers could serve with Regiments, or in Station or General Hospitals, as they deemed preferable. This system, leaving the Administrative Medical Officers to be appointed by the Director General, would, probably, with some extra men at the base of operations to meet casualties, etc., meet all requirements, as well as, or better than, any other plan. Medical Officers would again have all the advantages of Regimental life secured to them permanently in time of peace, a temporary severance to no great distance in the rear being required on active service only.

The Soldiers, now discontented at the loss of their tried and valued friends, would again be satisfied; for, whether they were admitted to the Station Hospital during peace, or the Hospital of the Brigade or Division in the field, they would always find one Regimental Doctor who knew their habits, character, constitution, and previous history, ready to interest himself in their welfare; benefits, lost in the new system under which the constant change of Medical Attendants, must be injurious.

Peace with us is the rule—war is exceptional and rapid, no arrangement we can make in peace time will ever be equal to the emergencies that will then arise. General Hospitals, Civilian Medical men, Volunteer Ambulances, added to our own Department, will all be insufficient to relieve the horrors of a European Battle-field in future; and those who delude themselves with the idea that 1000 Doctors on the Staff will work harder and prove more efficient than the 500 Staff and 500 Regimental we have hitherto had, are resting upon a broken reed; what we want, is, better organization, and more power to ensure perfect arrangements and sufficient supplies, carriage, etc. It is the administration that is vacillating and imperfect. The Executive Medical Officers will always be in the same degree useful whether styled Staff or Regimental.

Young Officers should, as a rule, be posted to Regiments where they would acquire habits of discipline and learn the routine duties of the Service under a Senior, the moral effect of a well-conducted Mess are too well known to be despised by any administrator having the welfare of the department at heart. To carry out this plan it would not be necessary to abrogate the late warrant, or to restore to Regiments, Hospitals, Hospital Sergeants, or Orderlies, these, with Compounders, etc., would belong to stations as at present, and, by having permanent Surgeries, there would be no loss or destruction of property by conveyance from place to place of Medicine Chests, etc.

The Station Hospitals would continue to receive all the sick of *Garrisons*, but arrangements could easily be made to admit of Medical

Officers, treating and looking after their own men, in contiguous beds and wards, [1] as far as practicable and consistent with classification of diseases, but all under the superintendence of a Senior Medical Officer, who should be a Deputy Surgeon General in large Hospitals.

Now that the Purveyors' Department has been abolished and the Army Hospital Corps raised, its strength should be much increased and arranged in *Two Branches*; the first an Hospital Store Branch, whose duty it should be to receive in gross, from the Control Department, the various supplies of provisions and stores necessary for an Hospital, their issue in detail, and the proper accounting for such issues. The ranks should be

1. Hospital Store-keeper.
2. Steward.
3. Assistant Steward.

The second branch charged with the personal care, feeding, and nursing of the sick, consisting of

1. Wardmasters.
2. Compounders.
3. Orderlies.
4. Cooks.

If Officers of the Army Hospital Corps are neeessary, they should be Captains and Lieutenant of Orderlies, or better still, Quartermasters who could be appointed in such proportions and at such stations as were deemed necessary; they would be charged with the payment and discipline of the Corps, be responsible for all *equipments, stores, and supplies*, the cleanliness of wards, passages, and buildings generally, and responsible that everything necessary for the sick were punctually supplied, leaving to the Apothecaries the duties they originally performed. These Officers should clearly understand they are merely aids to the Principal Medical Officer, and not independent of him.

Privates for the Army Hospital Corps should not be enlisted direct, but should be taken from Regiments, after two years service in the ranks, when they have acquired habits of discipline. Old Soldiers of good character might also, if fit for Hospital duties, be allowed to complete their service as Hospital Orderlies at home, instead of going abroad with their Regiments.

But if the Army Hospital Corps were specially constituted, having a code of its own, with peculiar punishments in the shape of fines,

1 Sir George Ballingall says—"Independently of the usual and most important arrangements of patients according to the diseases under which they labour, it may be useful to subdivide the sick according to the Divisions, Brigades, or Regiments, to which they belong; so that Medical Officers, of Divisions, and Brigades, when serving in these General Hospitals, may have their respective charges concentrated as much as possible; while by the mere juxtaposition of men belonging to the same Regiment, the steady Soldier or Non-Commissioned Officer who feels for the character of his Corps, may have a vigilant and controlling eye over those who may be disposed to irregularities, idleness, or malingering."—*Military Surgery. Page* 84.

to be inflicted by the Senior Medical Officer. Any serious offence which a pecuniary mulct could not deal with, to be *visited by immediate* transfer to a Regiment, or dismissal, then there would be no difficulty in giving the entire charge of the Corps to the Medical Officers of the Department, and the present necessity for a Military Commandant at a General Hospital, and the anomaly of the position of Captain of Orderlies would be avoided. In which case Sergeant Majors would be the highest rank, and there could then be no clashing of authority.

The Hospital Store-keepers, or holders, should not rank as Officers, but have Warrant rank, these appointments should be given as prizes to the Non-commissioned Officers of the Army Hospital Corps, in the ranks of which men perfectly qualified can be found. The appointment of these subordinates would relieve Medical Officers of much unprofessional labour, and leave them more time to devote to their strictly medical duties. [1] All these branches, as well as the Medical Staff, would be under the Principal Medical Officer, who should be the supreme authority in an Hospital, in fact, a sort of "Medical Controller and Commandant combined."

Medical Officers are as well qualified to exercise authority over the Army Hospital Corps as Control Officers over the Army Service Corps, they do not desire power, but if responsibility is exacted, the necessary authority to ensure successful administration should be granted. [2]

During war, an Officer of the Control Department should be detailed for the express purpose of supplying food and stores, in bulk, to each large Hospital, and another to the Hospitals of each Division.

With regard to the second paragraph, which refers to the "*slowness of promotion*," it is felt that some special measure is at the present time needed to remedy the stagnation complained of, such as has been necessary in the Royal Navy, the Royal Artillery, the Indian Army, etc.

A bonus should be offered to a certain number of the Senior Officers, *annually*, to induce them to retire, the scale of retirement for all ranks should be revised, and the terms proposed by the British

1 Sir Charles E. Trevelyan says,—"This short summary of the French Hospital system clearly indicates the causes of our failure at Scutari. Our administative staff was totally insufficient, the sick and wounded were attended by convalescent and other Soldiers, who were attached to the Hospitals because they were unfit for Military not because they were fit for Hospital duty; and our Medical men were embarrased by having to add to the absorbing cares and anxieties of their own profession, the inconsistent duties of Steward and Purveyor. Two classes of functionaries must be combined to produce efficiency in a Military Hospital; the Medical men who prescribe medicines, and direct the mode of treatment and the description of food; and the intendants and their agents whose care it should be to see that all things necessary to carrying out the Medical prescriptions are punctually supplied."—*Report of Committee on Transport*, 1867.

2 In the instructions for Military Hospitals, issued at Berlin in 1869, the rule is thus laid down:—"The Chief Surgeon has command over the Field Hospital. The Military, Medical, and Administrative *personnel* must obey him unconditionally."

Medical Association for the Medical Officers of the Royal Navy might be extended to Army Medical Officers. This, with a limited number of permissive retirements, annually, in the executive ranks, where the Officers have become inefficient from ill health or age, at one shilling per diem for each year's service, would tap the top of the Department, secure a steady flow of promotion, and do much to restore the hopes and prospects of the juniors who are now despondent, and have little or no chance of promotion to the higher grades.

It may be urged that these schemes for retirement have failed in the Navy and elsewhere, and have put a number of young men out of active employment; but I only propose to extend the bonuses and permissive retirements to old and worn-out Officers who have lost their health in the Service, so that the objections do not apply. The number of Beneficial Appointments in the British Medical Department are too few, there being only about 40 Administrative to about 1100 Executive Officers. In the French Army there are 87 superior appointments to 1190 or more than double our proportion; I would therefore propose an increase in the number of Deputy Surgeons General, and give one such Officer to Ceylon, one to Mauritius, one to Jamaica, another to the West Coast of Africa, adding to their administrative duties, in small stations, the professional care of the Staff and Departments; I would also recommend that a Deputy Surgeon General be appointed Senior Medical Officer of each large Station Hospital, both at home and abroad, containing 200 beds, there would then be a fair proportion of Administrative Officers ready to take the field in the event of war, which we certainly have not now. [1]The Senior Surgeon-Majors should go through a course of instruction to qualify them for administrative duty in the field. I know of one Officer qualified to impart this instruction, but the Government have lost his services by allowing him to retire without honour or reward, after many years of faithful and valuable service.

The ages of compulsory retirement might remain as at present, but a limit ought to be fixed for the tenure of office in the highest rank, so that no one Officer could hold a lucrative employment more than once. If the measures proposed are carried out liberally, I am of opinion that the old average of promotion for Surgeons after 9 years will soon return, while I fear if promotion, after 12 years, were made the rule, it might subsequently be adhered to. I consider that 12 years is too long to keep Surgeons without a step.

With respect to paragraph three and the question of "*dress*," Medical Officers should, I venture to think, wear the dress of the Corps to which they are appointed, with the *distinctive professional dress belt*, doing away with the useless cocked hat, which in the Cavalry and Artillery is particularly inconvenient; it might, however, be retained for the administrative ranks *only*. In most Foreign Armies all ranks wear the same head dress, generally a Helmet. In the

1 Who might be termed Staff Surgeon-Majors or Brigade Surgeons.

Indian Army this is universal, and no inconvenience results; but to dress 800 men in one way and the 801st in a different way, makes a man conspicuous and ridiculous; and to this Medical Officers object. The stars and crowns worn by Medical Officers might be of black velvet on scarlet coats, and of scarlet velvet on blue coats, so that they should not be mistaken for other Officers, which they do not desire.

In action, the red cross would sufficiently distinguish all.

In the matter of *status*, the rank and position of Medical Officers should be more clearly defined, and they should have all the advantages of other Officers of corresponding rank. In private life, the advancement of the Medical profession in influence and authority is more fairly acknowledged, although not yet what it ought to be; but the social position and influence of the Army Surgeon, though rising day by day, is not so satisfactory, for we find that any redress of our grievances, which public opinion at one moment forces on the Authorities, is as speedily as possible thereafter nullified; in fact, our grievances are less occasioned by curtailment of emolument than by curtailment of those rights and privileges which the Authors of previous Warrants have tried to give us; I feel sure, that if the Military Authorities would concede to the Officers of the Department absolute equality with the combatant branches, we should hear of few complaints; but we shall probably have to go through a prolonged and disastrous war before the necessity of a change so opposed to present ideas and conceptions becomes apparent. We were led to believe that the relative rank conferred upon us by the Royal Warrant of 1858, carried with it all the advantages of corresponding ranks, such as precedence, choice of quarters, and allowances; instead of which, on going to India, the Warrant was found to be null and void in the most important matter of pay, so that an Administrative Officer received only the pay of the rank below him, and the other advantages were abrogated one by one by illiberal interpretations. Medical Officers only ask that they shall be treated in all respects as other Officers are, and that they should pay mess and band subscription as other Officers do once on appointment, but when removed from a Regiment for the convenience of the Service, remission might be made. Forage allowance should be given to every Officer possessing Field Officer's rank, every Regimental Surgeon-Major should be mounted; for Staff Officers the forage allowance might be included in a consolidated pay, which should include the pay of a groom; Deputy Surgeons-General should, on appointment as Principal Medical Officer, rank with Colonels, promotion bring to them no increase of rank or allowances, the latter being on the same scale as for Officers of 15 years service. [1] The step of honorary rank, given on retirement,

1 At present neither the Surgeon-General or Deputy Surgeon-General obtain their proper rank on promotion, this is contrary to the established use of the Service both in the Army generally and in the Civil Departments.

should carry with it Widow's pension and compassionate allowances but no other pecuniary advantage. In the above sketch, I have endeavoured to reconcile the two systems, with the view of improving the position of the Department at little cost, while its efficiency is augmented by the recovery of such advantages as the old system possessed. In fact, all the proposed advantages and improvements could have been carried out without the hasty separation of Medical Officers from their Regiments, an ill judged measure which has produced more despair in the Department than anything I can remember.

Day by day, Medical Officers are ordered to India and elsewhere, and many experience for the first time the difference it makes going abroad on the Staff instead of as formerly with their Regiments; in the one case they are alone and neglected, passage for their wives and families often refused on the ground that there is no room for them; in the other they carried their homes, friends, and servants with them, and transportation was thus robbed of at least half its discomfort. Why the wives and families of Regimental Subalterns and Quarter-Masters should be provided with passages in troop-ships, and the wives of Medical Officers be left behind (as has happened lately,) is somewhat difficult to explain, except that at present no one seems to take any interest in the Officers of so unfortunate a Department.

Medical Officers who have had a fair share of Foreign Service should be allowed to exchange as other Officers do; but I do not advocate continual exchanges by Officers every time they come near the top of the Roster, by which some have hitherto secured for themselves almost continuous home service at the expense of the health and lives of their brother Officers. These Officers should either go abroad when their turn came, or retire on the half-pay they have earned.

In regard to leave, Regimental Medical Officers should be on the same footing as other Officers of Regiments, one at a time should be allowed to go on long leave (2½ months) after the General Inspection, as the other Officers do, provided he can be spared and no inconvenience results; of this the Commanding Officer, the Principal Medical Officer, and the General, should be the judge; but to limit one Officer of a Regiment to 60 days and to allow his brother Officers twice and thrice as much, if they wish it, is an invidious distinction which produces discontent, more especially as the Medical Officer has often to make a private arrangement for the performance of his duties during his absence. Officers of other Departments, in addition to their 60 days, can generally calculate on 52 Sundays every year; but on this day Medical Officers have no rest from their labours; a frequent holiday is therefore absolutely necessary for their efficiency. When Medical Officers are serving at home they should be allowed every indulgence in the matter of leave; for when they go abroad leave to them is generally impossible, or, if possible, useless, from the distance. Then as to sick leave, a Medical Officer returning from abroad is placed upon half-pay, or removed from his Regiment, if unable to

rejoin in six months; while an Executive Officer, who, perhaps, comes home with him, may have his sick leave extended to two years or more without being placed on half-pay or removed from his Regiment.

There are still some other points of considerable importance, which, in the interests of the Department, are worthy of consideration, and which have been a source of much heart-burning and discontent: I allude to the unsatisfactory manner in which the roster for Foreign Service has been kept, by which a favoured few, by renewal of appointment, have been able to obtain an undue share of Home Service, of course at the expense of their less fortunate brethren, and this without losing any of the substantial advantages of the Service; on the contrary, some have secured by their stay at home, promotion over the heads of their seniors serving abroad. On the subject of the Roster I can speak feelingly, having been myself summarily placed on half-pay, shortly after my return home from a long tour of Service in the Field abroad, while temporarily indisposed; the reason assigned being that I was first on the Roster, while there was an Officer of my own rank who had not been out of London for nearly 15 years, who did not go abroad in his turn. This is by no means a solitary case, but it is one of the abuses calling for redress. Complaints regarding the Roster are so numerous, and the principles on which it is managed so little understood, that a wish exists in the Department that the Rules on which it is conducted should be printed and promulgated, that the list should be kept hung up in the Army Medical Office for every one's inspection and information, and that it should be rigidly enforced. As the average of Home Service for all ranks little exceeds three years, it seems to me only right that every Officer holding a Staff-appointment in Whitehall-yard, or elsewhere, should at once be placed on the Roster for Foreign Service and obliged to go abroad in his turn, or be placed on half-pay. Many would choose the latter alternative, but promotion would be accelerated in either case, for those who retired would give a step and the mortality among those who elected to go abroad would be greater than if they remained at home. In fact, according to Dr. De Chaumont's exhaustive statistical paper, the mortality in the Army Medical Department is more than double that of the same age at home, hence the more than unfairness of allowing Officers under any pretext a renewal of appointment and a comparative exemption from Foreign Service, as has too often been the case. A stroke of the pen would remedy this, give general satisfaction to the working members of the department, and do no injustice to any one. Regimental Medical Officers would, as formerly, take their tour of Foreign Service with their Regiments; and as Regiments have now usually 10 years abroad and 5 at home, there would be no difficulty in equalizing the proportion of Foreign Service among all; of course, a Medical Officer who had completed a tour of home service on the Staff, should not be appointed to a Regiment arriving home, as is too often the case now, due regard should be paid to the Foreign Service of others, perhaps less impor

tunate. It is also felt that some limit should be fixed for the occupants of the professorial chairs (which are at present unlimited) and that the appointments should not be for life, unless the professors were seconded and removed from the list of Effective Officers. The question of promotion should be placed on a more definite and satisfactory footing, while long and faithful, perhaps unobtrusive service, should always entitle to promotion by seniority, [1] there should be special promotion for distinguished service in the Field, which is one of the best tests of a Medical Officer's professional capacity, and administrative ability; if such promotion were in future made supernumerary to the establishment, Officers would obtain their just reward without detriment to their brother Officers.

For distinguished conduct or personal bravery in the Field, there are other rewards which could be given to those who deserve them, but it should not be promotion which ought, as far as practicable, to be given for good service, exceptional professional acquirements, zeal and proficiency. This would limit selection which is dangerous ground in such a department, it being almost an axiom in Medical Ethics that no one Medical man is competent to express an opinion as to the professional qualifications of any other. Good character and conduct are not alone sufficient to warrant selection.

I venture to think that it would be well were there on the part of the authorities a careful consideration for the feelings of men, often highly educated for a learned and invaluable profession, entering the service comparatively late in life, who should be placed on a footing similar to that of Officers of the scientific branches of the service, if this were so, we should not see a Medical Officer holding the relative rank of a Major-General, with a Lieutenant-Colonel placed over him *in an Hospital* as Commandant, nor would the head of the largest Department in the service be rewarded with the salary of £1,500 a year, which is £500 less than he received forty years ago when money was proportionately more valuable, and when the Department was less than half its size. The late Sir A. Smith considerd that a Private Secretary should be attached to the Director-General, and I believe the appointment of such an official, to confer with Officers in his absence, would be satisfactory to the Department generally and set the clerks in the office free to attend to their clerical duties.

I have good authority for saying that some eminent men in the profession who are probably not aware of our difficulties, have asserted that we do not, as a rule, keep up our knowledge, "*au courant du jour*," without, however, admitting this assertion, which I feel confident a perusal of the records in the office of the Medical Department as well as of the Departmental Blue Books, would go far to disprove; I would remark that it is well-known good men have for many years past been

1 The late Sir J. Hall, when asked his opinion as to promotion, by seniority or selection, replied, "If made by seniority, God help the department; if by selection God help the man who makes the choice."

selected by the Examiners for the Medical Department of the Army, and if they become, after a long tour of Foreign Service, somewhat behind their professional brethren in civil life in London, who have daily intercourse with each other and all the advantages of large Hospitals, Libraries, and good Schools, it is the conditions of the service to which they must submit, their isolated position and wandering life that is to blame more than the individual. Perhaps it is not generally known that Medical Officers have, at their own expense, established, and by means of monthly subscriptions among themselves, keep up Medical Libraries at all the large stations, both at home and abroad, and I would suggest, for the consideration of the Government, the advisability of encouraging and fostering so praiseworthy an effort by voting a small sum annually to supply these Libraries with the best Standard Medical Works as they are published; this is the more necessary, as the quantity of Baggage allowed to each Officer is necessarily fixed at as low a scale as possible, and allows a very small margin for the carriage of professional Books or Instruments.

Although the Confidential Reports have been amended, they are still somewhat inquisitorial in character, there is no good reason why the character and conduct of Medical Officers should not be reported on by Commanding and General Officers as other Officers are, this would relieve Medical Men from the unpleasant duty of periodically reporting upon each other, a duty which is exceedingly distasteful. When reports are prejudicial, the Officer should be informed of the grounds of complaint, that he may have an opportunity of explanation, which has not always been the case hitherto.

I am aware that the advocates of the new system expect from it a considerable saving of expenditure, but I believe experience will prove these expectations to be fallacious, and that what is saved in one direction will probably be spent in another; for example, it will cost many thousand pounds to procure barrack accommodation for the men displaced, to give the Surgeon a waiting-room and office in each Barrack in Great Britain, not to estimate the enormous cost of providing such accommodation in the Colonies and India. However, this may be, as it is not proposed to go back to the system of giving each Regiment a separate Hospital, as was the case formerly, and as there is little or no increase in the strength of the Department, or its pay, the proposed changes involve no further expenditure over the present, beyond the trifling bonuses required to induce a few old worn-out Officers to retire; an expenditure in the right direction, and essential to facilitate retirement and accelerate promotion.

But even were the expenditure greater, I would ask is economy

1 There are over 3000 men in ———; and the entire Medical care of the sick is in the hands of three Surgeons; while no fewer than ten others are in the place, only one of whom has any Hospital work.

2 The Unification System is in full working order here, and I am in a fair position to judge of its effects, as I am in charge of the new Station Hospital, at ——— The scheme has succeeded in filling our wards, not so much with very sick as with

to be preferred to the efficiency of the service? is the welfare of the Soldier to be sacrificed for a few pounds? Would any man of sense, when ill, prefer a stranger to his family Physician, because he saved a trifle thereby?

So far as the Southern District is concerned, the working of the new system has shewn a marked increase in the number of admissions into Hospital, and also an increase of the time each Soldier is under treatment. If this continues and is the case elsewhere, [1] the expenditure of the Hospitals will be very materially increased, and the number of men in Barracks to a corresponding degree diminished. This was just what happened during the Peninsular War, when the Sick and Wounded are described as hurrying to the General Hospitals in the rear by hundreds and thousands. On this subject the late Commissary General, Sir E. P. Coffin, says "Regimental Hospitals "were found to work so advantageously in the Peninsular, and were, "consequently, so much preferred and encouraged by the Duke of "Wellington during the latter years of that war, that they ought not "to be kept out of sight. A Soldier sent to a General Hospital used "to be considered as *nearly lost to the Army*, while those capable of "being treated in the Ambulatory Hospitals moved with each Regi- "ment, were for the most part speedily restored to the ranks, as "malingerers there could find no refuge, while good men were spared "the misery of the middle passage between the Army and the General "Hospital, enough to make patients of even those who were sound, "and serving to aggravate slight cases into serious ones."

Sir James McGrigor says "By making every Corps keep up an "Establishment for itself, we could prevent the General Hospital "from being crowded. Much severe and acute disease was treated "in its early and *only curable* stage, and no slight wounds or ailments "were ever sent off from the Regiment; *by which means the effective "force of the Army was kept up, or perhaps increased by several thousand "men.*"

This proves a necessity for the careful examination of men, by

men in the sick lists, who, under the Old System, could be rendered available for work—more especially in the Cavalry and Artillery; indeed this class is increasing to such an extent that if some cure is not adopted I scarcely think the duties of mounted Corps can be carried on. I could, already, almost fill a pamphlet with instances of suffering to individual Soldiers, caused by the New System, but *ex uno disce omnes*,—The night before last a man of the ——— Regiment was taken ill, at ——— with symptoms of colic, he was promptly seen and prescribed for, by Surgeon ——— late of the Corps, who, after prescribing the necessary remedies to, he found in the field companion, with fomentations from the cook house; finding the man was getting worse, had him conveyed to ——— Hospital, on arrival there every bed was found occupied, and the poor man was conveyed to ——— Hospital, where he died, last night. Now, doubtless he might have died in his own Regimental Hospital, but he would not have died among total strangers, he would have had comrades and friends, and familiar faces around him, and then the survivors would have had the satisfaction of knowing that everything had been done for him that human aid could do. Cases like these frighten the good old Soldier; but they do not deter the schemer or the man who does not like the "Drill Sergeant" or the "rough rider."

experienced Regimental Surgeons before they are passed to the rear in an Army like ours, the strength of which is limited, and the reinforcements for which are not likely to be over abundant, and that however suitable General Hospitals may be for nations possessing large Armies, where any number of men can be procured by conscription to replace the sick, they are not wholly suitable for us, who must keep every available man to the front, and jealously watch those anxious to go to the rear.

The clerical labours of the Officers of the Department should be reduced as much as possible, the absurdity of the Surgeon being required to write the extras he prescribes for a patient, first on the man's diet sheet, verified with his initials and signature on discharge, and again in the Medical Register, is an unnecessary repetition without object, now that the diet sheets are retained in the office of the Principal Medical Officer, where they can always be referred to, and do not go to the Control Department as formerly.

The number of medical books, forms, returns, etc., should be lessened—they are considerably increased by the new system. A weekly state of sick of each Regiment should suffice for all purposes. Four weekly states would then give the monthly sickness, and fifty-two weekly states would give the annual sickness, if required, but this compilation should be made in the statistical branch of the Army Medical Department at Head Quarters.

The amount of irritation at present caused in the Department by the unnecessary returns which record little or nothing is immense, for Regimental Surgeons have been deprived of their Hospital Sergeants who used to assist in the preparation of these documents; if the returns as at present are to be continued, then each Regimental Surgeon should be allowed *a paid writer* to prepare them, not a fatigue man only.

The Medical Regulations should be carefully revised, all that is obsolete expunged, while any of the Purveyors' regulations, which still apply, should be extracted and embodied in one volume.

An ambulance train of picked men should be formed, thoroughly trained and exercised in their important duties, a small nucleus of this train should be attached to each large Station Hospital. Railway ambulance trains should be organized, and it should be decided in peace time whether these trains, with their equipment, are to be in the charge of the Transport or Medical Department. The arrangements for removing wounded Soldiers out of action, and for the various transport duties connected with Hospitals, are at present in a very unsatisfactory state, a great deal is left uncertain until we take the field, when much has to be improvised, no one exactly knows his place or his duty, and confusion of course prevails; the whole tendency of the service at present appears to be, to prevent a Medical Officer becoming a man of business, and to confine him to the expression of a professional opinion when required, [1] yet, when war

1 Even on Sanitary Committees the Medical Officers are not members, but merely attend to give an opinion, if required.

breaks out, and he is more than ever occupied with the cares and anxieties of his own profession, [1] all sorts of additional duties are thrust upon him and he is expected to become all at once a skilled administrator, to organize carriage for sick, allot transport, forward medical supplies, examine and report as to the fitness of sites and buildings for Hospitals and Camps, and perhaps, in addition, have to act as Purveyor and Steward. If he fails he is ruined, he receives the blame, not those who permit such a system to exist. If he succeeds his reward is probably in his own conscience, for he is very likely to be over-looked in the distribution of rewards. In the New Zealand Campaign of 1860, the only Officers whose services were not recognised were the Medical—a marked contrast to what took place in a similar war about the same time.

I have not gone into the question of the accumulation of disease in General Hospitals, which is objectionable in principle, because diseases are aggravated, and Pyœmia, Gangrene, and other contagions generated, and mortality, of course, multiplied, because I intend to discuss this in a professional paper; [2] it is sufficient for my present purpose to bear in mind that General Hospitals have always been necessary evils, in which men acquire slovenly, irregular, and unsoldier-like habits, where misconduct is not easily repressed, particularly in war time, and where malingerers find refuge when their services are most required in the field.

The modified plan proposed by me will tend to remove some of these objections by securing, as far as possible, the treatment of each Soldier by a Doctor in whom he has confidence, and who knows all about him.

It is not contended that the above suggestions contain anything very novel, or all that should be done to ameliorate the condition of the Department, but if they contribute in any degree to assist in removing the discontent now existing, by inducing the Government to look into the well-founded grievances of the largest and not least important scientific Department of the service, I shall not regret having undertaken the unpleasant task of bringing the subject to notice, and in doing so I trust I have not in any way exceeded my duty.

J. MOUAT, Surgeon-General.

Portsmouth, November, 1874.

1 Guthrie, in his Preface to the 6th edition of his Commentaries, speaking of the Surgeons of the Army, then in the Crimea, says "They have thus proved that if the administrative duties of the Medical Department of the Army have not been free from animadversion, that its practical and scientific duties have merited public approbation, which, I am satisfied from what they have already done, they will continue to deserve."

2 To be read before the Southern Branch of the British Medical Association.

ADDENDA, &c.

It is now some weeks since the foregoing scheme for the Re-introduction of the Regimental System was placed in the hands of the Medical Department in Whitehall Yard, and in private circulation, and although I have received numerous letters from Medical Officers of all grades, there has only been one dissentient voice, and that came from one of the Professors at Netley, and was based on an erroneous view of the time I proposed the professorships should be held,—I merely maintained they should not be for life, unless the occupants were seconded and removed from the effective list. The new system has now been in operation for some time at all the Home and some of the Foreign Stations, with pretty much the same results, viz.:—general dissatisfaction to both Medical and Commanding Officers, among the latter, I believe the feeling against the new system is unanimous, and so far as the opinion of the public press has been expressed, a similar verdict has been given. Although it was desirable to ventilate the views expressed for the redress of some of the grievances of the Medical Department, no opinions were invited; but I have received some hints, which are embodied in a reprint of my pamphlet, the first copies of which were speedily exhausted, and I regret I have been unable to comply with the request of numerous friends to supply them with a copy, I did not anticipate so great a demand; the pamphlet was brought out in a somewhat hurried and perhaps imperfect manner, but I have no desire to withdraw anything, although I had not then seen Professor Hamilton's admirable and exhaustive brochure, on the prospects of the Army Medical Service, with much of which I concur, but he has fallen into a few errors in the financial part of his statements, which, however, it is not my intention to correct; I would merely observe that there are two great questions at issue: 1st.—The interest of the Sick Soldier and the efficiency of the service. 2nd.—The interest of the Officers of the Medical Department of the Army. The former is undoubtedly the most prominent and important; and so far as my experience of the new system goes, it has not advanced the interests of the Sick Soldier or the efficiency of the service, nor is it, in this respect, any material improvement on the old Regimental plan. But refering to the latter, it has, undeniably, produced the utmost *discontent*, *dismay*, and *dissatisfaction* of Medical Officers with their position and prospects, no one, I think, will venture to contend that such a state of things, if it exists, is calculated to promote the public welfare; and I would respectfully submit, that the best way to secure the cheerful co-operation of the Medical Officers of the Army, and to hold out inducements for the best educated men to enter it, as well as to induce those already in it to identify themselves with the public interest, is to enquire into and redress their just grievances. It is impossible for the Medical Officers, as a body, to put forth their grievances without a breach of discipline, while, at the same time, it is desirable the Authorities should understand the strong feeling of dissatisfaction that exists with the present state of things.

Since the above was in print, Dr. Grant's pamphlet has been received, and I will merely quote a few passages from his plea to show how much he admits in favour of the system he condemns; I cannot agree with him in believing that, if the two systems are considered side by side, the result would be in his favour; on the contrary, I have good grounds for believing, that if the opinion of the whole Department could be obtained, it would be found that the advocates of the General Hospital system were in a hopeless minority, and this even extends to the Administrative ranks, to say nothing of the whole body of Regimental, Commanding, General, and other Officers, who are almost unanimous. It is not a Medical question only, but concerns the interest of the whole Army; and Dr. Grant is quite right in considering it a cherished Institution, a title it fully deserves, and which, I submit, ought not to have been so hastily swept away to the manifest injury of the interests of a large body of Officers whose position is thus discribed by Dr. Grant himself:—"The Regimental System was unquestionably very attractive to many Medical Officers, and afforded them social advantages which it would be difficult to over-rate." "I fully admit the hardship to which Regimental Medical Officers have been subjected by their sudden eviction from their regiments." "It is quite true that their position in regiments is much more unsatisfactory than it was."

There can be no doubt the Regimental system did and will attract Medical Officers, while, if I am not much mistaken, unification will fail to do so. Young men, who enter the Medical profession, are very much like other young men entering life, and are likely to be attracted by the same means that induce others to enter upon a military career until they have settled down by which time many of them have lost all taste for private practice, as well as many years service, which they cannot afford to lose, or throw away, they are, therefore, tied to the service, and are content to spend their lives in it and identify themselves with its interests—this attraction has been withdrawn.

I do not propose to consider Dr. Grant's plea in extenso, as he states he has not seen my "Proposals and Suggestions," *du reste*. Dr. Grant's pamphlet partakes too much of special pleading; he dilates freely on the points, so captivating to economical financiers, and condemns the costliness of the Regimental System, which may to a certain extent, be admitted; while his objections against it, are more those of a partisan who is blind to, or at least, not open to conviction on its real merits, and cannot see that the two systems can be so modified or amalgamated as to ensure the substantial advantages of both. The Regimental Hospitals did admirable service in the Crimean and other campaigns, but in the former the amount of disease was exceptionally great; they were overwhelmed, as there were then no Brigade or Division Hospitals, and the General Hospitals were not properly organised in sufficient time to relieve the pressure; in fact we were overtaken,

without preparation, and I question if we are now in a better state, with even Netley and the present Station Hospitals which afford no real additional accommodation to meet any great pressure. This time last year, much inconvenience and distress was felt in consequence of the arrival of some 2000 invalids from India; for whom accommodation could not be provided, and a large proportion of these tropical invalids, chiefly convalescents, had to be sent to their depots in the depth of winter, because our existing establishments were incapable of expansion. Our Hospital Transport is still unorganized, and we have not even decided upon a pattern Ambulance for home or field service, the same class of heavy clumsy conveyances, that stuck in the mud in the Crimea, and signally broke down in New Zealand, are still in use; nor, do we possess any description of light carriage to convey solitary cases of Infectious disease to Hospitals. All these matters are quite independent of the Regimental system, and belong to the General Hospital organization.

I consider that the amalgamation of the Indian and British Medical Departments is highly desirable, the Royal Artillery and the Royal Engineers have been so amalgamated with the Indian, and so should the Medical Officers be united, the double administrative staff is expensive and unnecessary; the number of beneficial appointments, now monopolized by a few, would be thrown open to all, and act as a wholesome stimulus to professional exertion. In conclusion, I may sum up my recommendations as follows:—

1st. Return to regiments their Medical Officers.
2nd. Retain Station Hospitals.
3rd. Re-organize Army Hospital Corps.
4th. Principal Medical Officer to be the supreme authority in an Hospital.
5th. Increase the number of beneficial appointments.
6th. Offer bonuses to old officers to induce them to retire, so that
7th. Surgeons may be promoted after ten years service
8th. Concession of absolute equality.
9th. Formation of an Ambulance Train.
10th. Amalgamation of Indian and British Medical Departments.
11th. Removal of present restrictions as to leave.
12th. Publication of roster and its rules.
13th. Reduction of clerical labour.
14th. Revision of Medical Regulations and publication of a sanitary code.

15th. Supply Standard Medical Books to Libraries.

Other recommendations of minor importance will be found in the context.

All this shows that Medical Officers have strong grounds for dissatisfaction, and whatever may be thought of the two systems which divide the Department, or whatever want of unanimity there may be on this subject, there can be no doubt as to the real grievances of which the Medical Officers complain, and as so much has been recently done for the Navy, I venture to express a hope that the condition of the sister service, which represents so large a body of Officers, will receive the early consideration of Goverment, with a view to a restoration of the privileges and comforts they have lost by the abolition of the Regimental system, and to a redress of all such other grievances, as may be deemed just and expedient, J. M.

Portsmouth, February, 1875.

By Book Post.
Medicine Officers Library
Royal Victoria Hospital
Netley
Pd 1-

WHAT WE OBSERVED

DURING A

VISIT TO THE SEAT OF WAR

IN 1870.

BY

CHARLES ORTON, L.R.C.P. EDIN.,
MEDICAL OFFICER TO THE NORTH STAFFORDSHIRE INFIRMARY;

AND

WILLIAM DUNNETT SPANTON,
SURGEON TO THE NORTH STAFFORDSHIRE INFIRMARY.

LONDON:
J. & A. CHURCHILL, NEW BURLINGTON STREET.
1871.

and the nearest railway town, a distance of twenty-six miles. The wounded were conveyed generally in the long narrow carts of the country, filled with straw; sometimes in field ambulances, several long convoys of which we passed on the road. Food was scarce, owing to the immense number of soldiers and wounded who had passed through the place during the previous three weeks, the latter alone having averaged over 700 a day.

A ride of eight miles next morning, through a very beautiful country, in the heart of the forest of Ardennes, brought us to the descent towards Sedan, and in the villages, for the last two miles, we noticed numerous red-cross flags flying from the churches and most of the large buildings—sure evidence of suffering within. The marks of fighting along this part of the road were painfully evident, and the numerous graves on each side told their own sad tale. On one field the surface was literally covered with loose papers, the contents of the soldiers' pockets; and this we found always the case where the engagement had been severe. It is said that the men, in anticipating a desperate struggle, invariably empty out all their papers, so that they may have a chance of being picked up. Knapsacks, helmets, straps, and broken weapons of all kinds, were almost as numerous as the pieces of paper, and, in some places, literally covered the ground in heaps.

After the battle of Sedan no less than 14,000 French wounded were brought into the town; and although

many of these had, at the time of our visit, been sent away into Germany, the numerous cross flags flying throughout the town told of many still there.

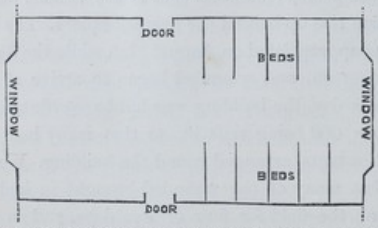
We may remark here, that the plan of the Prussians has been throughout this war to send away as many of the wounded as possible at once, and to keep none near the battle-fields who are at all able to be moved. The horrible stench we encountered in some parts of the town was sufficient to suggest the necessity of removal at the earliest possible period. We ventured to throw out a hint to some of the authorities that one very efficient means of lessening this smell would be to have numerous peat fires burning over the district—a very simple plan, which might easily be adopted.

The Anglo-American Ambulance, by far the largest in Sedan, was situated at the Caserne d'Asfeld, converted from barracks into a hospital. It stands on high ground, at the west extremity of the town, and facing some slopes upon which the Prussian batteries had been placed; on each side is the citadel, and the ramparts rise up behind the barrack square. The building was appropriated on August 31st, while the fighting was going on, and wounded began to arrive at once. The next day the building was full to overflowing, not less than 600 being sent in, so that many had to be placed in tents arranged round the building. We were told that many of the wounded brought in had been lying on the field for four or five days, and in many instances had to remain untended for two days in the

tents. There were sixteen surgeons, Dr. MacCormac and Dr. Marion Sims being at the head. Dr. MacCormac here, and Dr. Frank at Balan, are said to have performed all the operations; and if this was the case, it is easy to understand how some of the poor fellows may have lain two days, or more, before being operated upon. Then the question arises, How much better chance of life would have been afforded them, if the junior surgeons in charge had been allowed to operate at once?

A striking commentary on this circumstance is afforded by the fact, that in proportion to the length of time which elapsed from the receipt of injury to the time of operation, were the chances of the patient's recovery. Of those whose injuries dated back a week, scarcely one recovered.

The hospital contained 384 beds, arranged in a series of long rooms, one leading into the other, about 30 ft. by 50 ft., having a window at each end, the iron beds being in regular rows, twenty in each ward, thus:



The only furniture consisted of the beds, chairs, and

a table in each room, with a screen near some of the doors.

The operating room was the second from the entrance. The windows, which were of large size, had been kept open night and day, during all kinds of weather, from the first, the wind blowing through the ward. To this circumstance, along with the free use of carbolic acid, Drs. Sims and MacCormac attribute their success. There had been in this hospital no epidemic, no erysipelas, no hospital gangrene, no typhus. We noticed more than one case, however, of clear pyæmia, at our visit.

There were about 100 cases in the building, all the others having been removed. Of the latter, Dr. Woodham Webb took charge of forty, who were placed in a handsome, well-furnished chateau, near Balan, and, during the first week after removal, eleven cases of fever broke out. The rooms are said to have been close, owing, in some measure, to their being fully furnished; but so far the rate of mortality was unknown. Meanwhile, no case had occurred among the number of those left in the Caserne.

There is no doubt that the plan of free ventilation, admirably as it answers in warding off so-called hospital diseases, has this drawback—it has to answer for many cases of pneumonic and other chest mischief, which would not otherwise have occurred.

It is possible that deaths from this cause might have been prevented if there had been surgeons in sufficient

numbers and of sufficient experience to watch these cases, to detect any premonitory signs of chest affection, and then, in such a case, to have the patient at once removed to a somewhat less airy ward set apart for the purpose.

Conservative surgery had been attempted to a large extent, but the results were not so satisfactory as might have been anticipated. Most of the wounds we saw were those produced by shell or the needle-gun bullet—the former causing extensive flesh wounds, the latter smashing the bone very much. The needle-gun and the chassepôt bullet were both said to cause much crushing of bone, necessitating, as a rule, primary amputation. *In every case* in which a bullet was found to have entered the bone, amputation was resorted to. Resection cases were plentiful, and had in many instances turned out well.

It must be remembered that we saw what may be termed the intermediate cases only. Those in which the injury had been unusually severe or slight had gone—too many, alas! not far, but beyond human observation, as a small well-filled burial-ground hard by testified. All the slighter cases, including most of the injuries about the head and upper extremities, had been removed to healthier spots, and this may explain some statements which have appeared in the papers to the effect that a large proportion of soldiers were wounded in the lower extremities. Probably these alone came under the

notice of the writer, as they were, naturally enough, kept longest in hospital.

Among many cases of interest, we saw one in which *excision of both elbow and shoulder-joint* had been performed on the same arm, and the patient (a Frenchman) had also a very extensive lacerated face-wound. He was doing well, twenty-three days after receipt of injuries.

Another man had a large lacerated wound of the thigh caused by shell, with a bullet wound through both legs just above the ankle. This patient had tetanus early, which was readily and completely controlled by repeated doses of hydrate of chloral. He was suffering when we saw him from undoubted pyæmia, so that the case looked very unpromising.

We were told of one case in which a ball had struck a man on the front of the thigh, driving a piece of his trousers, with his watch, deep into the muscles.[1] This was with some difficulty extracted, and the watch, though completely smashed, was found complete. The man did not long survive.

In every instance where it was at all practicable, the bullets were extracted at once, and we were assured that in only three or four cases had it proved impossible to succeed in doing it. This forms a contrast to the plan pursued in the Dutch ambulances, of which we shall have something to say presently. The Dutch

[1] A part of this watch was exhibited at a late meeting of the Pathological Society.

surgeons only extract when the operation can be readily performed.

Chloroform was given in all the operations of importance at the Anglo-American Hospital. This was also the case at the French ambulance at Sedan.

The *mode of dressing* wounds and stumps was to use at first Lister's plaster, or simple wet lint; then, as a subsequent dressing, after washing out the wound with lotion of carbolic acid of variable strength, according to the nature of the case, to place over it a piece of wetted lint, and on that some oakum. At first, ordinary water dressing with lint and oil-silk, or gutta percha, or a simple poultice, was used; but the stench became intolerable. Under the use of oakum the wounds progressed more favourably, and the atmosphere of the ward is greatly improved. In a case of compound fracture of the thigh *two* long side-splints were employed with good effect, enabling the limb to be more readily moved without pain. The *diet* was liberal in the extreme, meat being given twice a day in good quantity, soup also twice, and coffee and stimulants freely. Smoking was in this, as in all the other ambulances we saw, not only permitted, but encouraged. From the eager desire the poor fellows so uniformly manifested for tobacco, we could come to no other conclusion than this—that it has an undoubted power in soothing the nervous system, and in this way is of invaluable service after the excitement of a battle, and perhaps even more so in those cases where defeat

has rendered the reaction more intense, as in the case of the French in this particular instance.

During the first three days after the battle of August 31st food was very scarce, and the medical men, like the patients, had to be content with bread and water, with some little wine. This, in the face of the work to be done, must have been trying enough; but now there is abundance—we may, indeed, say a redundance—of everything, medical help included.

At the *Sedan French Ambulance*, situated in what had been a large cloth warehouse, there had been three cases of primary amputation at the hip-joint, one of which was doing well twenty-four days after injury. One officer, who had both legs and both arms amputated at this hospital, was making a good recovery. A cavalry officer, he was riding, when a ball struck both his legs, passing through and killing his horse, and a second bullet went through both his arms. The amputations were said to have been performed in spite of the patient's earnest entreaties to be left to die.

The *Swiss Ambulance* in Sedan had been a cotton-mill, of which the three upper storeys were occupied, the ground floor being used for stores, &c. The windows, which were opposite, were so numerous that there was almost one to each bed; the rooms were low, but very freely ventilated by means of the windows and cracks in the floors. Free living, rest, and carbolic acid were the principal means employed, and with great success. Of thirty-five to forty cases of amputation only one

died. Of the cases of resection and compound fracture none succumbed who outlived the first few days. Many were brought in dying, some even dead.

We must not quit the subject of Sedan without noticing the very unsavoury state of the river Meuse, in which large numbers of horses and men were drowned, and which must surely, ere long, as it has indeed to some extent already, give rise to grave results among the population.

One word as to Bazeilles, that village of the dead, as it might well be called. Once a flourishing suburb of Sedan, with a population of about 3000, it is now as complete a ruin as the mind can possibly conceive, and the wreck of once charming villas and lively streets has become, it is to be feared, a vast mausoleum.[1] The ambulances under the care of Dr. Frank and Dr. Woodham Webb are situated near to this plcce, but we had not an opportunity of seeing them. The latter is at Balan, and we have already alluded to the unfavorable condition of its inmates in speaking of the patients removed from Sedan. The history of Bazeilles and Balan alone would fill a volume, but we must pass on to our next hospital visitation.

Leaving Sedan by way of the French towns of Mezieres and Givet, we made our way by a circuitous route to Saarbruck, being of the number of those who

[1] Accounts published in the 'Times,' since this was written, tell of a large number of persons already found buried beneath the ruined buildings.

travelled in the first passenger train to Saarbruck since the war began. Seeing in these towns a large number of French soldiers, and having previously observed many Belgian ones, we were enabled to compare them with the Prussians, of whom we saw large numbers. The superior physique of the Prussians is very marked, and their mental condition is quite as much superior as their bodily is to that of the French and Belgians. We found the Prussians, officers and men, very intelligent, courteous, and well informed. Many with whom we spoke attribute their success to their superior education and their better artillery. How far moral courage may also have helped them we have no means of knowing, but there can be little doubt that it has been an important element of success.

On our way we passed Arlon, the depôt of the National Society, which has proved a most inconvenient station for the purpose, and has sufficiently demonstrated by this fact the absolute necessity of having everything at hand and well organized for all field hospital work.

At *Saarbruck* we were first struck with the extent and completeness of the provision made for the conveyance of the wounded. At that station were many waiting to be sent off, those who were able being seated in the railway carriages, others placed in hammocks hung by means of india rubber fastened in the sides, and their comfort appeared to be cared for as much as was possible under such circumstances. It was an

extraordinary sight to see such scores of stretchers of all possible shapes lying about in heaps, long wooden tents outside the station, as well as an enormous extemporised waiting-room in the building for the soldiers to wait and to feed in. The evidences of dysentery among the railway travellers were repulsively manifest, and we cannot imagine why the simple plan suggested by Captain Brackenbury, of having long trenches at the stations with a supply of earth for the use of the men, has not yet been adopted.

The *Prussian ambulance*, at the Casino, a handsome stone building near the river, with beautiful gardens at the back, and a most luxuriously decorated suite of rooms within, formed such a charming retreat after the turmoil of battle as must surely have conduced, if anything could, to alleviate the depression of its inmates. The large concert-room devoted to the officers is very high, with large glass doors and windows constantly open, and there was an airiness about it which is unhappily most unusual. Everything was very clean; the patients were abundantly supplied, even to luxuries. We were told the cases had done very well. One French officer we saw had a gunshot wound of the leg, the ball having entered at the groin and passed out below the knee —doing well. There was a case of the fever which has prevailed so much, and which the Germans and Dutch term abdominal typhoid. The patient had a shell wound of the leg: dry tongue and lips; occasional

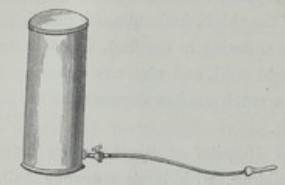
delirium; *no rash;* soft, quick pulse, flushed face, hot, dry skin, and tendency to diarrhœa.

A Prussian officer, wounded by a chassepôt bullet in the front of the thigh, had not much pain in the wound, but horrible suffering in the foot. Worn down by pain, he had caught cold, and was now suffering from lung mischief to a much greater degree than the poor fellow would admit.

The *Civil Hospital at Saarbruck* we found a commodious building, with large entrance hall, but the wards opening into a corridor, having windows, therefore on one side only. The wards were of moderate size, each one containing from six to a dozen patients, of whom the great majority were military cases. By the side of every bed was a closed locker, with a drawer, and standing on each one was a bottle of water and a glass. Ventilation only by windows and doors; bedsteads of wood, and the floors of polished oak. The beds had springs, with wool mattresses.

We saw in one of the wards an admirable contrivance for a lifting bed. The ordinary bedstead stands within the lift, which is merely a framework. The raising is effected by means of a handle attached to a winding iron rod at the head and foot; over each rod passes a band of webbing attached to the framework below, which lifts it to any required height. A series of screws at the sides tighten the cross-bands which form the floor of the lift, and these can be placed at any distance, or removed for convenience of

dressing, &c. The case we saw was one of *gunshot of the thigh*, with anterior wound of entrance and a

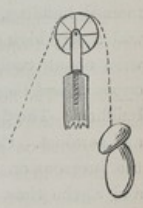


Irrigateur, made of tin, with a tap and simple india-rubber tube ending in an ivory nozzle.

posterior wound of exit. The thigh was bound up in cardboard splints, the posterior wound being left open. The patient raised, the wound was readily dressed without the slightest movement. It was done in this way :—first very freely syringed out with dilute Condy's fluid by means of a very simple "irrigateur" (see sketch), and then covered over with simple charpie and lint. The dressing was changed twice a day.

A case of *resection of tibia* for shell-wound was doing very well, placed in an open wirework splint, shaped like Butcher's, but sufficiently large to admit a water pillow within it as a pad, and a very excellent and cleanly pad it was. The whole was steadied by means of sand bags, and the patient said he was quite comfortable. Everything was very clean, and the ward arrangements were complete.

The *Swiss Ambulance* was situated at some barracks on the hill towards Spicheren. A large room, containing about thirty beds, with opposite windows and three doors, formed the chief ward. The same general plan of treatment was adopted as elsewhere, much being left to the *vis medicatrix naturæ*. Simple charpie, moistened with warm decoctions of chamomile or poppy, along with free cleansing of the wounds with some disinfecting fluid, was the ordinary dressing. There had been only one case of amputation, in the upper third of the thigh, and he was recovering. We saw a compound fracture of the thigh, in which there was quite a small anterior entrance wound, with a large, jagged posterior one of egress, put up in a long plaster of Paris splint reaching from the ilium to the toes, with windows for dressing the wounds. Another compound fractured thigh was being treated by the pulley, which was ingeniously screwed into the foot-board of the bed, as shown in the accompanying woodcut, much too heavy a weight being attached, however, which we ventured to suggest would answer its purpose more easily, and quite as effectually, if diminished by about two thirds.



We noticed a man dying from the so-called typhus which was at the time making sad havoc in the district. He was quite prostrate, with quick weak pulse, sallow

countenance, skin moderately but not excessively hot to the touch. Tongue dry and coated, but no brown fur upon it. No spots anywhere; no tympanites; no purging. This case differed somewhat from the one already mentioned, but this was probably owing to the different stages at which we observed the disease.

The cases of fever and dysentery together were being brought into Saarbruck from the Metz army at the rate of about forty a day; the mortality of the latter, we were informed, did not exceed five per cent.

We were much interested with the *Dutch Ambulance*, and had the advantage of being shown over it by a most courteous and intelligent volunteer surgeon, Dr. Lehmann.

The Dutch had immediately after the battle of Spicheren established their ambulance hospital in the Gymnasium and Riding School. This was a large one-roomed building, 80 or 90 feet long by 60 wide, and with a very high open roof. The windows opened, and were about twelve feet from the ground, arranged opposite, and there was a large door at each end of the building. The floor was several inches thick with tan and sawdust. Carbolic acid was used so freely that the surgeons on going to dinner were redolent of it, and at the time we saw the place, more than a fortnight after being cleared, the smell was quite strong. For about five weeks the cases went on very well. At the end of that time a compound fracture went wrong, soon another, and another. Then dysentery and pyæmia

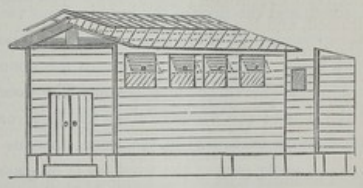
made their appearance, and it was decided at once to vacate the building. The patients were removed, some into adjoining barracks, others into large tents, but the latter had soon to be relinquished on account of cold. The rooms in these barracks were small, most of them having only four or five beds, and were, perhaps, the worst adapted for the purpose of any we had seen. There were some cases of *fever*, of similar type to those already mentioned, and they were evidently considered as typhoid, although we came to the conclusion that the Continental surgeons seemed, as a rule, not to distinguish as clearly as we do the line between typhus and typhoid. Many cases of *dysentery*, too, had come in—usually of a severe form—but not very fatal, as we have already mentioned in speaking of the Swiss Hospital. The patients suffered much pain, with frequent purging, and almost constant tenesmus; their faces pale and pinched. Greatest relief was afforded by the hypodermic injection of morphia in doses of $\frac{1}{6}$ to $\frac{1}{4}$ of a grain; but opium was also freely given. There was a man with a gunshot wound of the shoulder, with one opening in front of the axilla and four others on posterior surface, the ball, no doubt, having been split up into fragments, which were still left in. The rule is with the Dutch only to remove the ball when this can be accomplished quite readily. These wounds were dressed with charpie dipped in carbolic acid lotion, the edges of the wounds being first pencilled over with collodion.

The *diet* was very liberal; meat in full quantity twice a day, soup twice, one bottle of wine, coffee, tea and biscuits (similar to rusks) as much as they liked, constituted ordinary diet. Extras of all kinds were ordered when necessary.

The iron bedsteads had a hinge near the centre, so as to form a bed-rest, and in this way pillows were to some extent superseded.

We found the *stores* of this ambulance most admirably arranged, being entirely under the management of a private Dutch nobleman, and a very pleasant, jolly-looking, and intelligent one withal. Everything was brought from Holland except meat and bread and milk. All the different articles were arranged in a room of moderate size outside the barracks, in a most methodical manner, each portion allotted having a plain label. We noticed a large quantity of preserved edibles, such as extract of beef, extract of milk, extract of coffee, herrings, cheese, tea, coffee, sugar, &c., *ad infinitum*. Along with all these we were shown a portable cooking stove, after the pattern of one recommended by Prof. Longmore. It is only about eighteen inches square, but in a few minutes will make soup or coffee for fourteen or sixteen men, and a chop or steak can be prepared as quickly. Nowhere else did we see anything approaching the completeness of the arrangements of this store. In this, as in the Prussian hospitals we visited, we noticed the absence of any superfluous attendants, though there was everywhere

enough of everything needful, and the patients in every case expressed themselves as being comfortable, and all of them equally well cared for.



Side view.

End View.

Belgian Ambulance Huts at Saarbruck, made of rough logs of pine; cost about £9 each to build only, and accommodate 15 patients.

The *Belgian Ambulance* is situated in a garden about

a quarter of a mile out of the town, and consists of a series of ten wooden huts, five on each side, with a street between. They are each about forty feet long and twenty-five feet wide, and the space between each is about thirty feet; fifteen beds in each. The ground is well drained, and the floor of the huts is about two feet from the ground. They are built of rough pine boards, the roof being open along the centre for about six inches on each side of the long beam. The doors are facing the street; the windows about five feet from the ground, four on each side of the ward, opposite each other. The lower part of the windows is of glass, but the upper part consists of a wooden shutter opening by means of a hinge above, so that it can be closed or opened to any required extent. In this way air can find its way in and out most freely, the planks forming the floor being nearly half an inch apart to facilitate ventilation. The atmosphere of the wards was peculiarly free from the usual hospital smell. At the end of each hut, opening from the side and separated by a corridor in which are two opposite windows, the closets are placed. The receptacles are of wood, and are emptied and washed out with chloride of lime twice a day, earth being used. The huts for stores and kitchens, &c., were more firmly built, and excellently arranged.

The results in this ambulance had been most satisfactory. Of 300 cases admitted, only twelve had died; and of thirty cases of fever, only four or five had

died. There had been some dysentery, but of a mild type.

COST.

Total cost of the Ambulance from commencement to the 23rd September . . . . . Frs. 5402
Or, £216

Details of Cost.

Frs. 3561. Purchase of food, &c., for patients and staff.
529. Expense of journey to Saarbruck.
562. Drugs.
750. Indemnity to medical men at 10 frs. a day each.

Up to the 18th of September 159 sick and wounded admitted.
Total died, 7.
Of these, of typhus, 4.
Sent out cured, 38.

There were 141 Germans and 18 French.

Of Germans.—33 wounded.
37 typhoid.
64 dysentery.
2 ophthalmic cases and 5 other cases.

Of French.—17 wounded.
1 typhoid.

Staff—Two Directors.
Four Physician-Surgeons.
One Dispenser and his Assistant.
Six Male and six Female Nurses, one Cook and Assistant, and one Laundress.

We must not leave Saarbruck without expressing our warmest thanks to Dr. Hardwicke, whom we met

there, and who was most obliging in putting us in the way of obtaining information. He had been at Saarbruck nearly a month, and his only grievance appeared to be that he really had nothing important to do during the whole of that time. The English work there appears to have been done in a very desultory way, little calculated to bring our country into good repute.

The indomitable determination of the Prussians was nowhere more clearly shown than by a visit to the heights above the town, where the battle of Spicheren took place. The position is so impregnable that we could not help expressing our astonishment at the French ever allowing it to be taken from them.

At Saarbruck, as elsewhere, the number of patients in the ambulances was fast lessening, as those who were sufficiently recovered were being sent away. The places of the wounded were, however, being filled up to some extent by others affected with dysentery and fever, who were daily being brought in from the army before Metz. In the carriage with us when we left Saarbruck were three very interesting cases:—One man, a Prussian corporal, wounded at Gravelotte, had recived a chassepôt bullet below the left orbit, which passed through the palate and made its exit in the middle of the neck on the opposite side. The wounds were nearly healed. Another, a Prussian private, at Spicheren, was about to fire when a bullet struck him

on the upper jaw, carrying away the whole of his upper front teeth, and the alveolar process with them. While he was spitting out this unpleasant bolus a second shot entered his mouth, smashing the left side of the upper jaw and passing out through the malar bone. The third had a bullet wound of the forearm, and another in the loins, the balls having been in both instances extracted. They were all in capital spirits, and ready enough to keep up a vigorous song, the jaw-maimed man quite as loudly as the rest. These men were going with a number of others to Coblentz. Such instances might be multiplied almost indefinitely, so eccentric and so varied are battle-field injuries.

We next visited the model hospital at Bingen. To begin with the station of Bingerbrück, we noticed that the arrangements for receiving the wounded were even more perfect than elsewhere. A restaurant in the station was arranged as a surgery, in which those patients who needed it had their wounds dressed, bandages readjusted, food, &c. given them before being sent on to their destination. For it must be remembered that some—indeed, most of these poor fellows—had to travel from one to two hundred miles; and although everything was done which ingenuity and humanity could devise to mitigate their suffering, this must have been to many of them a severe trial. One object of the Bingen Hospital, established by Dr. Thudichum, is to waylay some of these cases—the

more interesting ones, we were told, but let us charitably hope rather the more severe ones, whether interesting or not. At any rate, those we saw served to confirm the latter view.

The hospital, (if such a term can fairly be applied to it) is situated on the Rochusberg, a hill about 250 feet above the Rhine, and more than a mile and a half from the station of Bingerbrück. It was a stiff forty minutes' walk. Why it might not have been placed somewhat lower down we could not understand; but we came to the conclusion that if the officers in charge had to descend many times a day, they will not be long before they wish it were at a somewhat lower elevation than it is now. If the comfort and convenience of the wounded soldier are to be studied, surely easy access ought to be the primary consideration. After a railway journey of considerable length, it will not tend to improve a compound fracture or a severe case of fever to be carried up such a long, steep hill.

The International Field Hospital, as it is termed, is situated in a field overlooking the Rhine, and bounded on the west by the Rochus Hotel. This building was used at first as the hospital, the upper rooms being made into wards, the lower ones being, as they are now, adapted to stores. The kitchen is an outbuilding of the hotel. On the western side the field is enclosed by wooden hoarding, and on the other sides by a strong hedge of fir twigs and poles. This protection was found necessary to protect the tents from being blown

away into the river below!* The field has been well drained by means of hard glazed pipes, which receive the waste water of the sinks. The liquid is carried into a distant shrubbery, where it is absorbed. No solid matter of any kind is allowed to enter the drains. At the entrance to the field is a porter's lodge, made of wood, and near this another building used as a store for spare tents, poles, &c. There are eighteen tents, each thirty feet long and sixteen feet wide, arranged in two rows, with a wide path between them. The tents are pitched on a wooden floor, raised about eighteen inches from the ground and surrounded by a trench, over which a little wooden bridge leads to the entrance. The sides of the tents are boarded. The canvas sides

* The following is an extract from a letter from Mr. H. W. Page, one of the Assistant-Surgeons at the Bingen Hospital, which appeared in 'The Times' of October 30th, 1870.

"Last night, amid a storm unparalleled for its violence, and such as I never shall forget, which rose as suddenly as it departed, after forty-five minutes' duration, the whole hospital was swept off the face of the earth. Never was such a scene; never such agony. If it was awful for wounded men, without shoes or stockings, with nothing but their blankets, which in a second were drenched, to turn out and be exposed to the elements, it was even worse for the sick. Imagine a typhoid fever patient, for whom it is almost fatal to move in bed, having to take up his bed, and walk.

"The storm began at 8.15 p.m., and not till 1 o'clock this morning did we succeed in housing the unfortunate creatures in the operation-room, in the porter's lodge, and in the hotel. The wonder is that they all lived through it. To-day, what a wreck! Nearly every roof is stripped, and the people declare they never remember such a storm. The rest I leave to your imagination."

are securely fastened to the floor, as the wind is too strong to allow of their being free. The doorway is made by unhooking one part of the tent, which is double. Ventilation is secured by means of a pipe leading under the bridge to the centre of the tent, and also by means of a small aperture in the roof about six inches wide with a canvas cover which can be shut or opened by means of a string inside. In each tent is a close stove, from which the smoke is carried under the flooring to the outside. The result of this arrangement is that, if the wind be fickle, the smoke is driven back into the tent so as almost to suffocate the inmates, as there is no other outlet for it. The atmosphere of the tents was, when we visited them, decidedly stuffy and close. It was certainly a very warm day, and, on the other hand, we learned that at night the temperature frequently fell as low as 5° Cent. (40° Fahr.). The mean temperature during the day was 25° Cent. (*i.e.* 85° Fahr.). The reason of this is that, the patients often complaining of feeling shivery, there is a temptation to make too great fires, and then the temperature cannot readily be modified.

There is a good operating room of wood, but as yet there has been little need for it. It is very well supplied with every requisite. At the end of the same row is a washhouse, with coppers for boiling linen, which was still unfinished, however. Opposite this is a small wooden shed, containing a stove of simple construction for drying earth for the closets. It is nothing more

than a long brick stove, covered with iron plating, and ending in a chimney. The chimneys are made of an admirable material, being solid perforated blocks about two feet long, of volcanic material mixed with fine cement and baked. The material is found at a village about three miles distant. It is proposed to move the kiln further off, as the smell of the earth is at times unpleasantly strong.

The *water* supply is brought from the Rhine by an eight-horse engine to a large galvanized iron tank, from which it passes to three large iron filters raised upon scaffolding, whence it is distributed by a regular series of pipes. All the water used for drinking, cooking, or for dressing wounds, passes through the charcoal filters. We did not notice any means of heating it, though there must have been some, as particular stress is made of the use of bathing in this establishment.

Arranged along the central street are five receptacles for fluids, which empty into the drains, and every drop of fluid refuse is carried to them. To each one a pump is attached.

There is an earth closet *in* each tent, with a zinc receptacle which is emptied and washed out with "mortar" daily (*lime?*). There was an entire absence of smell about them, though it is intended eventually to have each closet outside the tent, to be approached by a fold of canvas like that at the entrance to the tent.

Dr. Thudichum intends to have a tramway laid down from the kitchen round all the tents; at present it is about 150 yards distant from the furthest one. A telegraph wire is laid down from each tent to the porter's lodge and the hotel (where the medical officers are quartered), and thence to the station at Bingerbrück. By this means notice is given of the arrival of wounded at the station, when measures are at once taken for their removal to the hospital. Four trucks with light covers are used for this purpose, each holding one patient, and four men are required to pull one up the hill, so that sixteen men are thus kept employed whenever any stress of work comes. Each of these ambulances has six springs, so as to reduce the shaking to a minimum.

We now come to the interior of the tents, or wards we will call them. In each there are placed eight beds, not more than from eighteen to thirty inches apart, six only of them being occupied at one time. The bedsteads are of iron, with horsehair mattresses, straw palliasses and bolsters, and hair pillows. A small iron table, two chairs, and the stove and closet already mentioned complete the furniture. They were beautifully clean, and there was certainly an air of comfort about them. But a change from a bright September day to a foggy November one would probably alter the aspect considerably. The nursing is performed entirely by men (one to every four cases), and no women are occupied about the wards.

The *diet* is liberal; five ounces of cooked meat are allowed for dinner, and a smaller quantity for supper, but the amount given to each man varies somewhat as it is divided in the tent, and the patient's appetites are consulted to some extent as to how much each one shall have. This *rational* plan appears to answer well. Stimulants are given freely, chiefly, however, the wine of the district, which forms part of the ordinary diet. The store and kitchen departments are under the management of ladies, of whom Miss Thudichum is chief. There are two principal surgeons, Mr. Simon and Dr. Thudichum, with ten assistant-surgeons and five dressers, seventeen gentlemen in all to attend to at the most 200 patients. As yet, however, there have been but about fifty patients scattered in eighteen tents, so that there is no lack of medical attendance in this instance.

Dr. Thudichum very kindly showed us over the hospital, and gave us every information concerning its details. He informed us that the number of visitors was very considerable, as every one is naturally anxious to see a model of what is believed by its promoters to be a perfect hospital.

The fever cases are mixed along with the rest, or were when we saw them; but according to a letter in the 'Times,' a special tent appears to have been set apart for fever cases. This, however, is quite contrary to the principle which Dr. Thudichum expressed his approval of to us—that of mixing. He is decidedly

opposed (as were many whose opinion we asked on the subject) to any such building as a permanent fever hospital. One tent was set apart for cases of dysentery; but the cases had been of a very mild character, for some of them had been sent from a distance of 100 miles or more, chiefly from Saarbruck. The only treatment has been to give plenty of fresh air, simple (Liebig's) food, and now and then a little opium, but not much.

Carbolic acid has been freely used in the surgical cases; but less stress is laid upon this or any special mode of treatment than upon the influences of a fine, bracing atmosphere, good food, rest, and an entire freedom from outward contaminating influences.

The hospital is to all intents and purposes a convalescent institution. All the cases have, as a matter of necessity, to be brought a very long distance, and as there is a very remote prospect indeed of any fighting nearer than Metz, the cases may have to be conveyed further still. Why, then, to begin with, need it be placed in such an inaccessible position, with all its glaring drawbacks to counterbalance the advantages of a fine situation? Surely good air could be found in such a district without ascending nearly 300 feet. Then, again, what can twelve surgeons possibly find to do, even if they had no dressers to assist them?

We could point out what we conceive to be numerous defects in this so-called model hospital, but

will content ourselves with only one or two further remarks. During the lovely weather of summer and early autumn (and it *is* lovely at Bingen) all is admirable enough: but in the wet windy times, such as we are having now—fancy having to carry all the food for the patients a distance of more than a hundred yards through the open air—the medical officers having to pass the same way every time they visit a patient—the tents kept closed on account of the wind, the only ventilation being a small hole in the roof—half the work, in fact, having to be performed in the open air, and what comfort can there be in doing it? Then take midsummer. What patient could endure a canvass tent with the thermometer standing at say 80° or 85° Fahr. in the shade? The main point, however, appears to us to be this:—If it is intended for a *field* hospital, which we understand to mean really an ambulance, it appears little short of ridiculous to perch it upon such a hill, at so great a distance, too, from the scenes of action. If, on the other hand, it is intended to be a permanent hospital, while the same objections hold good with regard to its inaccessibility, it will have the additional drawback, we venture to think, of the loss in comfort and convenience which will more than counterbalance the advantages which are expected to accrue from its undoubted salubrious position. It has not the merit of being on an economical plan, as it has been stated by a member of the committee that the expenses will exceed £20 a day. Let us hope, there-

fore, that while it will serve to afford very many useful suggestions to those interested in hospital arrangements, and at the same time anticipating for it a favourable rate of mortality, it may not be taken as a *boná fide* model of what such an institution ought to be.

After leaving Bingen the only further opportunity we had of seeing a hospital was at Mayence, where we paid a very hasty visit to one of the permanent military hospitals. This probably serves as a type of the others; but many have been established in the large towns on the plan of the Belgian Ambulance already alluded to, which is an adaptation of that employed, on a very large scale, in the American war with great success.

The barrack hospital we saw contained 525 patients, as an index in the entrance-hall informed us, on which were also marked the names of the physicians and surgeons of the day, along with other particulars, among which were detailed the number of patients in each particular ward. The hospital was almost entirely filled with wounded men. One ward which we entered was numbered 80, in which were six patients, all Frenchmen. They expressed themselves as being quite comfortable, and well provided for. One had a half-filled bottle of wine by his side, another was eating chocolate, another smoking. As far as our observation extended, and judging from all we heard, no difference whatever was made between the French and Prussians in any of the hospitals, of whatever nationality. We were told, however, but cannot vouch for the truth of the statement, that only French soldiers were taken in the French ambulances, as a rule. Our travels beyond Mayence to Kehl and elsewhere were devoid of any medical interest, so that we need not relate any details of that part of our journey here.

We will conclude this paper by making a few general remarks on what we have already endeavoured to describe.

One satisfactory feature stands out prominently in regard to the present war. Enormous as the number of killed and wounded has been, there has probably never before, in any great war, been such a large proportion of the latter who have recovered. This result is attributable, no doubt, to many causes, but the principal have been the multifarious ways in which provision has been made for attending to the wounded and sick, and the manner in which they have been treated. Fresh air has been deemed of more vital importance than heretofore, and in most instances ample means have been adopted for securing a full supply of it. Then, again, the food supply has been in most instances better managed than it could have possibly been had the administration of it been left simply in the hands of the conquerors. For it should be remembered that in this war the Prussians have had to

provide, not only for their own people, but also for a very disproportionately large number of French also. It is manifest enough that the French commissariat, as well as the medical department, has been an utter failure. Thomas Carlyle writes thus of the French:

"So far as my reading goes, there never was such a war, never such a collapse of shameless human vanity, of menacing, long-continued arrogance into contemptible nothingness.

"Blow has followed blow, as if from the hammer of Thor, till it lies like a shapeless mass of ruins whining to itself, 'In the name of all the gods and all the devils, what is to become of us?'"

This forcible language well expresses what might have been the language of the French prisoners and wounded, had they been left to the tender mercies of what their own people provided.

One thing is sufficiently clear, that in those buildings in which there has been the most perfect natural ventilation the immunity from hospital diseases has been greatest; but this alone does not explain why, in some large buildings, such as churches and other high places, the mortality has been so large. We have come to the conclusion that ill ventilation alone is not sufficient to account for the difference. It has been observed that in churches, barns, and other similar buildings which have been long uninhabited, or never inhabited at all, there the mortality has been greatest. This

result has not always manifested itself at once, but, as in the case of the Riding School at Saarbruck, after being used for some little time.

In the case of our own new North Staffordshire Infirmary, in that of the new Infirmary at Aylesbury, and, it has been stated, in the new Leeds Infirmary—all built upon the best possible plans—as well as in many other new institutions, the surgical cases have at first turned out unfavourably. This circumstance is so singular that, taken in conjunction with what we observed among the unused buildings at the seat of war converted into hospitals, in which similar bad results followed, it set us thinking why it should be so.

The only probable explanation which suggests itself to our minds is this—that there must exist in new buildings, and for the same reason in buildings unused for habitation, some damp miasma which must act injuriously on the wounded. What the nature of it may be we are not prepared to say, but that some such cause exists for the ill success attending them we feel certain. In some of those we saw, *e.g.* in some of the churches, holes had been made, accidentally or purposely, in the roof and walls, which allowed of a fair amount of air circulation through; still bad results followed. Again, in some private houses where the wounded were lodged the same occurred; but in this case it might almost invariably be traced to a dislike which either the patients or their attendants had to

the admission of air. Where the ventilation by windows and doors was well managed, in them, as a rule, the results of treatment were favorable. This subject is, we venture to think, one which deserves some investigation, and we should be very glad to hear the opinions of those who have had larger opportunities of observing, as to whether the view we have expressed may not give the true explanation of why, in some buildings (*cæteris paribus*), the patients recovered so favourably, while in others the results were so fatal.

So far as the *treatment* of the cases is concerned, nothing absolute can yet be known regarding the rate of mortality among them as a whole, but it is abundantly clear that the plan generally acted upon has been both a scientific and a successful one. It appears to have been throughout the aim of the surgeons to trust very much to nature; to secure rest as much as possible; cleanliness by the adoption of frequent dressing and washing of wounds; to give as little actual medicine as was really necessary; and to secure a full supply of wholesome food. These conditions, with a well-ventilated room and good nursing, have yielded unusually favourable results. Where from any cause this plan could not be fairly carried out, success has been diminished.

With respect to *nursing*, we cannot say much; but we everywhere heard the conduct and usefulness of many, indeed, all those English ladies who have so

nobly gone out to help, spoken of in the highest terms.

The work is undoubtedly, as has been well said, "disgusting and divine," and those who have done, and are now doing it, deserve the highest praise. Such labour is a very different matter indeed from the dilettanti work at home with which so many self-complacent young ladies like to be amused, while at the same time flattering themselves that they are doing a noble work. We could well dispense with these, but for such nurses as those at Sedan we cannot be too thankful.

The organization, or, more correctly speaking, the want of organization of the English National Society, is a point about which we should like to have said a few words; but we will only remark that in our opinion a comparatively small amount of benefit has been derived from the enormous fund which the English people have so liberally and heartily given for the benefit of the sick and wounded in this terrible war.

LONDON: PRINTED BY J. E. ADLARD, BARTHOLOMEW CLOSE.

MEDICAL REPORT

OF THE

CAMPAIGN

CARRIED ON BY

GORDON'S ANGLO-CHINESE CONTINGENT,

AGAINST THE TAE-PINGS,

IN THE PROVINCE OF KIANG-SOO,

IN 1863 AND 1864.

BY

ASSISTANT-SURGEON A. MOFFITT, 67TH REGT.

NEWCASTLE-UPON-TYNE:
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1866.

MEDICAL REPORT.

HISTORY OF THE FORCE.

It is scarcely in keeping with a medical report of a campaign to enter into the political causes for war, or history of military operations, but owing to the uniqueness of the present position, it may be well, in order to make the report more intelligible, to give a short outline of the causes which led to the formation of an Anglo-disciplined force, its organization, composition, and subsequent career.

Some fourteen years ago, a body of men called by foreigners Tae-pings, but by themselves "The Brethren," with a profession of Christianity, took the field in opposition to the Imperial Government of China, in one of the south-western provinces, Kwangsee.

Their object in so doing, at first seems to have been more for self-protection than with any ulterior political designs; but being driven from place to place they wound their way into the valley of the Yang-tsze, and, with greatly increased numbers, following the course of this river eastward, attacked and captured the ancient capital of the empire, Nan-kin: they then conceived the idea of deposing the reigning dynasty and establishing what they called the "Heavenly Kingdom," and declared themselves accordingly.

Here they were for a time besieged, but taking advantage of the troubles of the Imperial Government with foreign nations, in 1860, they put forth all their strength, broke the Imperial lines, and soon made themselves masters of the two coast provinces of Kiang-soo, and Chekiang, except the city of Shanghai, in the former, under the protection of the foreign powers.

Here the provincial Chinese authorities, finding safety, collected, and seeing the inability of troops organized by themselves to stand against the insurgents, entered into an agreement with an American, named Ward, to raise and equip a force of Chinese, officered by foreigners.

Though the force so constituted did good service, and gained superiority over the rebels, yet, neither Ward, nor his successor, being military men by profession, it had but little claim to anything like a

military organization, and led to troubles which subsequently brought it under the command of a British officer.

By permission of Her Majesty's order in council of the 30th August, 1862, and 9th January, 1863, Major Gordon, Royal Engineers, entered the Chinese service; and on the 1st of April, in the latter year, commenced organizing a force, from the *materiel* of the old one, on strictly regular military principles.

The force, in its remodelled condition, consisted of 3,000 Chinese, natives of Kiang-soo, Chekiang, and the adjoining provinces, with about 120 foreigners, who, for the most part, having been in some service previously, and therefore acquainted with drill, were able, as officers, to instruct the natives.

The divisions comprised five infantry regiments and one artillery regiment, each 500 strong, with a military store department, commissariat department, and a medical department, which will be alluded to hereafter when detailing the medical establishment.

The infantry were equipped with the common smooth bore musket and bayonet, and ordinary accoutrements, but without a knapsack, having only a haversack and a blanket tightly rolled and slung over the shoulder, while all wore serge clothing of European make, with different coloured facings, to distinguish the different corps.

The rations, when in the field, were supplied by the Commissariat, and consisted of rice, oil, salt fish or pork, fresh and preserved vegetables.

Such was the force with which Major Gordon took the field, in April, 1863, and disbanded 1st June, 1864, after a series of twenty-eight engagements; and the expulsion of the rebels from all their strongholds in the province.

The scene of the operations was that part of the province of Kiang-soo lying south of the Yangtze river.

The head-quarters or depot was first at the city of Soonkong, some 23 miles distant from Shanghai, but was subsequently transferred some 25 miles further inland to the city of Quinsan, when captured from the insurgents, which from its central position and free water communication, afforded great facilities for transport in the prosecution of the campaign, and also afforded buildings sufficient for accommodation.

TOPOGRAPHY OF THE COUNTRY IN WHICH THE OPERATIONS WERE CONDUCTED.

Having given a short account of the origin and career of the force, I will now endeavour to describe the tract of country in which the campaign was carried on, before proceeding to the more medical portion of the report.

As I have already stated, the campaign was confined to that portion of the province of Kiang-soo, which lies south of the river, and is named by the natives Kiangnan, and embraces nearly the southern half of that vast tract of country—the alluvial flat or plain of the Yangtze river. This flat extends along the coast from the Bay of Hanchow towards the north, for a distance of not less than 300 miles; and inland from the coast 150 or more miles, having a superficial area of not less than 45,000 square miles. It is traversed through its whole length, from north to south, by the Grand Canal, which intersects the Yangtze, as it crosses the plain about the centre from west to east.

There is no doubt that by the deposits from the thick muddy waters of this monster stream, it has been raised from the bed of the sea, in the course of long ages, and is still stretching its banks further out every day into the ocean. The now barren and isolated hills, which rise to the height of from 200 to 800 feet abruptly from the surface, were, in former days, rocky islands standing out in the sea with their heads above the water. They are so few in number, and far separated, and with so small an area, that they do not destroy the character of the track as a continuous plain, seldom more than three to six feet above the level of the water, and indeed in some places below the tides of the neighbouring sea, as at Hanchow Bay, where the water is only kept out by a bund. That portion of the plain to which the operations were confined, has the level monotony broken in several places by these hills, such as the Tsingpo, Quinsan, Changsu, Yeshing, and Leeyang hills; and besides being traversed by the southern part of the Grand Canal, it is intersected in all directions by a thick net-work of water communication partaking more of the character of creeks than rivers or canals. They are the channels which, as the mud flats were reclaimed from the sea in past ages, were specially kept open to allow the rain-water that fell further inland a free passage outward, as also for the purpose of irrigation

and communication. In the proximity of the sea they are tidal, and from the height to which the tide rises, and the rapidity of the ebb and flow, they assume the appearance of rivers ; but further inland, beyond the tidal influence, their still waters, straight course, and high artificially maintained banks impart to them more the appearance of canals.

These not only intersect and communicate with each other so as to form a network, and pass through numerous lakes such as the Tai-ho, to the south-west of Foo-chow, the Yang sing-ho, Ta san-ho, and others, but they also freely communicate with the Yangtsze ; and as the Chinese have attained great proficiency in inland navigation, it can be understood that all traffic is carried on by these creeks, and how easy it is to traverse the whole plain without impediment or difficulty. Hence the great facilities afforded in the late campaign in the transport, not only of troops and munitions of war, but also of the sick and wounded, to be spoken of hereafter.

This flat, were it not for the labours of a most thrifty people, and the industry of ages, would now be a vast swamp and marsh growing instead of cereals and vegetables, reeds and aquatic plants : whereas, as it now stands, there is no district in the world, of equal extent, capable of supporting a more dense population.

Viewed from an elevation, the face of the country presents, besides the small hills breaking the monotony of the view, and the numerous creeks, running in every direction, clusters of luxurious growing trees planted round the little hamlets and burial places, which everywhere stud the plain, giving the whole a wooded appearance, while in the intervening spaces are seen fields of grain and other crops according to the season of the year.

The soil is a rich loam several feet in depth, and contains a large amount of vegetable matter, and is extremely fertile, except on the sides of hills where it is so scant that there is seldom any vegetation.

Trees or plants, indigenous to the tract, do not give a very numerous variety. There are, however, amongst the clumps surrounding the hamlets, some beautiful bamboo, which, where present, imparts somewhat of a tropical character to the scenery, though this may be said to be the only characteristic type of the tropics present. The weeping willow, and several varieties of pine, form the most prominent feature, while the mulberry tree is cultivated on the southern

part of the tract, on a large scale. It seems to grow better upon the sides of low embankments and artificially raised ground than on level land, therefore the whole of what is called the *silk districts* is cut up or scooped out into squares or patches of low flats with raised embankments between. On the latter are planted, in rows, of about six feet apart, the mulberry plants, while rice requiring water and moisture is grown in the low intervening squares.

The mulberry tree in its natural state is a fine tree some 40 to 50 feet in height, but where cultivated, it is dwarfed to a height of 10 feet or less for the convenience of plucking the leaves to feed the silk worms.

This district produces two crops a year. Wheat, barley, and beans, are sown during the winter, and removed in the beginning of June ; then rice, cotton, carrots, turnips, and vegetables of the cabbage tribe, are planted. To the culture of rice and cabbage is attributable, in no small degree, the prevalent diseases of this part of China, so it may not be out of place to describe the mode of their cultivation.

For rice, so soon as the first crop of the season is removed, the ground is prepared, and for this purpose, a rude implement in the shape of a plough, drawn by a water buffalo or bullock, is used. The land is first flooded with water, then the operation commences of turning up the clay (this plough seldom dipping deeper than six or seven inches into the soil). When the whole surface is thus turned over, a harrow of a still more primitive description than the plough is applied, and dragged over the upturned earth and water, until the whole assumes the appearance of a huge bed of paste, and is then in a fit state to receive the young rice plants. These seedlings had been sown some three weeks previously in patches of very rich ground, and when some five or six inches high are pulled and transplanted in small clusters of five or six plants each, and about ten inches apart.

The fields are, from this time until the season for cutting, *i.e.*, in the latter part of September, kept under water to the depth of a couple of inches, retained by a small mound or ridge round the field. The water is raised from the nearest creek by a wheel turned by a buffalo ; or, where this useful animal is not forthcoming, by a contrivance worked by women and children treading on it.

From this it will be seen a vast evaporating surface is exposed

throughout the summer months, which must, from the nature of the water from these ditches and creeks, full of decomposed vegetable matter, be a fertile source of disease, and highly injurious to health.

The cabbage tribe, as it is eaten largely as an adjunct to rice, is grown very extensively, not only here but all over China. Unlike our cabbages, those grown in China, except in some of the northern provinces, do not become white or produce a solid heart.

The seeds are sown broadcast in ridges, and, so soon as the young plants have made their appearance, the labourer commences the application of manure, the description of manure used for this purpose being nightsoil. It is carried from the cities and dwellings, where it is carefully reserved, and deposited in cisterns placed in the fields, in the most convenient situations for use. Early in the morning, or in the afternoon, water is carried from the nearest pond and stirred up with the contents of the cistern until sufficiently diluted. The liquid is then ladled into two buckets, one attached to each end of a bamboo, and carried off to its destination, where, by means of the same long handled ladle as used in filling the bucket, it is scattered over the growing plants, a process which is daily repeated until within a few days previous to the pulling of the plants for use or for market. The disagreeable odour which floats about during this operation can easily be understood; but it will also be observed that particles of the application are very likely to remain adherent to the surface of the vegetable in an unassimilated state, and that it is doubtful whether washing, as usually performed before cooking, will remove such; hence a fertile source of disease not to be overlooked.

The dwellings of the Chinese deserve a passing notice. There are no people in the world so gregarious as they are. Where one house is there are many, and these so closely packed together that they always give the idea of want of room and great economy of space. Every one lives either in a village or city: isolated dwellings are unknown. All houses, villages, and cities are built on the same common plan. The similarity of one house, village, and city to another is remarkably conspicuous; and, in fact, this similarity of all Chinese architecture is so striking, that one is inclined to think they have been built by instinct, without change, as do animals, and not by reason, with progress, as men.

The site of a city is usually a low lying valley or plain, water communication being paramount to all other considerations. A wall some 20 or 30 feet high, faced with brick and backed with earth, encloses the city as a defence. Outside this is a deep canal communicating with the interior by water gates and cross canals, and from it outward lead canals and creeks in different directions to the neighbouring cities. Streets from some superstition of the people, always run between the cardinal points—north to south or east to west, and consequently intersect each other at right angles. They are, for the most part, extremely narrow and as a rule badly kept. Very often they are covered over by throwing rafts from the roof of one house to the other, and laying over these reed mats. Houses are seldom more than one story high, with ground or tile floors. A frame-work of wood, supported on wooden pillars, is first raised and roofed with tiles, then a wall of single brick run up. In front, houses are generally open to carry on business and trades; but behind they are carefully shut in by a high wall. Within badly ventilated, indifferently lighted, the whole object seems to be to economise space. For the heat of summer they are badly suited, all wind and ventilation being shut out; and the sun, striking on the low tile roofs, rendering them when dry like an oven, and when damp like a vapour-bath. For winter they are worse adapted, being cold, owing to the thinness of their walls, and damp, without an abundance of fuel as in other countries; and for low, marshy, malarious districts nothing could be worse suited,—damp, dark, unventilated, with low ground floors, they are regular beds of fever and other miasmatic diseases.

In a country so large as China, there must of necessity be a great variety of climate and both extremes. Here, fortunately, is a central position, consequently a moderate climate, or at least not running into one extreme or the other. The hot weather commences in June and terminates in September, extending over a period of about three months. During this period a strong southerly wind prevails and relieves the oppressiveness of the high temperature registered by the thermometer. The temperature seldom rises above 90 deg., though it does occasionally run up to 95 deg. Rain generally falls in the beginning of summer in considerable quantities, also in the beginning of autumn; but the winter is

usually dry. As a rule the atmospheric damp is not very great, consequently the effect of heat in summer and cold in winter on the feelings is much modified. Nine months of the year may be said to be cool and well suited to European residents. The cool bracing air of winter, with some frost and snow enables them to retain their colour, and prevents their assuming that well known sallow, tropical appearance of Indian residents.

THE MEDICAL STAFF AND ESTABLISHMENT.

The medical department at the time of Major Gordon's taking command, like all the other arms of the force, was scarcely entitled to that name.

The writer being permitted to enter the Chinese service under the same order as Major Gordon, was placed by that officer in medical charge of the force, and on him devolved the duty of organizing the department from such means as were at his disposal, which, when in working order, may be described as follows.

It consisted of a medical staff, a stationary hospital and establishment, and a field establishment.

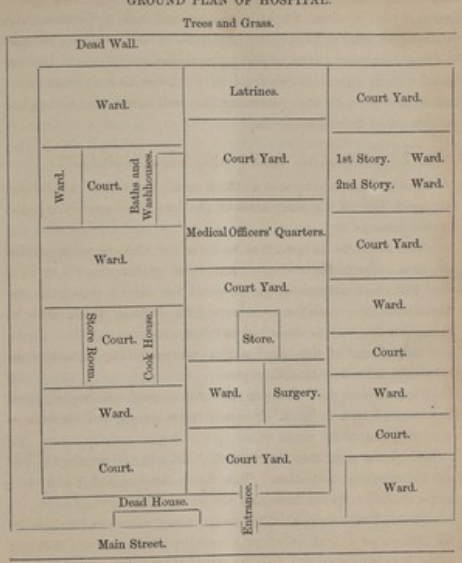
The medical staff consisted of three medical officers only, and these were disposed of, as circumstances required, and the limited number permitted.

The stationary hospital was first at the city of "Soonkong," but on the capture of "Quinsan" from the insurgents, and the removal of the head-quarters to that city, was transferred there.

A building, most likely to meet the requirements, was selected for that purpose; first, as having a central position; second, as having water communication, so that the wounded conveyed by boats could be brought close up without subjecting them to a carriage through the narrow streets of the city on stretchers; third, as affording accommodation sufficient for any probable number of casualities; fourth, as having a detached position; fifth, as being more lofty than the generality of Chinese houses, and thus admitting of being more efficiently ventilated.

When all lumber and useless partitions and walls were removed, and the whole thoroughly cleaned, whitewashed, and divided into wards, it afforded ample space for over three hundred beds, with cook house, surgery, store room, latrines, &c., &c.

GROUND PLAN OF HOSPITAL.



A description of bed, found in great numbers in the city when captured, was substituted for the common bed board, as affording a much more airy and easy sleeping place. This was a framework of wood, six feet in length, by two and a-half in breadth, across which was stretched a bottom worked of cocoa nut fibre, and supported by a trestle or stool at each end, at about two feet from the ground. With this no mattress was required. Two blankets, in addition to that carried by each soldier, with a pillow, formed a bed good enough for all ordinary cases.

The hospital staff of attendants comprised a young Chinese, who, having received an European education, was found a most useful and trustworthy man. He acted as ward-master, and had the general supervision of the hospital and attendants, being also employed as interpreter when required. From his knowledge of the classics, he soon became a most expert compounder of medicines, in which capacity he was invaluable. Under this man were two non-commissioned officers and a number of coolie orderlies, who, with a little instruction, became most useful and expert in dressing wounds, andin attending on the sick and administering medicines. In addition to these were a Chinese non-commissioned officer, who kept the hospital books and other documents ; a cook, and a contractor, who supplied the diets daily on requisition, at so much per diet, according to a scale drawn up.

The field establishment consisted of one Chinese non-commissioned officer, with six coolie orderlies, whose duties were to attend on the medical officers in the field, assist iu dressing wounds, and take charge of the hospital boats ; together with one non-commissioned officer from each regiment, with eight men, whose sole duty was to carry back the wounded of their respective regiments to the hospital tent or boat. For this latter purpose two stretchers were supplied, of the usual rolled up pattern, to each regiment, and carried by the eight men, four to each, under the superintendence of the non-commissioned officer. This party always paraded with their corps, stretchers in readiness, and always accompanied their regiments close behind into action. This arrangement was found to answer admirably, as a kind of rivalry sprang up between the different corps, it being considered a great slur if the wounded of a regiment were not quickly carried back. Indeed, so far did this urge them to the front that the casualties among the stretcher-bearers were out of all proportion to those engaged.

Two large covered boats answered as the field hospital, one being used as a surgery with medicines and appliances, the other for the temporary reception of the sick and wounded, before transferring them to the transport boats.

The latter boats were the usual Chinese gunboat, with a clear flush deck, of eight to ten feet broad and thirty to forty feet long, with a canvas awning, and propelled by two large oars or ulos in the

stern, and by sail when the wind suited. Nothing could have answered the purpose better for the transport of wounded than these. Such is the nature of the country, intersected by canals, that they were always available and close at hand. So soon as the wounded were dressed at the hospital tent or boat, they were transferred to these boats, placed crosswise on the deck, twenty to twenty-five in each boat, and almost as soon as the action was over they were ready to start for the stationary hospital. Screened by the awning in case of rain, covered with their blankets with plenty of food, and drink whenever required, a cooking place being in the stern of each, they were transported at a pace of three to six miles an hour without any of the knocking about, shaking, or inconvenience of an overland transport.

The boats running up close to the hospital, they were landed nothing the worse of the journey which, by working during the night as well as the day, was usually got over very rapidly. In this, suppuration not having had time to set in, the first dressing did not require removal until the patients were quiet and settled in their beds ; and, consequently, there was much less liability to those bad results attendant on wounds several days on the way, and necessarily in a measure neglected.

RETURN, showing the admissions and deaths from disease among the Chinese element of the "Force," for a period of twelve months, commencing 1st April, 1863, and ending 31st March, 1864.—Average annual strength, 3,000.

DISEASES.	MONTHLY ADMISSIONS.												TOTAL.	
	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	Admitted.	Dead.
Opthalmia	1	1	...	...	...	...	...	1	2	...	1	...	6	...
Dysenteria	...	...	2	6	21	19	4	2	...	...	...	..	54	7
Diarrhœa	3	43	16	50	224	278	21	8	24	15	8	...	690	9
Cholera	...	...	1	...	1	...	...	...	...	...	...	...	2	2
Febris Inter.	109	264	239	289	271	241	169	19	38	74	20	22	1755	8
„ Remit.	37	78	112	254	266	211	167	30	37	28	17	10	1247	48
„ Cont.	10	6	3	1	2	3	4	1	6	9	8	14	67	8
Rheumat. Ac.	1	...	...	...	...	...	...	...	...	...	...	...	1	...
Syph. Prim.	1	3	...	...	1	1	...	...	...	...	...	...	6	...
Scabies	4	22	3	4	7	11	...	...	...	5	7	3	66	...
Manis	1	...	...	...	...	...	...	...	...	...	...	...	1	...
Bronchitis	16	2	4	2	1	...	...	...	...	...	...	...	25	...
Dyspepsia	1	1	1	2	...	1	...	...	...	...	...	...	6	1
Hæmorrhois	...	...	...	...	...	...	...	...	2	1	...	...	3	...
Pleg. and Ulcus	9	22	19	7	6	10	1	1	7	12	5	...	99	2
Not in consequence of Action. Contusio	4	34	8	7	3	3	1	1	5	7	13	1	87	2
Not in consequence of Action. Vulnus Incis.	2	4	9	5	2	4	3	1	1	4	4	1	40	..
Not in consequence of Action. Combustio	1	4	2	..	...	...	...	...	...	..	2	2	11	...
Total	200	484	419	627	805	782	370	64	122	155	85	53	4166	87

The foregoing return is drawn up for a period of twelve months with the view of comparison with other annual returns. It shows all admissions among the native elements of the force, from disease and accidents, during the year, and the deaths resulting from them, but does not include wounds or injuries received in action, as they will be shown in a separate return.

The number of Europeans in the force being too small to furnish data, and most of their diseases having been induced by the excesses which men of their class generally run into, when in possession of large sums of money, no return is given of their diseases.

Owing to the limited number of medical officers, the hospital books, from which the return has been compiled, were kept by a native clerk, and in his own language, consequently it may not be so accurate, as it might otherwise have been; as, for instance, some of the cases returned as diarrhœa, no doubt should have been changed to dysentry, as also some cases admitted under the head of intermittent fever, should likewise have been changed to remittent fever, but with the exception of such unimportant errors it represents fairly the diseases of the force for the given period.

The monthly admissions are given for the purpose of shewing the unhealthy season of the year, also to illustrate a fact that was observed, viz.: that the force was more healthy when out in camp and actively engaged, than when quartered in the city, and inactive, and with this object the year may be divided into five periods. During the first period, extending over April, May, and part of June, the force was on active service. For the second period, extending over the latter part of June, July (except a few days in the latter part of the month), all August and part September, the force remained inactive in quarters at Quinsan.

The third period of the latter part of September, October, and November, was passed before Soochow.

During the fourth period of December and January the force was again in quarters, but the fifth period of February and March saw it again engaged in active operations.

The second period being the unhealthy season of the year, and the mass of the admissions being attributable to this, scarcely admits of comparison with any of the other periods, but by comparing the third and fifth with the fourth, it will be seen, that contrary to what might have been expected in that season of the year, a considerable increase took place in the latter or fourth period (*i. e.*) that in which the force occupied quarters in the city, and remained inactive.

The strength of the force may be put down as averaging 3,000 rank and file, hence the total admissions from disease amounted during the year to 138·8 per cent., or 1388· per thousand of the strength, and the deaths to 2·9 per cent., or 29 per thousand of the

strength; which among troops in their native country and climate, may be considered a large per centage of sickness and mortality.

The following Table compiled from return No. 1, shows the classes of disease by which sickness and mortality were caused, viz. :—

	Admitted.	Died.
Miasmatic	3822	82
Enthetic	6	...
Parasitic	66	...
Nervous System	1	...
Respiratory	25	...
Digestive	9	1
Integumentary	99	2
Accidents	138	2
Total	4166	87

And from it will be seen that six-sevenths of the whole admissions, and over eleven-twelfths of the whole deaths, arose from miasmatic diseases, while the immunity from tuberculous, scrofulous, and hepatic, and other constitutional and local affections is unprecedented in any country and among any people.

To make the foregoing return complete it would be necessary to give the invalids; but as no regular list of them was kept, only an approximate number can be arrived at, viz., 300 during the year. Debility, consequent on opium diarrhœa, and remittent fever, and ulcers, were principally the causes of their being invalided.

Many of those merely debilitated from fever would have recovered and resumed their duty, but recruits being easily got it was found more expeditious to drill them than wait for the old hands, consequently all men not likely to be fit for duty for a lengthened period were discharged.

Cholera, though epidemic at Shanghâi, and in its neighbourhood, occurred in only a few cases in Quinsan. It is a disease well known among the Chinese as Sha-ping (low sickness or fatal disease). The banks of the Yang-tsze have been visited from a very remote

period, to a greater or less extent, by this disease every summer. At Nan-kin it is said to be known for several centuries, but strange to say it has never visited the large city of Soochow, which is inland only 30 miles from the Yang-tsze. In Chinese subjects it is even more fatal than to Europeans. Complete collapse sets in at an early period, and death ensues rapidly. The treatment adopted by the native practitioners, is pinching the skin of the body until it is ecchymosed, and acupuncture over various parts of the body, according to the fancy of the operator. Over the solar plexus is often selected as a favourable place for the operation, and said to be attended often with beneficial results.

Bowel affections prevailed to a considerable extent, and proved in many instances troublesome and obstinate cases.

Diarrhœa presented three distinct varieties, *i.e.*, dyspeptic or indigestive, intermittent, and opium diarrhœa.

Each of these varieties were well defined by the symptoms, and it was of no small importance, in the treatment, to discriminate between them.

In dyspeptic diarrhœa the patient generally complained of uneasiness in the stomach, and a sense of fullness in the abdomen, after eating. The evacuations were frequent, light in colour, and containing a large portion of undigested matter, and more copious than natural. Without much suffering, wasting set in; and, if the disease was not stopped, very often debilitated the patient so that he was attacked by fever, or terminated in dysentry. The causes were various. Eating largely, and pouring quantities of fluids into the stomach; sleeping and lounging about during the day, without any occupation for either the mind or body, seemed to be very common sources of this disease. Bad and loathsome smells, salt fish in a bad state of preservation; and, though last, not least, thegreen vegetables so largely used by the Chinese as an adjunct to their rice, and cultivated as described, was also frequent causes. That the liver was also at fault there is no doubt, from the light coloured copious evacuations, but whether primarily or secondarily affected is hard to say.

Intermittent diarrhœa was not of so frequent occurrence as either of the former. Purging with copious watery evacuations came on periodically, either quotidiam or tertiam, and though it was attended

or ushered in by cold and hot stages, yet there is little doubt that it is one and the same disease as intermittent fever, only that in one case elimination takes place by the skin, and in the other by the mucous membrane of the bowels. In some cases it was observed that fever and purging alternated with each other, that the purging terminated altogether in the paroxysm of fever.

Opium diarrhœa was found to be a most troublesome affection to deal with. The subjects of it were opium smokers, whose constitutions had been debilitated by the excessive use of the drug. In such it usually comes on every summer and continues through the hot weather, or until it terminates life. Indeed, it may be looked upon as the end to which all persons who indulge in the pernicious practice must come sooner or later.

With it there is little pain, and no fever. Its prominent symptoms are looseness of the bowels, bad appetite, loathing of food, white tongue, depression of spirits, sallow skin, hollow cheeks, and sunken about the eyes, with wasting of tissue and general debility. It is slow in its progress, and does not yield easily to remedies. If the patient has strength enough to carry him through the hot weather, it generally ceases of its own accord on the approach of winter, but only to return the following summer.

The treatment found to give the most satisfactory result in dyspeptic diarrhœa was calomel and compound powder of jalap, alternated with opiate astringents. In the intermittent form a mild purgative, followed by quinine and Dover's powder, seldom failed to effect a cure. As to opium diarrhœa, the difficulty to contend with was to get the patient to give up the practice of smoking. This was no easy task as their desire for it, when confirmed smokers, is almost beyond their control, and they have but little faith in any proposed remedy.

However, in some cases where they were induced to leave it off, Dover's powders and tonics were found to be of much service; but it is necessary for some time to give opium by the mouth, to compensate for the sudden breaking off of the practice.

As a general rule, once a man has commenced to smoke opium, there is no retreat. He may be reformed for a few months, but will so soon as trouble overtakes him or temptation is thrown in his way, return to it. At first he is ashamed of the practice, but as he goes on the sense of shame become blunted, and he becomes reckless of

life and character. Its effects on the constitution is in proportion to the quantity and regularity of its use. Excessive use of it may kill in less than a year, while others may go on using it for 18 or 20 years in moderation, without any detriment to their capacity for transacting business, though as a general rule, such are sallow, hollow cheeked, and emaciated.

According to Chinese military law, opium smoking constitutes a very serious crime, and the punishment is proportionately severe, consequently it is not much indulged in by the imperial troops; however, such was not the case in the Disciplined Force, the only punishment being discharge from the service when they became physically unfit to perform their duties.

The dysentry treated was for the most part of a subacute character, and in subjects debilitated from previous fever or diarrhœa. Ipecacuanha was used in its treatment, but from its requiring careful administration, and a certain amount of persuasion to induce patients to persevere in its use, and as such can only be obtained under the immediate superintendence of the medical attendant, it did not prove so valuable a remedy as it might otherwise have done; but besides the dysentry of China having little of the acuteness or suddenness of attack that dysentry in other countries has, ipecacuanha is not so well suited for its treatment, and will very often disappoint those who have used it in India.

Intermittent and remittent fevers were by far the most numerous and fatal diseases present. It is strange in a country like China, where the inhabitants crowd together in great numbers, and where no system of drainage is pursued, nor any supervision of the removal of filth or garbage—in fact, no sanitary measures whatever adopted, —that continued fever should be of such rare occurrence. It is seldom that an epidemic of typhus visits a city in China, though nothing could be more favourable for the production of this type of disease.

Of intermittent fever there is but little to say, it having the usual characteristics, and yielding easily to antiperiodic remedies.

However, it sometimes terminated in the remittent form; and then, from being a mild disease, very amenable to treatment, and of a few days' duration, it became a slow, troublesome affection, as will be seen from the number of deaths resulting from it.

The remittent fever which came under treatment, though it often interchanged with intermittent, and had periodic paroxysms, and without doubt had the same origin, yet could not be said to be the same disease, no more than any one of the other miasmatic diseases.

For a few days previous to the commencement of the fever, the patients generally presented a sallow hue of the skin, and invariably complained of a burning pain in the stomach.

This gastric uneasiness, one of the most characteristic features of the disease, increased as the fever came on, and continued throughout.

It was the first symptom complained of by the patient when reporting himself sick. Sometimes the fever set in by a regular intermittent paroxysm of considerable severity; but, as a rule, it came on more slowly, ushered in by a slight chill, followed by hot skin, and after some time by a mild perspiration, which latter, though it relieved the ardent fever, was not followed by a regular intermission, but merely an alleviation of the suffering. This fluctuation of the symptoms, whether amounting to a regular paroxysm or merely an exacerbation, occurred generally daily, but at most irregular hours, sometimes in the morning, the next day in the evening—in fact, at any hour during the day or night. The bowels were always irregular, being either constipated or relaxed. Nausea and vomiting were often present, with total loss of appetite. As the disease progressed, the skin became more sallow, sometimes regularly dark brown, while in other cases regular jaundice supervened.

The dark colour of the skin was generally a bad symptom, but jaundice was much worse, very few of the cases in which it made its appearance having recovered. The nervous system participated strongly in the disease. Headache was always present, less or more, vertigo and noise in the ears, and deafness, suffusion of the eyes, a palsied state of the limbs and muscles were also of frequent occurrence and during the paroxysm, delirium was not unusual.

The intensity of the disease varied. In some cases the patients did not regularly lie down, while in others the muscular debility and head symptoms compelled them to keep their beds.

In ordinary cases the disease ran its course in about three weeks, and terminated rather abruptly in copious perspiration,

purging or intermittent fever. In cases about to terminate fatally head symptoms of a violent kind generally set in, and the disease assumed a typhoid character.

Convalescence, considering the great debility, was generally quick, there seldom being any organic lesions.

Purgatives were always found to give relief, and especially when head symptoms were present, calomel with pulv. jalap comp., was found to answer best. Quinine could seldom be given with safety or benefit. ×

In more than one case I have seen death result from its use, when head symptoms were present, and again I have seen it bring on head symptoms when not present. Dover's and James' powders were often of service.

× In such a type of fever as is here described with so much gastric disturbance, quinine ought to be given by enema—

(No. 2.)

CLASSIFIED RETURN of Wounds received in action by the Chinese element of the "Force," during the period from 1st April, 1863, to 31st May, 1864.—Average strength, 3,000.

REGIONS OF BODY WOUNDED.	Total Wounds Admitted into Hospital.	Deaths from Wounds and Operations.
Wounds of the Head...	92	8
„ Face	73	5
„ Neck	55	6
„ Chest	39	12
„ Abdomen	23	4
„ Back and Spine ...	17	4
„ Perineum and Genital Organs, and Pelvis ...	26	1
„ Shoulder	69	1
„ Arm	70	5
„ Forearm	32	1
„ Hand	73	2
„ Fingers	12	...
„ Thigh	40	7
„ Leg	120	5
„ Foot	123	4
Total	864	65

(No. 3.)

CLASSIFIED RETURN of Wounds received in action by the Europeans in the "Force," during the period commencing 1st April, 1863, and ending 31st May, 1864.—Average strength, 120.

REGIONS OF BODY WOUNDED.	Total Wounds Admitted into Hospital.	Deaths from Wounds and Operations.
Wounds of the Head...	9	1
„ Face	3	...
„ Neck	2	1
„ Chest	7	2
„ Abdomen	1	1
„ Back and Spine ...	2	...
„ Perineum and Genital Organs	1	...
„ Shoulder	2	...
„ Arm	3	...
„ Forearm	4	...
„ Hand	7	...
„ Fingers	4	...
„ Thigh	17	3
„ Leg	8	...
Wounds opening Large Joints... ...	2	2
„ injuring Large Arteries ...	1	1
Total	73	11

Wounds.

The foregoing returns, Nos. 2 and 3, show the wounded of both the Chinese and European element of the Disciplined Chinese Force during the campaign, extending over a period of fourteen months.

Of the Chinese element, 864 cases, and of the European element, 73 cases of wounds, came under treatment. Of these numbers 65 cases or 7·5 per cent. proved fatal among the former, and 11 cases or 15· per cent. among the latter.

If to the wounded be added the estimated number of killed,—viz., 477 of the native element, and 27 of the foreign element, the total number of casualties from injury received in action, amounted during the campaign, to 1,341 or 44·7 per cent. of the average strength of the former, and to 100 or 83·3 per cent. of the latter, thus showing that the officers suffered, as is generally the case, out of all proportion to the rank and file.

It cannot be shown how many of the numbers wounded were able to return to duty, inasmuch as the force was broken up, leaving some men, wounded in the late engagements, still in hospital, but in a fair way of recovery.

The proportion, however, who were rendered unfit for service, was very small as compared with the wounded in European warfare.

Though such a large number of wounded afforded several most interesting cases, and in so many instances proved fatal, yet as compared with wounds received in European warfare, caused by the modern projectiles, they were generally speaking of a much less severe nature.

Wounds from shell or round shot were very few, but nearly all such received by the Chinese element proved fatal by shock and collapse, from which no amount of stimulant could rally them. It was seldom an operation could be attempted for this class of wound.

All the wounds, with few exceptions, were inflicted by projectiles from muskets, matchlocks, and ginggals.

Owing to inferior powder and the balls not fitting the bore of the pieces, the velocity was low and the force with which the bullet struck much lessened, consequently it seldom caused much laceration or disorganization of the parts, and was seldom dangerous except when opening some of the cavities, joints, or arteries.

A few accidents in the ranks afforded a good opportunity of comparing the wounds inflicted by the European arms in the hands of the disciplined force, with wounds inflicted by the description of arms in the hands of insurgents.

In the former case a large bullet with a high velocity and considerable force struck a limb, passed through it and out on the opposite side, lacerating and destroying the muscles and tissues, and shattering the bone and everything which opposed it in its straight onward course, leaving a large track; while in the latter a small bullet with low velocity and little force struck the limb, passing very often between the muscles, leaving a small track with scarcely any destruction of tissue, and if it came in contact with the bone, either lodged against it or turned aside (seldom fracturing it), and became arrested in its course by the elasticity of the skin on the opposite side of the limb.

Such were the two classes of wounds as compared with each other when the extremities were the seat of injury; however, when the head, the cavities of the trunk, joints, &c., became the seat of wound, the difference in degree was not so great, as in such cases either had sufficient force to enter, and a penetrating wound is in many instances more serious than a perforating wound.

In most of the wounded among both the Chinese and European element a successful issue was obtained, and a large proportion were able to return to duty within a reasonable time. In the return No. 2, some of the cases of deaths shown as from wounds, such as that of the hand, &c., should rather have been put down to fever or some supervening disease. Many of the Chinese patients when debilitated by suppuration were attacked by intermittent or remittent fever.

This was observed to be the case specially in one particular ward, which on examination was found to be ill-lighted and deficient in ventilation.

Gangrene, for the first time, made its appearance among the wounded in the beginning of the month previous to the breaking up of the force. It attacked four cases, all Chinese, and it was observed that no two cases occurred in the same ward of the hospital. Amputation was had recourse to in two of the cases. It re-appeared in the stump of one of the two and proved fatal, the other case recovering.

Notwithstanding the better care and attention paid to the European wounded, yet the mortality was double that of the Chinese. The Europeans as a class were very irregular in their living, which combined with their different temperament, rendered them much more liable to high inflammatory action than the Chinese. The latter moderate in their diet, temperate in their habits, of the lymphatic temperament, patient and very tolerant of pain, without any cast, and with the greatest confidence in European surgery, were the best of patients, and seldom suffered from excessive inflammatory action. They, however, suffered more from shock than did the Europeans, and though the inflammation was of the subacute character, yet suppuration in contused wounds was profuse, but incised wounds healed in a most miraculous way, resembling more the manner in which fish heal up.

Owing to this tendency to suppuration, abscesses in the neighbourhood of wounds were of very frequent occurrence and required particular attention, as they formed generally very quickly and burrowed extensively if not evacuated. The liability to the formation of these abscesses was very much increased by the Chinese method of treating wounds, *i. e.* sticking a pitch plaster over the mouth of the wound, a practice which some of the patients at first had recourse to in a surreptitious manner until the evil was pointed out to them.

As might be expected from the class of weapon used, a large proportion of the bullets lodged in the muscular parts of the body, such as the thighs, nates, and back of neck, considerable difficulty was sometimes experienced in extracting them, and this difficulty was increased by the small size of the bullet, which left so small a track that the finger, which is the only really efficient probe, could scarcely follow it.

The bullets being rough and irregular seldom failed to create much irritation and do considerable mischief when they could not be extracted, and prolonged the cure indefinitely. It was very rarely they became encysted.

It is worthy of remark that Major Gordon received a wound from a small bullet which passed through the upper part of the calf of the leg, close to the back of the tibia, and that no suppuration took place from the track of the bullet, the only suppuration that took place being from the integument at the seat of entry and outlet.

The general line of treatment pursued was very simple. Attention was particularly directed to the removal of all foreign bodies. This done a light water dressing was applied. In many cases syringing the wound simply with water or with a slightly astringed or even stimulating lotion was found very serviceable.

In cases of profuse suppuration an equable pressure by bandage was often found to be of the greatest service in diminishing the discharge. The greatest care was necessary when the wounds were cycatrizing, to make Chinese patients exercise the limb to prevent contraction, as they had the greatest repugnance to move it until perfectly healed.

In cases of wound complicated with fracture of the long bones, various kinds of splints were devised, so as to secure steadiness of the parts and allow the wound to be dressed at the same time. In the upper extremity the results were favourable, but in the lower the results from conservative surgery were such as would decide me in favour of amputation, if ever again placed under circumstances where the best appliance and care could not be obtained.

Wounds of the Head.

Wounds of this region were of much more frequent occurrence than of any other part of the body, presenting an area of equal extent.

This may be accounted for two ways; first, the manner in which soldiers take cover behind mounds and other eminences, leaving their heads exposed; and second, the fact of the enemy's position on the walls of cities, being some thirty feet higher than that of the assailants.

Wounds of this region were not only more numerous than of any other part of the body, but they were also much more fatal in their results, as it must be taken into consideration, a large proportion of those put down as killed on the field was from injuries in this region.

It is to be regretted that the returns kept do not admit of the classification of the wounds of a region according to the degree, and of the lesion. As it is, all injuries of the head must be taken in the aggregate.

The following are some of the cases of wounds of the head.

which came particularly under notice, of both Chinese and Europeans, but they only form a small proportion of the numerous interesting cases treated :—

Case 1.

Private Wong-ta-sin was wounded in the assault on the city of Taitsan, by a matchlock bullet which struck the frontal eminence on the left side, inflicting a large scalp wound, and causing a fissured fracture of the bone in the shape of the letter V, with a slight depression of the apex. He did not report himself wounded until the second day after receiving the injury, being too busily engaged in collecting loot in the captured city. When dressed he was put to bed and told the danger if he did not keep quiet. Notwithstanding, on visiting the hospital in the afternoon, he was found to have returned to duty, and nothing could persuade him to remain in hospital. He insisted he did not feel ill, and therefore there could be no danger. He marched with his regiment for three successive days, and yet the wound healed without a bad symptom, greatly to the gratification of the patient, who took no small amount of credit to himself for his foresight.

Case 2.

Private Chang-lin-Sin was wounded before Soochow on the 29th November, 1863, over the left parietal bone. In addition to a large scalp wound, the bone was bared and a fissured fracture of horse shoe shape, about the diameter of an ordinary sized bullet, with a very slight depression at one side. There was no symptom present demanding more than ordinary treatment, water dressing, quietude, and low diet, until the 9th December, when he complained of unusual soreness of the wound and slight headache. A calomel purgative was administered, and a poultice applied to the wound. On the following morning he was found completely insensible, and with all the symptoms of compression.

The conclusion come to was, that abscess had formed, but while hesitating about using the trephine, the patient became so bad that it was considered useless to attempt any operation, and he died the same evening.

On removing the cranium, it was found that the rent or fissure had extended through both tables of the skull, and that the depression

of the inner table was only so much as to be perceptible, but between the edges of the fissure in the outer table was embedded a small piece of lead stripped off from the bullet, which from the appearance of the scalp wound must have struck obliquely.

Immediately under the fissure, between the bone and dura mater, was at least a drachm of pus. This gave rise to regrets at not having had recourse to the trephine, but on opening the brain a large abscess, containing at least an ounce of pus, was discovered in the hemisphere of the brain, and corresponding in position with the outer wound.

Case 3.

Private Ching-San was wounded in returning after the unsuccessful assault on the city of Kintang. The bullet struck about half an inch to the left and below the occipital protuberance, and depressed a portion of the cranium corresponding to the size of an ordinary bullet.

No symptoms of compression followed. The wound was dressed in the ordinary way, and the patient confined to bed, inasmuch as he had a wound of the leg also. At the end of nearly a month the patient one morning presented a piece of bone which came away from the wound.

It included both tables of the skull, but the outer nearly twice the diameter of the inner. Several other pieces of bone of smaller size being loose, were then removed, and the wound in the scalp closed ; not a bad symptom being present.

Case 4.

Private Ching-Wang-San was wounded in the assault on the intrenchments before Soochow, on the 29th November, 1863. The bullet ranged along the left parietal bone, close to the saggital suture, and shattered the bone into several pieces, lacerating the dura mater, and structure of the brain. The patient was in a lethargic state, with partial paralysis of the lower extremities, but no other symptom of compression was present.

The fragments of bone were carefully elevated and removed, leaving an opening in the skull fully an inch and a half in length, and the brain quite visible. The patient regained his senses completely, and the wound partially closed in, but though the paralysis

of the lower extremities improved, yet he could not walk without assistance.

The two following cases in Europeans are good recoveries from depressed fracture of the skull with compression, though differently treated.

Case 5.

Major Kirkham in the night attack on the 29th November, 1863, on the intrenchments before Soochow was struck by a bullet over the anterior part of the left parietal bone, about two inches from the saggital suture. In addition to a large scalp wound, the bone was bared, and fractured with quite a perceptible depression. He lay in a half stupefied sleepy state, but could be roused, though he immediately sunk into it again. He could not speak, though he evidently understood what was said to him, and could swallow drink and medicines. The breathing was very heavy, but could scarcely be called sterterous. The right side of the face was partially paralysed, and the mouth drawn to one side. The pupils were sensible to light and natural in size. The pulse at first was weak, from his being chilled, having fallen into the water, but so soon as the temperature of the body was restored, it was full and about natural, in frequency. The hair was removed, water dressing applied to the wound, and calomel given, till the gums were touched. He remained in the same lethargic state, without any pain or suffering for four days, then a less tendency to sleep manifested itself, and now though he heard and observed everything going on around him, yet he could not speak.

After several attempts to do so, he made signs for a pencil and paper, and succeeded in writing what he wanted, but left out several words in the sentence and letters in the words. He now for the first time began to feel the wound with his hand, and, complaining of its being painful, began to make inquiries about it. 2nd Dec., he was quite sensible and rational, and well aware of his position and state. The pulse quiet, the bowels regular, no unusual tendency to sleep, but still he could only give utterance to certain words, and this with great difficulty. The facial paralysis still continued, and he also complained of feebleness of the right arm. The wound looked healthy. It was dressed in the ordinary way, and went on favourably, and the speech daily improved, so that at the

end of six weeks he was able to resume his duties, with only a slight hesitation, a little excitability of temper, and a small part of the wound not yet healed, owing to some little exfoliation taking place. Paralysis completely disappeared.

Case 6.

Capt. Martin, an European, in the employ of the Mandarins at the assault of "Chanchow-foo," was struck by a bullet over the upper part of the occipital bone to the left of the mesial line. It caused a comminuted fracture of the bone, and depressed the fragments, but did not lodge. When brought to the hospital two days after the injury, I found him in a stupid state with heavy breathing, and though it was possible to rouse him, yet he was not cognizant of what was going on. He rather resisted when an attempt was made to wake him up, turning away and pulling the clothes tightly round him. An incision was immediately made through the scalp wound, and by means of an elevator and forceps all fragments of bone were carefully elevated and removed, and so soon as this was done, the dura mater rose and did not seem to be lacerated or punctured. During the operation the patient manifested but little sense of pain as if he were scarcely aware of what was going on, but when the wound was being washed out he seemed suddenly to recover his faculties, and sense of pain, and commenced vociferating furiously for being handled so roughly, but on observing me he quite understood his position, and began to make apologies, saying the horrible pulling about brought him to his senses. He was kept quiet, the wound dressed simply with lint and water, and the mouth slightly touched with calomel. Not a bad symptom followed. He left the hospital for duty on the 21st day from the operation, with the wound almost closed.

Wounds of the Face.

Wounds of the face, like those of the head, were of very frequent occurrence, and depending on the same causes for their frequency. The Chinese, being totally ignorant of the means of arresting hœmorrhage, have a great dread of it; consequently, wounds of the face, generally being attended with considerable loss of blood, were more appaling to them than wounds almost of any other part of the body. Some of the cases treated at first presented a frightfully

gashed appearance; but so great are the powers of reparation in this region that the results were beyond all expectation, and the deformity in most instances much less than could have been hoped for.

The two following cases in Europeans are good recoveries from severe wounds.

CASE 7.

Capt. Robertson, aged twenty-four, was wounded in the assault on the city of Taitsan. The bullet entered on the right side, at the angle of the inferior maxilla, and made an exit about the position of the mental foramen on the left side, shattering in its course the whole of the horizontal ramus, and mental process of the maxilla. On reaching the stationary hospital, Dr. Robertson, assistant-surgeon, Royal Artillery, who kindly rendered assistance on this occasion, removed by the mouth all the spicula of bone which remained of this part of the jaw. Considerable swelling followed, so that the patient could not swallow anything for several days. However, by means of enemas, fomentations, and such other antiphlogistic remedies as could be adopted, the inflammation and swelling began to subside, so as to admit of fluids being passed into the stomach.

The wounds took on a healthy action, hard tissue was thrown out to replace the removed bone, and a gutta percha mould being used to give the parts a proper shape, the patient made a good recovery, with very little deformity, beyond the loss of teeth which he has since had replaced by an artificial set.

CASE 8.

Captain Shamroffel, a Prussian, aged twenty-six, was wounded in the attack on the intrenchments before Soochow, on the 29th November, 1863. The bullet, of small size, entered immediately behind the orbital margin of the external junction of the frontal and malar bones, on the right side, and must have passed through the globe of both eyes and ethmoid bone, until it finally made its exit on the left side in a corresponding position to its entrance on the right side.

No time was lost in getting the patient under the influence of mercury, and though considerable inflammation followed in the membranes of both eyes, yet it did not extend farther. No symptoms of the brain being in any way affected, made its appearance. As the inflammation subsided both balls receded within the orbits so as to be covered by the eyelids.

The following case is illustrative of a bullet taking a most extensive course, without injuring any important part.

CASE 9.

Private Chang-sing-ling was wounded at the capture of the intrenchments before Soochow on the 29th November, 1863. At the time of receiving the wound, he states he was lying on his belly looking over a mound at the enemies position. The bullet entered the face on the right side of the nose, penetrated the palate a little to the right of the centre, passed through the base of the tongue a little to the left of the mesial line, and pursuing a downward and a backward course, finally lodged under the skin on the back, an inch and a half to the left of the second dorsal vertatra, from which it was extracted by incision roughened and scored by its passage through the bones of the face.

No bad symptoms followed this extensive wound. Portions of the palate bone and bones of the face being removed, it healed without difficulty or deformity, except a small opening in the palate.

WOUNDS OF THE NECK.

Numerous instances of the extraordinary escape of the large vessels from injury by the passage of bullets through the neck might be given, but beyond this, wounds of this region presented little worthy of remark, except the great difficulty experienced in extracting bullets when lodged in the muscles of the back part of the neck. In several instances, having failed to extract them, they became encysted and caused but little inconvenience.

WOUNDS OF THE CHEST.

Wounds of this region were, with few exceptions, gunshot. They were of two kinds—those injuring the parietes only, and those not only injuring the parietes, but penetrating or perforating the cavity of the chest and its contents. The former presented but few cases worthy of more than simple wounds, but amongst the latter were some of the most interesting cases which came under observation.

The statistics of all campaigns show that there is no more dangerous wound than penetrating wound of the chest, and the same is borne out in the present instance—(a larger proportion of this class of wound, as shown by the return, having proved fatal than of any other)—yet a sufficient number of recoveries took place to encourage perseverance in treatment, and to dispel the belief that wounds of the pleura and lung must necessarily be mortal.

Notwithstanding that much may be claimed for treatment in conducting a case to a happy termination, yet more will depend on the degree and position of the wound, and whether or not the missile be lodged. The pleural cavity may be opened without the bullet lodging, or it may not only be opened but the bullet may be lodged within it. In the former case the chances of recovery are much greater than in the latter where the foreign body by its presence seldom fails to create mischief in addition to that already done, and it is seldom that it can be extracted. Nos. 11 and 12, are illustrative cases. When in addition to the pleural cavity being opened the lung is injured, the wound is more dangerous than when the pleura alone is wounded, but the chances of recovery are increased the nearer the wound is to the periphery of the lung, and if the bullet perforate or lodge in a position from which it can be extracted. Nos. 13 and 14 are cases of recovery from wounds of the lung distant from its root, and where the bullets did not lodge or were extracted.

It is sometimes, on first seeing a patient, difficult to come to a conclusion whether the cavity has been opened or not, but I have observed that in all cases were the chest was opened into, there was an immediate paralysed, powerless state of the patient, which was never present when the parietes merely were wounded.

By this symptom alone I have been able to tell, when seeing a man on the field, whether the wound penetrated or not.

The following is a case of wound of the parietes, in which the bullet must have impinged very closely on the lung and subclavian vessels, but yet did not injure either.

Case 10.

Col. Kirkham (the same officer whose case is given under wounds of the head), in the unsuccessful attack on the city of Kintang, on

the 21st March, 1864, was wounded by an ordinary musket ball. The bullet entered below the right cavicle about its centre, and passed between this bone and the first rib, slightly injuring the latter; and, passing backwards, it fractured the upper margin of the scapula, and lodged under the skin on the back of the shoulder.

Pulsation in the arteries along the arm showed the subclavian to be safe, and there was no appearance of the vein being injured. No symptom of the lung being injured was present, and the absence of the paralysed state attendant on such wounds (he having walked by himself to the rear) led to the conclusion that the wound was not so dangerous as it appeared to be; but all measures of precaution were taken. The bullet was removed, with a few spicula of bone, the wounds dressed with water dressing, and strict rest enjoined in the horizontal position, with the arm raised on a pillow out from the body. After a time he became subject to paroxysms of the severest pain down the arm, and the arm could not be brought down to the side.

He was put under chloroform and the arm brought down, and some pieces of bone and clothing having come away from the wound, the paroxysmal pain ceased, the wound took on a healthy action, and he left on the 1st June for England, on the way to recovery.

Case 11.

Private Kong-tum-san was wounded in taking the city of Quinsan, by a small matchlock bullet. It entered a little to the left of the spine, and passed outwards between two ribs, opening the pleural cavity in its course, and lodging under the skin a little below the inferior angle of the scapula. He lay on the field so paralysed and prostrated that he could scarcely move, though there was no other symptom present to show that the cavity of the chest had been opened, nor could the finger give any assistance, owing to the smallness of the track, and the oblique course of the bullet.

The wound was closed, and a small compress put over each opening. Some severe paroxysms of dyspnœa soon set in, and inflammatory symptoms. Tartar-emetic, calomel, and opium were given freely, yet effusion took place into the cavity, and the dyspnœa became so distressing that it was necessary to open the wounds, and allow the collected fluid to escape.

A copious discharge continued to come from the wounds, at first serous, but subsequently purulent. Air passed in and out of the wounds over the expansion and contraction of the chest, and amphoric resonance was most distinctly heard. Sometimes the discharge would cease for two or three days, and the wounds showed symptoms of closing; but this was deceptive; a collection of matter was taking place inside, which, so soon as it had reached a certain quantity, burst out again. However, the parietes of this side of the chest began to contract and the discharge to diminish; and, as the drain from the system became less, the patient's general health improved, until he was in a convalescent state, when he was attacked by dysentry, which, in the enfeebled state of his system, proved fatal. The lung was found contracted to about half its size, and adhesions of the pleura above the level of the wound. That part of the pleura which was not adherent was a pus secreting surface. The substance of the lung was almost condensed.

Case 12.

Capt. Dunn, an Englishman, aged twenty-nine, was wounded on the 29th April, 1864, before Chan-chowfoo, by two bullets. One passed the anterior part of left deltoid, and the other entered close to its exit, and, passing under the great pectoral muscle inwards, struck the first rib, which it injured, and entered the apex of the chest. Calomel was given so as to affect the mouth; still considerable inflammation followed. Percussion and ascultation showed that effusion had taken place, but was confined by adhesion to the anterior part of the pleural cavity. It began to discharge freely from the inlet of the bullet, at first serous, but subsequently regular pus. No admission or exit of air took place, owing to the oblique valvular nature of the opening made by the bullet. Frequent attacks of dyspnœa and the continuous discharge told considerably on the patient's state of health. On the 24th of May he complained of severe pain to the left of the apex of the heart, and in the afternoon sent for me, saying that he had discovered the ball, and could feel it between the fifth and sixth ribs. At first I thought I felt it, but could not afterwards satisfy myself of it so as to justify an opening being made. The force was broken up in a few days after this, and this man was transferred to the Civil Hospital at Shanghai. There

Dr. Coghill, under whose care he was, though he could not satisfy himself of the existence of the bullet, risked an opening between the fifth and sixth ribs, and found the bullet lying against the apex of the pericardium, and extracted it. The man's health rapidly improved, and the discharge much diminished. With the wound in a healing state, he proceeded on his voyage home, in the beginning of July.

Case 13.

Private Won-ta-Sin, aged twenty, a stretcher bearer, was wounded by a small bullet at the city of Wokong on the 13th October, 1863. It entered the right side of the chest a little above and to the inside of the nipple, and passed out, and lodged under the skin on the back between the lower angle of scapula and spine. He lay helpless on the ground with profuse hœmoptysis until he became collapsed and faintish. He was carried in, and the bullet removed. The ribs at the inlet and exit were uninjured. There was an oozing of blood from both wounds. The wounds were closed, and a compress of lint put over both and retained in site by adhesive plaster, and calomel and tartar emetic given freely. Scarcely any inflammatory symptoms followed. Hœmoptysis continued rather freely for days, then the expectoration became purulent. The wounds, when the compress was removed on the third day, had begun to suppurate, and though discharging, yet not sufficient to have come from the cavity of the chest. By rest and spare diet the wounds took on a healthy action, and healed without a bad symptom being present, except a copious purulent expectoration which continued for some time. Five months after I examined his chest, and with the exception of slight feebleness of respiratory murmur I could detect no other trace of the injury.

The patient however lost such a large quantity of blood by hœmoptysis that he continued very pale and anœmic.

Case 14.

The Chinese General Yang, aged twenty-six, was wounded at Chan-chowfoo, when commanding a division of the Imperial army. All the Chinese who saw him gave him up as lost, but he himself being a young man of the progressive school in China, and knowing from his intercourse with foreigners, that they are ahead of his own countrymen in the science of war, thought they should also be superior in surgery, and accordingly requested foreign medical advice.

The viceroy of the province who was present asked me to go and see him. On arrival I found that a middle-sized bullet had entered the side of the chest between the second and third ribs, about an inch external to the sternum, and passing outwards and backwards, had lodged in the muscles, forming the posterior fold of the axilla, at the anterior margin of the scapula.

The prostration and hœmoptysis showed that though pursuing this superficial course, yet it had pierced the lung.

The bullet was removed by incision greatly to the delight of the patient and his friends, inasmuch as the Chinese will not in any case venture ~~to~~ the use of the knife. A pledget of lint was placed over both wounds, strict rest and quietude enjoined, with a spare diet, and calomel, tartar emetic, and opium adminstered. Slight feverishness followed, with a short tickling cough, and attacks of dyspnœa. Effusion began to take place into the cavity of the chest, and daily increased slowly, until the whole of the side was dull on percussion, and scarcely any respiratory murmur audible. The wounds became adherent so as to prevent the escape of any fluid, and began to heal. On the 15th day the dyspnœa became so urgent from the pressure of the fluid that I had decided to tap the chest, but when making preparations to do so, the patient was seized with a fit of coughing and began to expectorate large quantities of pinkish coloured pus. It came in such quantities that for a time there was danger of his being suffocated. This copious expectoration (amounting to pints) continued for two days, and by that time the respiration was greatly relieved, and the fulness of the side considerably diminished.

The expectoration gradually decreased and the patient's general health improved, so at the end of four weeks he was able to walk about.

At the end of two months his chest on this side was considerably contracted, but still there was respiratory murmur over the whole of the lung, though rather feeble at the apex and base. He has since resumed his command and got married.

The case coming under the immediate notice of the viceroy of the province he took much interest in it, and made a special report of it to his government, and has since been trying to obtain as his

own medical attendant a Chinese who was educated at Edinburgh, and who is at present practising at Canton.

Wounds of the Abdomen.

It was a fact worthy of notice, how very few serious wounds of the abdomen came under treatment. It can only be accounted for by the fact that the Chinese are in the habit of wearing an enormous padded and stitched belt, round this part of the body, which addition to their ordinary clothing (which is rather clumsy about here), their pouch, belts, &c., must have acted as a kind of shield in stopping the missiles. On one occasion a round shot struck a man on the padded belt, and though the injury proved fatal, yet it did not perforate the belt.

Wounds of the Extremities.

Wounds of the extremities only became serious when complicated with fracture, and especially fracture of the large bones. Of compound fracture of the thigh 13 cases came under observation, four of them Europeans and the other nine Chinese. Amputation was had recourse to in eight cases, and four recoveries took place, while in five cases an attempt was made to save the limb by conservative treatment; but, unfortunately, though two of the cases in Chinese subjects were selected, owing to the apparently slight splintering of the bone, yet all, after much pain and suffering, sooner or later died.

A belief was entertained that an attempt might be made to save the limb, and that, if this were found impossible, a secondary operation might be performed. But delusive hope! Once the golden opportunity passed it never came again. Pain, swelling, suppuration, diarrhœa, fever, and a host of other ills followed in succession, until death was a happy release to the sufferers.

All efforts to get the patient into a fit state to perform an operation with any hope of success were attended with disappointment.

Though an advocate at first for conservative treatment, experience has led to the conviction that primary amputation is the proper practice to be adopted in compound fracture of thigh bone, when it can be performed below the trochanter. Experience shows that a greater number of recoveries follow it, and, besides, it saves patients much suffering, and leaves a clean stump, which, with artificial appliances, is far preferable and more useful than the shortened,

deformed, and very often powerless member remaining when union does takes place.

This is, however, not the case in compound fractures of the leg and upper extremities. Many excellent recoveries took place where there were very extensive injuries of these bones. Lieut. Murdough received a bullet wound when storming a stockade. It entered a little below the tubercle of the tibia, and passed right through the limb, but not causing much splintering, and leaving the fibula safe. Callus was thrown out and consolidation took place, and a limb almost as strong and useful as the other was the result, and with no deformity but a slight bend outwards, and some loss of substance of the tibia from exfoliation. In the upper extremity the results were even more favourable, both in cases of fracture of the humurus and of the bones of the forearm.

The return shows that death followed injury of the upper extremity in seven cases, but though the wounds were indirectly the cause, yet death was actually caused by some supervening disease, such as gangrene (as will be shown when speaking of operations), fever, dysentry, &c. The same was also the cases in the deaths from injury of the foot. Two having died from tetanus, and the others from fever supervening when debilitated from suppuration.

RETURN of Capital Operations performed, and of Deaths following them, in the Chinese element of the "Force."

		OPERATIONS.			DEATHS.		
		Total.	Primary.	Secondary.	Total.	From Primary Operations.	From Secondary Operations.
Amputations.	Of Arm	9	5	4	2	...	2
	„ Forearm ...	2	...	2	1	...	1
	„ Thumb, &c. ...	4	4	...	...	...	...
	„ Fingers	8	8	...	...	...	..
	„ Thigh { middle third }	4	4	...	3	3	...
	„ Thigh { lower third }	2	2	...	...	...	...
	„ Leg	2	1	1	...	...	...
Ligature.	„ Arteries { com'on carotid }	1	1	...	1	1	Died on 15th day.
Totals		32	25	7	7	4	3

RETURN of Capital Operations performed on the European element of the "Force."

		OPERATIONS.			DEATHS.		
		Total.	Primary.	Secondary.	Total.	From Primary Operations.	From Secondary Operations.
Amputation.	Of Arm	1	1	...	...	...	...
	„ Forearm ...	1	...	1	...	...	...
	„ Fingers	2	1	1	...	...	...
	„ Thigh { middle third }	2	2	...	1	1	...
Elevation.	„ Bones of Cranium	2	2	...	1	1	...
Totals		8	6	2	2	2	...

The foregoing returns, Nos. 4 and 5, show the capital operations performed during the campaign.

The numbers are too small to draw comparison between the results of operation as performed on the Chinese and European to be of any practical value.

Amputation was had recourse to in thirty-seven cases, of which seven proved fatal, or 19 per cent.

Twenty-eight cases were primary operations, and nine secondary, giving a relative mortality of 14·3 of the former, and 37·5 of the latter.

Of ten amputations of the arm, two died, or 20 per cent. Of three of the fore arm, one case died gangrene, having re-attacked the stump. Of fourteen cases of operation on the hand and fingers, none proved fatal. Of eight cases of amputation of the thigh, four proved fatal, or 50 per cent.

Of two cases of amputation below the knee, both were successful.

Hemorrhage having taken place in one of the latter cases, it is worthy of notice.

Private ——— was wounded in the attack on the intrenchments before Soochow, on the 29th October, 1863. A small bullet entered the thick pad of the heel, passed upwards through the oscalcis and astragalus, and lodged against the end of the libia. The patient refused to have any operation performed, and, as might be expected, fearful inflammation followed, extending up the leg. He, however, exhausted by suffering, submitted to operation on the eleventh day, and accordingly the leg was amputated below the knee by the flap operation.

The case progressed most favourably till the tenth day, the patient feeling so well that he requested permission to have his head shaved, an operation the Chinese never neglect when they think they have shaken off disease, and are returning to health.

Whether from some strain on the ligature or not, hemorrhage of a most alarming nature came on in the afternoon, and before assistance could be got the patient was very low from loss of blood. The hemorrhage was arrested by the application of tourniquet, thus giving time as to what step should be next taken. It was decided to seek for the bleeding vessel in preference to ligaturing the main artery, and accordingly the stump was torn open with some difficulty, the adhesion being very firm. A large clot was turned out, and then the posterior libial was found to be patulous and without a ligature.

Two or three attempts were made to ligature it, but the ligature would not hold, a tenaculum was then passed deep through the artery and surrounding tissue, and the ligature applied behind it. The tenaculum was left in, and the edges of the flaps brought together as far as its protruding handle would permit. No attempt was made to remove the tenaculum until the twenty-fourth day from the first operation, when it was withdrawn, the ligature coming away at the same time. No hemorrhage occurred, the flaps were got well together, and the patient made a capital recovery, with an excellent stump.

The only large artery ligatured was the common carotid, which proved fatal on the fifteenth day. The following is the history of the case.

Corporal Lee-ta-Ching, a fine young soldier, was wounded in the face by a small bullet in the attack on the rebel intrenchments near

Wohong, on the 13th October, 1863. The bullet entered at the upper part of the left canine fossa, close to the lower margin of the malar bone, and passing backwards pursued a course rather to the inside of the condyle of the maxilla, the neck of which it fractured, and lodged deep and far back in the parotid space as far as could be ascertained by the probe.

Severe hemorrhage occurred at the time of injury, but was arrested by a compress over the wound. It however recurred during the night, and reduced the patient to syncope before pressure could be applied.

On the following day, having reached the camp at Soochow *en route* to the general hospital, hemorrhage again set in, so I decided to tie the common carotid. Having no medical assistance, and the patient having confidence that he could bear the operation, chloroform was not administered.

The patient being placed in a suitable position, an incision was made over the upper stage of the common carotid on the inner margin of the sterno-mastoid muscle, and though there was considerable swelling from the wound, yet the sheath of the vessel was exposed without any difficulty or annoyance from veins or small arteries. The sheath being opened, a ligature was passed round the vessel and tied. The edges of the wound were now brought together, the vein not having been seen once during the operation.

The patient being sent on to the stationary hospital, progressed most favourably, so that by the 15th day the incision had closed with the exception of the small space where the ends of the ligature protruded. Nothing could convince the patient of the necessity of keeping quiet in the horizontal position. He felt well, consequently, in his Chinese style of reasoning, danger could not be near, so notwithstanding all warning, he took advantage of the first opportunity, and, having broke out of hospital, went and spent some hours in a tea shop. On his return a slight oozing of blood took place from the opening from which the ligature protruded, and during the night hemorrhage occurred, which proved fatal. Unfortunately no examination was made of the parts after death.

In amputation, the flap operation was that had recourse to in all cases, being more expeditious, and not requiring so much assistance as the circular. The Chinese subjects being, as a rule, very

muscular, some difficulty was experienced in cutting the integument so as to cover the muscle, and in many cases it was necessary to remove a slice of the muscle before adapting the parts to each other. There was no fault to be found with the results of this mode of operation, the stumps in all the cases that recovered being well covered and shapely in appearance.

Chloroform was administered in all cases of capital operations. Being short of assistants it very frequently had to be administered by the operator before commencing, and then confided to a Chinese, yet not a single case occurred in which any ill effects were produced by its use. The Chinese fully appreciate its value. It was observed in administering it to them that the stage of excitement is not nearly so marked as in Europeans. In many cases there could not be said to be any excitement whatever produced.

CONCLUDING REMARKS.

The Chinese physically are on an average below the standard of Europeans in height, but in build they are superior to any other Eastern race, and compare well with most of the Western nations. They have good muscular developement, and, unlike many of the natives of India, their limbs are well formed, symmetrical, and without the slightest tendency to fall away at any one point.

They are all of the lymphatic temperament, or, probably, what might be called the lymphatic bilious temperament. The absence of the nervous and sanguineous temperaments, to an extent, accounts for the immunity from inflammatory disease, so remarkable among them. Inflammation in a Chinese subject is very rarely acute, always being either sub-acute or chronic.

Considering the variety of climate in a country of such extent as China, the gregarious and crowded manner in which the inhabitants live, and other causes favourable to the developement of the tubercular diathesis, it is most remarkable how comparatively few cases of scrofulous diseases are met with.

Phthisis and scrofulous diseases of the bones were occasionally met with in the Northern provinces, but further South such were very unusual.

The freedom from this class of disease has been ascribed entirely to climate, inasmuch as Europeans seldom suffer from phthisis in China, but it is more likely that bowel affections take the place of the latter disease, and that many of the men who die in China from dysentry would die at home of phthisis; therefore, it strikes me that besides climate, marriage in early life amongst all classes in China, and, consequently, the absence of that scourge of occidental civilization —syphilis—have much to do with the prevention of scrofulous diseases.

The Chinese adopt a varied diet, consisting of rice and other grains, vegetables, fish, pork, or any other flesh, but that preferred being pork, inasmuch as it contains more fatty matter requisite with the rice which forms the bulk of their food. They have no caste or prejudice, consequently they have no objection to any kind of food, the only condition being—is it good and palatable? For intoxicating liquors they have no desire.

On this diet they are equal to a vast amount of fatigue, they are tough, long enduring, and tenacious, and this not only in a temperate climate, but also in a hot one where Europeans have to submit.

Mentally they are intelligent, and this intelligence is very generally diffused among the people in the different stations of life. Their memory is remarkably tenacious of facts, and their mind, though not sending forth any very bright theories, being tied down by materialism, is, nevertheless, capable of taking an expansive and liberal view of most subjects, and has strength and clearness enough for the investigation of even the most abstruse of the sciences.

Their disposition is cool, calm, and deliberate, and it is seldom they lose their temper or command over themselves. In ordinary life they are peaceably disposed, regular in their habits, and orderly; but, when taken from their peaceful homes and legitimate occupations, as soldiers they change much in character. They become quarrelsome, reckless, daring, piratical, and unsettled, and averse to honest occupation. If properly organised and trained they have all the material in them, both mentally and physically, to make good

soldiers,—intelligence, steadiness, endurance in either hot or cold climates, simplicity of diet, few wants, and not deficient in pluck, as shown by the Chinese pirate, than whom there is no man more daring or regardless of life.

It may be worth while to draw attention to the belief that they would answer well for service in India, and not only be a less expensive article but more efficient than the English soldiers in that climate.

THE

COMMISSARIAT IN THE CRIMEA:

BEING

REMARKS ON THOSE PARTS OF THE REPORT

OF

THE COMMISSION OF INQUIRY

INTO

THE SUPPLIES

OF

THE BRITISH ARMY IN THE CRIMEA,

WHICH RELATE TO THE

DUTIES OF THE COMMISSARIAT.

BY

COMMISSARY-GENERAL FILDER, C.B.

LONDON:
W. CLOWES AND SONS, 14, CHARING CROSS.
1856.

These Remarks were printed for Private Circulation at a time when it was doubtful whether the Explanations addressed to Lord Panmure would be laid before Parliament. The Remarks, though not literally, are substantially the same, with somewhat greater detail in respect to dates and other minor particulars.

REMARKS

ON THE

REPORT OF THE CRIMEAN COMMISSIONERS.

THE animadversions contained in the Report of the "Commission of Inquiry," recently laid before Parliament, so directly and heavily impugn my conduct in the charge lately held by me, that I am compelled to offer, in my own vindication, the following remarks on those parts of the Report which relate to the Commissariat duties. Though placed at a manifest disadvantage in being driven to this course, since there are neither distinct charges alleged against me, such as could be decided upon by a judicial tribunal, either civil or military, nor have I had any preparatory notice of the intention to put me thus on my defence, I yet hope to be able to shew that my proceedings have not rendered me justly liable to the censure cast upon them. That under such a mass of difficulties as I had to contend with, they should have been altogether exempt from error, is a merit that I will not venture to claim; but after a careful review, I still believe them to have been in the main correct, as far as the then existing circumstances could guide my judgment; and if less success attended them than I was led to expect, and was to be desired, any failure arising from causes beyond control, ought not to be imputed to defect of zeal or ability on my part, or that of the meritorious body of officers acting under my direction.

The Commissioners have not, indeed, done us the injustice committed by some less well-informed of facts, of expressly denying to us the praise of having endeavoured to do our duty, according to the measure of our ability; but they have, nevertheless, sought to reduce this measure, short as it may be, below its real limits, by bringing together such a number of alleged instances of improvidence, omission, mismanagement, and even wilful disregard of the best interests of the service, as would, if substantiated, go far towards disproving their

own admission in our favour. These instances are given in a scattered form, interspersed with their own general observations and suggestions, and cannot easily be collected together under specific heads. I must, therefore, answer them in detail as they stand in the Report; but as they partly arise out of a misconception of the extent of my power and responsibility, as head of the Commissariat, it is necessary to the proper understanding both of the passages in the Report, and of my explanations in reply to them, that I should premise a few remarks on the nature of the duties which the Commissariat had to perform with the army in the East during the time of my charge, to which I will add some general notice of the means I had at my disposal for carrying them out. This and all other needful information could better have been furnished to the Commissioners on the spot, and would, whether sought or not, have been given by me, had they intimated the probability of any such accusations being brought against me or the Department; but this I was in no way led to expect, and the first knowledge I have of them is derived from the publication of the Report itself, more than seven months after its date, when I am far removed from the official records of my proceedings, as well as from officers whose more immediate acquaintance with facts and details would materially assist me in explaining and justifying them.

The Commissariat has the duty, by the Regulations of the Service, of raising, of holding, and of paying the funds necessary to meet the whole of the army expenditure, and of making all purchases required for the service of its own or any other department. It is responsible for keeping up the supplies of provisions, forage, fuel, and light, according to the regulated scales of allowance, with such additions as may be specially authorised by the Commander of the Forces; but the Commissary-General has no authority to alter, nor has he, except so far as his opinion may be asked or deferred to, any influence in altering the established ration or other allowances in the most minute particular. With respect to supplies of any other kind, such as Quarter-Master-General's and Hospital Stores, the Commissariat, during the time I was in charge of it, only held them on behalf of the departments at whose respective disposal they were, and issued them on their requisitions. Stores of this description with the army in the East have recently been given over to Storekeepers of the Ordnance Department; but it was and is still the duty of the Commissariat, in case of any deficiency in the supply sent out from England, or of any emergency rendering necessary articles of a description not ordinarily in use, to purchase them on the authorised requisition of the proper departments, the heads of those departments being responsible for the extent and nature of their demands.

The Commissariat had likewise, until it was transferred to a separate and independent establishment, the duty of providing all the Land Transport required for the service of the army.

To carry on these extensive and onerous duties, which indeed embrace all the civil administration of the army excepting the Hospitals, and have since been divided amongst three separate departments, I had from the first an insufficient establishment both of officers and subordinate employés, which was still further weakened by the great amount of sickness and mortality which prevailed, owing to the nature and excessive labour of the duties to be performed. No one of the subordinate establishments, absolutely necessary to the efficiency of a Field Commissariat, existed at the outbreak of the war; and even the officers had to be collected from the most distant parts of the empire, from Sierra Leone, the Cape of Good Hope, and New South Wales, and of course by slow degrees. In the mean time I had to carry on the duties with the temporary assistance of gentlemen furnished from other public departments, and wholly without experience in Commissariat Service. This inefficient state of the department when I took charge of it, necessarily diverted much of my attention from the more important general arrangements of the Service to the regulation of details; but I notice it less for the purpose of accounting for my own possible errors and omissions, than with the object of meeting the comparison which has been frequently made elsewhere, and is partially made use of in this Report, between the success of the French and British Commissariat operations. That the success has been uniformly on the side of the former is far from being established, but that generally it *ought* to be so is quite clear, inasmuch as there is the greatest possible advantage on that side, in the completeness of the establishments on which so much of Commissariat success depends. These are not, as with us, discarded at the termination of a period of active warfare, and wholly neglected during the continuance of peace, but are constantly kept up in an effective, even if a reduced state, and are considered as necessary an accompaniment of every body of detached troops as any other portion of the army, and thus give a facility of action to a French force at the outset, which can be acquired by an English army only after long, and perhaps disastrous, as well as costly experience. I do not presume here to enter into the question whether or not a similar system ought to be adopted in our Service, but the fact that no such system *does* exist in it should be taken into consideration in estimating the exertions of British Commissariat Officers, who usually, like myself, are thrown at once upon their own slightly aided resources, and compelled to occupy themselves in creating the means of action at the moment when action is already needed.

A further, and, as regards my own immediate responsibility, a yet more important difficulty under which I laboured, was the uncertainty of the intended, or even probable position of the army during the approaching winter. The supply of a large force in that season requires, in almost any country subject to great alternations of climate, timely and extensive previous arrangements, but

in a situation like that of the besieging force before Sebastopol, it demanded attention as early even as when the army first landed. I had indeed, before that expedition was known to be projected, and when it was generally supposed that the troops would be put into cantonments near Constantinople, applied to Lord Raglan for instructions to guide my preparations. I repeated my application when the expedition was on its way, and renewed it in the early part of October, but it was not till the 12th of that month that his Lordship was able to give me any orders whatever on the subject. They then went no farther than directions to lay in a stock of fuel at Scutari (*see* papers annexed, A., B., and C.); and it was only on the 8th November, when winter had already commenced, that I learnt that the army would remain in the Crimea, and received orders to make provision accordingly. The Commissioners, though apparently aware of these facts, represent as a defect of intelligence and foresight on my part, that I did not, of my own authority, and on my own responsibility, take measures from which the officer in chief command withheld his sanction; and they assume, contrary to the fact, that through adherence to established but inapplicable usages, I omitted to avail myself of the resources within my reach, by which the extraordinary and unforeseen exigencies of the service might have been met. My replies to their more specific allegations will shew how far they have misjudged my actual proceedings; but I may here observe that they have widely miscalculated my power of enlarging the bounds of them, without the risk of exposing myself to condemnation which I had more cause to dread than their censure. Neither the Regulations nor the general character of our service give to the head of a commissariat establishment the unlimited range of discretion which they presume; and although he may, in solicitude for the ultimate benefit of the service, venture far on his personal responsibility, it is hardly to be expected of a subordinate officer that his zeal should carry him beyond the point which his immediate superior declines to overstep.

As my replies to the various allegations oblige me to enter into details of some length, and not all of equal interest, I will first state the results which they serve to establish with respect to the more important points, namely, the deficient supplies of vegetables, of lime juice, of fresh meat, of fuel, and of hay and straw, the latter involving in its consequences that of land transport for all purposes. These results do not, I trust, substantiate the blame which the Commissioners endeavour to cast upon the Commissariat arrangements, and are as follows.

As respects supplies of vegetables at the time the troops were without them, the Commissariat had not been ordered to provide them; and, at a subsequent period, when the supply of vegetables had become a Commissariat duty, and when the Commissioners have reported that the troops were confined exclusively to biscuit and salt meat, larger quantities of vegetables were issued than at a still later period, when the Commissioners, being present in the Crimea, have

represented that the diet of the troops was, in their opinion, better than any army in the field had ever before been supplied with.

The allegations of the Commissioners with respect to the non-issue of lime juice, at a time when there was a supply in store, and the troops needed it as a prophylactic, and of fuel during the winter, are in a great measure disproved by papers then in their possession; it being shewn, as regards the former, by the Medical Memorandum of the Inspector-General of Hospitals in the Crimea, in page 167, No. 6, of the Appendix to their Report, and by the Monthly Memoranda submitted by him to Lord Raglan, that at the time referred to by them the providing and issuing of lime juice were entirely under the control of the Medical Department; that the Inspector-General must have been informed of the supply in store, and knew also of that expected from England; and that he did not recommend an issue to the troops generally until the arrival of further quantities, but confined its use to men affected with scurvy. While, as regards fuel, I have never maintained, as asserted by the Commissioners, that the troops were not to be supplied with it by the Commissariat, if they were so circumstanced that they could not provide it themselves, nor have I shewn any neglect or indisposition to provide the requisite supply; there being, on the contrary, a paper from me, printed in the Appendix, page 79, No. 35, in which I point out the difference in this respect between the troops in the Peninsula, who were on one occasion encamped in winter, but who could provide themselves with fuel, and those in the Crimea; and there are two other papers from me (pages 78 and 80) which shew that the Commissariat was prepared to commence the issues of fuel when ordered.

Again, with respect to supplies of fresh meat, I employed all the vessels suitable for the conveyance of cattle, that I could obtain; since, when sailing vessels had been employed by me in winter for this purpose the losses were so great, that to have continued that mode of conveyance, in addition to steam vessels, as the Commissioners suggest might have been done, and the issues thus increased, would have been to destroy the supplies of the army, and must have led to a deficiency.

My explanations will also, I trust, shew that had my requisitions for supplies of pressed hay to be sent from England been complied with, the deficiency of forage which was experienced throughout the winter would have been prevented; and it is to the deficiency of this article that the Commissioners attribute all other deficiencies, as limiting the number of transport animals that could be maintained in the Crimea.

A perusal of the Commissioners' Report might lead to the inference, that the diet of the troops had been brought to that state of excellence in which they have described it to have been at the time of their departure from the Crimea, in consequence of their enquiries and recommendations. Any such conclusion would, however, be erroneous. This state of the supplies had been gradually brought

about by the *unaided* exertions of the Commissariat directed by me, in proportion as they ceased to be impeded by impassable roads and continuous storms. The diet of the troops was indeed, as nearly as may be, in all respects the same when the Commissioners arrived, as it was when they left the Crimea, with the exception, that in the interval the Commissariat was enabled to issue more fresh bread to the troops, in consequence of the arrival from England of the Floating Bakery for which I had applied, aided by two ovens, which one of the Commissioners, Colonel Tulloch, was so good as to undertake to build; and which, when delivered over to the Commissariat were found capable of baking about 2000 rations daily,* towards the consumption of an army then drawing, exclusive of Turks and Sardinians, 42,000. Two minor articles of diet, salt and pepper, were also added to the ration, in the interval; but that was done upon the recommendation of a Board of Officers, of which I was myself a member. I here speak of the issues to the army generally. I have no knowledge of what may have taken place with respect to the hospitals.

The Commissioners have suggested certain measures for obtaining Commissariat supplies for the army in the East, and improving their quality; such as the employment of Agents possessing a knowledge of the language and resources of Turkey; increasing the issues of fresh meat, by bringing slaughtered meat to the Crimea, in addition to live cattle; and feeding the cattle at depôts. But had they made the enquiries which it was possible for them to have done, they would have learnt that all their suggestions had been anticipated. They have made certain other suggestions in relation to Commissariat duties; but these also, as I have more particularly pointed out in my remarks, are only conformable to what is the established practice of the Commissariat with armies in the field, whenever circumstances admit of it. Nor did I, as far as I can remember, receive any information from the Commissioners respecting the resources of the country on more than two occasions, in both of which cases it had been forestalled by that already obtained through other channels put in use by me.

Finally, I trust, have shown that, however unequal may have been my ability to cope with the unprecedented difficulties of my position, I did not neglect or overlook any means of overcoming them which were within my reach; and certainly did not allow any consideration of mere form or usage to interfere with the fullest application of those means.

* By a Report which I have received, since these remarks were in type, from the Commissariat Officer, who superintended the Bakery Establishment whilst I was in the Crimea, I learn that the two ovens yielded 2,400 rations daily.

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Quantities in Store.—But the ration of biscuit having on the 15th of October been increased by General Order to 1½lb. in consideration of the severe labour to which the troops were subjected, it was reduced on the 7th of November to 1 lb., on the express ground of the "supply of biscuit being insufficient to furnish the increased ration lately authorised."

Having heard that there had been such a deficiency, or apprehended deficiency, of salt meat as to make it necessary to apply on the 21st of January to the Navy for assistance, we inquired into the circumstances. From the Returns handed to us by the Commissary-General, and from his statements, it appears that although the Commissariat had at that time in store

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The established ration for all troops in the field was not reduced, but the *extra* allowance was discontinued. It was a matter of notoriety that 1½ lb. of biscuit was more than the men could eat, and that they sold or gave away a part of what they received to the French troops who frequented our lines. This was before the storm, or any deficiencies in the rations had occurred. My motive for recommending the discontinuance, under such circumstances, of the extra allowance was that its issue impeded the progress of the depôt which I was then forming in front, that object being at the same time further impeded by the appropriation of a part of the commissariat transport for the conveyance of ammunition.

Had the extra quantity of biscuit issued to the troops in camp been allowed to accumulate in depôt there, the animals which during the winter were occupied in transporting that article might have been employed in carrying up other supplies which were then so much needed. The extra quantity issued very greatly exceeded all the deficiencies of biscuit which occurred throughout the winter.

I did not see the General Order before it was issued, or I should have objected to the wording of it.

The Commissioners have omitted to state what is shewn by the evidence appended to their Report, p. 158, that the salt meat received from the Navy only replaced the quantity which had been supplied from the Commissariat stores for seamen and marines serving on shore. This supply from the Navy was not therefore a loan, but the restitution of a loan.

OBSERVATIONS OF COMMISSIONERS.

sufficient for several days' consumption, there was still, in consequence of some mistake it is stated on the part of the Commissariat officers at Constantinople, cause for considerable anxiety lest the whole army should be left without salt meat at a time when no other articles of food were available except biscuit, rum, and the ordinary groceries. The arrival of a vessel with a supply of salt meat before that which had been obtained from the Navy was issued, relieved the Commissary-General from the anxiety which he had previously felt upon that subject.

Short Rations. — On those stations (foreign) however, in addition to 1 lb. of soft bread, the troops had at all times either 4 oz. of rice or half a pint of peas daily, besides which a portion of their pay was expended in purchasing vegetables in the markets; whereas, in the Crimea, during the greater part of November and December, and also in a great measure during January and part of February, the soldier was confined exclusively to biscuit in addition to his salt meat.

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Notwithstanding that rice was not a ration from November 16th to December 27th, the Commissariat officers issued it by my orders during that period, whenever they could get it conveyed to the front; and a considerable proportion of the troops received it during a great part of that period. I will advert to this hereafter.

In January, rice had again become a ration, and during the whole of the month it was issued regularly to all the army, with the exception of the 4th division, which, as stated in the preceding paragraph of the Commissioners' Report, did not receive any "for the first 10 days nor for 3 other days, and part of the Light Division, which for 6 days of the month received only half rations." There was also issued to the troops in January,—

59,824 lbs.	Preserved and Dried Vegetables.
77,250 „	Fresh Vegetables.
Total . 136,074 lbs.	

OBSERVATIONS OF COMMISSIONERS.

Short Rations.

Fresh Meat.—A Return was also furnished at our request by the Commissary-General, from which it appears that the

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In the month of February all the troops without exception received regular rations of rice. More vegetables also were issued to them in that month, that is, before the arrival of the Commissioners in the Crimea, than in the month preceding their departure, when, according to their report, the diet of the soldiers was better than any army had in any former campaign been supplied with.

Vegetables issued—February.

Fresh . . .	559,000 lbs.
Preserved . .	3,780 „
	562,780 lbs.

Average number of troops drawing rations 32,300; being 17 lbs. per man, as shewn by the Vouchers now at the Audit Office. See also page 13 of Appendix to the Commissioners' Report.

May.

Fresh . . .	435,000 lbs.
Preserved . .	53,540 „
	488,540 lbs.

Average number drawing rations 42,000; being 11½ lbs. per man, as shewn by the Receipts from the Regiments at the Audit Office.

The troops were not therefore, as asserted by the Commissioners, confined exclusively to biscuit, in addition to their salt meat, during the period stated. Nearly nine days fresh meat per month had, upon the average, also been issued to them by the Commissariat.

The Return shews that the average quantity of fresh meat supplied by the Commissariat during the 5 winter months, from

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average quantity of fresh meat issued to each man of the 5 divisions composing the army, including the sick in camp, was in

December . . . 6 lbs.
January . . . . 9 lbs.
February . . . 8½ lbs.

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November to March, was nearly 10 lbs. per man per month, exclusive of that furnished for the troops on board hospital ships in harbour, the aggregate force being 158,617 men, and the quantity of fresh meat issued by the Commissariat 1,525,949 lbs. The issues in December fell greatly below the average, that is, to 6½ lbs. per man, in consequence of the cattle vessels which had been damaged in the hurricane being still under repair during that month.

That the healthy did not receive the ration which these figures would indicate, was unfortunately owing to the large numbers of sick, who in some divisions received full rations of fresh meat daily, in others 5 days a week; thus curtailing the rations of the rest of the troops.

The French troops during the greater part of the winter received a ration of 10 oz. of fresh meat 1 day in 3, or 6¼ lbs. per month, and sometimes less.

The French suffered no losses from the hurricane of November 14th, nor were the operations of their Commissariat ever impeded, as ours constantly were during the winter, by the occupation of a narrow and confined harbour, which, when the wind blew with any violence, prevented vessels from coming in or going out, or from discharging their cargoes.

I at no time ceased to make every exertion to increase the supply of fresh meat, and before the month of August last, when I was obliged to resign the charge of the Commissariat on account of ill health, I had brought the issues up to 5 times a week, which is as much, considering its inferior quality, as the military authorities think desirable.

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Vegetable Food.—When the original order for the issue of 2 oz. of rice per man expired on the 30th of September, the Commissary-General states, that finding there was a sufficient quantity in store, and that bowel complaints still continued to prevail, he suggested, as a measure beneficial to the health of the army, the extension of the order to the 15th of November. It is much to be regretted that when he subsequently found himself unable, from want of transport, to carry the 2 oz. of rice, in addition to the salt meat, he was not induced, by the same motives, to inform the General Commanding, that he had still enough of rice in store to continue the issue, which had become even more necessary than on the 30th of September, and that he did not call for a decision as to whether the army then suffering, not only from bowel complaints, but also from scurvy, should be deprived of the only vegetable food besides biscuit, which was immediately available, or should submit to a reduction of 2 oz. in the daily supply of salt meat, which a larger proportion of the men did not consume.

Had Lord Raglan's attention been called to the stores of rice and other farinaceous and vegetable food at his command, or had there been any officer on his staff who could be held responsible for the proper application of the available supplies, there can be no reasonable doubt that the men would have received, in lieu of 2 oz. of the salt meat which many of them could not eat, an equal weight of food that would have been both more acceptable and infinitely more beneficial.

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I have no where stated, as here alleged by the Commissioners, that the prevalence of bowel complaints was a motive for my recommending the continued issue of rice. I recommended its continuance, as is stated in my evidence, because there was a sufficient quantity in store, and I had transport for its conveyance.

Lord Raglan could not attribute the discontinuance of rice to there being none in store; and his lordship was perfectly well aware that further supplies could at any time be procured on short notice from Constantinople.

If, however, any misapprehension on this point did occur, it was of the less importance, since although I could not recommend, as I had done on a former occasion, that rice should be continued as a regular ration, when I had not the transport to carry it up, I gave orders to the Commissariat officers to issue it whenever they could find the means of conveying it to the camp; and the receipts from the regiments, now lying at the Audit Office, will shew that a considerable proportion of the troops received it during a great part of the period when its issue as a ration had ceased. There was, therefore, no pretext for assuming that there was no rice in store; and if it had been thought preferable to make the substitution here suggested, it was for the military and medical officers to propose it.

The Commissariat has no knowledge of the particular articles of diet which are best suited to the troops. This is within the peculiar province of the military and medical officers, who are living amongst them and inspect them daily; and it is upon the representations of these officers that changes

Observations of Commissioners.	Remarks.
Vegetable Food.	in the rations, having reference to the health of the men, are ordered by the General Commanding.
The deficiency of transport, which is assigned as the reason why these supplies were not conveyed to the front, need not have affected the corps in and around Balaklava, which were suffering from the same diseases, though not to the same extent.	The period during which rice ceased to form part of the ration, was 42 days. The Highland brigade, which was stationed in the neighbourhood of Balaklava, received rice during the whole of that period, excepting on 15 days. I am unable to explain, in the absence of the Commissariat officer attached to the brigade, why it was not issued on those days. The cavalry division also, which was stationed not far from Balaklava, received rice, or Scotch barley, although irregularly, throughout the period.
Lime Juice.—A more unaccountable and still more unfortunate failure to apply to the use of the army stores, of which it stood in the most urgent need, occurred in regard to lime juice. On the 10th of December, 278 cases, containing nearly 20,000 lbs., arrived by the *Esk*, for the purpose of being issued generally to the troops. Small quantities obtained from the purveyor, and also, it is understood, from the navy, had been issued to the hospitals for the cure of scurvy during the previous month, but no measures had been taken to counteract the tendency to that disease, which was rapidly spreading. The necessity for issuing lime juice as a prophylactic, had been stated in many of the medical reports to the Inspector-General, and had been especially pointed out in those which he transmitted to the Adjutant-General for the months of November and December.	The *Esk* arrived at Balaklava on the 19th of December, and the lime juice was delivered into the Commissariat stores on the 20th. Lime juice had never been supplied by the Commissariat for general issue to the troops, nor had I received any intimation that it was to be so for the future. The quantity here mentioned was sent out from England by desire of the Director-General of the Medical Department, consigned to the Commissariat, but was considered, (no special instructions having been received to the contrary,) as in all cases of stores forwarded by the Medical Department at home, to be intended for the hospitals. It was the established practice to inform the Medical Department in the Crimea of the receipt of stores intended for its use, and that Department must no doubt have been apprised of the arrival of this supply. If therefore no demand was made upon the

Observations of Commissioners.	Remarks.
In these he anticipates the speedy arrival of a supply that would admit of the issue generally to the troops of what they so much needed. Yet, from the 10th of December, the lime juice brought by the *Esk* was lying in the Commissariat stores at Balaklava, and none of it was issued till the first week in February, an interval during which the sufferings of the army from scurvy were probably at their height. Had the General Commanding been informed of the arrival of that supply, it cannot be doubted that it would have been issued to that part of the army which most required it nearly two months earlier.	Commissariat for it, it may be concluded that the Purveyor at Balaklava was provided with a sufficient quantity for the use of the hospitals. Dr. Hall also, being advised by Dr. Smith of the shipments of lime juice from England, would have made enquiry had there been any omission on the part of the Commissariat to apprise the Medical Department of the arrival of expected supplies. It is apparent from the Medical Memorandum of Dr. Hall, the Inspector-General, dated the 2nd of January, which is printed at page 167, No. 6, of the Appendix, and from the Monthly Memoranda on the health of the army, submitted by him to Lord Raglan, through the Adjutant-General, that at the time referred to, the providing and issuing of this article were entirely regulated by the Medical Department—that Dr. Hall was advised of intended shipments—that he knew of the quantity in store, and that which was expected from England, and that he did not recommend an issue to the army generally, until the arrival of further quantities, but confined its use to men affected with scurvy. It is to be regretted that on a matter which the Commissioners considered of such vital importance, they did not ascertain, by questions put to Dr. Hall, or to me, the cause of the non-issue of lime juice to the troops generally. It was not till the 29th of January that I received a letter from the Adjutant-General, accompanied by one from Dr. Hall, dated the 27th, informing me that the issue of lime juice was to become general. When, shortly afterwards, it was directed that lime juice should in future be a regular ration, and that the Commissariat was to provide it, steps were promptly taken to

Observations of Commissioners.

Remarks.

procure a supply from Malta and Sicily, the nearest points from which any large quantity could be obtained; and from that time the issues to the troops have been regularly maintained, under arrangements made by the Commissariat.—(Appendix to Commissioners' Report, page 76, No. 25, B.)

Fresh Bread.—Shortly after our arrival, an arrangement was made with those establishments, by Lord Raglan's directions, by which they engaged to supply the Purveyor with a certain quantity daily for the use of the hospitals, to be issued on requisition as a medical comfort.

The demands for the army hospitals being unlimited and uncertain, the Commissariat only provides supplies for that service on special requisitions. When a requisition for bread for the General Hospital at Balaklava was first presented to the Commissariat, immediate arrangements were made for supplying it to the full extent of the demand.

Shortly afterwards I received a communication from Lord Raglan, transmitting a representation from Dr. Hall on the subject, when I informed his lordship that the necessary measures had already been taken for supplying the hospital with bread, on the usual requisition of the Purveyor.

We are not aware of any sufficient reason why soft bread might not have been baked at any time for the use of the sick, and also for the whole army. The French army has been regularly supplied with fresh bread, and the erection of a sufficient number of ovens was not an operation involving any great expense, or requiring much skill or much time, if it had been undertaken by the proper public departments. There were bakers enough in the neighbourhood to have worked many more ovens than were required to supply the whole army; and if these could not be spared from their military

The French army moved to the East with the portable ovens and the military bakers, by means of which it had been supplied with bread in France or Algeria. "The Intendant-General" had no new establishments to create, nor any change to make. It was only necessary to let things go on in their ordinary course; indeed, whilst the French troops are stationary, and close to the seaboard, there is little or no difference between the manner in which they are supplied at home and abroad. When the French army became too numerous to be supplied with bread by means of the portable ovens, or the

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duties, there was no difficulty in procuring bakers from Constantinople; but there appears to have been an indisposition to make the attempt (*see* Colonel Tulloch's Memorandum, Appendix, page 20). The Commissary-General understood that a floating bakery had for several months been in preparation in England, and it was considered unnecessary or impossible to do anything till it arrived.

ovens had been worn out, 50 artificers were furnished by the corps "d'Arts et Metiers," for building permanent ones; and at the same time 150 men from the line were furnished for constructing magazines and sheds at Kamiesch Bay. I could obtain no such assistance from the British army.

I was not indisposed to furnish the troops with fresh bread instead of biscuit. I had purchased three months' supply of flour for the army at the commencement of the winter for that purpose, but bread requires 50 per cent. more of transport for its conveyance than biscuit, and it would have been impossible in the then state of the roads and of the transport to have found the means of carrying it up to the camp during the winter. I had received a semi-official letter from the War Department, dated in January, informing me that the floating mill and bakery, for which I had applied, would leave the Thames about the 13th of February, and being fitted up in steam vessels, I had every reason to expect they would arrive about the middle of March. They were delayed however in England, and the vessel with the bakery did not reach the Crimea till the 12th of May. In the meantime, as soon as the roads had become passable and the state of the transport had improved, the experiment was made, by order of Lord Raglan, of bringing bread sufficient for an issue twice a week for the whole of the army from Constantinople, which answered so long as the weather was cool. As it appears from the Correspondence and Memoranda, printed in the Appendix to the Commissioners' Report, that they were aware of this arrangement, I do not comprehend on what grounds they allege that it was deemed un-

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Fresh Bread.	necessary or impossible to do anything till the floating bakery arrived. When on its arrival I ascertained that its capabilities were insufficient, the construction of ovens was commenced, and I at the same time applied to England for an additional number of bakers, so that when I resigned the charge of the Commissariat, there were the means of baking bread for an issue to the troops on three days of the week. There were several small ovens in the neighbourhood of Balaklava, which might have been used by the Commissariat; but as we could not convey bread to the front, it must have been issued (had we taken possession of the ovens) to the troops near Balaklava, to the exclusion of those in camp before Sebastopol. Lord Raglan, when I pointed this out to him, disapproved of any measure which would have that effect; for by allowing the ovens to remain in possession of private traders, the regiments in front and officers individually, by sending down their bât horses and servants, had the benefit of the supply. The bakers were encouraged by the Commandant, Lieut.-Colonel Harding, under whose control they were, to extend their business by every means in their power.
Green Coffee. — When the difficulty about fuel to roast the coffee began to be seriously felt in December, there were 2705 lbs. of tea (equal to 173,000 rations) lying in the Commissariat Stores at Balaklava. This would have afforded the usual quantity of a quarter of an ounce per man daily to the corps in front, where the greatest difficulty was experienced in	This quantity of tea was reserved for the use of the hospitals, and considering the vast number of sick, it was not more than it was prudent to keep on hand for that purpose. However, as I have before stated, all changes of diet which have regard to the health of the troops are made by order of the Commander of the Forces, on the representations of military and medical

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making use of the coffee, till a supply could be obtained from Constantinople, or other quarters, sufficient to make the issue a general one. A temporary supply, too, might probably have been obtained from the navy, as there are generally large stores of tea on board. Nothing of this kind, however, appears to have been attempted, and the coffee continued to be issued in a green state to the men in front till the month of February, though much of it was not used, in consequence of the difficulty of preparing it. It appears from the statements of a great majority of the medical and other officers examined, that tea would, on the whole, be preferable to coffee, especially on a march, provided the ration of sugar were increased by one quarter of an ounce, that is, from 1¾ ounces to 2 ounces. That change would somewhat diminish the weight to be carried, always an important consideration, and would materially diminish the cost of the ration. It was objected by the Commissary-General, that tea is more likely to be damaged than coffee, especially on a march; but as the whole of the tea used in Russia, and in some countries of Asia, where it is largely consumed, is carried overland from China, there can hardly be any serious difficulty in carrying a supply with an army.	officers. Lord Raglan never expressed to me a wish that the troops should have tea instead of coffee, not even after it had become usual to furnish him with returns of all supplies in possession of the Commissariat, and when he must have known that there was a large quantity of tea in store at Balaklava. When I did receive an order from the War Department to supply tea on alternate days, the issues commenced immediately, being made from the quantity which had been reserved for the hospitals, and I was able to obtain from Constantinople sufficient to last till further supplies could be procured from England. Military men differ very much amongst themselves as to what is best suited to the troops. Coffee was fixed upon by a Board composed of general officers, and commanding officers of regiments, of great experience, and both military and medical officers were examined by the Board, of which I was also a member. The evidence was so much in favour of the use of coffee, that Sir George Brown, who was President, and who objected to coffee, felt himself constrained to give up his opinion. The object for which the Board met was to ascertain which of the different articles the Commissariat was then supplying to the troops, to be paid for by them at cost price, should constitute a fixed ration. In deciding upon coffee, the Board well knew that it was sold to the troops in a green state. Subsequently a small quantity of roasted coffee was sent out from England as an experiment, upon which I was desired to report; but although ordered in July, it did not reach the army till towards the

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end of September, when we were on the march from Kalamita Bay to Sebastopol; and as soon as I learnt that it was approved of, I recommended that coffee should be sent out roasted, but none arrived till about the 24th of January, from which date green coffee ceased to be issued to the troops. In the mean time, a few large coffee roasters were made by the engineer of the *Sanspareil*, by order of Captain Heath, R.N., and I believe at his suggestion, out of the damaged funnels of steam vessels in possession of the navy, by means of which a considerable quantity of coffee was roasted under the superintendence of the Commissariat for the use of the troops.

The precautions used in carrying tea overland from China to Russia, as an article of merchandise, prove its great liability to damage, and at the same time furnish the strongest contrast to the usage which tea, as an article of government stores, would receive with an army in the field, and the exposure it would then inevitably undergo. The difference is as great as that between peace and war.

Fuel.—The Commissariat maintained that it was not the practice of the Service to issue fuel to the troops in the field; that a soldier was not entitled to a ration of fuel unless in barracks. Lord Raglan however, on the 11th of November, instructed the Commissary-General to provide a sufficient supply of fuel for the ensuing winter; and by a General Order, dated the 4th of December, directed the issue of rations of fuel to the troops. But although it appeared that even long before the 11th

No such opinion is expressed in my evidence, or in that of any other Commissariat officer: the Commissioners would therefore appear to have taken the opinions of the Commissariat from the evidence of other parties. I may have stated that fuel had never before been issued to an army in the field as a reason why I was not prepared with transport for its conveyance; but I have never maintained that the troops were not to be supplied with fuel by the Commissariat, if they were so circumstanced

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of November the Commissary-General had provided a depôt of fuel at Scutari for the use of the army, when in barracks, he was not prepared to issue fuel in the field when it was ordered on the 4th of December.

To provide and issue fuel was no doubt a considerable addition to the duties of the Commissariat, and the difficulties arising from the deficient state of the land transport, the narrow space for landing stores at Balaklava, and the great amount of labour which the other duties of that department involved in the peculiar circumstances of the army, may have led the Commissary-General to insist upon the alleged previous practice in the Peninsula and elsewhere, of leaving troops in the field to find their own fuel. But the circumstances of the army before Sebastopol were obviously exceptional, and an appeal to precedent was out of place. In consequence of the representations of the Commissary-General however, the Order of the 4th of December appears to have been modified, and it was not until the 29th of December that the troops in and near Balaklava received rations of fuel.

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that they could not provide themselves with it. On the contrary, there is a paper from me, printed in the Appendix, page 79, No. 35, in which I point out the difference in this respect between the troops in the Peninsula, which were on one occasion encamped in the winter, but could provide themselves with fuel, and those in the Crimea; and it was only mentioned there to shew that, issues never having been made in the field, the Commissariat had no guide by which to regulate the allowance to officers. The only scale that had been authorised for the army in the East was applicable to troops in barracks and quarters, and if adopted in the field, the highest ranks might have been supplied to the prejudice of the rest of the army; for the fuel which had been ordered up from Constantinople having been forwarded in sailing vessels, the period of its arrival was uncertain. It had long before been settled, that is early in November, that the Commissariat was to supply the troops with fuel when they could no longer provide it themselves, and we were quite prepared to commence the issues whenever ordered. Eight hundred thousand rations of charcoal which had been brought up in steamers by the navy at the request of Lord Raglan, and transferred to the Commissariat early in November, remained untouched up to the 4th of December, when the order was given to commence the issues. When that order appeared, notice was immediately sent by me to the Commissariat officers attached to the divisions in front, that the troops could receive rations of charcoal from the depôt at Balaklava. The only delay was with respect to the issues to the officers of the

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staff and departments, for whom no scale had been fixed; but I at the same time gave orders that officers in camp before Sebastopol might receive what was necessary for their immediate use, pending the decision on this point of the Commander of the Forces, as stated in the Memorandum addressed by me to Lord Raglan, which is printed at page 80 of the Appendix to the Commissioners' Report. Between the 4th of December, when the issues commenced, and the end of that month, part of the fuel I had ordered to be sent up from Constantinople having arrived, there was in the possession of the Commissariat on the last day of that month nearly a million of rations, exclusive of a considerable portion of the charcoal which had been received from the navy, and which remained unissued, for an army consisting at that time of about 28,000 men. But had the Commissariat not been prepared then to commence the issues, it would have been owing to my not having sooner received the order to provide fuel; that is, to bring it up from Constantinople, where Lord Raglan knew I had laid in a store. The day following that on which I received the first intimation of the description of fuel that was to be provided, (in respect to which there had been some previous discussion as to what was most suitable for troops in tents,) which was only five days after it had become certain that the army would winter in the Crimea, and I had received instructions to purchase materials for hutting the troops, I dispatched directions to Constantinople to send up the charcoal that had been laid in there, by order of Lord Raglan.

The troops stationed in the neighbourhood of Balaklava were not excluded by the modified General Order from the issues of fuel at my suggestion, but because they could still provide themselves with it, which is the rule with armies in the field.

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This apparent want of alacrity on the part of the Commissariat to provide fuel for the army in the field could not have arisen from any difficulty in procuring firewood. The Southern coast of the Black Sea is wooded down to the shore for hundreds of miles; firewood could have been procured there in unlimited quantity, but the resources of that coast had not then been explored. Wood has more recently been obtained thence at little more than one-fourth of the price paid for it during the winter at Scutari and Constantinople. Unfortunately, after fuel had been provided at Balaklava, the want of land transport made it impossible to carry it to the front, except in small quantities for the use of the hospitals; and being issued only in the vicinity of Balaklava, it was of no use to the soldier on the heights, unless he could find the means of carrying it to the Regimental camp.

The fuel was in the first instance obtained from Constantinople, because a supply had been laid in there and was ready for shipment. It could not have been obtained with equal dispatch from any part of the Black Sea, where it had not been previously prepared. All subsequent supplies were obtained from the neighbourhood of Sinope.

There was never at any time a want of fuel at Balaklava. The only difficulty was to find the means of conveying it to the front. Irregularities no doubt may have occurred in the issue of it at Balaklava, owing to the total want of accommodation, and of the space necessary for transacting the business of a large army. This inevitably led to extreme confusion. But it should be observed, that the want of fuel was as much owing to the soldiers of the British army being overworked, as to the deficiency of transport, for neither the French nor Turkish troops were ever supplied with fuel by their Commissariats. They cut it themselves throughout the winter, and, for the most part, in the immediate vicinity of the English encampments. Although, during the winter, only the fuel required for the hospitals was conveyed to the front by the Commissariat Transport, fuel for the troops was carried up by the public bât animals attached to regiments, and the ammunition animals; and the quantity conveyed by these and

Observations of Commissioners.	Remarks.
Fuel.	other means was great, although not sufficient for the wants of the troops.

Abundance of Cattle.—In December, when scarcely any but salt meat was issued, the Commissary-General says that he had 8000 head of cattle secured. He attributes the deficiency in the camp to the want of sea transport, the difficulties of the winter navigation, and the delays caused by the use of Balaklava as the port of the army.

All these circumstances doubtless increased the difficulty of bringing forward a sufficient number of cattle; but, looking to the amount of sea transport at his command after the 11th of December, when the sailing horse transports were placed at his disposal for another purpose, to which they were not applied, and could have been made available for the conveyance of cattle, in addition to the steam vessels already at his disposal; and, considering the vicinity of Samsoon and other ports on the Southern shore of the Black Sea, where cattle could not only have been procured, but were actually tendered to him in December, and rejected, we are forced to the conclusion that the Commissary-General was not then sufficiently alive to the importance of that article of food, and that the quantity might have been considerably increased during the months of December, January, and February, if proper measures had been taken for that purpose.

I was at all times fully alive to the importance of providing fresh meat for the use of the troops, and employed to the utmost all the suitable vessels I could obtain (see paper annexed, marked D.); but I consider sailing vessels to be unsuitable for the service in winter in the Black Sea. Of all the cattle which were forwarded in sailing transports from Varna at the end of October and beginning of November, more than one-third were lost at sea; and at an earlier period 204 horses, belonging to the cavalry, were lost on board three sailing transports on the voyage from Varna, being I believe the greater part of their cargoes. Even on board steamers, which were not fitted up as cattle vessels, the casualties were very great. To have continued the use therefore of sailing vessels would have been to destroy the supplies of the army, and must have led to a deficiency; for in winter it would have been impracticable to obtain large supplies of cattle from the interior of Turkey to replace such losses. One of the parties whose tender for cattle, to be delivered during the winter, was accepted, declined signing a contract, and paid the penalty of £1000 which was attached to the acceptance of his offer. The Commissariat Officer at Constantinople also reported on 12th of February, that "cattle were getting scarce and dear."

The offer of a small number of cattle, 300 head, little more than one day's supply, here alluded to, deliverable at Samsoun, was rejected, among other reasons, because

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Abundance of Cattle.	Samsoun is an open roadstead, where in winter vessels may lie many days without being able to take in cargo. Constantinople, where I had plenty of cattle, is at that season nearer to the Crimea in point of time than Samsoun.

The time is not very remote when armies depended upon sailing vessels for all the supplies transported by sea; but the Commissary-General was deterred from using such vessels for the conveyance of cattle by what he describes as the "frightful" proportion of casualties. This does not appear to us to be a sufficient reason. 3,000 additional bullocks in the three months above mentioned would, on the average, have given the whole army fresh meat every alternate day; and we cannot persuade ourselves that three or four of the sailing horse transports could not have landed that number in three months, in addition to all that were brought by steam vessels, chiefly from the Bosphorus.

If there was difficulty in bringing the additional cattle alive, they might have been slaughtered, and at that season of the year the meat might have been carried without much loss. In short it appears to us that fresh meat in much larger quantities might have been, and ought to have been, supplied to the army.

I know of no large army that has at any former time been dependent upon supplies brought by sea in sailing vessels.

When the army in the Peninsula was cooped up within the lines of Torres Vedras, its communication with the fertile country south of the Tagus was open to it. The greater part also of the cattle of the country lying between the Mondego and the Tagus had been driven by the inhabitants into the lines before the retreating army, and there may have been the means, in the cases alluded to by the Commissioners, of replacing the losses caused by such a mode of conveyance; but in Turkey this, as before observed, would have been impracticable in winter.

Slaughtered meat *was* sent by the cattle vessels during the winter, in addition to their cargoes of live cattle, notwithstanding that the plan, in a climate where the variations of temperature are so extreme, was attended with much loss. It was possible for the Commissioners to have enquired into the manner in which this important service had been conducted by the Commissariat, and they would have discovered that their suggestion had been anticipated by our practice. The Commissioners cannot, it is presumed, mean that slaughtered meat should have been forwarded in sailing transports, as vessels of that class were often in winter nearly a month in performing the voyage from the mainland.

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Importance of Fresh Meat.—But the highest price that has been paid per pound for fresh meat, including freight and casualties, was 5*d.* or 6*d.*, and therefore less than the lowest price at which salt meat has been put into store in the Crimea; and if the casualties, which in the winter voyage from the Bosphorous in steam vessels are variously stated at from 14 to 20 per cent., had been double that amount, or even a larger proportion, that would not have been a sufficient reason for leaving the army without an adequate supply of what was necessary to preserve the health of the troops.

Considering the preference which has been shown, not only in the present, but in other campaigns, particularly those in the Burmese and Chinese Empires, for issuing to the troops salt meat and biscuit, instead of fresh meat and bread, notwithstanding the alarming extension of diseases of the bowels, which usually manifests itself in military operations, there seems reason to apprehend that the facility of obtaining and distributing the former description of supplies, may not unfrequently have had an influence in causing too extensive a use of them.

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In the circumstances in which the army was placed, the question of expense was never taken into consideration. What was deemed best for the troops, was purchased without regard to its comparative cost. This is stated in the written answers sent in to the Commissioners by the Quarter-Master-General, who consulted me on this point.

I am not aware of any such preference having been shown in any former campaign, except as a result of necessity, so far at least as concerns the British Commissariat. In the two instances specified, the charge of supplying the troops was in the hands of the East India Company's officers, and I know neither the fact stated, nor the reasons for it which may have existed. Biscuit was certainly the habitual ration of the army under the Duke of Wellington's command in the Peninsula, but only when the means of obtaining fresh bread were wanting; and salt meat was *never* issued to that part of the army which was in motion, and sparingly, if at all, to the troops stationary near the coast. The sea ration may have been a common resource at the commencement of our maritime expeditions, but, even in those cases, only during the period which intervened between the landing of the troops and the resources of the country becoming accessible. I do not believe that a case, similar in all its circumstances to that of the army in the Crimea, can be cited.

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The duties of the Commissariat are then in campaigns, when salt meat and biscuit are supplied instead of fresh meat and bread, in a great measure confined to maintaining an ample store of these in the general depôt by shipments from home, which involves little trouble; and the distribution of this supply, according to the numbers in each division, merely involves the simplest operation of arithmetic. But when cattle have to be sought out and purchased, often in remote provinces, have to be fed and cared for, and kept in condition before shipment; when transport has to be provided, forage obtained for the voyage, and subsistence thereafter till they are given over to the troops, the measure, however useful, is one which must necessarily be attended with much extra trouble, great complication of accounts, and no small personal exertion.

The preparation for soft bread, in like measure, involving as it does the purchase of wheat, its conversion into flour, the building of ovens, the hiring of bakers and extensive superintendence, requires a very different amount of trouble and responsibility from what would be created by the receipt and issue of a certain number of bags of biscuit daily. It is, perhaps, but natural, under such circumstances, that those who have the charge of supplying the troops, should cling to a system which tends so materially to relieve their difficulties during a protracted campaign.

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As there was a large number of cattle collected in depôts at the commencement of the winter, and the animals were shipped to the fullest extent to which suitable vessels could be obtained, no consideration of this kind could have influenced the operations of the Commissariat.

The supposed extra labour would, of course, require extra hands to perform it, and would, therefore, add little to the trouble of those otherwise employed, who, being always, in point of number, rather under than over their work, could not, without such extra assistance, perform that and the supposed additional work also. In most cases, however, the unworthy motive assumed by the Commissioners would not exist, even according to their hypothesis, for while salt meat requires transport, and a greater detail of distribution, cattle carry themselves, and the trouble of slaughtering the animals, and distributing the carcasses, is commonly undertaken by the regiments.

The papers which I have appended to these remarks, will shew that I was fully sensible of the importance of supplying the troops with fresh bread, and that I had no desire to save the Commissariat the additional labour and accountability here alluded to. The employment also of the floating steam-mill and bakery, for which the Commissioners knew I had applied, necessarily involved all these details. But the real obstacle to the regular issue of fresh bread, is the entire absence in our service of any thing in the nature of a Field Bakery Establishment. In all instances within my knowledge, the *local* means of supplying the troops with fresh bread have been used to the fullest available extent; but a moving

Observations of Commissioners.	Remarks.
Importance of Fresh Meat.	army can never be regularly thus supplied, except by a properly organised establishment for the purpose attached to the army, like that in the French service; and no such establishment has, I believe, ever been formed in our service.
But as experience has shown, that this saving of trouble in the first instance, can only be effected at the risk of great suffering, vast expense, and tenfold trouble in the end, the dependence on a diet of salt meat and biscuit only, should in future be confined to cases in which the general officer in command has satisfied himself as to the impossibility of procuring other supplies, and therefore directs, in General Orders, the issue of that description of food; the restriction to this ration should then be communicated immediately to the Home Authorities, in order that they may send out supplies of preserved meats and vegetables, to counteract its sameness and innutritious quality.	The suggestion here made is only a recommendation of that which has been the long established practice of the service, the composition of the ration when differing from that in ordinary use being *always* regulated by General Order. With regard to preserved meat and vegetables, the supply of the latter, as part of the ration, has never before been customary, nor, I believe, needful. As to the former, I received advice that supplies had been ordered to be shipped from England, but they never arrived.
Supplies of Vegetables could be obtained.—The deficiency in the supply of vegetables is even more objectionable and more unaccountable than that of the fresh meat. If the army was to be fed on salt meat, a sufficient supply of vegetable food was known to be indispensable to the maintenance of health. The Turkish provinces could have furnished, and at a later and more unfavourable season did furnish, a considerable amount. There are several varieties which can safely be carried by sea, and which will keep several months, of which potatoes and onions are perhaps the best; and the different varieties of	As I have before observed, it formed no part of the duty of the Commissariat to provide vegetables, which had always been supplied under regimental arrangements, the troops paying for them. On the 24th of October, on account of the appearance of scurvy among the troops, I received for the first time an order from Lord Raglan to send a vessel with a Commissariat officer to purchase vegetables; and on the same day the *Harbinger* was dispatched for that purpose to Constantinople, as being the place where a supply could be obtained with the greatest certainty and despatch.

Observations of Commissioners.	Remarks.
preserved vegetables are available at all seasons, and at a moderate cost.	It can scarcely have been owing to the long continuance of the use of salt meat that this disease first broke out, for at that period the troops had been less than four weeks before Sebastopol, and had received a large proportion of fresh meat: they had been able also during the earlier part of the period to procure vegetables in the Crimea. As at that time our communications were frequent with the northern coast of the Black Sea, Lord Raglan, without my knowledge, desired the Commandant at Varna to forward supplies of vegetables to the army; and every vessel coming from thence brought a proportion. But the quantity that can be obtained from any part of Turkey on the shores of the Black Sea is inconsiderable, as compared with the wants of a large army; as I subsequently found, when, it having become the duty of the Commissariat to provide vegetables for the troops, I attempted to procure supplies from Samsoun, for they were soon exhausted. When also, in the month of April, or May, 1855, I urged the Consul at Trebizonde to forward supplies from thence, he was unable to undertake to do so till the month of November. The vegetables received by the *Harbinger* having been shipped (owing to the anxiety of the Commissariat officer to meet the urgency of the occasion) in wet and boisterous weather, a large proportion of them arrived bruised and damaged. This was in November. In December vegetables which had been ordered by Government to be forwarded from Trieste and Venice arrived; but a portion of these also were in a damaged state. But for these losses there would probably have been no defici-

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ency in this respect, as, in addition, large quantities of onions and potatoes had been brought to Balaklava for sale, in good condition, by private individuals. The following is the copy of a Report from the Commissariat Officer in charge of the depôt at Balaklava, on this subject:—

CRIMEA, *Dec.* 22, 1854.

SIR,

I have the honour to transmit for your information, Board of Survey, Statement of Issues, &c., respecting vegetables received from ships *Harbinger*, *Jason*, *Trent*, *Cormorant*, and *Albatross*.

It will be perceived that great losses have accrued from the inclemency of the weather, and I also attribute much to the large quantities shipped and arriving here at the same time, or nearly so.

I have, &c.,

(Signed) W. H. DRAKE, D.-C.-G.

To Com.-General Filder.

During November and December also, preserved potatoes had been offered to the troops by the Commissariat, but were refused by them.

Up to the 10th of December, the troops paid for their vegetables, whether sent out by Government or procured from other sources; but when from that date they were ordered to be issued gratuitously, it became obvious that the supply must be wholly undertaken by Government. I accordingly took measures for procuring them; and from the time that my arrangements came fully into operation, aided by the consignments which had been ordered by Government, and were already on the way from Trieste and Venice, large quantities have always been issued to the troops. It being, however,

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difficult at certain seasons to procure sufficient supplies of *fresh* vegetables, I sent a telegraphic message to England for preserved ones, in order to ensure a regular and uniform issue of vegetables (preserved or fresh) to the troops; but it was not, I believe, practicable at that time to obtain in England or France sufficient quantities for the purpose.

As a reason for not issuing the preserved potatoes during the winter, when they would have been so useful in preventing scurvy, the Commissary-General states that the men rejected them, and returned into store several cases that had been issued. On investigating the circumstances, however, it appeared that they had been returned into store, at a time when the troops had a sufficient supply of fresh meat; and when they understood that they were to pay for one pound of the preserved the price of four or five pounds of the fresh potatoes; when they were afterwards issued gratis, and the men had learnt how to cook them, they became exceedingly popular.

No reference is given in the Report to this investigation; but the following copy of a Memorandum from the depôt officer, who must have been best acquainted with what had taken place in the matter, will shew that no such information could have been obtained from him; and that the preserved potatoes which arrived from Varna in November, having been offered to the troops both in that month and December, were rejected, as they had been on former occasions.

(Copy)

Preserved Potatoes.—32,468 lbs. were landed from Varna in November 1854. Though frequently offered, none were taken either in November or December. A further supply was received from England in January 1855, and in that month the troops first began to take them. The issues were as follows:—

January . . .	53,474 lbs.
February . .	3,780 „

during the latter month 558,925 lbs. of fresh vegetables being issued.

(Signed) W. H. DRAKE, D.-C.-G.

May 22nd, 1855.

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Among the reserve supplies at Scutari, which were not brought over to the Crimea at a time when they might have been of the utmost service to troops labouring under scurvy and insufficient nourishment, were 147,088 gallons of porter, which remained in store there from the 1st of December, 1854, till April or May last. It might have been impossible, considering the inadequate means of transport, to carry any portion of this porter to the head-quarters camp; but there appears no reason why these should not have been issued to the troops in the vicinity of Balaklava, as well as the numbers sent there from the camp on fatigue duties, which would by degrees have extended the supply throughout the force in front without the trouble of carriage. It was one of the hardest consequences of the fatigue duty to Balaklava that the men had often to remain there for the greater part of the day without food; a pint of porter and a biscuit would have obviated this, and been of material benefit to their health; such a supply would also have been most valuable for the sick.	Conveyance could not during the winter have been provided for bulky casks of porter, even to the camps of the Cavalry and the Highland Brigade, without appropriating for the purpose transport which was required for more urgent wants. When at a later period I learnt that the use of the porter had been recommended by the Medical officer of the Highland Brigade, I ordered a supply to be forwarded from Constantinople; and it was issued to such of the troops near Balaklava as preferred it. Notwithstanding, however, that when it arrived the railroad had been laid down as far as the Col de Balaklava, it was found impossible to obtain conveyance for more than a small proportion of it to the front. The troops that came down to Balaklava on fatigue duty must have received from the Commissariat in camp their ration of biscuit and rum, and no doubt brought with them such proportion of it as they pleased. I never however received any intimation that it was desirable that porter should be issued to them at Balaklava.
Supplies of Food now abundant.—At a future time we shall be prepared to submit some suggestions as to the rations of troops in the field; meanwhile, we have the honour and satisfaction to report that, before our departure, the supplies of food to the army in the Crimea were abundant, and the diet of the soldier, in the opinion of those who are best able to judge, better than any army in the field has, in any former campaign, been regularly supplied with.	I have already observed that the favourable state of the supplies here described was gradually brought about by the unaided exertions of the Commissariat, when they ceased to be impeded by impassable roads and continuous storms, with one, not important, exception, which I have pointed out.

Observations of Commissioners.	Remarks.
We are able to state that, in their entire satisfaction with the rations now issued, the men concur with their officers. The only objection, so far as we can ascertain, is to the inferior condition of the cattle, and the grounds of this objection are in the course of being removed, as the animals are daily improving in condition upon the new grass, which is now abundant in the grazing countries; but as the natives of those countries are not in the habit of winter feeding their cattle, they will begin to fall off after the month of October, unless arrangements are made by the Commissariat to have them properly fed and kept in condition. Such arrangements, instead of increasing the cost of meat, would, probably, produce a considerable saving, for the oxen, if so attended to, would yield nearly double the quantity, and of better quality. We anticipate no difficulty in maintaining, or, if necessary, in largely increasing the supplies of cattle, and also of vegetables, from the Turkish provinces.	It is necessary to commence such arrangements early in the year for the following winter. In the month of February, that is before the arrival of the Commissioners, I ordered the Commissariat Officer at Constantinople to apply for firmans from the Ottoman Government, to secure all the hay of the approaching harvest in the districts, in which cattle depôts were to be established; and when I left the army, fodder had been collected, and sheds constructed at the different shipping places in the Black Sea by my directions, for feeding and sheltering many thousand head of cattle, and it is from the depôts there formed, that the troops in the Crimea are now being supplied with fresh meat. A depôt had been formed in January at Sinope, where the cattle were stall-fed on oil cake, barley, and chopped straw, by the Commissariat, and another in the same month at Sizopolis; but it not having been possible to commence these at the proper season, they were of a more limited extent. Depôts had been established also since the preceding autumn on the shores of the Sea of Marmora. These suggestions of the Commissioners had therefore been anticipated by me.
Land Transport.—From a Return prepared by the Commissariat, there appears the startling fact, that in January 1855, the whole number of effective animals belonging to that department, was 333 pack horses and mules, and 12 camels. The Commissary-General had considered it necessary, before the army should move from Varna, to have transport at his disposal equal to about 14,000 pack animals.	The transport was in this state for a few days only; but, in addition to this number of efficient working animals in possession of the Commissariat, the public bât animals attached to regiments, and those appropriated for the conveyance of ammunition, both of which now form part of the general transport corps of the army, were available and employed in carrying up rations, and though these establishments were incom-

OBSERVATIONS OF COMMISSIONERS.

Land Transport.

From the evidence of the Commissary-General it appears, that this diversion of a part of his transport from Commissariat to siege purposes, prevented him from completing the formation of a depôt near head-quarters, which he had commenced, and which was a measure of great importance to the army, as subsequent events too clearly proved. He was, therefore, from the commencement of the operations against Sebastopol, aware that the transport he had col-

REMARKS.

plete, the number of animals amounted to several hundreds. The number of 14,000 pack animals, or waggons and pack animals equal to that number, was considered necessary by me for all the different services of the army; for the regimental establishments of bât animals; conveyance of ammunition and Commissariat transport; and the estimate had reference to the movement of the troops through Bulgaria to the Danube, a much more extensive scene of operations than the Crimea.

That the efficient transport was for a few days reduced to this low state, was owing to the great number of animals which were daily destroyed or rendered unserviceable, in attempting to struggle, when laden with supplies, through a morass. The transport of the French army did not suffer from this cause. The road from their camp to Kamiesch, lay over downs the whole of the way, till it abruptly terminated close to the bay. When one track became impassable another was used; nor had its transport to carry up fuel or huts, with the exception of what might be required for their divisional hospitals in camp. It therefore remained available for the conveyance of the ordinary field rations of the troops.

At the commencement, the transport, exclusive of what had been appropriated to siege operations, was sufficient for all Commissariat purposes. It was not till about the 18th or 20th of October, when it became obvious that the effect of our fire on the fortress was not such as had been expected, that I first contemplated forming a depôt in front. Up to that time the transport sufficed to carry not only the daily rations of provisions and forage, but also

OBSERVATIONS OF COMMISSIONERS.

lected was not all available for Commissariat purposes, and was not sufficient for all the purposes for which it was required. In answer to the question, why, in those circumstances, he did not increase the transport in the Crimea, he states that he had as many animals as he could feed. The measure of the amount of transport to be provided for the army in the Crimea was not, therefore, what was required, but what the Commissariat could feed. The reason for not increasing the amount of transport, was not that a greater number of animals was unnecessary, but that a greater number could not be fed in the Crimea. But if proper arrangements had been made to provide the army with forage for the winter, wherever it might be at that season, the forage would have been available for use in the Crimea.

REMARKS.

extra rations of the former, and supplies in advance had been accumulated besides, and were in possession of the Divisional Commissariats in camp. Afterwards, the number of animals that could be fed, necessarily became the rule.

In answer to the alleged omission of timely arrangements for the provision of forage, I have to state that so early as when there was full expectation of the army advancing to the Danube, I made a contract for about 3500 tons of hay, to be delivered loose, at different places in the neighbourhood of Constantinople; and I also desired the Commissariat officer there to form a depôt of chopped straw, in case the army should return and occupy cantonments in Turkey during the winter. I took these steps as a precaution, notwithstanding that supplies of chopped straw, the usual forage of the country, can be obtained to almost any amount along the shores of the Bosphorus, the Dardanelles, and the Sea of Marmora; and these arrangements would have been adequate to the object in view, had the army been cantoned in these districts. Subsequently, when it became known that we were to proceed to the Crimea, the contractors, at my request, were willing to engage to deliver about 500 tons of the hay pressed, instead of loose; but learning, when the army was on the way to the Crimea, that I could not rely on the fulfilment of this contract, I wrote on 13th of September to England, requesting that 2000 tons of hay might be sent from thence. Of this demand only about one-tenth was forwarded, and this portion reached Balaklava on the 30th of November; and although, shortly after arriving before Sebastopol, that is on 8th of October, I reported that the

Observations of Commissioners.	Remarks.
Land Transport.	supply of forage to be obtained in the Crimea was nearly exhausted, and by my letters of 23rd October, and 8th, 18th, and 27th November, represented that we should be entirely dependent for this article on England, and urged the forwarding of further supplies, and repeated these representations in December and January, the consignments fell greatly short of my wants; the whole of the quantities forwarded from England, during a period of six months, not amounting to the 2000 tons for which I first made a requisition, or about two months' supply according to the estimates I had transmitted home. Had my requisitions for hay been complied with, the deficiency in this respect, which was felt throughout the winter, would have been prevented, and I should have been enabled to maintain a sufficient transport establishment, and replace the animals which were rapidly destroyed or rendered unserviceable, in attempting to struggle with their loads through impassable tracks, and from exposure to the weather. No exertion on the part of the Commissariat could remedy this deficiency, it being impracticable to convey across the Black Sea, chopped straw or loose hay in sufficient quantities, or to procure the means of pressing enough of either for the consumption of a large army: the latter plan was adopted to the utmost extent to which means could be procured. Notwithstanding that upwards of 25,000 tons of hay were collected by my directions during the last spring and summer, at one port alone in the Black Sea, besides large quantities at other places, it is still found necessary to forward from England supplies of pressed hay, equal nearly to the whole of the consumption of

Observations of Commissioners.	Remarks.
Land Transport.	that part of the army which is in the Crimea.

Supply of Hay. — The Commissary-General had, indeed, concluded a contract for about 1,000,000 lbs., or about 800 tons of hay, to be made at Buyook Tchakmedge, on the Sea of Marmora, and hydraulic presses were sent out from England to compress it for shipment. The contractors failed, it is said, to complete their contract, and only about 600 or 700 tons were made. They appear to have been men without capital, who borrowed money at a high rate of interest, to carry out their various contracts with the Commissariat. At length the hay was secured to the British Commissariat. But in the meantime the hydraulic presses had been erected in the vicinity of Constantinople, more than 15 miles from the place where it had been collected, and it became necessary to carry the loose hay that distance, either by land or water, before it could be pressed.

This operation could not be carried on in bad weather; and thus by defective arrangements throughout the whole transaction, the only provision for supplying the army with hay which had been made in Turkey, was rendered nugatory, at a time when 600 or 700 tons in the Crimea would have been invaluable. The Commissary-General admits that if the presses had been erected at the place where the hay was made, he could have fed more animals, and there can be little doubt that every addition to the transport in the Crimea saved the lives of men.

The contractors here alluded to were recommended by the Embassy to Deputy-Commissary-General Smith, on his first arrival at Constantinople, as competent persons, and they have held several important contracts, which, on the whole, they have executed satisfactorily, with the exception of this one for hay. The quantity of 500 tons of pressed hay was to be in lieu of an equal quantity of loose hay, part of the 3500 tons already alluded to, which the contractors had engaged to deliver in the neighbourhood of Constantinople; and the superintendence of this service, and the erection of the hydraulic presses, were necessarily left to the Commissariat officer at that place.

In his absence, and in the absence of my official papers, I am unable to explain the particulars of the transaction as regards the delivery of the hay; but with respect to the erection of the presses, Mr. Smith took the precaution of sending two Commissariat officers to select the most eligible place for putting them up, and it was upon their recommendation that the site was chosen, on account of its affording some facilities for repairing and working the engines. When it was made known to me that the presses were separated from the hay, I strongly censured the arrangement, but received a letter, of which the following is an extract, from Mr. Smith, in explanation:—

"I sent Mr. Edwards and Mr. Downes to see what was best to be done, and they both recommended, under all the circum-

OBSERVATIONS OF COMMISSIONERS.

Supply of Hay.

At this time, however, he only contemplated bringing up 250; and the *Jason* sailed for that purpose on the 26th of November, and returned to Balaklava on the 16th of December; having been absent 20 days. The average passage at that season, including coaling, watering, &c., appears to have been about 15 days. The *Jason* thus exceeded the average time by a few days, of which two may be accounted for by the time occupied in sending for and bringing the mules from Tchakmedge, where they were recovering from the effects of the journey from Varna. They had been badly cared for, and many were utterly useless; a certain number, however, arrived at Constantinople, in very bad condition, about the end of November; 250 of the most serviceable were selected to be shipped in the *Jason*, but even these appear to have hardly been considered effective by the Commissariat officers when they arrived at Balaklava.

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stances, that the presses should be erected where they are. To have erected buildings in other places would have been a work of months, with interminable expense."

These are matters of detail, however, for which the Commissary-General in the Crimea cannot be answerable. The Commissioners confine their observations to the provision which I had made in Turkey for supplying hay, although it was in evidence before them (Evidence, page 157,) that I had made a requisition for a large quantity from England.

The number of horses sent for was 350, (see Evidence, page 61,) which was as many as the vessel was supposed to be capable of carrying. The captain informed the Commissariat officer at Constantinople that he could only convey 250; but when he had shipped that number he found that his vessel could take 100 more. The Commissariat officer, very properly in the circumstances in which the army was placed, dispatched the steamer without waiting till more could be brought up from the depôt at Buyuk Tchekmedgeh.

The number of days quoted by the Commissioners as the average length of the voyage, includes the time occupied in cleaning boilers and repairing machinery, which was usually done when steamers went to Constantinople, and swells the average. Steam vessels, not requiring repairs, that have been dispatched for cargoes of animals, which walk on board, have performed the voyage in 8 days; and the *Jason* might have done it in the same time instead of 20 days, had she not undergone repairs. It was during her prolonged stay that the army suffered most,

OBSERVATIONS OF COMMISSIONERS.

Supply of Hay.

On the 11th of December, the sailing horse transports of the army were placed at the disposal of the Commissary-General to bring up transport animals, but were not employed for that purpose. On the 24th, he applied for a steam vessel, which appears to have been immediately ordered. On the 28th, he applied especially for the *Jason*, which had then discharged her cargo of animals, &c., and in pursuance of orders given on the 24th, she was immediately placed at his disposal, and sailed on the 29th for Constantinople. He makes it a ground of complaint, with reference to the reinforcement of the transport in the Crimea, that, having sick on board for Scutari, she was detained till the 7th of January landing them; but, having been questioned on the subject, he admitted that after landing the sick at Scutari, she was sent by the Commissariat, though not by his order, to the Sea of Marmora, to take in a cargo of fuel; and he could not say that she might not have been absent a week or ten days for that purpose. The deficiency in the land transport of the army cannot, therefore, be accounted for on the ground that he could not obtain sufficient sea transport to convey the animals he was desirous of bringing to the camp.

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and that some of the troops came down to Balaklava for their rations. When she returned they ceased doing so.

Sailing transports might have been nearly two months on the voyage, going and returning; it was therefore expedient to wait for a steamer.

The *Jason* must on this occasion have reached Constantinople on the 30th or 31st of December; and it is certain that 7 or 8 days after her arrival there she still had sick on board, when I had understood that she was to be entirely at my disposal for the conveyance of transport animals. This delay therefore was in addition to any that may have been caused by her having been sent to the Sea of Marmora for wood.

Observations of Commissioners.

The real cause of the deficiency of transport appears therefore to have been the want of forage, not the want of ships or of animals; and a similar failure to provide the requisite forage would again limit the number of animals available for the army in the Crimea, whatever might be the number in possession of the Land Transport Corps. It may be hoped that the formation of that corps will prevent the recurrence of any similar calamities from the same cause.

At this time (November 14th to January 1st) several hundred quarters of buckwheat and millet seed, which had been taken at the capture of the town, were lying in a large stone building close to the town under the cattle wharf, and might, it is presumed, have been made available for some of the horses or baggage animals, when there was a difficulty in landing corn from the ships; but it remained in this store during the whole of the winter, and was still there when we left Balaklava in June, thus unnecessarily occupying a building which might have been valuable as a store for other purposes, besides allowing a most useful supply for horses or cattle to go to waste.

A man of comprehensive views might probably have risen superior to these disadvantages, and created an organization suited to the circumstances. He would, doubtless, at once have perceived that the established practice of procuring all supplies by tenders and contracts is not calculated to draw forth the resources of Turkey, or to make them available when required. Finding that his supplies must

Remarks.

From the time that my requisitions for supplies of pressed hay from England were complied with, there has always been sufficient forage for the Land Transport Corps, as well as for every other branch of the army; although the number of animals for which forage was drawn when I left the Crimea, amounted to upwards of 23,000.

The destitute inhabitants of Balaklava, Karani, and other villages within our lines, who had remained in their houses on our arrival, but who were not permitted by the military authorities to go into Sebastopol or the interior of the country, after the siege operations had once commenced, were relieved throughout the winter from the store of captured grain here alluded to. Subsequently, and I believe during the time the Commissioners were at Balaklava, these people were regularly rationed by the French and British Commissariats alternately; the issues from the store may therefore have been less frequent at that period, but assistance from it was still occasionally given to them.

The Commissioners have here assumed that I obtained no supplies except by means of contracts and tenders, and that I had only followed the beaten track. I am unable to say whence they have derived the opinion; but however derived, it is inconsistent with the fact. I obtained supplies in every variety of mode in which it was possible to procure them, that is, by means of agents having a knowledge

Observations of Commissioners.

be drawn from provinces, of the resources of which he had little knowledge, and to the inhabitants of which he was unable even to communicate his wants in any language which they could understand; he would probably have turned to good account the knowledge of the country and its resources possessed by a large and respectable body of public servants, Her Majesty's consuls, and he would then have found those resources more ample and more easily made available than till lately they were believed to be. But it is unreasonable to expect that every man who may rise to the head of so limited a department, even after a long course of meritorious service, is to display, whenever the occasion may demand it, inventive resources and administrative capacity of a very high order.

Remarks.

of the resources of the country, and of the language and habits of the people; by direct purchases made by Commissariat officers from the parties holding the supplies, without either written tender or agreement; by public competition; by special tender; and, when necessary, by requisition on England; and there were at all times ample supplies in possession of the Commissariat of all articles excepting forage. I never doubted, as may be seen from my official Reports to the Treasury and War Department, that the resources of the country were ample, although it might become necessary, as has since been found to be the case, to draw supplies of cattle from greater distances. I also communicated the same opinion to Sir John Mc Neill, in writing. I should have supposed indeed that Sir John Mc Neill must have known that I was employing agents in procuring supplies, as Mr. Guarracino, the Vice-Consul at Samsoun, a gentleman who has been long resident in Turkey, and is well informed of its resources, was engaged by me to make purchases on commission, both at that place and in the interior of Anatolia; and when he came to Balaklava on the business of his agency, he usually called on Sir John Mc Neill, with whom he had been previously acquainted. Mr. Guarracino had been employed by me in the same manner the preceding year, 1854. (*See* paper annexed, marked E.) I also employed other consuls, but the result was not always satisfactory. Large purchases were likewise occasionally made at Constantinople, on commission. When offers of supplies are made to Commissariat officers who are stationary, as at Constantinople and Balaklava, they are very properly

Observations of Commissioners.	Remarks.
Supply of Hay.	put in writing in the shape of a tender, to establish the terms and prevent disputes; and whenever we are in a position to do so we also attach a penalty to the non-performance of the agreement. Even if the regulations restricted the mode of proceeding in the way described by the Commissioners, which is not the case, I should not have hesitated, with the sanction of the Commander of the Forces, to disregard them, had their observance in any way interfered with the supply of the troops.
The purely executive duties of the department appear to be well performed. The officers attached to divisions and brigades are generally intelligent and efficient; several of them are men of considerable capacity. The generals commanding divisions and brigades, with few exceptions, expressed their satisfaction with the exertions and services of those officers, and used terms of high commendation in speaking of some of them, especially of Mr. Power, attached to the second division, who was absent on duty, and whom we therefore did not see.	I have at all times borne testimony to the great zeal and ability displayed by the Commissariat officers who served under my orders with the army in the East, and to their exertions during the winter in getting up supplies for their divisions from the depôt at Balaklava, under circumstances of unparalleled difficulty. As a body of officers they are not in point of integrity, gentlemanly demeanour, and intelligence, inferior to those of any department of Government.

I trust that the foregoing remarks serve fully to establish the results which I have ventured to anticipate from them, and to shew that my conduct in the execution of the important duties confided to me, during a service of almost unexampled difficulty, does not deserve the grave inculpations which the Commissioners have thought proper to bring against it.

APPENDIX.

(A.)

Memorandum *submitted by the* Commissary-General *for the* Consideration *of the* Commander of the Forces.

I will speak to Mr. Filder.

(Signed) R.

If it should be intended that the army or any part of it, is to winter in this country, it would be desirable that arrangements for lodging and provisioning the troops should be commenced without delay. With this view the positions to be occupied, and the number of troops to be stationed at each, should be determined upon.

It would be necessary to construct, convenient to the barracks, ovens capable of baking bread for the probable number of troops to be cantoned at each station. If Scutari is to be occupied, reliance could not be placed on the communication being kept up during the winter with Pera, from whence the troops were supplied with bread when they were at Scutari in the spring.

It would be requisite that slaughter-houses and sheds, for the public animals belonging to the Commissariat Transport Service, should also be constructed.

For these purposes, the assistance of the engineer department would be required. The work might be done by contract, under their supervision.

The provision of fuel is a matter of great importance. I do not apprehend there will be any difficulty in laying in an adequate

supply of wood, but it would require time; and it may be for consideration whether coals obtained from the mines at Heraclia, which are now in the possession of the British Government, might not be made available and be deemed preferable. In the one case, the barrack rooms would have to be fitted up with stoves, and in the other, with chimneys. The stoves and grates must be sent from England. It might also be desirable that proper persons should be sent from the Tower, to repair the tents and camp equipage in charge of the Commissariat, it being doubtful whether men perfectly competent to the business could be obtained from the Regiments.

(Signed) WILLIAM FILDER,
Commissary-General.

Varna, August 1, 1854.

(B.)

(Memorandum.)

I cannot give these orders at the present moment.

(Signed) RAGLAN.

At Sea.
Steam Ship "Hope,"
13th September, 1854.

The Commissary-General begs reference to the Memorandum submitted by him on the 1st of August, respecting the arrangements that it would be necessary to make for lodging and provisioning the troops, if it should be determined that they are to be cantoned in Turkey during the winter.

The period has arrived when there is barely sufficient time left before the termination of the present expeditionary service to complete these arrangements, particularly for laying in a store of wood,

the construction of ovens, and the necessary preparations for executing the more important contracts.

Instructions are respectfully solicited on this subject, together with information as to the force for which provision is to be made at the different cantonments.

(Signed) WILLIAM FILDER,
Commissary-General.

General Lord Raglan, G.C.B.
&c. &c. &c.

(C.)

No. 292.

COMMISSARIAT, PERA,
30th September, 1854.

SIR,

Not having received any instruction as to providing a winter supply of firewood and charcoal at Scutari, and not being aware whether such a supply will be required to any considerable extent, I take the liberty of bringing the matter under your notice, in order that, if required, arrangements may be made for the purpose while there is a prospect of procuring the articles on comparatively reasonable terms. The season I fear is already advanced rather far.

I have, &c.,
(Signed) G. W. SMITH,
Deputy-Commissary-General.

Commissary-General Filder, C.B.

BALAKLAVA,
8th October, 1854.

I brought this subject under the consideration of the Commander of the Forces as far back as 1st August, and again more recently, but he is unable, in the present state of the military operations, to give any definitive orders in the matter.

(Signed) WILLIAM FILDER,
Commissary-General.

I think it will be better at once to make arrangements for a supply of firewood for 20 or 25,000 men.

(Signed) RAGLAN.

Submitted 12*th October.*

(Signed) W. F.
Commissary-General.

(D.)

(Memorandum.)

I have no objection, provided Captain Christie can send another steamer to Baltjik instead of the *Emperor*, but that condition is imperative.

(Signed) R.

BALAKLAVA,
30th November, 1854.

In consequence of the difficulty, in the present state of the roads, of conveying a sufficient quantity of salt meat for the troops, from Balaklava to the Camp, it has become of the utmost importance that the supply of live cattle should be increased by every means, and that every available steam vessel should be appropriated to their conveyance. There is at present lying in the harbour of Balaklava the steamer *Emperor*, well adapted to the transport of cattle and ready for sea, which is about to proceed to Baltjik, in consequence of orders from the Commander of the Forces, but which it is submitted, if the conveyance of cattle should under present circumstances be deemed of more importance, might be appropriated to that service.

There are other steamers it is understood in harbour equally well adapted for the service on which the *Emperor* is about to proceed, but not for carrying cattle.

(Signed) WILLIAM FILDER,
Commissary-General.

General Lord Raglan, G.C.B.
&c. &c. &c.

(E.)

(Memorandum.)

Commissary-General Filder, at the recent interview with which he was honoured by Lord Panmure, omitted to mention to his Lordship, as it had been his intention to do, that Mr. Guarracino, the Vice-Consul at Samsoun, who has been employed in purchasing supplies in Anatolia, for the Commissariat, informed Mr. Filder, immediately before his (Mr. Guarracino's) departure for England, that proposals had been made to him by the "Intendant-General" to undertake a similar engagement for the French army.

As the Commissariat occupied the district of Samsoun before the French Intendance, and the resources of that part of the country are required for the British army, such an engagement would be prejudicial to our interests, and would seem also to be incompatible, under present circumstances, with Mr. Guarracino's duty to the British Government.

Mr. Filder would beg to submit for consideration, therefore, the expediency of a communication being made by the Foreign Office to Mr. Guarracino, who is now, Mr. Filder believes, in England, enjoining him, on the grounds above-mentioned, not to accept any proposal of the nature alluded to that may be made to him by the French Administration.

57, *Eaton Square*,
September 10th, 1855.

LONDON:
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D. Walford

With Sir John Hall's comp.ts

II.

OBSERVATIONS ON THE REPORT

OF THE

SANITARY COMMISSIONERS

IN THE

CRIMEA,

DURING THE YEARS 1855 AND 1856.

BY

SIR JOHN HALL, M.D., K.C.B.,

Inspector General of Hospitals.

LONDON:

PUBLISHED BY W. CLOWES AND SONS,

14, CHARING CROSS.

The Editor of the "Times."

7, Ormond Terrace, Regent's Park.
14th March, 1857.

Sir,

It was with astonishment I read in that part of Lord Palmerston's speech on the Mc'Neill and Tulloch debate on the evening of the 12th inst., that the excellent condition of the Military Hospitals in the Crimea was attributable to the advice, and suggestions of Dr. Sutherland and the Sanitary Commissioners.

His Lordship has been misinformed in this matter; and I owe it to my own reputation and position distinctly to state, that neither Dr. Sutherland, nor any other member of the Sanitary Commission, had anything whatever to do with either the organization, or management of the Military Hospitals in the Crimea, and I believe them all to be gentlemen of too much honor and probity to take credit for anything of the kind.

What valuable information they may have furnished to Government I am unable to say, but, so far as their suggestions on sanitary matters in the Crimea are concerned, it was admitted by themselves that almost everything they could think of was either in actual operation, or had been recommended by the Medical Department of the Army before their arrival; but as they were invested by Government with greater power than was conceded to the principal Medical Officer of the Army, they thought they might assist in getting useful measures carried out.

I should have allowed this subject to remain unnoticed, as I have done many others, did it not proceed from an authority which stamps it in public estimation as a denial on the part of Government of any credit due to myself, or

the Medical Department, for months of anxiety, toil, and privation in the Crimea; and it is disheartening to Medical Officers to find that the meed of praise, which is so justly their due, has been given to civilians who arrived after the difficulties of the army had been surmounted.

I am, &c., &c.,

(Signed) JOHN HALL,

Inspector-General of Hospitals (Half Pay.)

Since writing the foregoing I have seen a copy of the Report furnished to Government by the Sanitary Commissioners at the seat of war in Turkey during part of 1855 and 1856, and if my surprise at the laudatory encomiums bestowed on them by Lord Panmure and Lord Palmerston ceases, it is only to be replaced by the astonishment occasioned on reading the Report itself, which ignores the efforts of Army Medical Officers in nearly all sanitary concerns, and attributes either directly or by implication, all merit to the Commissioners themselves in such matters.

With what justice I am unable to say, as, until I read their Report, I was wholly unaware of the extent of their assumed labors, and I am still ignorant how far their recommendations swayed the military authorities in preference to my own, and those of the other members of the Medical Department of the Army, who, according to the report of these gentlemen appear to have remained passive cyphers in the hygienic transactions of the army before Sebastopol; but who, as I think I shall be able to show by the following statement and correspondence, really initiated, or recommended all measures that were essentially necessary for the health of the army, and this the Commissioners cannot plead ignorance of, as they, on more occasions than one, when obtaining useful hints and information, now apparently forgotten by them, stated both to myself and others, that nearly all they could suggest was either actually in operation, or had been recommended by the Military Medical Officers before their arrival, but that they, with the increased powers with which they were invested would be enabled to assist us in getting those measures carried out, which we ought

to have had authority granted to us by Government to accomplish ourselves; and that their sole aim and object was to aid us, and strengthen our hands as friends—an apt illustration, I fear, of the old adage of "Save me from my friends!"

Of the condition of the Hospitals at Scutari, on the arrival of the Commissioners, I am unable to speak from personal knowledge, but they ought not to have been in the dirty state, either within or without, that has been described by them, if the orders which were originally sent down to the principal Medical Officer there had been attended to; but when they draw the comparison which they do in the table given at page 50 of their Report, and ascribe the decreased mortality in the Hospitals from March to June 1855, to their own trifling sanitary improvements in and around the Barracks at Scutari, one cannot help smiling at their so wilfully shutting their eyes to the fact of the improved health and condition of the army in the Crimea, from whence the sick in the Hospitals on the Bosphorus were supplied. But to place this in an intelligible light, and enable the reader to estimate the labors of the Commissioners at their true value, in reducing the number of sick, and amount of mortality in the Scutari Hospitals, it is only necessary to state the number of sick which was sent down from the Crimea to Scutari, and the number of deaths that occurred on the passage, during the quarters ending 31st March, 1855, and 30th June, 1855.

During the quarter ending 31st March, 1855, 6,284 sick soldiers were sent down from the Crimea to Scutari, and of these 258 died on the passage:

Whereas during the quarter ending 30th June, 1855, to which the labors of the Commissioners, in the table which they have given at page 50 of their Report relate, not more than 3,193 sick were sent down, and of these only 19 died on the passage! thus proving in an incontestable manner, I think that more powerful agencies were at work in modifying the type of disease under which those men labored who were sent down to the Scutari Hospitals during the second period than is admitted in the Report, and which must have exercised greater influence over the mortality there, than the traps of the privy drains, and other arrangements of the Sanitary

Commissioners, which are spread out *in extenso*, and taken at their utmost value in the account of their transactions. But after all it appears the privies themselves were left in their original state until March and April, 1866, when, after the armistice with Russia had been signed, and it was known to all the world that peace would be proclaimed, they were fitted with patent water closets, which was as wanton a waste of public money, as it was a useless alteration of the building itself; for I was told when I passed through Scutari on my way home in July, 1856, that only two out of the whole number were serviceable.

The description of the outbreak of cholera in the German Legion, and Osmanli Horse Artillery at Scutari, in Nov., 1855, given by Dr. Sutherland, differs considerably from that furnished by Dr. Linton to the Director-General of the Army Medical Department.

At page 55 of the Report it is stated: "The outbreak was a most severe one while it lasted, and death in not a few instances ensued within a short time after the accession of the disease. It lasted altogether about a fortnight during which period there were about 225 cases, nearly three-fourths of which proved fatal. The severity of the attack was over in a few days."

"Immediately on the appearance of the disease, Dr. Linton, Principal Medical Officer at Scutari, communicated with Dr. Sutherland as to sanitary precautions he was desirous of adopting to arrest the progress of the outbreak. Dr. Sutherland accordingly met Dr. Linton and Major-General Storks on the subject, when it was arranged that the troops within the Hospital should be camped out—that the troops in depôt should be thinned—that the barrack rooms should be ventilated, and all the part of the Hospital where the troops were, cleansed and whitewashed. The privies were also to be cleansed and deodorized. Medical Officers were directed to keep up a rigid inspection of the men, for the discovery and treatment of premonitary cases, and warm belts were to be issued to the troops."

"The necessary orders were immediately given by Major-General Storks, who himself selected the encamping ground to which the troops were removed. Every thing having been prepared, the German Legion, and

Osmanli Horse Artillery, were camped out on the 18th November at a distance of about three miles from Scutari, after which the disease speedily disappeared from among the men."

Dr. Linton on the contrary states that he took the initiative in these sanitary arrangements, and that the camping out of the men was carried into effect at his recommendation.*

It is clear both these statements cannot be correct, and I am not in a position to decide between them. It was the duty of the one to recommend what was done on the occasion, and the interest of the other in his position to take as much credit for it, and everything else, as he could—and the Commissioner has certainly seized on the lion's share of laudation—but whether the result of his advice and labors on this, and all other occasions during the whole period of his residence in the East, entitles him to this assumption, I am not prepared to say: the question, however, I think may be left without fear or hesitaton, by the Medical Department, to the decision of the authorities at the seat of war.

The members of the Sanitary Commission arrived in the Crimea in the following order:—
Mr. Newlands, Inspector of Nuisances, 19th March, 1855.
Dr. Gavin, Sanitary Commissioner, 23rd March, 1855.
Dr. Sutherland, Sanitary Commissioner, 6th April, 1855.
Mr. Rawlinson, Civil Engineer, 6th April, 1855.

On the 20th April Dr. Gavin was accidentally shot, and died on the morning of the 21st April, 1855.

On the 10th June Mr. Rawlinson's coat pocket was struck by a round shot which drove his porte-monnaie against his hip and injured it; and he returned to England on the 21st June, 1855.

On the 7th June, 1855, Mr. Newlands, Inspector of Nuisances, left Balaklava for England; and on the 23rd July Messrs. Freenry and Aynstry followed him.

Dr. Milroy, Sanitary Commissioner, arrived 22nd July.

On the 11th of April, 1855, the Sanitary Commissioners made their first Report to Lord Raglan of the condition of Balaklava, and what was, in their opinion, necessary for its sanitary improvement.

* Vide Dr. Linton's letter attached, marked 1.

In this Report they admit that Lt.-Col. Hardinge, the Commandant, and Admiral Boxer, the Port-Admiral had, been using their best endeavours to improve its sanitary state, but by some strange forgetfulness, for they could scarcely have been ignorant of the fact, they overlook the labors and recommendations of Dr. Anderson, Staff Surgeon, 1st class, and Principal Medical Officer of the place, whose urgent representations on all sanitary matters extend as far back as December, 1854, and one of them dated 15th January, 1855, was considered of so much importance, that a Committee, of which no less a person than Lt.-Gen. Sir Colin Campbell was President, was appointed to inquire into the matters complained of, and devise means for remedying the crying evils.

I annex copies of Dr. Anderson's correspondence on sanitary matters, dated 29th December, 30th December, 1854; 8th and 15th January, 16th and 19th February, 13th and 28th March, 28th and 30th April, and 18th May, 1855.*

With reference to the huts in which the Commissioners took up their residence on their arrival in the Crimea, I may be allowed to quote the following extract from one of my letters to the Quartermaster-General, dated 28th January, 1855:

"While on the subject of health it is necessary I should bring under the notice of the Commander of the Forces, the highly objectionable site that has been selected for erecting barrack huts on at the entrance into Balaklava. They are placed between a newly filled and imperfectly covered Turkish graveyard, and a perpendicular rock; and when hot weather comes on the very worst consequences may naturally be expected."

Notwithstanding the above warning the huts were proceeded with, and the consequence was, that those who inhabited them suffered much; and in the proceedings of the Military Sanitary Board, which was assembled on the 11th March, 1855, at my request, as Principal Medical Officer of the Army, to report on all matters connected with the health of the army, there is the following remark:—"That, in their opinion, the site of the hutted encampment at present occupied by the Coldstream Guards is highly objectionable:

* Vide Dr. Anderson's Letters in Appendix, marked 4.

1st.—On account of the defective ventilation; the huts being crowded into too small a space, and the air being shut out by the rocks in rear.

2nd.—The front is almost entirely closed by the stables of the Land Transport Corps, and the atmosphere tainted by the immediate proximity of a large Turkish burial ground, in which the dead are superficially buried, as well as by the accumulated filth at the head of the harbour."

"Spotted typhus fever having shown itself in the Battalion of Guards, the Board are decidedly of opinion the huts alluded to should not be occupied by troops. The Board beg further to call attention to the valley on the opposite side of the road, and to the encampments of the 71st Highlanders and Horse Artillery in particular, which must be rendered unhealthy by the large extent of marshy undrained ground in their front, into which dead horses have been thrown and allowed to remain defiling the stream of water that runs through it. This water is used by the troops in the vicinity."

"It is, therefore, suggested that a large deep trench be dug the whole length of the valley from Kadakoi to the head of the harbour."

The attention of the Board has been called to the state of the Latrines in the General Hospital at Balaklava, which requires remedying, and as the nature of the soil and absence of water render it impossible to construct privies for so large an establishment, it would be advisable to have small carts and tubs to carry away all impurities daily, with paid laborers to perform this necessary labor."

The large trunk drain recommended in the foregoing paragraph was carried out at a subsequent period, and, in conjunction with the road and railway ditches, effectually drained the Kadikoi valley.

At page 88 the Commissioners say: "The great mortality which took place in the winter of 1854-5 led to the use of the marsh at the head of the harbour as a place of interment, into which a large number of dead were put close to the line of the road.

"The bodies appear to have been laid almost in water, and sparingly covered with earth; that portions of the clothing, and even of the remains, protruded through the surface at the time we first examined it. Close to this graveyard a number of animals had also been buried."

I positively deny that the dead of the army were ever buried in this careless manner, from any of the Hospital establishments, and I fearlessly appeal to the whole army on the subject.

The railway from Balaklava to camp had been run along the margin of this graveyard, and if any scenes like those described did occur, the remains of the dead must have been disturbed by the railway workmen; but even that could hardly have brought the clothing of men to the surface who were buried naked, and merely wrapped in a blanket by way of winding sheet.

At page 88 the Commissioners remark: "There had been during the preceding months, an excessive mortality among the Mahommedan part of the population, and the dead had been imperfectly buried in a graveyard of their own at the head of the harbour, but on its west side."

There was no Mahommedan population in Balaklava beyond the Turkish army during the early part of the winter of 1854-5, and so many of them died of an aggravated form of typhus, that Dr. Anderson was apprehensive of its degenerating into plague itself, and on the 15th January, 1855, he applied for their removal from the village, and for the state of their graveyard to be taken into consideration, both of which were of too urgent a nature to be overlooked by the military authorities, and the Committee I have already mentioned, was appointed to take the matter into consideration.

At page 111, in describing the objectionable site of the camp of the 79th Highlanders, the Commissioners say that: "They recommended to the Commander of the Forces, on *the 14th April*, 1855, either to remove the troops to better ground, or improve the drainage and ventilation of the huts, which recommendations were immediately assented to by Lord Raglan. All the huts on the wet ground were abandoned, and those on the better ground improved."

The defects of this camp had been noticed, and their injurious effects on the health of the men of the 79th pointed out by me to Lord Raglan in my weekly Reports of *the 19th and 27th March*, and the necessity of removal urged; but it was stated at that time that the defence of the lines did not admit of the withdrawal of the 79th from its position, but of the propriety of the measure in a

sanitary point of view there could be but one opinion, and when the Commissioners made their recommendation, circumstances admitted of the arrangement being carried out, which I had previously so urgently wished for; and when cholera subsequently appeared in the 31st Regiment, quatered in these very same huts, the number of men in each hut was immmediately diminished at my recommendation, by sending a portion into the huts formerly occupied by the 63rd Regiment, which were situated on a higher and drier part of the plateau under the marine heights.

At page 117 the Commissioners state: "That the best manner of destroying organic matter is by burning it in kilns as is done in the cantonments of India."

This is an excellent method of disposing of camp refuse, but it is by no means general in India, and I think I mentioned to the Commissioners that I had seen it adopted at Kurrachee, in Scinde.

At page 118 they say: "As a general principle, it appeared that, at the period of their arrival in the Crimea, camps where there were animals yielded a greater amount of sickness than others."

At the period of their arrival in the Crimea, (March 1855) the admissions from disease in the cavalry were 7 per cent less than they were in the infantry; and the deaths 3·72 per cent lower in the cavalry than in the infantry.

In continuation they say: "During the early part of the warm season, from the beginning of May to the middle of July, 1855, there was an excess of sickness among the cavalry and artillery over that of the infantry."

In this observation the Commissioners are correct so far as diseases of a zymotic character are concerned, but, in their anxiety to establish a particular doctrine, they have omitted to state that 41 per cent of these two arms of the service arrived in the Crimea during the period specified, and as cholera was then very prevalent, and particularly fatal amongst new comers, this excess of mortality is easily accounted for. Indeed 72 per cent of the deaths which occurred were from that cause alone, whereas in the infantry it did not exceed 53·77 per cent; but if we take the admissions from all causes in the cavalry and artillery during the same period, we find that they amount to 59·50 per cent, and the deaths to 3·70 per cent. In the infantry the admissions were 59·73, and the deaths 4·62 per cent,

which is so near an approximation of the ratio of admissions in the several branches of the service, that the difference is scarcely worth mentioning, and it would be unfair to lay much stress on the excess of mortality in the infantry, as that was owing chiefly to the accidents of war, to which neither the cavalry nor the artillery were at that time so much exposed as the infantry were.

At page 119 the Commissioners say: "The 3rd and 4th divisions were encamped on an elevated part of the plateau to the N.W. of the Guards. It was nearly surrounded by depressions and deep ravines, affording ample facilities for surface drainage. In some places occupied by Hospitals and camps the surface was more deeply covered with wet retentive clay. These camps were not so healthy as others on the plateau, and when cholera first appeared in May, 1855, it attacked them by preference."

In the outbreak of cholera at the end of April and beginning of May, the two first fatal cases which occurred took place in two wounded men of the Light Division, who had been brought down to the Castle Hospital, at Balaklava, for the treatment of their wounds, and were attacked soon after their arrival there: it then appeared in the B. S. and P. batteries of artillery, in the 2nd battalion of the Royals, and Buffs belonging to the 2nd Division; and in the 48th and 71st belonging to the 4th Division; but the 3rd Division escaped almost entirely from the visitation.

The description given at page 120 of the position of the 2nd Division is erroneous. It was part of the 4th and not the 2nd Division that was located on the slope of Cathcart's Hill.

The Commissioners state at page 120: "That they deemed it necessary to recommend the removal of the camp of the Naval Brigade from the ravine in the rear of the 3rd Division to higher ground."

They may have done this, but I remember perfectly well Dr. Deas, Inspector of Naval Hospitals, coming up to camp to urge this very change, and his mentioning the circumstance to me, and my coinciding in opinion with him as to the propriety of the measure.

Neither Dr. Deas, nor Rear Admiral Sir Stephen Lushington, Commandant of the Naval Brigade, has any recollection of this recommendation of the Commissioners

as will be seen on reference to their letters in the appendix numbered 2 and 3.

From page 126 to page 130 the Commissioners embody under date of the 17th of May, 1855, the suggestions, which they submitted to the Commander in Chief on the construction and ventilation of huts, and concerning the general sanitary regulations to be observed in camp, to which no reasonable objections can be offered, as the most essential of them were either in operation or had been already recommended by the officers of the Medical department of the army. And the Commissioners conclude this part of their report by stating that: "After having completed the enquiry (inspection of the camp) Dr. Sutherland with the concurrence of Mr. Rawlinson addressed two communications to Dr Hall on the 16th of May. In one of which, the removal of the affected camps to better ground, (alluding to those of the Buffs 71st, and 48th Regiments), the diminution of overcrowding by serving out a larger supply of Tents to the affected Regiments, and examination, deodorization, and covering up of old Latrines, and other offensive matters, within half-a-mile of the affected Tents was recommended."

"In the other communication it was pointed out that the existing means of discovering, and treating diarrhœa cases were insufficient, and that it was necessary to take steps for discovering the disease at the very commencement either by inspection of the troops, by setting a watch over the Latrines, or by any method consistent with the rules of the service, whereby the malady may be discovered, and the medical treatment carried to the patient without waiting for his applying for it."

It is quite true these two letters were written, but Dr. Sutherland knew perfectly well when he wrote them that they were sent *pro forma* so far as the arrangements in camp were concerned, but I see now that they were intended to answer an ulterior purpose which I was not then aware of.

I say that the letters were not necessary, because Dr. Sutherland, when he accompanied me to the camp of the 48th regiment, on the 15th of May, was distinctly told by me, that it, as well as those of the Buffs, and 71st, had been ordered, on my recommendation, to be removed to the dry ridge to the S.E., and he could hardly have

avoided noticing that the change was actually taking place when he was there. I not only mentioned those changes to him, but I told him that the 2nd Battallion of the Royals, which was suffering from cholera, and the Camp of which I had also been anxious to get removed, could not be changed for strategic reasons. Great, therefore, was my surprise at receiving Dr. Sutherland's letter of the 16th, recommending changes which he knew perfectly well had already taken place; and his second letter was nearly as unnecessary as his first, as he was informed that the pointed attention of Medical Officers had been called by a Medical Department Circular Memorandum, issued by me on the 30th of April, 1855, to the importance of watching the approach of cholera, and treating it in its diarrhœal stage. Not only was this caution given to Medical Officers on the 30th of April, but the same subject had been strongly impressed on their minds the previous July, when cholera prevailed so extensively and so fatally in Bulgaria. The men were also made fully aware of the necessity of applying at once for medical aid when their bowels became relaxed, and this was as likely to be efficacious as harrassing them with additional, and useless parades, or setting a watch over the Latrines in camp.

The suggestion made by Dr. Sutherland of increased tentage during periods of epidemic sickness is a good one, but it is not always available on service, nor can the Commissioners' recommendation of bolting the huts to the rock beneath for security at all times be carried out. It must also be borne in mind, that when the imperfectly constructed Portsmouth huts arrived in the Crimea at the begining of 1855, their immediate erection was considered a matter of great moment to the army, and this had frequently to be accomplished in a hurried manner, and, for military reasons, on sites that were not the most desirable. The ventilation, which had been overlooked in the original construction of the huts in England, attracted the attention of both Lord Raglan, and myself, at a very early period, and many experiments were resorted to, to remedy the defect. In the first instance, a couple of rows of large auger holes were bored through the bottom of each door, and double rows of smaller holes through the upper board just under the eaves, and under the windows of

each hut. This was tried in the huts of the general Hospital at Balaklava, and recommended by me officially on the 14th of March, 1855, for all the huts in camp.

The Military Medical Board of Health which sat in March recommended roof ventilation, by means of three wooden tubes, eight inches square, and eighteen inches long, with louvered sides and penthouse tops, placed in the roof of each hut, in addition to holes bored through the bottoms of the doors, and under the windows; but the Engineer department said they had not the means for carrying the proposed plan into effect.

A very effectual mode of roof ventilation was then suggested by 2nd class Staff Surgeon Dr. Jephson, at the Castle Hospital, Balaklava, from what he had seen in India, which consisted in raising and louvering a couple of planks, to the extent of six feet on each side of the ridge pole, and formed a ventilator of the simplest, and most efficient kind, which any one with the slightest knowledge of mechanics could make. The penthouse ventilators were tried in the Hospitals of the light division where workmen could be obtained, but I think they were inferior to the Indian plan. Side ventilation was made by cutting square windows out of the boarding, and securing them by means of buttons, and leather hinges; at other times a plank was raised the whole length of the hut, and secured in the same way. Others, where workmen could be found in the regiments to perform the work, made sliding pannel ventilators. In this way, simple and inexpensive as the means were, the Medical Officers were enabled to flood the huts with fresh air during the warm weather, but during the winter these side ventilators could not be used.

At the General Hospital at St. George's Monastery, in addition to the Indian mode of roof ventilation, ventilators were cut just above the ground on each side, and, as the huts were double boarded, by cutting the inner holes between the outer spaces, a free circulation of fresh air was obtained without any injurious draft.

In the General Hospital at Balaklava the most perfect ventilation was secured by ripping up a board in the ceiling along each side of the wards, so as to allow the heated and vitiated air to escape through the dormer windows in the roof above, and by boring double rows of auger holes through the bottoms of the doors, an ample supply of fresh air was at all times provided.

In the front rooms of the General Hospital, which were nearly square, a board in the centre required to be raised, as well as one on each side, to complete the ventilation. This Hospital became a model of cleanliness and neatness, under the unwearying zeal of Mr. Fitzgerald, the Purveyor, and was the admiration of all visitors, both of our own army and that of our allies. Some Officers of rank of the Sardinian Army solicited to be accommodated in it when sick, and several Russian Officers of superior rank, the chief of the Staff for one who visited it, were unbounded in their praise and admiration of its cleanliness and arrangements.

This Hospital, though the Sanitary Commissioners, I see affect to look down with pity and contempt on it, continued a most useful, and efficient establishment to the very last, and as the mortality in it, notwithstanding the severity, and variety of the cases admitted into its wards, amounted only to 7·7 per cent, it could hardly have merited the condemnation they bestow on it.

At page 132, the Commisioners say, "The chief removable sanitary defect in this Hospital, was the condition of the Latrines, the worst of which was filled up at our request."

In January 1855, the state of the Latrines in the General Hospital at Balaklava, was brought under notice by the medical department of the army, and a new one was dug by the engineer department, which was long before the arrival of the sanitary Commissioners in the Crimea; but as they eventually had all the available labour in Balaklava placed at their disposal, it is possible that some of it may have been employed in filling up the privy at the General Hospital when the new mode of removing the filth, which had been recommended by the Military Sanitary Board, came into operation.

The Commissioners say, " A proposal was subsequently made for removing to a distance the whole filth of the Hospital to which we gave our approval."

This proposition was not subsequently made, but formed one of the recommendations of the Military Board of Health, submitted to the Commander-in-Chief before the arrival of the Commissioners in the Crimea, as will be seen on reference to the extract from Board's report given at page 9 of these observations, and until I saw this report, I had no idea

that their opinion had ever been asked, or that their approval was at all necessary for such an arrangement. But the richest morceau is the following:—" The sanitary condition, (speaking of the General Hospital, Balaklava), except in the points already mentioned, was as satisfactory as could have been expected, and the Commissioners deemed it sufficient to inspect it from time to time, in case anything should arise requiring their notice."

The Commissioners allude to complaints that were made about the accumulation of stable manure, and other refuse among the huts in the vicinity of the General Hospital, which they say were represented by them to Lieu. Col. Harding, Commandant of Balaklava, and removed. Dung hills of this nature certainly accumulated rapidly, and on the 1st of March I find those in the immediate neighbourhood of the Hospital were removed at my request. This was prior to the arrival of the Commissioners, indeed before I had ever heard of their appointment, and I mention the subject to show that such matters had not escaped my observation, and that steps had been taken to remedy the evil as soon as ever it was known; but it is very possible similar accumulations may have subsequently taken place at more distant points, as it required constant watchfulness on the part of the local authorities to guard against them, owing to the negligence of the occupants of the huts, and the laziness of their attendants and followers. Even the vicinity of the dwelling of the Commissioners itself, report says, was complained of by the Commandant on account of its accumulated dirt. And if they, with hired labor at their command, became subject to such an observation, what indulgence might not others, less favorably situated, reasonably claim?

The Castle Hospital, Balaklava.

This establishment met with the approval of the Commissioners, and he must have been a fastidious man indeed who would not have approved of it. But envious of its good fame, I suppose, or over-cautious for the safety of the sick accommodated in it, some one wrote home to the Secretary of State for War, to inform him I had placed the huts in such an insecure position that the lives of the inmates were endangered, and an order came out to have them secured; and to my disgust and dismay I found

on the 15th October, 1855, when I went down to visit the Hospital, that a huge rampart had been erected within eighteen inches of the ends of the huts, which consisted of three tiers of gabions filled with earth, reaching as high as the tops of the huts themselves. I endeavoured to arrest this monstrous piece of barbarism by writing a strong protest to the authorities, but all I could obtain was the removal of the gabion rampart a few inches more distant from the huts; and having failed in my efforts, I brought the matter under the notice of Dr. Milroy, one of the Sanitary Commissioners, who happened then to be in the Crimea, thinking, from the superior power the Commissioners said they possessed, he might effect more than I had been able to accomplish, but the rampart remained until the following spring, when I ordered it to be kicked over the precipice. Fortunately the army was so healthy during the winter, we had little occasion for the Castle Hospital: but had it been otherwise this obstruction to the ventilation would have been a serious drawback to its usefulness. During the autumn of 1855 we had the interspace between the inner and outer boarding of the hospital huts both at the Castle, Balaklava, and St. George's Monastery filled with clay and chopped straw, which made them not only warmer dwellings during the winter, but gave the buildings a stability which they did not otherwise possess, and I cannot help thinking, notwithstanding the opinion of the officer of engineers who examined the Castle huts, that the barricade put up there was unnecessary. It was found to be so at St. George's Monastery, where the huts were higher above the level of the sea, and quite as much exposed as those at the Castle Hospital were: indeed, if anything, more so.

Of the General Hospital in camp the Commissioners say:—"The space it occupied was considerably raised above the general level of that part of the plateau, and it had ample means of natural drainage. Unfortunately, however, the ground consisted of a deep tenaceous clay, hardly admitting of improvement by drainage, and becoming a complete swamp after rain."

"The huts were too close together, and were too nearly encroached on by regimental camps—they were undrained—they had earth raised against their sides, and were imperfectly ventilated. Considered as a whole, this Hospital

was therefore less favourably situated than the other General Hospitals."

The General Hospital in camp consisted of a certain number of regimental huts, which were received over from the 14th and 39th Regiments, in April, 1855, for the purpose of forming an hospital establishment in camp, for the reception, and treatment of primary cases of wounds, when the Regimental Hospitals were full, and further accommodation on the spot was required. The huts were built on the crest of a hill, sloping east and west, and with a considerable decline to the south; and how such a position could, under any circumstances, become a "complete swamp" is to me inexplicable. When the site was first selected the huts were detached and open on all sides, and it was considered as desirable a place for an Hospital as any in camp, but as the force increased, the open space was encroached on on all sides but the south west, which remained unoccupied to the last. The situation of this Hospital was not so desirable as that of either the Castle or Monastery Hospitals. No one required Special Sanitary Commissioners to tell them that; but it was a temporary expedient, and the Commissioners have unfairly selected the period for their report when the huts were in a transition state from barracks to Hospitals, because at the end of April, 1855, when it was made, the Hospital was scarcely open for the reception of patients of any kind, and no wounded had been sent into it at that time; and if they mean to say that the huts were not properly ventilated, and the ground deeply trenched afterwards to carry off the surface water, I have no hesitation in stating that they must have wilfully shut their eyes whenever they passed the General Hospital in camp after their first visit; and I fearlessly appeal to every one, either civil or military, who was employed in it for confirmation of my statement. So far from not being ventilated, the huts were absolutely flooded with fresh air on every side as soon as they became the receptacles of sick and wounded men. This is matter of notoriety; and I am bound for my own credit's sake, and that of Mr. Mouat, Principal Medical Officer of the Hospital, to make this statement, and to give, however unpleasant it may be to my feelings, the most pointed, and positive contradiction to the Commissioners' Report on this subject.

The Commissioners in their communication of the 17th

of May, 1855, at page 126, and seqr., which is so frequently referred to by them, as containing all the elementary knowledge on camp hygiene that is necessary to be known or practised, innocently propound this as something novel, and unthought of before their arrival, not knowing, I suppose, that much of what they recommend is enjoined by the practice, if not by the printed Regulations of the Service, and that nearly all their suggestions had been previously submitted to the military authorities by the Principal Medical Officer of the Army either in verbal or written communications made to the Commander-in-Chief, or to the Adjutant and Quarter-Master Generals; and,

1stly. With regard to Latrines, and the general cleanliness and supervision of the different camps, general orders had been issued bearing date 12th May and 28th June, 1854, a whole twelvemonth before the Commissioners made their suggestions.

2ndly. With regard to other sanitary matters, the following may be quoted as some of the suggestions offered by myself, as Principal Medical Officer, to the military authorities.

On the 21st June, 1854, an application was made to Major Sillery, Commandant of Scutari, for a daily fatigue party of 45 men to attend morning and evening at the General Hospital there, to keep it and its precincts clean. Measures were taken to clear the pipes of the water-closets, which had become obstructed by foreign bodies thrust down them.

6th July, 1854.—I wrote to Dr. Menzies, Principal Medical Officer at Scutari, requesting him to attend to the pipes of the water-closets, informing him that application had been made by Lord Raglan to the Seraskir to get the offensive catgut manufactory removed from the neighbourhood of the General Hospital, and directing him to apply to the Commandant at Scutari to have the open sewer between the General Hospital, and the main barrack cleaned out.

13th August, 1854.—I wrote to Dr. Menzies to get the rooms in the main barrack, which had been given over for hospital purposes, properly cleaned, whitewashed, and fitted up.

The sanitary arrangements and recommendations in Bulgaria not having come under the notice of the Sanitary Commissioners, it is unnecessary to advert to them here: and with regard to those in the Crimea, it was not necessary to do much so long as the country was locked up in frost and snow, and the temperature so much diminished as to prevent offensive emanations from being given off by decaying substances; but immediately the weather became a little more open, towards the end of January, 1855, the following official communication was addressed to the Adjutant-General on the 24th of that month by me, in addition to several verbal representations that had previously been made, which, with those that followed on the same subject, together with the report of the Military Board of Health of the 11th March, 1855, will, I think, be considered by almost every one as fully anticipating the suggestions given at page 127 of the Sanitary Commissioners' report, and numbered from 1 to 6, viz.:

Nos. 1 and 2. Regarding the burial of dead animals and offal.

No. 3. Destruction of refuse matter by means of fire.

No. 4. On Latrines.

No. 5. Picketting places of animals, and

No. 6. Recommending tents to be struck.

Copy of Letter from Dr Hall to Major-General Estcourt, dated 24th January, 1855.

"I have the honor to enclose a communication from Dr. Hume, Staff Surgeon, in medical charge of the 3d Division, pointing out a nuisance in the immediate vicinity of the hospital marquees and huts, which ought most certainly to be removed, and the drivers and their ponies placed more immediately under the eye of the Quarter-Master, or whoever has charge of the baggage animals of the division; for, to say nothing of the dirt they create, and the nuisance they are to the Field Hospitals of the division, I myself saw an artilleryman brought from the direction of the huts two days ago in a state of intoxication at mid-day.

"When on the subject of camp nuisances, I may mention that proper Latrines should be dug in the camps, and the soil covered over daily with earth.

"All dead animals ought to be buried in place of being allowed to decay above ground, and taint the air.

"It would also be highly desirable to direct the pioneers to clear round the hospital marquees, and men's tents daily, collect all offal, dirty, and condemned clothes, and

rags, which are now merely thrown outside the tents, and there allowed to rot.

"The trenches round all the Hospitals should be deepened, so as to carry off the surface water, and drain the interior of the tents.

"When the surgeons or superintending medical officers are spoken to by me on these subjects, they invariably excuse themselves on the plea of not being able to procure fatigue-men to perform the duty, so that the matter will have to be enforced by authority, because no regiment can possibly be so pressed for duty-men as not to be able to spare a party for a short time daily to perform these essential offices of camp economy.

"If the present system be allowed to go on diseases of a graver nature than even those now prevailing amongst the men will make their appearance, and carry off thousands.

"It has been communicated to me by the Director-General of the Army Medical Department, that 30 tons of soap have been ordered out by Government for the use of the army; and when it arrives the men ought to be compelled to wash and clean themselves two or three times a week at least; and I would recommend some kind of cravat to be worn by the men, as their bare throats with either very dirty shirts, or no shirts at all, has an unseemly look, and gives them an unnecessary appearance of misery and destitution."

In consequence of the foregoing communication to the Adjutant-General, I was asked what quantity of lime would be necessary to consume the dead horses in camp, and on my replying that some definite number should be stated, I received a letter from the Quarter-Master General naming one hundred, to which I sent the following reply on the 28th January, 1855:—

"With reference to your letter of the 26th instant, requesting to know what quantity of quick lime, I think, would be sufficient to consume the carcasses of 100 dead horses, I have the honor to state that much would depend whether the bodies were collected together or detached. If detached, it would require one bushel of lime at least for each (100 bushels), and even that would only temporarily correct the stench which would arise as the process of putrefaction went on in warm weather.

"The best and most effectual way of getting rid of this dangerous nuisance would be, in my opinion, to bury the bodies, and throw some quick lime over them in their graves. But if the process of burying be adopted, it must be done effectually, and the bodies covered at least three feet deep—not a little loose earth sprinkled over them, as I notice is the practice now in many instances where an attempt has been made to bury animals. This imperfect manner of disposing of dead animals is worse than useless, as it only prolongs the period of generation of noxious gases, which would be more speedily dissipated if the bodies remained exposed in the open air.

"With regard to the Latrines in camp, if the trenches were dug sufficiently deep, and a portion of earth thrown over the soil every morning by the pioneers of the regiments, quick lime would scarcely be required; but as they are constructed at present, the men have no accommodation to sit on,— in many cases trenches are not dug, or not dug deep enough, and the men obey the calls of nature in every direction. As the Latrines are constructed now, it would require half a bushel of lime to each daily to correct the nuisance which they will become in warm and open weather.

"It is necessary to remove not only these two sources of evil, but all the offal, dirty clothes, blankets, and rags that are now allowed to lie and rot about the different camps should be collected daily, and either burnt or buried."

In consequence of the above communications to the Adjutant and Quarter-Master Generals, supported by verbal communications to Lord Raglan himself, steps were immediately taken for burying all dead animals and cleansing the different camps, and either burning or burying all refuse matter.

On the 8th March, 1855, a Board of Health was applied for by me, as Principal Medical Officer of the Army, and appointed to sit by paragraph 6 of the general order of the 11th March. The object of this board was to inquire into the diet, supply of water, clothing, duty, and encamping of the army; and under the head of camps there is the following observation:—

"The localities of many of the camps are objectionable from the immediate vicinity of ravines, containing dead animal remains superficially buried, and other impurities;

but this the board is aware, from the military position taken up for the siege of the fortress, is to a great extent unavoidable, but they consider it necessary to advise that immediate steps be taken to cover all animal remains with an additional quantity of earth, as well as lime, and prevent the recurrence of any nuisances. As we are in a standing camp, in which impurities must collect, it becomes in the highest degree important that the utmost cleanliness should be preserved in the camps and their vicinities —that great attention should be paid to the Latrines, which ought to be dug sufficiently deep, at least four feet, to admit of their being covered in with earth daily, and for the purpose of deodorizing, ashes and refuse charcoal, as well as lime should be frequently used.

" In conclusion, the board have observed in passing through the various camps and roads leading to Balaklava, that dead horses are still lying about, in some instances unburied, in others scarcely covered, and beg to call attention to the circumstance as likely to be productive of disease.

" And in order to stop irregularities, such as the sale of spirits, and other camp nuisances, they strongly recommend that an efficient camp police be established, which should be directed to exercise thorough surveillance of the Bazaar establishment near Kadakoi, complaints of which have been brought to the notice of the board."

On the 1st March, 1855, I applied officially to the Quarter-Master General, as has been already stated, to have a dung-hill removed from the south side of the General Hospital at Balaklava, and on the 14th of the same month I sent a protest to the same officer against the Land Transport Corps pitching their encampment of animals close to the Hospital huts of the 4th Division.

On the 12th May, finding that many of the graves of animals had fallen in from the heavy rains of the two preceding days, I addressed the following letter to the Quarter-Master General:—

" I beg to draw attention to the graves of dead animals in camp, many of which, from the decay of the bodies, and falling in of the earth since the heavy rain set in will become very offensive and injurious to health on the return of hot weather.

" Cholera has manifested itself in the 2d Division, and

in some of the newly-arrived regiments—the Buffs, 71st, 48th, and 2d Battalion of Royal, for instance; and I would recommend the coarse waterproof blankets which have been sent out to be issued to them for the men to sleep on.

" The graves of dead animals and the cemeteries of the different divisions should be covered at once with a stratum of earth, lime, or charcoal; and, in future, when bodies are buried it would be desirable to cover them with lime or charcoal."

This recommendation was immediately attended to, and effectual measures were taken to remedy the evil.

On the 30th April, 1855, when symptoms of cholera had made their appearance in camp, I addressed the following to the Quarter-Master General, in consequence of representations which had been made to me.

" Some cases of cholera have taken place in front, all admitted from the trenches. The stench in the advanced trench of Green Hill, and about the caves, where the men are sheltered in the day time, is described to be very great, arising partly from human excrement, and partly from the decomposition of bodies buried there. If practicable, I would recommend the graves to be covered with more earth and quick lime, and earth and lime to be spread over the surface that has been used by the men as a Latrine. Perhaps Latrines could be dug in some sheltered spot that would prevent the present practice of men obeying the calls of nature in every direction."

On the 1st May, 1855, I had occasion to bring under the notice of the authorities the dirty condition of the precincts of the Croat Hospital huts, which were at the very door of the Sanitary Commissioners at Balaklava, and on the 2nd of May, Mr. Fitzgerald, Purveyor, submitted his plan of getting rid of the hospital filth at Balaklava, which I approved, and recommended for the Commander-in-Chief's favourable consideration.

On the 5th April, 1855, I had occasion to bring under the notice of the military authorities the nuisance that the Latrines and bat animals of the Scots Fusilier Guards were to the 2nd and 6th Dragoons, at Kadekoi.

These are given as examples of some of the recommendations that had been made by the Army Medical Officers in anticipation of the Commissioners suggestions—1, 2, and 3, inserted at pages 127 and 128 of their report.

These recommendations, and many other verbal ones, were made to the military authorities, irrespective of the Sanitary Commissioners, who were more likely to borrow hints from the Army Medical Officers than they to require instruction from them in such matters. I say this advisedly, and I shall be able to shew by subsequent correspondence that at no period of their residence in the Crimea was their advice or assistance necessary, so far as the local sanitary affairs of the army were concerned. Even the practical conclusions they have arrived at, though unexceptionable, are so common place, so well known, and so generally admitted that it is amusing to see them paraded as the result of so many months' deliberation on the part of functionaries invested with almost unlimited power to correct bad smells and other sanitary defects.

All admit the advantages of space and ventilation in barracks, hospitals, and tents, and when the Commissioners were about it, like children wishing, why did they not at once recommend the Indian scale of accommodation of 1,200 cubic feet of space for men in barracks, and 1,800 for the sick in hospital? It is all very fine to say the sick should have this or that amount of space, every one knows that; but in the early part of the winter of 1854-5 it was a question of shelter of any kind, and very often both Hospitals, huts, and tents were overcrowded; but this was neither unknown to, nor unnoticed by, the Medical Department, as will be shewn by the following communications addressed to the military authorities by myself and the other officers of the Medical Department of the Army prior to the arrival of the Commissioners—I may say before they had been heard of, and which are given in answer to proposition No. 6, page 128 of their report.

On the 21st February, 1855, in writing to Dr. Pine, Medical Superintendent of the 2nd Division, about supplies, there is the following passage in my letter: —"I am urging on the completion of the huts at the Castle Hospital, Balaklava, for really the mortality from fever at Scutari is so great that I send men down with great reluctance. Within the last few days the fever cases at Balaklava have been doing much better. Have you noticed any favorable change in the cases under treatment in camp?"

And in a letter of the same date, addressed to Dr. Hume,

Superintendent of the 3rd Division, there is a paragraph of the same purport as that addressed to Dr. Pine, which is followed by this observation:—"I hope you insist on the walls of the hospital marquees being lowered whenever the weather will admit of it, and that you urge on the attention of Medical Officers the necessity of moving and cleaning under every patient daily, or every second day at the outside, to prevent accumulation of filth of every kind, which is so apt to take place if this be not attended to.

"It would be a good thing for you to recommend through the divisional authorities the men's tents to be struck occasionally during moderate weather, that the ground where they stand and the interior of the tents themselves may be purified by free exposure to the air.

"As low fever, you say, is on the increase, I think it would be well to have all the filth near the Hospital establishments and near the men's tents collected daily, and either burnt or buried."

Considering that febrile disease was generated by want of personal cleanliness, and that other complaints, such as itch, scurvy, and ulcers remained undetected for want of the usual weekly inspection of the men by their own Medical Officers, I issued a circular memorandum on the subject, dated 17th February, 1855, in which there is the following passage:—"He therefore requests superintending Medical Officers will see that this duty is performed weekly; and so important does he consider personal cleanliness on the part of the men, as a preventive of disease, that he directs a certificate may be added on the back of the weekly state of sick that this duty has been performed. Government has provided soap, and there is no excuse for the men going about from one week's end to another without either washing their persons or changing their flannels or shirts."

This order was taken exception to by some of the Medical Officers, and some one took the trouble to publish a copy of it in the newspapers, with the sneering remark, that "the Doctor must have mistaken the date." Sarcasm is double edged, and the man who published this forgot that as the order referred solely to an established, and, in a sanitary point of view, an important regulation of the service, it was to be regretted the Inspector General of Hospitals had occasion to issue it all.

On the 27th March, 1855, in a letter to the Quarter-Master General, calling attention to a report of Staff-Surgeon Roberts, on the over-crowded, and ill-ventilated state of the men's tents in the 4th Division, I make the following remark:—"The men generally are extremely dirty in their persons, and are likely to continue so unless some well-regulated coercive measures be adopted to compel them to pay attention to this all-important sanitary measure.

"With fever prevalent in camp, and on the increase, crowding of the men ought to be specially guarded against. The walls of the tents should be raised daily, and the men's clothes and bedding exposed to the open air, when the weather will permit of it; and the tents should be struck once a week to purify the ground where they stand.

"If measures of this kind, and personal cleanliness be not enforced by authority, the fevers which now prevail will in all probability become infectious, and spread extensively through the camp."

The above, I think, will be admitted as sufficient evidence of the attention of Army Medical Officers to what the Commissioners recommend at page 128, paragraph 6, viz.:—"It would be very advantageous to strike the tents, and remove them a short distance from the ground they occupy, so as to leave it exposed to air and sunshine."

At page 148, the Commissioners say:—"*On the 18th July*, another communication was addressed by Dr. Sutherland to General Simpson, respecting the bad sanitary condition of certain parts of the trenches. At one point the works had to be advanced through places where interments had been made, and offensive emanations had arisen in consequence.

"It was difficult to dig graves deep enough for the burial of those who fell. From the nature of the service it was found to be impossible to make any proper Latrine arrangements, and the effluvia arising from this cause was highly dangerous to the health of the troops, and there was reason to believe that cholera and diarrhœa had arisen in consequence. To remedy these evils, it was suggested that peat charcoal might be carried in bags to the trenches and spread over all graves or accumulations of offensive matter. General Simpson at once agreed to and adopted the precaution."

It will be remembered that on the *30th of April*, when cholera re-appeared in camp, I recommended quick lime to be used in the trenches, to correct the stench there; and on the *4th June*, in a letter to the Adjutant-General of the Army on the subject of cholera, I advised charcoal to be used night and morning for the same purpose: so that the Commissioner was late with his suggestion, as by the time it was made cholera had nearly disappeared from that part of the camp.

The mode of clearing sites for the huts, recommended by the Commissioners at page 126, paragraph 2, is unexceptionable; but the mode of securing them, suggested in paragraph 7—"To secure each hut to the site in exposed situations, holding down bolts or timbers should be inserted in the rock or earth, as the case may be"—is easier given than it would have been found practicable to carry out in the winter of 1854-5, when both means and labour were wanting, and the readier mode of banking up earth and stones was resorted to; and though this may not be the most scientific manner of securing huts, its simplicity recommended it, and it was, in many instances, continued to the very last without any material detriment to the men's health, as the condition of the interior of the huts depended more on the surrounding surface drainage than on any trifling embankment of this nature placed round the base of the huts themselves.

Of the different modes of ventilation adopted, the merit, if any, is entirely due to the Medical Department of the Army, as not a single one of them was originated by the Sanitary Commissioners.

The only notable expedient I heard of was that of covering all the huts in camp with white calico! but that I believe, was the suggestion of Sir John M'Neill, and not of the Sanitary Commissioners; and as it was brought officially under my notice by Staff-Surgeon Wood, I felt bound to submit it for Lord Raglan's consideration. His Lordship appointed a committee to report on the recommendation, and as the suggestion was not adopted, I presume, he did not consider it expedient to incur so heavy an expense for so questionable an advantage.

On the 14th March, 1855, after my official inspection of all the Hospitals in camp, I issued the following

medical memorandum to all the Superintending Medical Officers of Divisions:—

"Many of the Hospital huts in the divisions are overcrowded with sick, particularly as fever is the prevalent disease. Dr. Hall requests that the number in each hut may be limited to 16 with fever patients, and 18 or 20 with other complaints, and that these numbers be never exceeded."

On the 14th March, 1855, I made an official application through the Quarter-Master General to have all the huts in camp ventilated.

This application was made in anticipation of the report of the Medical Committee then sitting, so important and pressing was the subject considered by me. On the 25th March the Medical Committee reported as follows:—

"The Board have observed that the Hospital accommodation, although very considerable, consisting of huts, marquees, and bell tents, for every regiment, will scarcely prove adequate to the comfortable accommodation of the sick in warm weather, and the avoidance of that degree of crowding, which may convert simple into infectious fevers, and therefore strongly urge that an unlimited amount of Hospital accommodation be placed at the disposal of the Medical Department, and that steps be taken, without delay, to have all the huts ventilated in such a manner as to adapt them to any vicissitudes of climate or temperature we are likely to experience, and that cannot be tampered with by the men themselves.

"The plan of ventilation proposed is as follows:—Three wooden tubes, 6 inches square, and 18 inches long, to be inserted in the roof of each hut, 12 inches projecting outside, and 6 inches within, with a penthouse covering; that holes be bored at the bottoms of the doors, and a ventilator placed over the fixed windows."

On the 27th May, 1855, the subject of ventilating the huts was again brought under the notice of the Quarter-Master General, on returning the proceedings of a board of officers, which had been assembled to consider the subject of Sir John M'Neill's proposition for covering all the huts in camp with white calico.

On the 8th July, cholera having made its appearance in the 13th Foot, quartered at Kadekoi, I recommended that the neighbourhood of the huts, which was

covered with rank vegetation, should be cleared, and that the men should be thinned as much as possible in the huts; and, if the service would admit of it, that a portion of them should be sent to the Balaklava heights, either to the huts formerly occupied by the Guards, or to those in which the 63rd Regiment had been located.

On the 11th July, 1855, a special report was made to the Quarter-Master General by me, of the number of dead animals lying about the General Hospital at St. George's Monastery.

18th July, 1855.—Application was made to have the surface drainage of the General Hospital in camp improved, and the obstruction of officers' kitchens, between the Hospital huts, removed.

25th August, 1855.—Letter from me to Major-General Airey, representing the offensive state of the privy at the General Hospital, Balaklavae, and applying to have it filled up, and the plan pursued in India, of having the soil tubs removed daily, adopted.

27th August, 1855.—Letter from me to the Quarter-Master General, representing the over-crowded state of the men's tents in the Cavalry Division.

On the 11th February, 1855, I submitted to the Quarter-Master General a copy of a representation which had been made by Dr. Hume, Staff-Surgeon, to the military authorities of the 3rd Division, of the unserviceable condition of the bell tents in use in the 28th, 38th, and 88th Regiments, and that the men of F Battery of Artillery had no boards to sleep on.

On the 13th of the same month, I brought the subject again under the notice of the Quarter-Master General in the following terms:—"Huts should at once be got up for the sick, and if no tents are in store at Balaklava great facilities exist, by the constant running of steamers, to get them up from Constantinople. Proper shelter for the men is a thing of so much importance, I cannot too strongly urge it on the notice of the Field Marshal Commanding-in-Chief."

At page 76, the Commissioners say:—"These various points connected with the water supply were brought under the notice of the late Field Marshal Lord Raglan, in communications on the subject addressed to his Lordship on the 16*th* and 26*th* May, 1855.

"In making these recommendations the Commissioners were aware of the want of certain materials required for carrying them out. The Commander of the Forces was desirous of giving effect to any improvement the Commissioners might suggest, and he directed Captain Ewart, Royal Engineers, to consult with Mr. Rawlinson on the subject, but, unfortunately, before an appointment could be kept Mr. Rawlinson was obliged to return to England."

These suggestions the Commissioners say were made to Lord Raglan on the 16th and 26th May, 1855, and as Mr. Rawlinson did not leave the Crimea until the 21st June, it is to be presumed that his Lordship could not have considered the Commissioners' suggestions of immediate practical urgency, or that the arrangements for the supply of water, which had been brought under his notice by the Military Board of Health in the month of March, were beyond the skill of the Royal Engineers to carry out.

The following is the Report of the Military Board of Health made to Lord Raglan in March, 1855, on the supply of water for the camp in front of Sebastopol.

"Too little attention appears to be paid to the supply of water, which, although limited, is allowed to run to waste, and from the absence of tanks or proper means of collecting, is often charged with mud and animal and vegetable impurities. It is, therefore, suggested that immediate steps be taken to husband the water, and dig new wells in different directions before the summer season, or the effects of a dearth may be experienced."

"Referring to the water supply of the 3rd Division in particular (but the same principle applies to all the other Divisions) it is recommended that tank No. 1, nearest the spring, be cleared and reserved for the hot weather; the next, or No. 2, to be used for domestic purposes; that a trough be constructed between Nos. 2 and 3 for watering horses: and that No. 3 be appropriated for the purposes of ablution."

"As these tanks are on different levels, and fall one into the other, this arrangement can easily be effected At present there is a great waste of both time and water, the latter is polluted and rendered unfit for use by washing clothes, &c. in the tanks."

In the course of the early part of the summer attention was paid to the water supply of all the Divisions; the

springs were covered in, and the water led by iron piping (an abundance of which was on the spot) to the tanks or reservoirs, which were all cleaned and repaired. Some fresh sources of supply were opened up, and in this manner a sufficiency of water was secured for the army during the summer.

These arrangements were carried out by the Engineer Department, and no very great merit is due either to the Sanitary Commissioners or to any one else for bringing such a common-sense matter of fact under notice.

At page 72 the Commissioners say of the water supply: "Several of the springs combined in a ravine near the monastery, we guaged on the 15th May, 1855, and found them to yield 35,000 gallons per day of 24 hours, and this yield could have been much increased by simple engineering contrivances."

Very possibly these springs might have produced the number of gallons per day as stated, when they were examined by the Commissioners in the month of May, but of what use were they to the British army beyond supplying two batteries of artillery which were subsequently encamped not far from them, as they were distant, at least, three miles from the nearest point of our lines.

At page 73 the Commissioners say: "Descending towards Balaclava the upper part of that valley towards the 'Col' had a stream of water running down it, derived from springs flowing from the lofty hill sides south of the 'Col.' This water if properly economised would have supplied a large number of troops. Near its source, however, it was fouled by both Turks and French, and, for want of care, became so polluted in a very short time as to be unfit for consumption."

"Below this point a number of dead animals had been thrown into the bed of the stream, and by the time the stream arrived at Kadikoi it was useless."

There were springs under the 'Col,' or rather Middle Hill, above Mrs. Seacole's hut, which supplied water all the year round, and were preserved for domestic use, but the feeble surface water rill here alluded to by the Commissioners ceased to run in the summer.

Lower down the ravine, about mid-way between the 'Col' and Kadakoi, there were abundant and never-failing springs, capable of furnishing almost any quantity of water,

which was preserved pure in tanks at three different places, and from these the camp of the Land Transport Corps, and that of the Army Works Corps, at the stationary engine, as well as the cavalry horses were supplied.

Neither French nor Turkish troops were encamped near the springs here alluded to under the 'Col' for many months prior to the army quitting the Crimea, and when they were, encamped there in the spring and summer of 1855, no British troops were near them, nor was the water of the springs in question required; but when a division of the Land Transport Corps subsequently occupied the ground the springs were properly protected.

In like manner the Commissioners description of dead animals thrown *into the bed of the stream* might lead strangers into error, as they would be apt to infer from such grandiloquent terms that there was a regular rivulet at least, whereas it consisted of nothing more than a simple gutter which drained the surface water from the high ground into the ravine below during the winter. And as for the dead animals which were thrown into the ravine, the Commissioners could only have seen those on their arrival, when some French artillery occupied the ground near its upper part, because care was taken to bury them all at a later period. But at all events, buried or unburied, they could have had no influence over the supply of water at Kadakoi which was drawn from springs on the spot, quite distinct from the run produced by the surplus water of the springs higher up the ravine.

The description of the supply of water for the cavalry camp, given by the Commissioners at page 73, only holds good during the winter months, as the small stream from the Karani valley had no existence during the summer, and the horses were watered either at the tanks already mentioned in the ravine leading from Middle Hill, Mrs. Seacole's, or at Kadakoi.

At page 131, the Commissioners say:—"On the 3rd May the Commission was applied to by Dr. Hall to examine a site for a fourth General Hospital, which he had selected near the Monastery of San Georgio, and of which we entirely approved."

A strange construction seems to have been put on what was merely meant as an act of courtesy towards the Commissioners on the part of Dr. Hall, for to say nothing of

his ability to select a proper site for an hospital, after 40 years' service and experience in every quarter of the globe, the Commissioners must remember that part of the hutting material was already on the ground at the period of their visit, so that he could have had no serious intention of consulting them on the matter; nor was it any vanity on his part to suppose that he was as good a judge in such affairs as either Dr. Sutherland or Mr. Rawlinson, when left freedom of choice.

At page 141, it is stated:—"We examined the hospital arrangements on board the ships "Orient," "Poictiers," "St. Hilda," "Clifton," and "William Jackson." We found them generally good, and sufficient for conveying sick to a distance, but we were decidedly of opinion that in the existing condition of the port no ship could be used there as an hospital with safety. We accordingly stated this opinion to the Commander of the Forces on the 19th April."

This is in every way creating a giant on the part of the Commissioners for the sole purpose of slaying him, for it was perfectly well known that these ships were fitted up by the Army Medical Department, on authority from the Secretary of State for War, as a measure of precaution in case of the army meeting with any reverse, and were never intended to be used as floating hospitals in the harbour of Balaklava, so that the forethought and precaution of the Commissioners were unnecessary; and one is only astonished at seeing such statements put forth as useful information afforded by them to the military authorities in the Crimea. It is possible they may have laboured under some such delusion at the time they wrote their despatch, as despatch-writing seems to have been their anxiety and forte; but they might have had that corrected had they asked the question of Dr. Anderson, Principal Medical Officer at Balaklava, who superintended the fitting up of these ships, or applied to Dr Hall, Principal Medical Officer of the Army, for information on the subject; but, "Where ignorance is bliss it is folly to be wise."

At page 230, the Commissioners give the rations of the men, which they admit were abundant, but they recommend flour, peas, and cheese to be added.

The subject of diet, however, had not escaped the notice of the Military Board of Health, and the following is a

copy of their remark :—"So far as the board have been able to ascertain, the rations at present furnished to the troops by the Commissariat appear ample, more than sufficient in quantity, and good in quality; indeed, so far as the quantity is concerned, it is well known that a great waste of food takes place—the biscuit and salt meat is not only thrown away, but frequently sold to our allies for spirits, which, owing to the absence of any camp police, cannot be prevented. This may be attributed to two causes, a distaste or dislike for food which offers little variety, and the well known penchant of the British soldier for spirits. Although fresh meat is now (March, 1855) regularly and daily issued to all the Hospitals the supply to the troops generally is rather limited, but, this varies in some regiments and divisions.

"This report refers to the present month, March, but the Board are aware that in the winter the troops were for too long a period on salt rations exclusively, which sometimes were eaten half raw, or quite so, for want of adequate means of cooking.

"This contributed undoubtedly to the generation of scurvy, and a deterioration of the general health of the men.

"To remedy this, and afford what appears to be the essential requisite, viz. a sufficient variety of animal and vegetable food, it is recommended, if practicable, that bread be substituted four times a week for biscuit, that fresh meat be issued regularly at least three times a week, alternating with salt, and that the salt meat be soaked—the pork 12, and the beef 24 hours; that a proportion of fresh, or preserved vegetables, as well as lime juice, be given daily, so long as scurvy exists. That condiments, such as pepper and salt be issued as part of the ration, and that mustard and vinegar be purchased by the messes. Beer and porter, while the army remains in its present position, might be advantageously substituted for half the ration of rum, which, when taken on an empty stomach, as is too frequently the case, must be injurious. Tea to be issued alternately with coffee, as was recommended by the Special Board, which was assembled on the 19th March, 1855, to consider and report on the subject."

The above, with the many recommendations, both verbal and written, which had from time to time been made to

the Commander-in-Chief by Dr. Hall, the Principal Medical Officer of the Army, on the subject of diet, some of them dating as far back as July, 1854, show that due attention was paid to this important subject by the Medical Department of the Army, so far as they were concerned; and if the ameliorations which they recommended could not, from the nature of the service, and the position the army was placed in, be carried fully into effect, it was not their fault.

In like manner the following remarks of the Military Board of Health made on clothing, in March, 1855, may be contrasted with those given at page 234 of the Sanitary Commissioners' report :—

"That all superfluous warm clothing, such as sheepskins, buffaloe robes, fur caps, &c. be discontinued the moment the weather will admit of it—such things harbouring dirt and vermin, as well as being a means of propogating infectious diseases. It would be advisable to have them all collected into store, and sent to Constantinople, or elsewhere, to be thoroughly cleaned and fumigated, so as to be again fit for re-issue if required.

"The urgent necessity of introducing some regimental arrangement throughout the army for washing men's clothes both in and out of Hospital is so obvious as to need no recommendation from the Board. At present, except in a very few regiments, the men are left to themselves.

"In recommending a return to the ordinary clothing, it is requisite that steps be taken to get rid of all clothing and blankets infested with vermin, that the men, if possible, have a change both of boots and clothes, and be compelled to appear at least once a week in clean undergarments; and that personal ablution be enforced."

These suggestions were adopted—places of ablution were provided, and the army soon assumed its ordinary appearance.

From an early period of the campaign the clothing of the army occupied the attention of the Medical Department of the Army. Dr. Dumbreck, Deputy Inspector General of Hospitals, in his topographical report of Servia and Bulgaria in the spring of 1854, described the bedding and clothing used in Northern Turkey; and on the 17th and 21st August, 1854, Dr. Hall furnished Dr. Smith with an account of the winter clothing worn by the Austrian

and Russian armies, and recommended a waterproof piece of cloth for the men to sleep on in their tents, to protect them from terrestrial exhalations. Subsequently waterproof blankets were furnished in abundance, but the mischief that was apprehended when the suggestion was made had then been done. Even 120 tarpawlings that had been shipped by the provident foresight of the Director-General of the Army Medical Department, on board the Mauritius steamer, for the use of the sick, were seized on by other departments, and appropriated for other purposes, such as the protection of gunpowder, &c.; and when Dr. Hall remonstrated, he was told the services they had been applied to were of more importance. The services might be important, but whether more so than those of protecting human life admits of doubt; but be that as it may, the departments that required tarpawlings should have had them provided in some other manner than by trenching on the resources of the Medical Department.

At page 83, the Commissioners say:—"While inquiring into the sanitary state of the troops, we were struck with the comparatively small amount of sickness in the Naval Brigade serving in camp before Sebastopol."

This is accounted for by Dr. Smart, at page 298 of the report, in his statement of the duties the Brigade had to perform, their superior shelter, diet, and means of cooking, from the period of their landing in October, 1854. All casualties, it appears, were immediately replaced from the fleet, and the greater part of the force was changed altogether in the course of the winter of 1854-5; so that in place of the constant and harassing duty of twelve hours in and twelve hours out of the trenches, with other laborious duties, which the troops of the line had to perform, with no reserve to replace those that were killed or fell sick. The Naval Brigade had to man one battery, which admitted of the men enjoying always two, and often three uninterrupted nights' sleep out of four in their tents. These, that is, rest, less duty, and more comforts are the great secrets of the superior health of the Naval Brigade; and Dr. Smart states them fairly and candidly, and does not attempt to draw the disparaging inference which the Commissioners do.

With reference to the selection of sites for the erection of convalescent establishments on, I may quote the following to show that the Army Medical Department were as fully alive to that important subject as the Sanitary Commissioners could be.

From Dr. Hall to the Quarter-Master General, dated 4th April, 1855.

"I have the honor to submit for the favorable consideration of the Field Marshal Commanding-in-Chief a report and rough sketch of Sinope, by Mr. Cruikshank of the Commissariat Department; and as the advantages of the place are so apparently superior to many others that have been named as convalescent stations, I beg to recommend that one of the Sanitary Commissioners sent out by Government to the Crimea be directed to report on the advantage or disadvantage of forming Hospital establishments there."

At page 143, the Commissioners say:—"That soon after their arrival at Balaklava they received a request from Lord Raglan, asking them to examine the Peninsula of Sinope, as a site for an Hospital. On the 30th May they sailed from Balaklava for Sinope, and they remark:—'The anchorage at Sinope was carefully examined, and found to be good, and jetties for landing the sick could easily have been constructed. There were no buildings in the town of Sinope itself which could have been rendered available for an Hospital, but there were several excellent sites on the Peninsula. The mass of the peninsula consists chiefly of igneous and tertiary rocks, the natural drainage is sufficient, there are no marshes, or local sources of malaria, and the sea almost surrounds the lofty table land of which it is composed. It is, perhaps, the most healthy site along the north coast of Asia Minor. Fevers were stated to be unknown, and invalids came from the neighbouring districts to recover their health. The supplies are abundant, except in the matter of fresh vegetables. The water was good, but limited in quantity, and a sufficient amount could not be obtained for an Hospital of any large size without incurring considerable cost for engineering works.'

"This was the main objection to Sinope, which in other respects was a good place for a large Hospital as could have been desired."

Never having been at Sinope, I am unable to speak

from my own observation, but Mr. Cruikshank, in his report, described the supply of water from some springs, not far distant, as ample, and that there were old Roman cisterns in the place which could easily be cleared and repaired.

That want of water could not have been a valid objection to the place is proved by the number of men and animals belonging to the Commissariat and Land Transport Corps, which were subsequently stationed there without any inconvenience on that score having been felt.

On the 23rd April, 1855, Dr. Hall, in reply to a letter from Dr. Parkes, of the 19th of the same month, informing him that he had been sent out by Lord Panmure to establish an Hospital on the shores of the Bosphorus, drew his attention to Sinope as a desirable site for an Hospital, both on account of its reputed salubrity, and its proximity to the seat of war.

The suggestion was not entertained by Dr. Parkes, for fear of incurring demurrage, and he fixed his establishment at Renkeoi, nearly the most distant point of the Dardanelles from the Crimea, and there, in addition to the enormous expense of erecting this temporary establishment, water had to be led down from the neighbouring hills, at an expense far greater than would have been required at Sinope for the same purpose.

In April, 1855, there is the following reply from Dr. Hall to a communication from the Quarter-Master General, informing him that 40 Hospital huts had just arrived from England, and requesting to know how he wished them to be disposed of:—

"I have the honor to state, as I have done on a former occasion, that much will depend on the length of time it is probable the army will remain in its present position. If there is a probability of its remaining during the summer and autumn in front of Sebastopol, it will be absolutely necessary to erect Hospital establishments on distant and uncontaminated sites. Such as the neighbourhood of the Monastery, and on the plateau to the westward of the entrance into Balaklava harbour, both of which are good, and would be desirable localities. The situation of Cossack Bay, on the west side of the entrance into Balaklava harbour, I have already pointed out as an eligible place for an Hospital establishment; and the neighbourhood of the

Monastery would depend greatly on permission being obtainable or not to take water either from the fountain within the precincts of the Monastery itself, or draw it from the well in front of the outbuildings.

"From all accounts Sinope would make a most desirable convalescent station, and it has the additional advantage of being equally applicable, whether the army remain in its present position, or move to a distance to act against the enemy."

On the 5th May, 1855, a question was raised about Cossack Bay by the Quarter-Master General, to which Dr. Hall made the following reply:—

"In returning the enclosed correspondence between Rear-Admiral Boxer and Sir E. Lyons, concerning Cossack Bay as a convalescent station, I have the honor to state that I consider the site a very eligible one for the purpose, but the objections raised when I proposed it were want of water, and difficulty of landing when the wind was from the south, owing to the swell that then sets into the harbour. Though the site is desirable, as the military did not avail themselves of it, it would not be fair to attempt to interfere with the navy, who have taken possession of it, and have already erected huts there.

"The site near the Monastery is, in my opinion, a more eligible one on the score of health than Cossack Bay, and the supply of water is more abundant, but the trouble of transporting other stores will be much greater."

On the 10th May, 1855, the attention of the Quarter-Master General was drawn by Dr. Hall to the leaky condition of the Hospital huts at the Castle, Balaklava, and a request made that they might be repaired as speedily as possible.

On the 12th May, 1855, a report having been made to Dr. Hall, Inspector General of Hospitals, by the Surgeon of the 68th Regt., of the injurious quality of the wine allowed to be sold in the canteen of the 4th Division, he transmitted it to the Adjutant General of the Army, with the following remark and recommendation:—

"This is a subject of very serious importance, because the canteen man, whose object naturally is to make as much money as he can, will purchase and sell inferior articles, if his establishment be not placed under strict military supervision.

"I would, therefore, recommend that all canteens should be visited at uncertain periods by a committee, composed of a captain, a quarter-master, and a medical officer, and that they be empowered to condemn all articles found to be of a quality dangerous to the health of the troops.

"It would be well if a tariff of prices could be established in the canteens, on the plan that is adopted in the bazaars in India, and, I believe, in the French camp here."

The subject of canteens is a vexed one, and many officers have a fancy for them. Major Whitmore, who had been appointed Commandant of the Monastery Hospital, established one there, contrary to the wish of Dr. Jameson, the Principal Medical Officer of the Hospital. The subject was referred to Dr. Hall by Dr. Jameson, on the 10th December, 1855, and submitted by him to the Chief of the Staff, with a request that the nuisance might be abated, and the answer he received to a question of so much sanitary importance was the following laconic reply, written on the margin of his letter, "Left to the discretion of the Commandant."

The result of the Commandant's discretion was, as might have been anticipated, drunkenness amongst the Hospital attendants, which was represented in the following letter from Dr. Jameson to Dr. Hall, dated 31st January, 1856: —"With reference to my letter, No. 491, 10th December, 1855, on the subject of the inexpediency of establishing a canteen in the immediate neighbourhood of the General Hospital, more especially when that Hospital is unprotected by a single sentry. I have now the honor to submit—I am credibly informed, that contrary to the original instructions, spirituous liquors are constantly sold in the canteen of the Monastery. Indeed, only this morning, an orderly of the Medical Staff Corps, confined at my request, at the night visit of the Staff Surgeon, for drunkenness, alleged to me in his defence he had only drank two glasses of cogniac he had purchased thereat."

The above letter was transmitted to the Chief of the Staff by Dr. Hall with the following communication:— "I have the honor to submit a communication which I have received from Dr. Jameson, Principal Medical Officer at the General Hospital, Monastery, pointing out the ill effects of having a canteen on the spot to tempt the men to drunkenness, and I can only repeat what I stated before,

that such an establishment is not, in my opinion, needed there, and ought never to have been established by the Commandant."

No attention was paid to this, and on the 15th March, 1856, Dr. Hall had occasion to forward a third remonstrance from Dr. Jameson on the same subject. Besides the orderlies and people about the General Hospital, there was only a small detachment of about 30 men at the Monastery, so that the canteen was unnecessarily mischievous, and shows in a striking manner the impolicy of giving uncontrolled power to local commandants unless they are men of sound judgment, prudence, and discretion, which this transaction leads one naturally to infer all are not.

During the winter of 1856 much drunkenness prevailed in the Army in the Crimea, and several men died from the direct effects of it. There was reason to believe that liquor of a deleterious nature was sold to the men, and on bringing under the notice of the authorities a statement made by Surgeon Watt, of the 23rd Fusiliers, that one man had died under the apparent effects of some narcotic poison, and that another had very narrowly escaped the same fate from drinking liquor purchased at the regimental canteen under the denomination of rum.

This letter was submitted by Dr. Hall, Principal Medical Officer of the Army, with the following one from himself, dated 8th April, 1856:—

"I have the honor to enclose a letter from Surgeon Watt, 23rd Fusiliers, dated 7th inst., calling attention to the deleterious nature and fatal effects of the spirits sold in the canteen of that regiment.

"So many deaths have occurred from the direct effects of drunkenness in the course of the winter, and what Dr. Watt hints at is of such fearful import, that it is of importance all canteens should be placed under strict control, and no liquor be permitted to be sold in them that has not been approved by a board appointed for that purpose, and I take leave to suggest for the favorable consideration of the Commander of the Forces, that a permanent board, composed of a captain, a medical officer, and a quarter-master, be appointed in each regiment. That this board, or any member of it, be empowered, and enjoined to visit the canteen frequently, and at uncertain periods, to ascertain the nature and quality of the liquors sold to the

soldiers, and that all liquors bought by the canteen man for sale to the soldiers be submitted for the examination and approval of the board previously to its issue. By these precautionary measures it is to be presumed the sale of drugged liquors would be prevented; and by placing a non-commissioned officer over the canteen, as is the usual custom in quarters, the sale of liquor to men in a state of intoxication would be prevented.

"All canteens not belonging to regiments should be abolished, and if any arrangements could be entered into with our allies on this subject it would be desirable."

The foregoing communication was returned with the following marginal note, in the Commander-in-Chief's own handwriting:—"How does Dr. Hall wish to prevent French canteens selling brandy and bad spirits?"

"All regimental canteens are in the direct power of regimental commanding officers at this moment."

If the canteens were in the power of commanding officers of regiments it was very clear, from what had occurred in the 23rd Regiment, that they did not exercise sufficient control over them, at least, that was my opinion at the time, and the Commander-in-Chief's remark did not alter it. Nor did I see that there would have been much difficulty in his coming to an understanding with the French Marshal on a point of so much importance to both armies.

On the 1st of August, 1855, the following letter was addressed to the Quarter-Master General by Dr. Hall, the Principal Medical Officer:—

"I have the honor to acquaint you that loud and almost universal complaints have been made of the leaky condition of the Hospital huts, and of the inconvenience and injury the sick have sustained from that cause. I request, therefore, you will be good enough to give instructions to have this very serious defect remedied with as little delay as possible.

"It is true we may fairly calculate on rain not continuing for any length of time at this period of the year; but we all know, from past experience, that the season is fast approaching when heavy and continuous rain may be expected."

On the same day the following estimate of hutting for the Medical Department was sent in:—

	Huts.
HOSPITAL HUTS.	
50 Regiments of Infantry	100
14 „ Cavalry	14
Royal Artillery and Royal Sappers and Miners	30
Ambulance Corps	2
Land Transport Corps	12
	158
STORE HUTS.	
6 Divisions of Infantry	12
1 „ Cavalry	2
Royal Artillery and Royal Sappers and Miners	4
Ambulance Corps	1
Land Transport Corps	2
Head-quarters Camp	1
	22
OFFICERS' HUTS.	
Head-quarters Principal Medical Officer	1
„ „ for office	1
„ for Clerks and Medical Officers	3
Cavalry Division Principal Medical Officer	1
„ Staff Surgeon	1
„ Purveyor and Dispenser	1
	8
Royal Artillery Principal Medical Officer	1
„ Right Siege Train	2
„ Left „	2
Royal Sappers and Miners	1
6 Divisions of Infantry, 6 Principal Medical Officers	6
„ 12 Staff Surgeons, 1st Class	12
„ 48 Staff Asst. Surgeons	24
„ Purveyors and Dispensers	6
BALAKLAVA.	
Principal Medical Officer	1
General Hospital	1
Castle „	1
Purveyor	1
Purveyor's Clerks	4
Medical Officers	10
Total	260

On the 3rd August, 1855, Dr. Hall addressed the following letter to the Quarter-Master General, on the subject of hutting:—

"With reference to my memorandum of the 1st inst., of the number of Hospital huts required for the army during the ensuing winter, I have the honor to inform you that timber and boarding will be required to make kitchens, and Latrines for the use of the Hospitals and sick, and as I am unacquainted with the process of calculating and estimating for timber for building, I think it would be desirable for an engineer officer, or clerk of the works to go round and ascertain the probable quantity required.

"The old huts now in use, if retained for the winter, would require to have their walls doubled, or covered with blanketing or felt, and the roofs should be thoroughly repaired, and the felting more carefully put on, so as to make allowance for its shrinking. Proper drains and causeways should be made around, and leading to the Hospitals before the wet weather sets in. The same measures should be adopted with the men's tents, and every precaution taken to keep the men from damp. For this purpose boarded platforms should be used for sleeping on, and better means for ventilating the tents adopted than now exists.

"The mode of ventilation used in the tents of the French Imperial Guard might be adopted in the British service with great advantage."

On the 27th August, 1855, Dr. Hall made the following remark on a communication from the Sanitary Commissioners, representing the over-crowded tents of the Cavalry Division, which was submitted to him by the Quarter-Master General:—"Six men in a hut calculated to hold fifteen is a liberal allowance, but during periods of epidemic sickness it is of the utmost importance to prevent crowding; and if 12 tents for every 100 men were issued when sickness prevails in any corps, I think, it would be sufficient. The misappropriation of tentage should be strictly prohibited."

This reference was made in consequence of a representation which had been forwarded to head-quarters by the Sanitary Commissioners, stating that the men in the Cavalry Division were over-crowded in their tents; but on inquiry it was found that there were not more than six

men in each, which is a smaller number than the transport of any army on service would admit of.

To show that the sanitary concerns of the army were not neglected by the Principal Medical Officer, the following letter from Dr. Hall to the Chief of the Staff, dated 30th August, 1855, may be quoted:—

"Being of opinion that it is not desirable for men to go on duty in the morning fasting during unhealthy seasons of the year, and more especially when any disease prevails in an epidemic form, as cholera does at present, I called the attention of Medical Officers to the subject, but a difficulty has been started about sugar, and it has been proposed to add one ounce more to the daily ration, which would raise it to 2¾ ozs. per man daily. This quantity I consider too large for the purpose, but if the daily ration were raised from 1¾ oz. to 2 ozs. per day, I think, it would be found amply sufficient."

On the 3rd of October, 1855, the Principal Medical Officer of the Army made the following representation to the Quarter-Master General of the Army:—

"I beg to call your attention to the objectionable site that has been selected for the camp of the Royal Regiment. It is close to, and has within its precincts, numerous large mounds of imperfectly buried and half-decayed horses and offal. The Hospital marquees are very unfortunately placed, indeed the whole regiment is; and if there are no urgent military reasons for retaining it in its present situation I would advise its immediate removal, or we may look for the appearance of typhus fever."

The Royal Regiment was removed to the Highland Division, at Kamara, soon afterwards, and no great damage was done.

But it may be fairly asked where were the highly-paid Sanitary Commissioners on this occasion, and what were they doing that they did not attend to this, or to the slaughter-yard and offal pits at Kadekoi, which were in a measure at their own door, that Dr. Hall, Principal Medical Officer of the Army, had to see to and get regulated at a later period.

On the 25th October, 1855, the Principal Medical Officer of the Army had occasion to address the following communication to the Quarter-Master General on the subject of the Hospital huts:—

"With reference to my letters of the 1st and 3rd of of August last, pointing out the repairs that would be necessary to render the present Hospital huts habitable during the winter, I have the honor to observe that no steps have been taken to carry out my recommendations; and as we may look for wet and stormy weather in a few days now, I entreat that the subject may have prompt attention paid to it, for there is little prospect, I fear, of the regular Hospital huts, which were demanded on the 1st August, arriving in time to be made available before the winter sets in. Porches to the huts are essential, and I beg to recommend their erection in addition to what I recommended in my former letters."

On the 15th October, 1855, Dr. Hall, Principal Medical Officer of the Army, in a letter addressed to the Commander-in-Chief, called his attention to works that had been commenced at the Castle Hospital, calculated to impede the ventilation, and prove injurious to the sanitary condition of the establishment. At whose recommendation this highly objectionable measure had been commenced is not known to the Medical Department, as Dr. Hall, the Principal Medical Officer, was not consulted about it, and knew nothing of it until it was commenced, and he felt called on to enter his protest against such a monstrous piece of absurdity. Even essential repairs were neglected to carry out a measure that was not wanted, and was practically mischievous, as will be seen by the following letter from Dr. Hall to the Quarter-Master General, dated 27th October, 1855:—

"I beg to call attention to the defective state of the roofs of the huts at the Castle General Hospital, at Balaklava, and to entreat that immediate steps may be taken to render them weather tight before the rains set in, which cannot be long delayed now.

"This I consider of vital importance to the welfare of the sick, and I am of opinion that some of the labor which is being expended to damage the sanitary condition of the Castle huts might be more profitably employed in making these repairs, which are really necessary. But to raise a gabion rampart of loose earth at this season of the year six feet wide and nine feet high, within two feet of huts of only ten feet elevation, is a proceeding I cannot comprehend. If it be intended as a measure of safety, the work

has been undertaken too late in the season, and will not, at the rate it is progressing, be finished on this side of Christmas, when a similar rampart will be required to protect the huts from violent snow storms, which blow from the north.

"Whatever security, real or assumed, this rampart may afford to the huts, it will most assuredly impair their sanitary condition."

On the 1st of December, 1855, Dr. Hall, Principal Medical Officer, had occasion to call the attention of the Chief of the Staff to certain repairs required in the General Hospital in camp; and on the 2nd of December, after an official visit of inspection to the Hospital huts of X Battery of Artillery, in the Karani Valley, and I Troop of Horse Artillery, in the Kadekoi Valley, he addressed another communication to the Chief of the Staff on their condition, in which there was the following passage:—"No attempt has been made either to line the walls, or repair the roofs, and the wet comes through in every direction. It is to be regretted, I think, that the Commanding Officer of Artillery declines to receive representations of the condition of the Hospitals, and requirements of the sick, except through the commanding officers of batteries and colonels of divisions, as by that means, without imputing any intentional neglect to those officers, whose minds are naturally occupied with their own peculiar duties, the interests of the sick suffer.

"The present condition of these huts cannot be permitted to remain longer unremedied; and I consider it to be my duty to bring the subject under the notice of the Commander-in-Chief."

This state of the Hospital huts had arisen from the Commanding Officer of Artillery declining to receive representations from the Superintending Surgeon of Artillery concerning them unless they came through the several commanding officers of batteries and division. And as the Commander-in-Chief, to whom the subject was referred, seemed to think that the duty of the Medical Officers consisted in the purely medical treatment of their patients, that all other arrangements should be made by or through the military authorities, and any deviation from this he viewed as an effort of independence on the part of the Medical Officers. This doctrine, which is applicable to

the regulations of the French army, where the Intendant provides all supplies for the Hospitals, and the Medical Officers' duties are confined to those of his profession, does not hold good with regard to the British, where a totally different system prevails; and so long as the Principal Medical Officer is held accountable for the condition of the Hospitals both by the Government and the public, it is but fair that he should be allowed to resort to the most direct way of getting defects in them remedied. It would be a relief to the Principal Medical Officer, but, from what I have seen and heard of the working of the French system, I apprehend no advantage to the sick to have the present plan altered.

So far as independence is concerned, no one can read the Principal Medical Officer's voluminous correspondence during the last war without, I think, coming to the conclusion that it would be for the benefit of the service were he invested with more authority, and had the military authorities been enjoined by regulation to ask his opinion on many points, Special Sanitary Commissioners would not, in all probability, have been considered necessary, and there would have been no occasion for these remarks.

At page 164, the Commissioners say:—"During the depth of winter the ventilation of many of the Hospital huts was unquestionably defective; and in some instances there was none, except from the chance opening of the door."

The censure here broadly put forth, I have no hesitation in stating, was not deserved; and, as the Commissioners accompanied Dr. Hall in his official inspection of all the Hospitals and camps at the end of 1855 and beginning of 1856, they had an opportunity of seeing the sanitary arrangements of the army in detail, it is neither candid nor fair of them to conceal that fact, and merely state in their report, as they do at page 165:—"During the first week of January, 1856, we made a detailed inspection of the Hospitals throughout the camp:"—as if their visit had been special, and their letter of the 15th January, 1856, to Sir William Codrington, which, they say, was sent by him to Dr. Hall, called for—whereas they knew perfectly well that in every instance where there was evidence of either over-crowding in the barrack room, or tampering with the ventilation, which soldiers are apt to

do if it is left within their power, the attention of the medical officers of the corps was drawn to it at the time by Dr. Hall. Not only was the attention of medical officers drawn to it at the time, but special letters were written by him to the military authorities on these and other matters on the 27th December, 1855, and 16th January, 1856, which anticipated, on all points, the Commissioners' recommendations, with the exception of their suggestions for the ensuing summer, which Dr. Hall did not consider necessary, as it was not probable the army would remain so long in front of Sebastopol if the war continued.

The Commissioners, I see, think it necessary to state that their letter to Sir W. Codrington of the 15th January, 1856, was sent to Dr. Hall. They are, perhaps, not aware that all their communications to the Commander-in-Chief were submitted for his opinion.

Having thus in a cursory manner passed in review the report of the Sanitary Commissioners, I think all dispassionate people will see and admit that the benefit of their labors was more assumed than real, and the result of their mission not commensurate with the expense it cost the British public; for, in my opinion, neither the health nor mortality of the British army was in any appreciable manner affected by any measures adopted at their recommendation: and had they never set foot in the Crimea the result would have been the same; and in proof of this I may appeal to the following statement,* by which it will appear the sickness and mortality were lower in 1855, before their operations came into effect, than they were afterwards. I will not, however, be so uncharitable as to ascribe it to them, but to causes over which neither they

	Dec., 1854.	Jan., 1855.	Feb., 1855.	March, 1855.	April, 1855.
*Admissions into Regimental Hospitals	10,632	11,282	7,108	5,813	4,497
Deaths in all Hospitals	2,005	3,179	2,529	1,415	581

	May, 1855.	June, 1855.	July, 1855.	August, 1855.
Admissions into Regimental Hospitals	5,701	11,118	10,165	10,211
Deaths in all Hospitals	563	*1,052	549	678

* 211 were from wounds.

nor their arrangements had any control—though they have certainly most skilfully assumed to themselves the whole merit of the labors of others, and allowing them the advantage of pleading ignorance to the suggestions of the army medical officers, they cannot well do the same to the published report of the Medical Commissioners on the Hospitals, &c. at the seat of war.

JOHN HALL,
Inspector General of Hospitals, Half Pay.

London, May, 1857.

Note.—On the 26th March, 1855, the Sanitary Commissioners commenced their labors at Scutari, and on the 3rd of April, 1855, in Balaklava, so that the decrease of sickness and mortality which had taken place in the army before their arrival could not have been influenced in any way by their suggestions.

J. HALL.

1st September, 1857.

I have this day been furnished with a copy of a letter from Dr. Sutherland, Sanitary Commissioner in the Crimea, to Lord Shaftesbury, dated Balaklava, 19th July, 1855, which was published in the *Times* newspaper on the 22nd August, 1855. In that letter Dr. Sutherland makes admissions which so fully bear out what I have endeavoured to impress on the reader's mind in the course of the preceding remarks, that I am tempted to quote his own words; and in doing so I violate no confidence, as the letter in question has been before the public for two years, though I had never seen it previously to the receipt of the present copy.

At the commencement of his letter the Doctor states that—"About 20,000 men went in and out of Balaklava every day. Nothing could be worse than its condition. It is a small port, land-locked, lying among lofty hills, crowded with ships; the margins of the harbour formed with dead animals and filth of all kinds; the upper end a marsh, which has been used as a graveyard, where some thousands of carcasses of men and animals had been buried, mostly in water, and hardly covered with earth; carcasses floating in the harbour, and also the refuse and blood of cattle slaughtered on board ship; no Latrines but the hill sides; and backyards of houses covered with filth in consequence."

This description is more graphic than real, and I fear the Doctor must have drawn on his imagination regarding both the number of daily visitants to Balaklava, and the formation of the margin of the harbour. The first reminds one of Falstaff's men in buckram, and Kendal Green; and the second is answered by the Doctor himself in a subsequent part of his letter, where he says:—"It will assist you further to estimate our sanitary condition if I compare it with things at home familiar to you. Balaklava harbour is much sweeter than the Thames, and the town is cleaner than nine-tenths of the lower districts of London, Manchester, or Liverpool. Liverpool dock basins smell worse every day than Balaklava did at the worst, when the town itself was held up to the reprobation of the civilized world, from its unburied carcasses and filth—it was not worse than entire villages I could name in our own country; and it was about on a par with the districts where

knacker's yards, private slaughter-houses, and unwholesome trades exist in the Borough, and where cholera was so fatal last year.

"I think it right to mention this comparison, in order that the truth should be known.

"The same may be said of the sanitary condition of the camp. Putting out of sight the local malaria, the camp is in a much better state than the towns and villages at home, out of which the men have come.

"*It is also very satisfactory to state* THAT ALMOST EVERY PRACTICABLE IMPROVEMENT WE HAVE ADVISED FOR THE CAMP WE HAVE FOUND ALREADY IN OPERATION IN SOME PART OF IT. *We have only wished the worst practices to be avoided, and the best systematically adopted: but in doing this all depends on the commanding officers of regiments, and hence different regiments show different degrees of improvement. We have also found the medical officers thoroughly alive to the nature of the changes required,* REPRESENTING THEM TO THE AUTHORITIES, but without power to carry them out. And hence I have heard the most useful suggestions coming from military medical officers, called 'doctor's crotchets,' and thrown aside.

"At present, I believe, little if anyth ing more can be done here in the way of initiation of camp sanitary measures; the only difficulty is in ensuring the continued application of these measures, and this the military authorities alone can do. It might be well to vest the decisions of medical boards with something like authority."

This extract from Dr. Sutherland's letter is, to a certain extent, a confirmation of what I have stated, viz., that in nearly everything which was really essential for the welfare and sanitary condition of the army, the Sanitary Commissioners had been anticipated by the recommendations of the Army Medical Department. But explicit as the Doctor's statement to Lord Shaftesbury is, it falls far short of what he and his fellow Commissioners personally expressed to the military medical officers in the Crimea; and neither he nor they would have have lost anything in public estimation had it been as freely and candidly stated in his official report to Government, which has since been published, as it was to the military medical authorities themselves. He might even have added what is stated in his letter to Lord Shaftesbury:—"We have all learned

much, perhaps, more than we have advised;" without either damaging the reputation of the Commissioners, or either flattering, or in any way benefiting us, for we all felt it to be a truism. It was not likely that I, or others who had spent their lives in camps and barracks could have much to learn from Sanitary Commissioners who were entering on a new field of observation, and brought with them the ideas and technicalities appropriate for cities and the permanent abodes of men, which all were either acquainted with, or had the means of becoming so through the popular and cheap publications of the day, but which were not applicable in all cases to an army in the field.

Speaking of the camp before Sebastopol, Dr. Sutherland says in his letter:—"It is clean, and well attended to; but here again there are malarial spots to which the troops are tied by the exigencies of the service."

"In regard to the burial of the dead in our camp, it appears to be properly done, judging at least from any instances I have seen of interments. The proper authorities say it is always done in conformity with the regulations.

"The burial of animals is, or rather has hitherto been, well attended to. I have not seen an unburied carcass in our camp for months before a day or two ago. I saw two at that time, and instantly reported them to head-quarters.

"There are, however, plenty of unburied carcasses about—they are not ours, but belong to the other armies. It speaks volumes for the care and attention of the authorities that the loss from disease has been so little during the summer, because, do what they can, our troops are exposed to the exhalations from the foul encampments of the other armies, which have suffered far more from disease than our men have.

"The winter mortality was a far different thing to the summer mortality. Hardly any of the causes, viz., bad food, want of rest, over work, want of clothing and shelter, and exposure to the elements which caused scorbutus over the whole army, exist now. I do not think it can be fairly said that any of these causes now exist to any extent; all the cases then were scorbutic, and hence the fearful mortality in the Hospitals at Scutari; it was exactly like the Irish famine fever; now we have malarial diseases, fever,

and cholera—the intensity of which in our camp has been no doubt most materially lessened by the great care bestowed on the men. I have myself gone among them, and asked about their provisions and clothing, &c. I have never been able to elicit a single complaint, except one, viz., that they were not in Sebastopol; they have always told me they had nothing else in the world to complain of.

"Considering the local circumstances, I am of opinion that the epidemics I have named have been mild in character, and that we have certainly not suffered more than in such a climate we had a right to expect. Diarrhæa has been prevalent, *but there is a system of inspection in use for its discovery and treatment, which appears to work as well as could be expected.*

"Another element of evil should not be overlooked. Our great mortality from epidemics arises among the young unacclimatised troops. The men have to change rapidly their country, climate, habits, and food, as well as their occupations, and a large per centage must inevitably perish."

Considering that Dr. Sutherland stated publicly in a letter which was printed in the *Times* newspaper in March last, that the Sanitary Commissioners had nothing whatever to do with either the organization or management of the Military Hospitals, that in fact they were precluded by their instructions from interfering with these matters—the following passage in his letter to Lord Shaftesbury may be fairly taken as a tribute due to the Medical Officers of the army, under whose care the Hospitals and all their concerns were immediately placed:—"Our Hospitals are the one point I am proud of; we have first-rate men, and everything clean and beautifully ordered, I only wish we had a permanent staff of orderlies thoroughly trained, and kept at their work, instead of the useless vagabonds who are too often sent to attend the sick, because they are fit for nothing else. The present arrangements for the sick and wounded are to treat the latter entirely here, at least, until they are convalescent, and then to send only convalescents or sick who had arrived at the best possible point, to Scutari. From the latter place I have just returned. The Hospitals are really beautiful; we have nothing in London to compare to them in their sanitary

relations. It is a perfect treat to walk through them—the air is as pure inside as out."

With this extract I will close my observations on Dr. Sutherland's letter, and leave the public to draw their own conclusions.

J. HALL.

APPENDIX, No. 1.

Near Dumfries, May 26, 1857.

My dear Sir John Hall,

Your letter of the 22nd instant has this moment been received.

The particulars of the outbreak of cholera at Scutari in Nov., 1855, are these:—Sporadic cases of cholera had been occurring from the beginning of the month, and even before it, in the neighbourhood and garrison; and several days previous to the 14th stringent sanitary measures were commenced, viz., cleansing, purification, and ventilation, &c.; but notwithstanding which there was an increase in the number of cases on the morning of the 14th, when corridor G was at once selected for the accommodation and isolation of the cholera patients, all communication with the other parts of the Hospital being cut off from it.

Medical officers and orderlies were appointed for their attendance, and extra orderly medical officers for their reception during the night.

The rooms occupied by troops in the eastern part of the Hospital were recommended to be thinned, and an extra blanket given to each person—and I contemplated encamping them, but the weather became so severe as not to render it advisable.

The huts occupied by the cavalry were also attended to, as far as possible—but the thinning *generally* not being so much as I thought necessary, I went to Major-General Storks again on the 15th on the subject; and in the same evening, or the following morning, it appeared in orders, that "the rooms and wards in barracks and Hospital will be thinned and ventilated as much as possible."

Subsequently the medical officers that could be spared were sent for from the different Hospitals, and Major-General Storks suggested that Dr. Sutherland should be made acquainted with the outbreak of cholera, which I did by note. He was living at Pera, and did not come to Scutari until the second day after my note had been dispatched, when, in the course of conversation with him, I recollect "camping" being mentioned as impossible during such weather, which continued blowing cold and harsh with rain; but on the morning of the 18th, it appearing to me, before daybreak, somewhat more settled, I went immediately to Major-General Storks, and recommended that the troops should at once be marched out of barracks and encamped, which he readily assented to, and immediately gave an order to this effect. He then rode out, and selected ground about 2½ miles off, and of which selection I afterwards approved.

Dr. Sutherland came at this period from Pera generally, when the weather permitted, on the morning of the day on which the mail for England was made up, and when, of course, he had ready access to my office, and was furnished with all the particulars of the admissions and deaths from cholera, &c. in the different Hospitals.

It will thus be seen that the necessary sanitary measures were in operation before Dr. Sutherland was made acquainted with the matter; and the encamping which I mentioned took place on my own responsibility.

Believe me,
Very sincerely yours,
W. Linton.

APPENDIX, No. 2.

Aspenden Hall, Buntington, Herts,
August 1, 1857.

My dear Sir,

I never had any communication with the Sanitary Commission either verbally or by letter, nor indeed did I know of their existence till long after I shifted my camp.

I chose the sight of my camp myself, with a view to occupying the higher ground in the summer; and, indeed, obtained Lord Raglan's permission myself to do so,—this was in November, 1854. When the 39th, Colonel Munroe, encamped above us early in the spring, the Deputy Quarter-Master General marked out the boundary of our summer camp, and no troops were allowed to encroach upon it.

Dr. Deas on one occasion suggested to me it was time to go

up, but I declined doing so at that moment, as I had *no* sick, and I wanted the ground for other purposes. When the weather became hot in June I shifted up, but without reference to any one's opinion, but that of my own excellent surgeon, Dr. Jenkins.

With regard to the site itself, it was the best in the camp, being well sheltered from the north east, with far more mud above than below us; and the stream, though it accumulated a small quantity of mud and occasionally much snow, carried off the dirt of the camp in the winter, and was dry and hard in the summer. The inconvenience of crossing at night to the Latrines on the opposite side was rectified by throwing over it a small suspension bridge. We were remarkably healthy from the day we occupied it.

I remain, dear Sir,
Very truly yours,
STEPHEN LUSHINGTON.

Sir John Hall, K.C.B.

APPENDIX, No. 3.

The following is an extract of a note from Dr. Deas, Inspector of Naval Hospitals, dated 23rd May, 1857, in answer to one of mine, sending him an extract from page 120 of the Sanitary Commissioners' report, regarding the removal of the camp of the Naval Brigade :—

"No suggestion was ever made to me by the Sanitary Commissioners on the subject referred to, or any other, their statements to me invariably being that I had left them nothing to suggest."

APPENDIX, No. 4.

(Copies.)

December 29th, 1854.

Sir,

I beg leave most respectfully to protest against the establishment of the Commissariat Transport camp behind, or the bazaar upon the right of the Hospital, as it is *very* necessary in a sanitary point of view that those spaces should be kept clear of malaria, either human or animal.

(Signed)
A. ANDERSON, M.D., Staff Surgeon.

To Lt.-Col. Haines, Commandant,
Balaklava.

December 30th, 1854, Balaklava.

Sir,

I beg to call your pointed attention to the prevalence of one or two nuisances, the removal of which would, in my opinion, tend considerably to the improvement of the sanitary condition of the town. And first, let me bring before you the filthy state of that part occupied by the Turkish troops. Death seems now busy with its victims, and of what the unfortunate die I have no means of ascertaining—judging from appearances, I should say typhus; and this will, I have no doubt, eventually degenerate into plague, whereby Christians as well as Turks would be swept off wholesale.

Another very crying nuisance is the existence of that sea of fœtid mud near the wharf, where the sick are embarked. This emits a malaria highly prejudicial to the health of the town, extremely deleterious to the sick, who may have to wait there for embarkation, and likely to be productive of the worst effects to the health of those two energetic officers, Lieutenant Gosse, R.N., and Staff Asst.-Surgeon Tarrant, who, in the exercise of their duties have to remain there many hours each day.

(Signed)
A. ANDERSON, M.D., Staff Surgeon.

Lt.-Col. Haines, Commandant.

8th January, 1855, Balaklava.

Sir,

I beg respectfully to call your attention to the state of the harbour near the Hospital ship, "the Pride of the Ocean." The carcasses of bullocks and horses are floating about in all directions; and I am informed that two days ago one animal was shot and immediately consigned to the tide. The smell is now very offensive, and I think Captain Christie ought to be applied to, to give orders to have the bodies towed out to sea.

(Signed)
A. ANDERSON, M.D., Staff Surgeon.

Lieut. Col. Haines, Commandant.

Balaklava, January 15th, 1855.

Sir,

I beg leave through you to call the pointed attention of the authorities to a subject which I represented to them in a letter, dated 30th December.

The number of deaths amongst the Turkish soldiery here has increased to such an extent as *imperatively* to call for an inquiry, and I would also suggest that their burial-ground should be

brought under observation, as I have been assured by the Rev. Mr. Haward and Captain Ross, the D. A. Qr. Master General, that the bodies are barely covered, and in some cases the lower extremities are projecting from the ground.

When the warm weather sets in, or when the temperature becomes even a little milder than it is at present, should nothing be done in the meantime in the way of removing the above-mentioned fertile sources of disease, and in clearing that portion of Balaklava now occupied by the Turks, I am confident that we shall have plague in its worst form.

(Signed)

A. Anderson, M.D., Staff Surgeon.

Dr. Hall, Inspector General of Hospitals.

16th February, 1855.

Sir,

I have the honor to inform you that there are now floating in the harbour, opposite my window, the carcases of at least 20 bullocks; I have also to call your attention to the fact of there being a quantity of carrion lying along the beach near the entrance of the harbour, and would suggest that this be represented to Captain Christie. Steamers are occasionally employed to tug the dead animals to sea, but I consider this very necessary operation ought to be a daily one.

(Signed)

A. Anderson, M.D, Staff Surgeon.

Lieut.-Col. Hardinge, Commandant.

Balaklava, February 19th, 1855.

Sir,

I regret to have to state that the new privy at the Hospital appears to be for the present left half-finished. I would also suggest that small wooden conveniences should be erected near the huts, in the vineyard of the Hospital, capable of accommodating three patients, with moveable seats placed over pits, so that when the pits become offensive they may be filled up, and new ones dug. At present the open pits are particularly offensive to the inmates of the wooden huts and to those passing by.

(Signed)

A. Anderson.

Dr. Hall, Inspector General of Hospitals.

Balaklava, 13th March, 1855.

Sir,

I beg leave to call your attention to the filthy state of the beach and the encampment behind and beside the cattle wharf. This is, in my opinion, one of the few remaining abominations of Balaklava; and I am sure you will agree with me that its speedy removal (at a time when there is so much fever about) would be of the highest importance to the health of both those afloat and on shore.

(Signed)

A. Anderson, M.D., Staff Surgeon.

Lieut.-Col. Hardinge, Commandant.

Balaklava, 28th March, 1855.

Sir,

As I cannot get the carcase of a dead horse, in the vicinity of my house, removed in any other way than by applying to you, I would feel obliged by your ordering the officer whose duty it is to cause such nuisances to be removed, to have it done forthwith, as at present it is exhaling a most pestiferous odour.

(Signed)

A. Anderson, M.D., Staff Surgeon.

Lieut.-Col. Hardinge, Commandant of Balaklava.

Balaklava, April 28th, 1855.

Sir,

I beg most respectfully to call your attention to the insufficient ventilation in the huts at the General Hospital, and to suggest that, now that the warm weather is approaching, the roof should have openings similar to those in the huts at the Castle. I beg further to mention that this has already been suggested, but that no notice has been taken of it, and, in my opinion, it is now absolutely necessary.

I have the honor to be,

(Signed) A. Anderson, M.D., Staff Surgeon.

Dr. Hall, Inspector General of Hospitals.

Balaklava, April 30th, 1855.

Sir,

I beg leave to call your attention to the state of the huts occupied by the sick of the Croats, and those used as Hospitals huts behind the Land Transport camp.

There being no Latrines either for the camp or the Hospitals, human excrements are copiously deposited in the immediate vicinity, and the stench from this and from putrefying urine is pestiferous.

Of the state of the interior of the Hospitals, I regret I cannot make a favourable report. The medical officers work hard, but I consider it quite impossible for them to do their duty, or properly treat men with whose language they are totally unacquainted. An interpreter has certainly been provided, but though he talks Turkish, he explains in French, a language of which the medical officers know as little as the interpreter does of English.

Moreover, as only (I believe) 2 English orderlies are allowed for the whole, instead of one to each hut, and as the other orderlies are foreigners or Turks, it stands to reason that the attendance of the unfortunate sick must be very much neglected, as under the circumstances the orderlies cannot be instructed in their duties.

I am aware (though I trust not) that an objection might be raised to the employment of soldiers in attending sick Turks. * * * * * * * * * * *

I consider the site of the Hospital in the immediate rear of a large number of sick mules, many of them with open sores, a very objectionable one.

(Signed) A. Anderson, M.D., Staff Surgeon.

Balaklava, 18th May, 1855.

Relative to the filthy and crowded state of the Black hut, occupied by the Commissariat drivers, in rear of the General Hospital, and nuisances round about it—7 cases of cholera admitted from this hut within the week. House in centre of town occupied by 4 C. Clerks; a foul privy on the premises; fever prevalent in the house.

(Signed) A. Anderson.

Lieut.-Col Hardinge, Commandant.

Balaklava, 11th June, 1855.

Relative to the state of the huts used as Hospital for the sick Europeans and Turks of the Land Transport Corps.

(Signed) Dr. Hadley.

Dr. Hall, Inspector General of Hospitals.

Nichols and Son, Steam Printers, Chandos Street, Strand.

II

REPLY

TO

SIR JOHN HALL'S "OBSERVATIONS"

ON THE

REPORT

OF THE

Sanitary Commission,

DESPATCHED TO THE SEAT OF WAR IN THE EAST,

1855-56.

By JOHN SUTHERLAND, M.D.,

LATE MEMBER OF THE COMMISSION.

LONDON:

HARRISON, 59, PALL MALL.

1857.

REPLY.

Any one reading Sir John Hall's observations on the Report of the Sanitary Commission despatched by Her Majesty's Government to Constantinople and the Crimea, in February, 1855, without having read the Report itself, might be led to believe that the Commissioners had been guilty of some great injustice to the Medical Department of the Army, and more especially to Sir John Hall: that they had suppressed facts, kept back documents, indulged in self-laudation, and appropriated to themselves the credit due to others, for he appears to consider that the gaining of credit is the main end of public service, and he does not disguise his opinion that the whole affair was an intrusion into his field of duties, that the Commissioners did no good, and that the Government might as well have left him to himself to pursue his own sanitary reforms in his own way.

Now the fact is, that the Sanitary Commissioners had nothing whatever to do with Sir John Hall. His name does not occur in their instructions. They were directed to communicate officially with Lord Raglan and the Commandant at Scutari only; they were directed to execute certain duties and no others, and their Report is simply a reply to their instructions prefixed to the Report.

Sir John Hall complains that recommendations made by him and others are not mentioned in the Report, and he adduces, in proof of his assertion, that

the sanitary requirements of the army were not neglected, certain documents sent by himself and others to the military authorities, documents which have come under our notice for the first time in his pamphlet. The reply to all this is simple enough.

The Sanitary Commission was not a Commission of Inquiry. It had nothing to do with such questions as these: "What sanitary recommendations have been made regarding the Hospitals at Scutari, or the occupation in the Crimea?" "Were those recommendations sufficient?" "By whom were they made?" "Were they carried out?" "If not, who was to blame?"

These might have been very fit subjects of inquiry, and if the Commission had been sent out for such a purpose, it would have been justly chargeable with neglect of duty if it had overlooked them. Its functions, however, were of a totally different character, and might be summed up in the following words: "Examine for yourselves what sanitary defects, likely to interfere injuriously with the sick or the healthy, exist in the Hospitals at Scutari, at Balaklava, or in the occupation before Sebastopol: represent these, with your recommendations for their removal, to Lord Raglan, or Lord William Paulet, without delay, urge their adoption, and see that they are carried out."

The Commission was in reality an Executive Commission, sent out to see to the execution of sanitary improvements, of a nature presumed to be similar to those which the members had long been engaged in carrying out at home, under Her Majesty's Government. For anything we knew, every necessary recommendation had been made, and notwithstanding the universal complaints at home, on account of the enormous loss of life in the Hospitals at Scutari, these Hospitals might have been in the very best possible sanitary state. Had it been so, we should simply have reported the fact; but as it was quite otherwise, we did our best to carry out our instructions, and in

reporting the result, we have done nothing more than describe the sanitary defects we found at Scutari and in the Crimea, without comment or reflection on Sir John Hall or any one else — the recommendations we made, and the gradual progress of sanitary improvement, with the final results to health. If, in replying to our instructions, we have incidentally shown, without expressly stating it, that the improvements did some public good, and that, however perfect in theory the sanitary system of the army may be, it was, as judged by the results in the East, to a great extent a nullity, such a conclusion was perhaps unavoidable.

It certainly never occurred to us, that the Medical Department of the Army was chargeable with the state of things we found on going out, for that department is in reality a medical and not a sanitary department. We have made no charge against it in our Report, but on the contrary, we have, in several places, borne our testimony to the perfection of the Hospital arrangements, as well as to the single-minded devotion of the medical officers to their public duties, although beyond the scope of our instructions to take cognizance of such matters. But notwithstanding this, Sir John Hall, in his zeal to show that no blame was attributable to himself for sanitary neglect, with which we have not charged him, has not scrupled to brand with implied dishonesty, those who were public servants as well as himself.

We feel compelled to protest against his "Observations" being taken as a representation either of the spirit or contents of our Report. He has adduced certain instances of alleged inaccuracy, in matters of fact, which we have replied to in the Appendix, because they are of no public interest. What we are mainly interested in, are the sanitary documents, produced for the first time in the "Observations." These documents are of importance to the public service, as showing to what extent the health

of the army is likely to be protected or sacrificed, by the sanitary *régime* at present in operation.

Every system purporting to protect the health of troops must be tried by its results, not by any recommendations that may have been made under it. Recommendations may be merely a means of shifting responsibility from one's own shoulders. Sanitary requirements, which ought to have been foreseen, may be delayed until it is impossible to fulfil them, or until they are no longer necessary. Recommendation may be little else than pointing out nuisances which everybody knows, or they may be altogether inadequate to remedy the evils complained of.

But whatever may have been done in the way of recommendation, the fact remains, that during the seven months of the Crimean war, from October, 1854 to April, 1855, above a third part of the army was swept away by disease, mainly of the zymotic or mitigable class:—that of the sick shipped for Scutari, between the middle of September, 1854, and the end of January, 1855, there was a mortality in the transports, during an average stay on board of 8¼ days, of 80 deaths to every 1000 sick landed alive at Scutari, while on board one transport, the "Caduceus," the deaths in 6 days, were in the ratio of 36 per cent. landed:—that after the remaining sick had arrived at Scutari, and were lodged in magnificent buildings, apparently well suited for their reception and care, there died out of the sick treated, a proportion varying from 138 per 1000 in October, 1854, to 427 per 1000 in February, 1855.

With these facts before us, is there not great reason to doubt whether the hygiène of the army during the winter of 1854—55, was efficient, notwithstanding the recommendations made by Sir John Hall, and whether, in fact, the results were not as bad as if there had been no recommendations made at all?

The causes which led to the enormous amount of zymotic disease during the winter months have been

fully examined by others. With these special causes we have nothing further to do here, than to state that they existed, and to express our conviction that if army hygiène, in the widest acceptation of that term, had been part and parcel of the constitution of the British army, the loss of life from these diseases, during that disastrous winter, would have been very greatly mitigated.

It is of importance, however, to know what recommendations of a sanitary kind really were made by the Principal Medical Officer of the army, with the view of ascertaining how far these could have aided in diminishing the mortality from zymotic disease, and we are now, for the first time, furnished with the means of doing so.

In the remarks we are about to make respecting these documents, we beg, once for all, to state that we desire to attach blame to no one. We have to deal with a system, not with individuals.

The Army Medical Department is, as its name imports, charged with the treatment of the sick and wounded of the army. So far as our opportunities of observation went, it discharged itself of that duty nobly and well. But, as already stated, it is not a sanitary department, as we in civil life would understand such a term, although there are certain very imperfect advising functions of a sanitary kind, included in the Army Regulations, but without any form of procedure, whereby good advice if given, necessarily becomes effective.

Again, there are no means in use for ensuring special sanitary acquirements in the medical officers. There are no lectures on sanitary science in our colleges, and sanitary knowledge is not required for admission to the service. There is no examination upon it. In short, the Army Medical Officer has to acquire sanitary knowledge as he best can, although of all members of the medical profession he requires to be best instructed on the subject,—*prevention* of disease, not successful *treatment*, being that

on which the numerical strength and efficiency of an army depends.

But while pointing out these deficiencies, we cannot forget the debt of gratitude due in times past, to such men as Pringle, Ferguson, and others who might be named, from whom some of the clearest lights in sanitary science have been derived. By these lights we have profited in our application of sanitary arrangements to civil life, and what is now imperatively demanded by the public interest, is that similar benefits should be extended to the army. This can only be done by raising the whole subject of hygiène, both as regards barracks, camps, hospitals, and diet, drink, clothing, &c., to that importance which is due to it, as the only real conservator of the health and efficiency of armies.

We next proceed to analyze the sanitary documents in Sir John Hall's "Observations," adopting the arrangement of subjects contained in the instructions issued to the Sanitary Commission by the War Department.

MILITARY HOSPITALS ON THE BOSPHORUS.

Our Commission began the inspection of the Hospitals at Scutari on the 6th March, 1855, about 9 months after the General Hospital was occupied, and about 6 months after the Barrack was first set apart for the reception of sick. We have described in our Report the bad sanitary condition of all the Hospitals, at the period when we made our first examination of them. The defects then existing were so very obvious, that they could hardly have escaped the notice of any one accustomed to sanitary problems connected with large structures. Considering the peculiarly defective nature of the sanitary arrangements in Turkish buildings, nothing short of a most minute and searching

inquiry and examination into the entire condition of those given over to Her Majesty's forces, and the carrying out of every requisite improvement before a single sick man was placed within their walls, would have rendered any of them safe for Hospital purposes.

So far as we can judge from the information on this subject contained in Sir John Hall's "Observations," no such preliminary examination appears to have been made. He gives at page 20 the following: "as some of the suggestions offered by myself as Principal Medical Officer to the Military Authorities."

"On the 21st June 1854, an application was made to Major Sillery, Commandant of Scutari, for a daily fatigue party of 15 men to attend morning and evening at the General Hospital there, to keep it and its precincts clean. Measures were taken to clear the pipes of the water-closets, which had become obstructed by foreign bodies thrust down them."

These pipes, be it remembered, were numerous open tubes, communicating with cesspool-sewers full of filth, at the bases of the building, and opening into out buildings at each angle, and on each flat of the Hospital. There was a direct communication between the outbuildings and the interior, so that the sewers were ventilated solely into the Hospital. There were no water closets in any of the Hospitals.

The following is the only other recommendation given for the General Hospital.

"6th July 1854.—I wrote to Dr. Menzies, Principal Medical Officer at Scutari, requesting him to attend to the pipes of the water-closets, informing him that application had been made by Lord Raglan to the Seraskir to get the offensive cat-gut manufactory removed from the neighbourhood of the General Hospital, and directing him to have the open sewer between the General Hospital and the main Barrack cleaned out."

The Barrack was in a worse sanitary condition than the General Hospital, and had greater structural defects. About the beginning of autumn 1854, it

became necessary to prepare it for the reception of sick, and the following communication on the subject was made by Dr. Hall, about 6 weeks before the battle of the Alma.

"13th August, 1854.—I wrote to Dr. Menzies to get the rooms in the main Barrack, which had been given over for Hospital purposes, properly cleansed, whitewashed and fitted up."*

The drainage defects at the Barrack and Kululi Hospitals were the same in character, but greater in degree, than those of the General Hospital.

There appears to have been no sanitary advice given by any one, regarding the Kululi, Palace, or Stable Hospitals.

Such, so far as can be learned from the "Observations," was the entire sanitary procedure which it was deemed necessary to recommend in regard to vast buildings, the sanitary condition of which appears never to have been inquired into. There is nothing about the drainage of the buildings, nothing about cleansing, trapping, and flushing sewers belonging to them, so as to prevent sewer-air, that most fatal of all sources of atmospheric pollution, from diffusing itself through the air breathed by the sick,—nothing even about opening the windows of the privies to allow the sewer-air to escape before it could reach the corridors, nothing about ventilating the buildings—nothing about apportioning a proper cubic space for each patient, nothing about the proper burial of the dead.

Of the very few recommendations contained in the extracts given above, the best appear to have been made by Lord Raglan's advice; but allowing them every possible value, they never touched or even recognised the chief defects, which eventually rendered these otherwise magnificent buildings little else than pest-houses for the sick, before the numbers

* Sir John Hall ought to have stated that the cleansing and white-washing of the Barrack were written about by request of Lord Raglan.

admitted even approached to what the wards were capable of containing.

Sir John Hall visited these Hospitals in October 1854, and reported to the Director-General on the 20th of the month, that they were in a very satisfactory condition, and this at a time when all England was roused to indignation about them, and just before the arrival of Miss Nightingale with the nurses at Scutari. Even at that period, and while the catastrophe which followed from the sanitary defects was pending, the importance of these defects was not even recognized.

We have stated in our Report the measures we put in force to remedy the sanitary evils at all the Hospitals, and we have given a table showing the immense falling off in the mortality on the remaining and admissions up to June 30, 1855, at which period the mortality on the remaining and admissions had fallen to nearly a tenth part of what it was when the works were commenced.

We gave the results in our Report as they occurred; but at the same time expressed an opinion, that part was due to the improved health of the army in the Crimea.

These results, however, are in themselves so condemnatory of the previous neglect, that Sir John Hall, while expressing his contempt for the "trifling sanitary improvements"* which he had moreover on

* The following were the "trifling sanitary improvements," he alludes to, directed by the Commission, and carried out at the Hospitals on the Bosphorus, partly by their own officers, 1. Daily cleansing the vicinity and squares of all the Hospitals, and the burial of dead animals. 2. Opening, deodorizing, and cleansing of drains of Hospitals. 3. Erecting flushing tanks at the head of all the drains, and at the privies in the Barrack-square, and flushing out the entire drainage and sewerage three and four times a day. 4. Diverting the privy drains from under the General Hospital. 5. Trapping and ventilating all the sewers, and placing flaps over their open mouths, to prevent sewer-air blowing into the Hospitals. 6. Removing the upper part of the windows in the privies and galleries to allow sewer-air to escape before entering the wards and corridors. 7. Closing 50 Turkish privies, and

his own shewing no means whatever of estimating, for he was not again at the Hospitals till the end of the war, has considered it necessary to adduce statistical proof that the results were due to a totally different cause.

He says, page 5, "During the quarter ending 31st March, 1855, 6,284 sick soldiers were sent down from the Crimea to Scutari, and, of these, 258 died on the passage!"

Whereas, during the quarter ending 30th June, 1855, to which the labours of the Commissioners in the table which they have given at page 50 of their Report relate, "not more than 3,193 sick were sent down, and of these only 19 died on the passage!" and this statistical fact is adduced as proving "in an incontestable manner" that other influences were at work in diminishing the mortality, besides the sanitary improvements in the Hospitals.

The number of sick that died on board the transports, it will be perceived, is taken by itself as a test of the health of the army, and of the character of the cases sent to Scutari! The argument from it may be stated thus: between such and such dates, on account of the unhealthy state of the army, so many sick died on the passage, and hence so many sick died in the Hospitals, and between such and such other dates, on account of the improved health of the army, so many fewer sick died on the passage, and hence so many fewer sick died in the Hospitals.

removing 200 Cavalry horses from under the wards at Kululi, and evacuting the wards. 8. Frequent limewashing of all walls and corridors in all the Hospitals. 9. Ventilating all the Hospitals by openings and louvered turrets, and all the wards by shafts and perforated zinc panes. 10. Allotting 1000 cubic feet of space to each patient, and 6 feet for each bed. 11. The immediate removal of excreta from wards. 12. Draining damp and wet ground. 13. Covering water-tanks and filtering water for the sick. 14. Removing all soldiers out of the Barrack Hospital. 15. Proper burial of the dead. And, more lately, erecting proper water-closets, and improving the drainage to obviate any chance of risk from a large influx of sick or from neglect of constant flushing the sewers.

Two very important points fully appreciated by every one conversant with hygiène, are thus ignored, namely, the sanitary condition of the Hospitals, and the sanitary condition of the transports, and by keeping these points out of sight, the blame of the whole catastrophe at Scutari is traced back to the state of the army in the Crimea; and hence whoever is to blame for this, nobody ought to be blamed on account of the condition of the Hospitals!

As already stated, we have not in our Report, overlooked the probable influence of the improved health of the army in the Crimea, on the condition of the sick at Scutari, although we have not attached to it very great importance, for we hold it to be a self-evident proposition, that if the constitutions of the sick brought down from the front for shipment to Scutari had been ever so weakened by the causes of disease to which they had been exposed, they would be all the more likely to suffer from foul air or similar defects, whether on board the transports or in the Scutari Hospitals. We know that men in health, were taken ill and died of zymotic disease in these Hospitals owing to the sanitary defects existing in them, and how much more likely to die were sick men in the state of those landed from the transports at Scutari! We shall besides presently show, that the sick who were not exposed to the polluted air of transports and hospitals suffered much less than those who were.

With regard to Sir John Hall's statistics, it is necessary to state, that his manner of dealing with the mortality on board the transports in relation to the mortality in the Hospitals, conceals the real facts of the case; and we shall therefore introduce the monthly statistics of the whole tragedy, as far as concerns the transports and hospitals.

The following table shows the approximate sick embarked, with the deaths on those embarked month by month, not quarter by quarter, as he has taken it; and along with it the mortality in the Scutari Hospi-

tals on cases treated (the mean of admissions and discharges including deaths).

Months 1854.	Sick embarked at Balaklava.	Died on Passage.	Deaths per 1000 on sick embarked.	Hospitals at Scutari and Kululi.		
				Mean Sick population.*	Deaths per 1000 on cases treated.	Period of Sanitary Improvments.
September	3,987	311	78			
October ..	1,721	76	44	2,016	128	
November	1,902	103	54	3,119	118	
December	3,339	314	94	3,457	144	
1855						
January .	2,144	172	80	4,440	316	
February .	2,178	41	19	4,178	427	
3 wks. endg.						3 weeks ending
March 17th	1,067	5	4·6	3,779	315	March 17th
April 7th	860	4	4·6	3,306	144	April 7th
„ 28th	793	8	10·	2,803	107	„ 28th
May 19th	471	—	—	2,018	52	May 19th
June 9th	615	1	1·6	1,504	48	June 9th
„ 30th	890	8	9·	1,442	22	„ 30th

It will be seen at a glance that this table gives results directly opposed to Sir John Hall's assumption, to bear out which it is necessary that a falling off in the mortality on board the transports, should have been attended by a falling off in the mortality in the Hospitals.

Let us see how far this was the case.

1. The mortality was highest among the sick embarked in December 1854; but the mortality was highest in Hospital in February 1855.

2. The mortality on sick embarked fell from 94 per 1000 in December, to 80 per 1000 in January; but the mortality on cases treated in Hospital, rose from 144 per 1000 in December, to 316 per 1000 in January.

3. The mortality on sick embarked fell from 80 per 1000 in January, to 19 per 1000 in February, and at the same time the mean sick population fell

* Mean of weekly numbers remaining.

from 4,440 in January, to 4,178 in February. The mortality in the Hospitals nevertheless rose from 316 per 1000 in January, to 427 per 1000 in February, while at Kululi it was no less than 520 per 1000 on the cases treated.

Even if we exclude the excessive mortality in February, we find—

4. That the mortality on board transports for 4 months, from October 1854, to January 1855, was 72 per 1000, and the deaths in Hospital 176 per 1000, while in March the mortality on board transports fell to $4\frac{1}{2}$ per 1000; but the deaths in Hospital nevertheless rose to 315 per 1000 in the 3 weeks ending March 17th, when our sanitary improvements were commenced.

Besides these obvious conclusions from the table, which also shews that the mortality in the Hospitals went on increasing the longer they were used, and the rapid decline in mortality while the sanitary improvements were in progress, we have the experience already alluded to, of the far larger proportion of recoveries among sick of the same class, and at the same time, where the sick were not exposed to the polluted atmosphere of the Scutari Hospitals.

No privations to which the sick of an army could have been exposed, could have been more severe than those which befel the sick in the Crimea during the winter months of 1854—55. Without proper shelter, covering, supplies, or equipments, for a considerable part of the time, they ought to have perished in large proportion to the recoveries, and yet the mortality in the Crimea was much less than at Scutari.*

Sir Alexander Tulloch has shewn that the sick

* As nearly as we can ascertain, from the data at our disposal, the approximate number of sick treated in the Crimea, between October 1st, 1854, and April 30th, 1855, amounted to 38,786, and the deaths to 5,531, or 142 per 1000, while the mortality among the sick treated at Scutari, where they ought to have had every advantage, was 227 per 1000 during the same period.

admitted into the General Hospital at Balaklava, a ventilated, tolerably good, stone Hospital, without the drainage defects of Scutari, and therefore so far affording a means of comparison with the Hospitals there, amounted to 2,144 for the 7 months, from October 1st, 1854 to April 30th, 1855, and the deaths to 190, giving a mortality of 88 per 1000 on the cases admitted. In the same months there arrived at Scutari 14,854 cases, and there were 3,665 deaths, being in the proportion of 247 per 1000 on the cases admitted; but the mortality on the sick population was 227 per 1000, giving by either method, an enormous preponderance over the mortality in the General Hospital at Balaklava.

Dr. Hall himself states the mortality of this latter Hospital at 7·7 per cent. for the whole war.

In writing to Lord Raglan on March 2nd, 1855, Sir John Hall gives another very striking proof of the unhealthy state of the Scutari Hospitals, which completely annihilates his assumption from the transports. He says (published despatches), "Out of 442 patients treated in the General Hospital at Balaklava, between February 18—24, only 3 casualties have occurred, which I think may fairly be termed a low rate of mortality, considering the class of patients that are generally sent in there for treatment—men brought down from camp too ill to embark when they arrive at Balaklava."

Out of these men too ill to be sent to Scutari, there died at Balaklava 3 in the week, or at the rate of 12 a-month for February 1855, equal to 27 per 1000 per month. The mortality at the Hospitals on the Bosphorus during the same month was 427 per 1000 of the sick treated, and it was 520 per 1000 at Kululi. Hence if these 442 sick had been unfortunately sent to the Bosphorus, there would have died in the Hospitals there, not 12, but 189 during the month; and if they had gone to Kululi more than half of them would have perished.

Any one conversant with sanitary practice could

not have failed to detect the causes of the excessive mortality which occurred at Scutari and Kululi. If the sick had not died there in large numbers, it would have contradicted all experience. The enormous losses in these otherwise magnificent buildings give a very clear insight, into the causes of the almost uniform failure of large General Hospitals in war.

Buildings so apparently appropriate, have very rarely come into the possession of armies for Hospital purposes, and yet the result was disastrous. Dr. Hall was fully aware of this, for (page 26) in writing to Dr. Pine on the 21st February, 1855, he says that he is urging the completion of the huts at the Castle Hospital, Balaklava, "for really the mortality from fever at Scutari is so great that I send men down with great reluctance." But the cause of this great mortality never seems to have occurred to him.

Even so late as March 8th, 1855, just before our sanitary improvements were carried out, and on the very eve of the striking results which followed, the Director-General deemed it to be his duty to summon a Medical Board, which recommended the "crowded and polluted" Hospitals to be evacuated to the largest practicable extent, and the sick to be brought home.

These facts prove that the principal Medical Officer in the Crimea and the Director-General at home, were aware that there was something wrong in the sanitary state of the Hospitals, which they did not know how to deal with, except by using them as little as possible.

Our works were commenced in the middle of March, 1855, and, by referring to the table already given, it will be seen, that the mortality fell as they progressed, from 315 deaths per 1000 of the sick treated, for 3 weeks ending March 17th, to 22 per 1000, for 3 weeks ending June 30th, about which rate it afterwards continued. There is nothing wonderful in this. From our experience in civil life, we

felt from the very beginning perfect confidence in the result. It is in entire accordance with sanitary experience everywhere, that improved health should have followed the works executed, and there is no reason why the Scutari Hospitals should have been any exception to other buildings. The laws of nature are the same everywhere. To attempt to palliate such evils as existed in these Hospitals, and to deny the evidence of such facts, is wilfully to throw away the lessons of experience.

With regard to a statement made by Dr. Hall at page 6, that the privies in the Hospitals were left in their "original state" till March 1856, it is simply contrary to fact. Local causes of disease were abated, and the "original state" of the drainage was improved 12 months before, by temporary means well known to sanitary engineers, but it was nevertheless deemed advisable by the Commissioners to substitute soil-pans to prevent the possibility of future mischief, an improvement which was agreed upon 9 months before the armistice. Men and materials for this work did not arrive from England till December 1855, and the permanent drainage improvements were commenced where they were most necessary. Sir John Hall states that water-closets were not put up in the Hospitals till after the armistice with Russia had been signed, and all the world knew that peace would be proclaimed. The real fact being that the armistice was agreed to in the middle of March, while the first soil-pans had been put up in February, and the works progressed until peace was confirmed, when they were immediately suspended by Major-General Stocks. In regard to Dr. Hall's being told at Scutari, when he passed through, after our engineer had gone home, that only two of the closets were serviceable, the fact—if fact it be—only proves the want of intelligent superintendence.

Mr. Unsworth, who put up these closets, is an engineer of well known ability in such matters. They

were essentially the same in construction as those put up at Renkioi by Mr. Brunton. Dr. Parkes, the Medical Superintendent there, assured himself personally that all the sanitary appliances of his wards were in proper working order, and they were always so. Those at Scutari, while Mr. Unsworth was there, acted equally well.

BALAKLAVA.

Let us inquire next, what precautionary sanitary measures were recommended by the Principal Medical Officer of the Army, for Balaklava, the basis of the British operations before Sebastopol.

The importance of establishing a system of sanitary police for towns, in order to prevent the occurrence of evils likely to prove injurious to health, is now so thoroughly recognised that it would be quite out of place to insist on it here. The whole subject is well understood, and it ought to have been next to impossible to have overlooked the nature and importance of the sanitary problem presented by such a place as Balaklava.

It is a small village of some 500 inhabitants, situated on the margin of a tideless harbour, and inclosed in a narrow, deep hollow, with very little spare ground, and a considerable extent of marshy surface at the head of the harbour.

Into this confined area had to be crowded all the transports, all the officers and men engaged in the supply of the army; many thousands of men and animals had to pass in and out of the place every day. It had, in fact, to fulfil the purpose of a basis for the operations of an army of indefinite size for an indefinite period of time.

Balaklava was one of those places which it would have been comparatively easy to have preserved in

a good sanitary state, if taken in time, but it was likely to be a very difficult matter to remove nuisances from it after they had been permitted to accumulate. One would say that a small town of such importance ought at once to have been placed under a sanitary police, and that the necessity and the method of doing so ought to have been pointed out by the Principal Medical Officer of the Army, if he really were charged with proper sanitary functions.

There is no trace in Sir John Hall's "Observations" of his having given any advice, or, indeed, of his even having considered the subject worthy his notice.

He was zealous in recommendations as to the condition of the building used as the General Hospital; but so far as regarded the town, he advised nothing.

There was thus an entire absence of any preliminary sanitary precautions as regards Balaklava, and, according to the documents now published for the first time by Sir John Hall, it was not till nearly 3 months after the town was occupied, and after epidemic disease had broken out, that there is any indication of its sanitary state having attracted attention.

On the 29th December, 1854, Dr. Anderson, the able Principal Medical Officer of Balaklava General Hospital, protests against the establishment of a transport camp and bazaar near his Hospital. At this date typhus was decimating the Turkish troops quartered in Balaklava, and on the 30th December, Dr. Anderson represents to the Commandant the filthy state of the part of the village which they occupied, but this was *after* the fever had appeared. The fœtid mud at the sick-wharf, opposite the General Hospital, had also become a crying evil, and it was also represented. On the 8th January, 1855, Dr. Anderson represents dead horses and bullocks floating about in all directions, and suggests their being towed out to sea. On the 15th January, he

again repeats his representation about the great amount of sickness among the Turks, and also the state of their burial-ground.

A month later, on the 16th February, he represents that the carcases of 20 bullocks are floating in the harbour, and on the 19th writes to Dr. Hall about the Hospital latrines.

On the 13th March he calls attention to the filthy state of the beach, and of the lower end of Balaklava, and on the 28th he complains of a dead horse near his own house.

By this latter date, the late Dr. Gavin and the inspectors of the Sanitary Commission had arrived at Balaklava, and our Report and Diaries contain a detailed statement of the abominable condition in which the town and neighbourhood were at that period.

There is no mention of the British burial-ground at the head of the harbour even in Dr. Anderson's representations; but so far as was in his power, he discharged his duty in the representations he made to the military authorities. He acted up to the Army Regulations, which concern themselves not at all with preventing sanitary evils, but rather require that such evils should be represented after they have occurred.

The result of this system was, that we found it would require about 300 men to abate the nuisances which had accumulated since the occupation, before the warm weather set in, as well as the organization of a sanitary police to prevent their recurrence, and we had to report to Lord Raglan that such was the state of the place, that there was great danger of the breaking-out of epidemic disease, an event which actually occurred.

Dr. Anderson's letters are most important, for they illustrate the fundamental nature of the defects in the present sanitary system of the army.

The next sanitary proceeding was, in some respects, a remarkable one, both as regards the time when it took place, and the result of it.

The Commission, consisting of Sir John M'Neill and Colonel Tulloch, with the Sanitary Commission, arrived at Constantinople on board the French mail packet, on the 6th March, 1855, and on the 8th Dr. Hall recommended Lord Raglan to appoint a Board of Health to consider "the sanitary state of the army." The instructions to this Board contained several matters coming under the instructions given to the two Commissions sent out from England, namely, "diet and water, accommodation for sick and well, clothing, duty and locality." The Report of the Board was sent to Lord Raglan on the 25th March, 6 days after our sanitary inspectors had arrived at Balaklava, and 2 days after Dr. Gavin's arrival.

Our Report, as already mentioned, shows what was the state of Balaklava while the sittings of the Board of Health were taking place in the town, and it is a sufficient proof of the absence of any appreciation, either of the then sanitary condition of Balaklava, or of the risk which was likely to be incurred from epidemic disease, that it was not one of the subjects specially included in the instructions to the Board, and, consequently was not even mentioned in its Report.

The Board alludes to the unhealthy condition of the Turkish burial-ground, above the head of the harbour, but does not mention the far worse condition of the British burial-ground.

We have given in our Report full details of the state of Balaklava, and the effect of its bad sanitary condition on the town and shipping. We have shown the steps taken by the Commission to improve it, by the aid of our own inspectors, who had at their disposal, during a period of 3 months, a force of men latterly amounting to 150. We have also described the measures adopted by us for arresting epidemic disease, during a period of 4 months, among the transports. At the time when our inspectors left the Crimea, others were appointed at our

request, by the Commander of the Forces, for whose guidance we issued a code of sanitary instructions. We have pointed out the gradual improvement of the place, until it became as clean and healthy a little sea-port as one would wish to see, and for several months before the evacuation, it required little or no interference on our part. After a great expenditure of labour and money, it had at last arrived at that sanitary condition which it ought to have possessed from the commencement of the occupation.

THE CAMP.

We have shown in our Report, that whatever sanitary neglects had occurred at Scutari and Balaklava, the Camp before Sebastopol was clean when we first inspected it, but that at the same time there were local conditions here and there, likely to affect injuriously the health of the troops. There were evident marks that sanitary precautions had been taken, but in some points these precautions were defective, and in consequence zymotic disease had prevailed. Without of course knowing what recommendations had been made for preserving the sanitary condition of the Camp, we made those which we considered necessary to remove the existing defects.

The most important of our recommendations were those for surface-draining the ground around huts, for the drainage of hut-sites, the removal of earth from the walls, and of damp saturated earth from the floors of huts, ridge ventilation, and lime-washing all huts externally to keep them cool. Various other recommendations were made, which had reference chiefly to sanitary precautions, already taken to a greater or less extent over the whole Camp, but which we desired to have more strictly and uniformly carried out.

Sir John Hall's "Observations" show that from first to last a number of recommendations had been made in regard to the Camp, but, as we shall presently show, even these exhibit the usual short comings of the army sanitary system.

The country occupied by the allied forces at the commencement of the siege-operations, had been several times described by travellers and residents, as peculiarly unhealthy, and their descriptions would certainly have led civilians to have adopted more than ordinary sanitary precautions in such a country. So far, however, as we can judge from Sir John Hall's "Observations," not a single sanitary precaution appears to have been recommended by him for the Camps till the 24th January, 1855, at which date, in consequence of a letter from Dr. Hume, complaining of nuisance in the vicinity of the Hospital of the 3rd Division, Sir John Hall writes to General Estcourt, pointing out the danger to health of various sanitary defects which then existed, but which, so far as we can judge, ought never to have existed at all, under a proper sanitary system.

The letter makes appropriate recommendations, but the health of the troops would have been much better secured by the adoption of sanitary measures when the army broke ground in the beginning of October 1854, instead of waiting till the evils had accumulated to such an extent in January 1855.

Dr. Hall recommended latrines to be dug in the Camps, and daily covered with earth; dead animals to be buried; offal, dirt, and old clothes to be removed from around Hospital marquees and tents; trenches round Hospitals to be deepened to carry of surface-water.

On the 28th January, a further communication on the same subject was addressed by Dr. Hall to the Adjutant-General. These recommendations, so far as they go, are very proper, except as to the date.

The next proceeding was one already referred to, namely, the appointment of the Board of Health, to

consider the sanitary state of the army on the 11th March, 1855, after the two Civil Commissions had arrived at Scutari. The Board drew up a Report containing many valuable suggestions in regard to the diet, clothing, and sanitary arrangements for the Camps, but the first thing that strikes us in reading it, is that there must have been a mistake about the date. It was appointed at the request of Dr. Hall, by a General Order, dated March 11th, 1855. If that Order had been dated 11th October, 1854, instead of the 11th March, 1855, the Report made in consequence would have been a very proper one, so much so, that with the history of that winter fresh in our memory, we cannot but express our regret that the advice of the medical officers who composed the Board was not called for by the principal medical officer before, and not after, the catastrophe had happened.

As it was, the proceeding was in accordance with the practice flowing from the regulations, as already stated, and which is not *prevention* of sanitary defects, but their removal, after their consequences have shown themselves.

The sanitary recommendations as to water-supply, hut and tent accommodation, burial of dead animals, regulation of latrines, striking of tents, opening sides for ventilation, burial of the dead, camp-police, are all good, so far as they go, except in their date, for which the Board is not responsible. The plan proposed for ventilating huts by louvred turrets, which was well carried out by Dr. Alexander, in some Hospitals in the Light Division, we have described and figured in our Report as the best method we found in use, although we recommended ventilation by raising the ridge boards of the huts instead, as being simpler,—a plan which was carried out, and also adopted in principle, in the panel huts sent out for the second winter Camp.

There were some important sanitary points omitted by the Board, as for instance, the clearing away of earth from the walls of huts, the drainage

of hut sites, on the side-long ground, from the want of which zymotic disease had arisen, the external lime-washing of huts to diminish the inside temperature, and there is no reference to the 79th Highlanders, then well known as suffering from fever and other zymotic diseases, on account of which half the force had already passed through Hospital.

Sir John Hall has shown that the removal of this Camp was advised by him on the 19th and 27th March; but it was not removed until the recommendation of the Commission of the 14th April had been sanctioned by Lord Raglan.

It is not necessary to discuss the sanitary measures carried out after the recommendations of the Commission had been sent to the Commander of the Forces. We have shown the progress of sanitary improvement, and expressed our satisfaction with the remarkably improved health of the army up to the end of the war, giving at the same time due weight to the influence of improved diet, clothing, &c. The results were similar in kind to those observed in civil life, to follow similar works. There is no mystery in army sanitary measures. They do not differ from those in civil life, except that they require greater vigilance.

We have given full details in our Report on the sanitary defects at Scutari, Balaklava, and in the Camp; and we have stated generally the improvements carried out with the results to health. After considering all we have said, Dr. Hall, page 51, thinks that all "dispassionate people" will see and admit with him that the benefit of our labours was more assumed than real, and he adduces as a proof of this, without apparently considering what the result will be as regards his own recommendations, a table of admissions and deaths in the Hospitals from December, 1854 to August 1855, the admissions and deaths being given without any reference to the force in the field! This table, like the statistical facts he brings forward about the Hospitals at Scutari, is absolutely worthless for any comparison. It is

as if he had adduced the fact of 100 deaths from cholera in London, with 2,500,000 inhabitants, and 100 deaths from cholera in Richmond, or any other town, with 25,000 inhabitants, as a proof that cholera was as fatal in the one case as in the other.

The following table showing the admissions and deaths to strength per 1000 per annum for the whole army in the East, from December 1854 to the end of the war, exhibits the real instead of the assumed facts of the case.

	Admissions to strength per 1000 per annum.	Deaths to strength per 1000 per annum.		Admissions to strength per 1000 per annum.	Deaths to strength per 1000 per annum.
1854.					
December .	3,888	721	September	2,004	121
1855.					
January . .	4,176	1,173	October	1,380	49
February .	2,760	979	November	1,176	52
March . .	2,316	561	December	1,332	32
			1856		
April . .	1,716	223	January	1,116	21
May . . .	1,944	202	February	924	9
June . . .	3,396	318	March	972	10
July . . .	2,832	152	April	840	8
August . .	2,760	181	May	720	7

This table shows the relative loss of efficiency month by month, from admissions and deaths reduced to a common unit. The increase in June 1855, was due to cholera, and to the first attack on the Redan; that in July and August to cholera, and the increase in September mainly to the attack on the Redan. Of course this table contains a very different view of the facts from that in Sir John Hall's inapplicable and useless one.

It will be seen that with the exception of cholera, the local predisposing conditions of which we have described in our Report, and which did not admit of removal before the epidemic arrived, there

was a steady reduction in the rate of mortality the whole time the Commission was in the Crimea.

The concluding opinion expressed in the Report of the Sanitary Commission, that the whole subject of military hygiène, as proved by the experience in the East, demands in future a practical development commensurate with its importance to the public service, receives a striking confirmation from Sir John Hall's pamphlet. Without casting blame on him or on any one else, we of the civil sanitary service accept his "Observations" as conclusive on this point. Sir John Hall himself desiderates a better position for the sanitary element in the army. He has tacitly acknowledged the existence of those defects at Scutari and in the Crimea, which he has attempted to palliate, and he has at the same time admitted the necessity for those preliminary sanitary precautions recommended by us in the practical conclusions to our Report, and which his own documents prove that he did not adopt.

We state in our "Conclusions" that in the Hospitals at Scutari, impure air arising from the defective condition of the drainage and ventilation, and the cubic space for the inmates, was sufficient to account for a large proportion of the excess of mortality in the buildings; and we proceed to show how such buildings should be examined as to their sanitary condition, and what precautions it is indispensable to take before they can be safely occupied by sick.

We state that the bad sanitary condition of the town and harbour of Balaklava and their vicinity was the cause of much sickness in the town, on board ship, and in the neighbouring camps, and we show that the organization of a sanitary police, on taking military possession of a town is a matter of absolute necessity for the health of the troops in occupation.

We further state, that by far the greater part of the disease and mortality existing in the Camp was due to cholera, fever, diarrhœa, and dysentery. That these diseases were connected with removable causes

of damp, foul air, and impure water, and we point out in what manner such causes ought to have been dealt with from the beginning.

We also state that these diseases declined on the carrying out of suitable works and measures, and our final "Conclusion," as already stated, is, that military hygiène demands in future a practical development commensurate with its importance to the public service.

Of these "Conclusions" Sir John Hall says, "Even the practical conclusions they have arrived at, though unexceptionable, are so common-place, so well known, and so generally admitted, that it is amusing to see them paraded as the result of so many months' deliberation on the part of functionaries invested with almost unlimited power to correct bad smells and other sanitary defects."

If we believed that to Sir John Hall had been committed the hygiène of the army, as we understand the word, his acceptance of these conclusions would be the strongest condemnation of his own proceedings.

"Common-place," "well-known," "generally admitted," and "unexceptionable," as he says they are, the neglect of them occasioned almost the whole catastrophe at Scutari, and endangered the efficiency of the army in the Crimea.

Civil Sanitary Commissions attached to an army are not a desirable means of supplying similar administrative defects, but the whole experience of the Crimean War, as well as the evidence furnished in Sir John Hall's "Observations," proves that in the present sanitary system of the army, if left to itself, there is nothing to prevent the recurrence of disasters from neglect of hygiène, like those of Walcheren, Scutari, and the Crimea, which are now matter of history.

APPENDIX.

Sir John Hall in his observations adduces instances of alleged incorrectness as to matters of fact in the Report of the Sanitary Commissioners to which we now proceed to reply.

At page 6, with reference to our account of the outbreak of Cholera at Scutari in November 1855, he gives a letter from Dr. Linton, in which it is stated, that Major-General Storks had suggested that Dr. Sutherland should be made acquainted with the outbreak, which Dr. Linton did by note: that Dr. Sutherland did not come to Scutari till the second day after Dr. Linton's note was despatched: that Dr. Sutherland came to Scutari, when the weather permitted, on the morning of the day when the mail for England was made up, and that the requisite sanitary measures were in operation before Dr. Sutherland was made acquainted with the matter.

First, then, as to the note which is dated "Scutari, 15 Nov., 1855." It is as follows:—"I regret to say that we have an outbreak of cholera, come over, therefore, as soon as you can and give us the benefit of your large amount of experience in this disease and oblige, very sincerely yours, W. Linton."

This note was delivered to Dr. Sutherland at 3 o'clock P.M. of the 15th November. Dr. Sutherland was suffering from an attack of fever, and was unable to go over that evening, but he wrote by the messenger to Dr. Linton, though the latter makes no reference to that note, giving him the advice he had asked for, and recommending inspection of troops and sick for the immediate treatment of diarrhœa, thinning all huts or wards where the disease had appeared, or even emptying and lime-washing them, and promising to go over in the morning.

These were the chief points in the letter which Dr. Linton doubtless has. Instead of there being a lapse of two days between the sending of the letter, and his going to Scutari, Dr. Sutherland met Dr. Linton at Scutari next morning the 16th, and went over all the circumstances with him, when Dr. Linton objected to the camping out of the troops, for the reasons he has stated.

The Report of the Sanitary Commission states what took place at the meeting with General Storks, and is believed to be a correct representation of the circumstances.

At that time, the measures recommended in Dr. Sutherland's note of the preceding evening had been initiated. It is quite

possible that Dr. Linton may have determined on them previously, but judging from the tenor of his note, it was considered that he really desired a consultation as to what was best to be done; but it is certain he was opposed to the most important measure, namely, the camping out, which was urged by Dr. Sutherland at that date, and his impression is, that it was General Storks who decided the measure in the affirmative.

In regard to Dr. Sutherland's visits to Scutari being confined to post days, as asserted by Dr. Linton, the statement is incorrect, for Dr. Sutherland was at Dr. Linton's office at Scutari, every day from the 16th to the 30th November inclusive, excepting the 25th, 27th and 29th, and the epidemic had declined before any of these dates.

As to Dr. Hall's statement that "the Commissioners had seized the lion's share of laudation," far from this being the case, the whole circumstances gave rise to no other feeling than that of regret, that so many lives had been lost, which in all human probability might have been saved, if the men had been removed out of the Barrack, as soon as the disease appeared among them.

At page 9, Sir John Hall, referring to the description given in our Report, of the state of the British burial-ground, at the head of Balaklava-harbour, positively denies "that the dead of the army were ever buried in this careless manner from any of the Hospital establishments." The Report does not say anything about the dead from the Hospitals. It simply describes the state of a certain burial-ground, and the manner of burial which had apparently been adopted.

Dr. Hall's statement at page 11, that he had mentioned to the Commissioners that he had seen camp refuse disposed of by burning in kilns while in India, is given in our Report as he made it; but the conversation to which he refers took place very nearly a year after the propriety of adopting the practice had been discussed by the Sanitary Commission, and about a month after such a kiln had been erected at Scutari, on the recommendation of Dr. Milroy.

At page 11, Dr. Hall admits that a statement made in the Commission Report, as to there being an excess of sickness in the cavalry and artillery over the infantry, from the beginning of May to the middle of July 1855, was correct, so far as zymotic disease was concerned; but he attributes it to the circumstance of a considerable part of these arms being new arrivals, while the Commission looking at the whole sanitary history of the army, up to the period of the evacuation, state that the excess "appeared to be mainly due to unwholesome conditions, arising from the presence of animals." Dr. Hall should have stated that during the period specified, there were new arrivals among the infantry, as well as among the cavalry and artillery, though in a smaller proportion.

At page 12, he says, the description given at page 120 of the Report, of the position of the 2nd Division is erroneous. It was part of the 4th and not the 2nd Division which was located on the

slope of Cathcart's-hill. The statement in our Report is that *part* of the 2nd Division was so situated, as well as the 4th Division. Sir John Hall's contradiction is a mere quibble as to the meaning of the "slope of a hill," the name of which was a local one. The site of the part of the 2nd Division referred to, is given for the second winter on a plan of the camp, prepared at Head-Quarters on the 4th February, 1856, and by referring the position given in the plan, to a contoured map, it appears that this part of the 2nd Division, was situated on a contour, sweeping round the hill, 80 feet above the nearest part of the ravine, between the summit of Cathcart's-hill and the Woronzoff-road. The description is as correct therefore as the local nomenclature would admit.

He further states page 12, with reference to the removal of the camp of the Naval Brigade, which our Report says we recommended, that neither Dr. Deas, nor Sir Stephen Lushington, to whom he had applied on the subject, had any recollection of such a recommendation.

This may be quite true, and yet the recommendation was verbally made, but not to them, and would have been repeated more formally, had it been deemed necessary. It was enough for us that the camp was removed.

At page 13, Dr. Hall states, that a letter written to him regarding the insufficient means of discovering and treating diarrhœa among the troops, and recommending "any method consistent with the rules of the service, whereby the malady may be discovered, and the medical treatment carried to the patient, without waiting for his applying for it," was written *pro formâ*.

This statement is unfounded. The letter was written for the express purpose of taking objection to the method of dealing with the diarrhœa then in use, and of advising a better. Whatever may be the case in the army, we in civil life know full well that it is a mere delusion to trust to choleraic cases applying for relief.

At page 19, the Commissioners are called to account for making certain supposititious statements in regard to the General Hospital in camp, which they are not aware exist in their "Report." The condition of the ground and of the huts at the date when the inspection was made, was such as they have described.

With reference to the communication about the trenches addressed to General Simpson on the 18th July, referred to in page 28 of the "Observations," and which Sir John Hall states he had anticipated on the 30th April and 4th June, the reply is, that notwithstanding his recommendations, complaint was made to the Commission of the state of the trenches, and the communication to General Simpson was made in consequence.

At page 32, Dr. Hall, alluding to certain recommendations of the Medical Board regarding the water-supply, makes certain statements on the subject, which it is impossible to answer, without entering into a discussion on the principles of water-supply

generally, with which principles Sir John Hall appears to have a very limited acquaintance.

The stream of water running from the hill above the Col of Balaklava, towards Kadikoi, and which Sir John Hall calls a "simple gutter," was the drainage outlet for about 5 square miles of area, and might, if required, have been made by far the most abundant source of water-supply within the British occupation.

At page 34. Dr. Hall states that his application to the Commissioners to examine the site for the Hospital at San Georgeo, was a simple act of courtesy on his part. We are obliged to him for his courtesy, but whether he had asked us or not, it would have been our duty to inspect the site, and object to it if we had considered it necessary.

At page 35, Dr. Hall, referring to certain objections raised by the Commissioners against the use of Hospital-ships in Balaklava-harbour, says they were never intended to be used as floating Hospitals. The following was the cause of our interference in the matter. While these ships were lying in Balaklava-harbour, we were desirous of having the sick removed from on board the "Diamond," but Admiral Boxer very properly objected to the recommendation, unless we would at the same time object, as a matter of principle, to any ships being used for sick in harbour.

We did so, therefore, and he yielded the point in regard to the "Diamond,"

At page 46, referring to a communication of the 24th August, addressed by the Commissioners to the Commander of the Forces respecting the unhealthy state of the Cavalry camps, in which they reported tents as overcrowded, Dr. Hall states that he found not more than 6 men in each. However this might be, our statement as to overcrowding, was made on sufficient authority.

At page 47, Sir John Hall states, that he represented the unhealthy position occupied by the Royals on the 3rd of October 1855, and he asks why the Sanitary Commission did not attend to it, or to the slaughter and offal pits at Kadikoi? In regard to the Royals, Dr. Milroy, who was the only Commissioner then in the Crimea, would heve interfered in the matter, if it had not been otherwise remedied. The offal-pits at Kadikoi were the subject of communication both with Head-Quarters and with the Commissary-General.

Remedies were pointed out for the nuisance, and they were put in practice with success, while the place was inspected by one of the Commissioners from day to day, till the nuisance from the offal pits was finally removed.

At page 52, Sir John Hall says, that the Commissioners commenced their labours at Scutari on the 26th March, 1855—(the true date is the 6th March), and at Balaklava on the 3rd of April, "so that the decrease of sickness and mortality which had taken place in the army before their arrival, could not have been influenced in any way by their suggestions." Of course it could not. With reference to Dr. Hall's statement, as to any knowledge

we might have had of the suggestions contained in the published Report of the Medical Commissioners to the Hospitals, we have only to reply that we never saw the Report until our work in the East was done. That Report contains many excellent suggestions, and much valuable information, but we have not been able to discover in it any sanitary recommendations bearing on the defects described in our report, except an objection against the occupation of the corridors in the Scutari Hospitals by sick, in which objection we happened to agree with the Commissioners. The duties of that Commission were of quite a different kind.

Sir John Hall, page 55, considers that all ordinary sanitary information, except such as applies to Camps and Barracks, can be obtained from the "popular and cheap publications of the day," treating on sanitary matters, a fact with which we were not previously acquainted. Perhaps Sir John Hall will tell us from which of these popular publications he derived his own information.

With reference to the letter addressed by Dr. Sutherland to Lord Shaftesbury and Sir James Clark, on the 9th July 1855, and part of which Dr. Hall has published at the end of his "Observations," we would remark first, that the capitals and italics in the letter are not Dr. Sutherland's, but Sir John Hall's; and second, that one most important statement in the letter, enforcing the necessity of securing by examination a large amount of knowledge on sanitary matters, on the part of the army medical and other officers, and which was the practical point of the letter, is altogether omitted. Lastly, that there is nothing in the letter, which in any way contradicts the statements in the Report, although there are two inaccuracies which must have remained uncorrected, in the absence of the documentary evidence supplied by Sir John Hall.

The letter states that "we have also found the medical officers thoroughly alive to the nature of the changes required, representing them to the authorities, but without power to carry them out." This statement, as the context shows, refers exclusively to the camp, and neither to Scutari nor Balaklava. It was believed to be correct, because in one or two instances it had been found to be so, but the statement itself was made on the authority of verbal assertions, such as the following:—"Every thing the Sanitary Commission has recommended, was recommended before," and the like.

But it now appears, from Sir John Hall's published recommendations, that this was by no means the case.

The other inaccuracy referred to is the following:—Sir John Hall quotes this from the letter. "Diarrhœa has been prevalent, but there is a system of inspection in use for its discovery and treatment, which appears to work as well as could be expected."

The Report throws doubts upon the truth of this, for it is therein stated, with reference to the army, that the inspection did not appear to have been so successful as in other instances. The statement in the letter referred both to Balaklava and the camp, in the former of which a very efficient system of inspection

for the discovery of diarrhœa on board ship, was carried out by the naval surgeons under our instructions. Dr. Sutherland understood also from a conversation he had with Sir John Hall at that period, that the men in camp were inspected for diarrhœa, but from the information conveyed in the "Observations," it appears that he must have been mistaken, for that such was not the case, and the men were merely cautioned to apply for that relief: good, so far as it went, but not enough.

It thus appears that these statements in the letter made on verbal testimony were inaccurate.

At page 54, Sir John Hall cites a paragraph of Dr. Sutherland's letter, in which it is stated that "little if anything more can be done here in the way of initiation of camp sanitary measures," and uses it as an acknowledgment that everything had been already done.

The paragraph refers to our own work and recommendations, as well as to what had been done by Commanding officers and others during the previous three months up to the date of the letter.

There is only one other point in the letter requiring notice. It is the comparison drawn between the sanitary state of Balaklava and certain districts of London and other towns, from which Sir John Hall appears to derive comfort. The comparison was drawn for the purpose of enabling two friends, practically conversant with the question, to form an estimate of the relative sanitary condition of the occupation, and to do this the very worst sanitary districts at home were selected — districts exhibiting the sanitary neglects of many years, with their results in localizing epidemic diseases. Balaklava is stated not to have been worse than these districts, but the real point was that Balaklava, from neglect of sanitary precautions, had descended in 6 months to the unhealthy position which had been attained by these home districts after long years of neglect.

It is satisfactory to know that the home districts referred to have been improving, and that strenuous efforts will no doubt continue to be made, under the recent Metropolitan Improvement Act, to remove the stigma from the Metropolis, as was eventually done from Balaklava.

Dr. Hall considers Dr. Sutherland to have been very candid in confessing in this letter, that we had perhaps learned more than we had recommended, and desiderates like candour in our Report, taking for granted apparently, that what we had acquired had been derived from himself. There was not, however, one sanitary problem in the Crimea, which the members of the Commission had not been engaged in for years in civil life, in towns, villages, and country districts, which do not differ in their sanitary relations from camps. Towns are really fixed camps.

What we did learn, was the supreme necessity of greater vigilance in preventing the occurrence of sanitary defects, rather than in trusting to their removal after they had occurred, which is the method in the Army Regulations, and we had an opportunity

of estimating more justly the vital importance of single sanitary defects, in predisposing to zymotic disease—defects very rarely seen in operation by themselves, for more causes than one are generally found acting together. We are always learning in sanitary matters, and there is no discredit in avowing it.

In sanitary methods or procedure there was really nothing to learn, but much to avoid.

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Dr Sutherland

SIR JOHN HALL'S REJOINDER

TO

DR. SUTHERLAND'S REPLY

TO HIS

OBSERVATIONS

ON

THE REPORT OF THE SANITARY COMMISSIONERS,

AT

THE SEAT OF WAR IN THE EAST,

IN

1855 AND 1856.

LONDON:
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1858.

REJOINDER.

It is neither my wish, nor my intention to enter at length into the Reply which Dr. Sutherland has made to my remarks on the Report of the Sanitary Commissioners in the Crimea; but, as some of his observations, if allowed to remain unexplained, would give an erroneous impression to the reader, I feel called on to advert to them, and in doing so, as the Doctor has disclaimed all idea of personality, I beg he will receive what I am about to say with the same feeling of charity that his own remarks were written in.

No one, I believe, undervalues the importance of sanitary arrangements either on service in the field, or in the fixed abodes of man; and few, I think, would deny the advantage of admitting a course of instruction on public health into the curriculum of education of all medical men, whether civil or military. But if Dr. Sutherland means it to be inferred, from what he states, that knowledge of this kind is confined to a few individuals, the profession at large, I imagine, would demur to such a doctrine, for no one can study the medical profession properly without becoming acquainted with the laws of health, as well as of disease; and the technicalities of what is termed sanitary science may be easily and readily obtained from the epitomised editions of the Health of Towns Report, and the suggestions arising therefrom, which individuals have favoured the world with in popular forms. It was to these I referred in my observations, and I am sorry they do not meet with the Doctor's approbation, which I thought they would have done, considering the apparently extensive use he has made of them, and of the writings of military authors, in his sanitary recommendations.

So much importance do I attach to sanitary instruction, that I would not only admit it into the curriculum of medical education, but I would make it obligatory on all staff officers of the army to attend a course of such lectures; and, I think, a plain code of instructions for the management of health might be drawn up with advantage for the guidance of the private soldiers, as, I understand, is the practice in some of the continental armies.

These instructions should be read and explained to the men by their officers, or, what would, perhaps, answer as well or better, they might be printed in their small account books for easy reference.

This discussion, however, is not of any importance. The main question, and the one which interests the British public, is whether the labours of Dr. Sutherland, and the other highly paid Sanitary Commissioners, with their expensive train of inspectors and scavengers, who were sent out to the East in 1855, were essentially necessary to the welfare of the army in the Crimea, and whether the sickness and mortality of the troops there were in any appreciable degree affected by their labours. I say no, and in this opinion I think I shall be joined by most men who served there.

The Commissioners arrived at Balaklava at the end of March 1855, when the difficulties the army had laboured under during the winter were being rapidly surmounted, and when health was returning to its ranks with the genial weather of spring; and, in my opinion, the result would have been equally favourable had they never set foot there. Their labours were confined principally to Balaklava; and with plenty of time on their hands, and means placed at their disposal, it was not not very difficult for them to give a creditable detail in their Report of so many basket or hand-barrowfuls of dirt taken from one place and thrown into another, of so many stercoraceous deposits scented out on the hill sides, behind old walls and buildings, and in the neighbouring ravines, and of so many paunches of animals fished out of the harbour and disposed of. In fact, when the Commissioner mounts his sewage cheval he rides full tilt, and won't even look at the humble labours of his neighbours.

Dr. Sutherland, in his reply to my observations, is cynical about my recorded sanitary labours; but I beg to remind him that many suggestions are made by the principal medical officer of an army on service in the field to the general in command, which are never committed to writing, and he forgets that the daily detail of management and supply of all the hospitals in the Crimea, which at one time amounted to nearly 100, had to be attended to by me. This duty occupied much of my time, and was a constant source of toil and anxiety to me; and if he will permit me I will contrast it with his more agreeable position, as detailed in the following extract from a letter, written by a gentleman who was intimately associated with him for some time after his arrival in Balaklava:—"I look on Dr. Sutherland and the Commission as the same body virtually. Having messed and

associated with that individual for some weeks on his first arrival in the Crimea, I am enabled to give some of his impressions with respect to the sanitary state of our army. I judge from what dropped from his own lips, in conversation with myself and others. When well, he was talkative and communicative, with a disposition to look upon matters in rather an exaggerated and sentimental light. He was so engaged in writing in his cabin on board the 'Walmer Castle' when the cholera broke out and gave just cause for alarm, that even the captain and officers of the ship exclaimed—'Of what use is this man?'

"The weather was fine in April, when I and others used to take our evening walk to Kadekoi, and stroll over the ground where Dr. Sutherland says that he saw human bodies buried almost in water, and so sparingly covered with earth that even their remains protruded through the surface. This statement I condemn as a —— ——, and an insult to our common sense feeling of decency, and I cannot conceive how Dr. Sutherland could dare to publish it in his Report."

Dr. Sutherland, at page 31 of his reply, states that the Sanitary Report does not say anything about the burial of the dead from the hospitals in the British burial-ground at the head of Balaklava harbour; but as that was the burial-ground of all who died in hospital there during part of the winter of 1854-5, if the Report does not allude to them, to whom does it allude?

Again, at page 22, he says, "The Military Board of Health alludes to the unhealthy condition of the Turkish burial-ground above the head of the harbour, but does not mention the far worse condition of the British burial-ground."

The Military Board of Health did not advert to the British burial-ground in their Report, as they, like many thousand others who passed along the road close to it daily, failed to discover what Dr. Sutherland has described in his Report; and, I think, few men would have hazarded so bold an assertion as that given at the close of the above sentence. The Turkish burial-ground at the head of the harbour had been the subject of a special inquiry on account of its offensive condition, arising from the number of bodies deposited in it, and the superficial manner in which they were buried, and it was ordered to be closed, and the graves covered over with additional earth mixed with quick lime, which was carried into effect before the arrival of the Sanitary Commissioners, though I see they take credit for doing something of the same kind, without making any allusion to the previous labours of the military authorities. It is but fair to assume, had the British burial-ground been in the condition described by

Dr. Sutherland, it must have attracted the attention of either the Board of Mixed Officers appointed to inquire into the condition of the Turkish graveyard, which was not more than 150 yards from it, or the Special Military Medical Board of Health, as neither of them had any object to attain by concealing the circumstance, if the graveyard were in the state described by Dr. Sutherland.

This graveyard, which is put so prominently forward in Dr. Sutherland's Report and Reply, was a slip of ground by the road side at the head of the harbour, distant, I should say at a guess, about 250 yards from the general hospital. It was of small extent, and was only used during part of the winter, as the dead were buried at the foot of the vineyard, in front of the general hospital, when the army first took possession of Balaklava; and early in the spring of 1855, they were taken to a new burial-ground, about a quarter of a mile beyond the village of Kadekoi.

The piece of ground at the head of Balaklava harbour, in part of which the dead from the hospital were buried, and on which the Sanitary Commissioners expended so much of their labour, did not measure more than about 100 yards from the water of the harbour to the bridge over the small brook up the valley, and about as many from the road on the eastern side of the valley to where the brook discharged itself into the harbour originally, but a more direct course was cut for it afterwards to drain the valley of Balaklava. This piece of ground, which formed a truncated cone, was miry for some distance from the water of the harbour, and required an immense amount of labour and material to render it fit to erect wharves and storehouses on, which was eventually done, and they were of great convenience to the commerce of the port, but of insignificant importance to the health of Balaklava. The main trunk drain originally recommended by me—recommended again by the Military Board of Health, and finally cut the whole length of the valley to Kadekoi, was a measure of greater sanitary importance to the neighbouring camps than the petty sewage of the small village of Balaklava, to which the commissioners devoted so much of their time and attention, and from which Dr. Sutherland draws such exaggerated and erroneous conclusions, as I shall make manifest by and by.

BALAKLAVA,

which has been raised to the dignity of a small town by the Sanitary Commissioners, is a mere fishing village, the male inhabitants of which fled on its being taken possession of by the English, and the women and children were removed shortly after-

wards, by order of the Commander-in-Chief. Balaklava had the defects of all Eastern villages; and during the wet weather of the winter of 1854-5, the main street and quay, which were unpaved, became, from the constant traffic of men and animals, almost impassable.

Dr. Sutherland says, a sanitory police should have been established for the health of the troops in occupation, immediately the *town* was taken possession of. Now, as there were no troops in occupation of the place in the first instance, beyond a few invalids encamped near the general hospital, and as not a single soldier could be spared from his immediate and proper duty in front, and there were no civil inhabitants in the place, I should like to ask him how he would have managed to carry the measure out had he been there? I admit the advantage of a sanitary police in towns, but there was no means of carrying it into effect at Balaklava during the winter of 1854-5. It is true I might have made a written representation to the Commander-in-Chief, and put on record, as the term then was, my opinion on the subject; but knowing Lord Raglan's disposition to do all in his power for the good of the soldiers under his command, and knowing his inability to spare a single man at the time, I did not think it right to embarrass him by doing so.

In November, the sick of the Turkish army took possession of a number of houses in the village, and an effort was made to obtain Turkish soldiers for the sanitary affairs of Balaklava, and some were granted in November by the Pasha in command of the nearest Turkish camp; but the men were disgusted with the employment, and the prejudices of their faith rendered it still more irksome to them under Christian command, so that little good was effected by the measure. Any one who has ever served with an allied army, where the supreme command is not vested in one person, will readily understand the difficulty that was experienced in dealing with that part of the village which was occupied by the Turks; but after the arrival of the 71st Regiment, in Dec. 1854, some progress was made in repairing the streets and quay, but it was slow work, as the men had neither hand-carts nor barrows, and they were compelled to carry the stones in their hands. Fortunately, the cold of winter prevented any injurious effects from the filthy state of Balaklava; and when the Turkish sick were removed out of the place, immediate steps were taken to purify the houses they had occupied by lime-washing. About this time the railway navvies began to pull down houses to form the line of rail which ran through two-thirds of the village, and when the Sanitary Commissioners arrived at Balaklava at the end

of March 1855, these operations were in progress. The streets and quays were being repaired by the debris of the houses pulled down by the railway navvies, and Lieut.-Colonel Hardinge, the active and intelligent commandant of the place, was using energetic means to remove the accumulated dirt, not of six months, as stated by Dr. Sutherland, but of years, and in due course of time it would have been accomplished, and wharves would have been built, and other improvements carried out if the Commissioners had never arrived.

Dr. Sutherland himself must have been impressed with this idea, for when applied to in his capacity of Sanitary Commissioner about an accumulation of dirt near some huts that were occupied by native drivers and railway navvies, he referred the applicant to the commandant, observing, to the amazement of several persons who were present, that he had nothing whatever to do with the removal of nuisances. At a subsequent period the commandant, I was told, had even to remonstrate with the Sanitary Commissioners concerning the filth which had been allowed to accumulate in the immediate neighbourhood of their own dwelling.

At page 28, in his reply, Dr. Sutherland states, "That the bad sanitary condition of the town and harbour of Balaklava and their vicinity, was the cause of much sickness in the town, on board ship, and in the neighbouring camps." This is a broad assertion of the doctor's, which is unsupported by experience, for it is well known that the troops encamped around Balaklava were infinitely healthier than those in front during the whole of the winter and spring of 1854-5, and at that period the place was certainly in its worst sanitary condition, so far as mud and other impurities were concerned, but the cold of winter rendered them in a great measure innocuous, so that the statement may be taken as a mere assumption on the part of Dr. Sutherland; and to prove that privation, exposure to inclement weather, and excessive duty, were the main causes of disease in the British army, one need only contrast a division encamped in front with one encamped in the immediate vicinity of Balaklava during the winter of 1854-5. Or what would be still more to the point, the 71st Regiment might be taken as an example, the reserve battalion of which, 417 strong, arrived from England at Balaklava about the middle of December 1854, and was landed and encamped at the head of the harbour for nine or ten days, when it was brought into the village, and quartered in houses and tents near the general hospital. In February, the 1st battalion, 473 strong, joined at Balaklava from Corfu, and the whole regiment was hutted in a

ravine above 250 yards above the head of the harbour, leading to the eastern heights of Balaklava, and remained there until the month of May, when it embarked with the expedition for Kertch. During the months of December 1854, and January 1855, only two deaths are returned in the regimental monthly sick returns, and as these were both from cholera, I apprehend their sick must have been treated and accounted for in the general hospital at Balaklava.

In February 1855, when their own regimental hospital was established, the surgeon returns 87 admissions and 5 deaths, out of a strength of 890 men; in March, 143 admissions and 5 deaths; and in April, 101 admissions and 4 deaths. In May the regiment embarked for Kertch.

The improvement in health of the brigade of Guards, which was brought down from the plateau in front of Sebastopol to the western heights of Balaklava, towards the end of February 1855, was very marked indeed; but as the health of the whole army was at that time beginning to improve, the same importance cannot be attached to this instance as to the cases of the regiments that were encamped near Balaklava during the whole winter; and I will merely give as an example the admissions and deaths in the Guards during January 1855, the month before they came down to Balaklava from the plateau in front of Sebastopol, and during the month of March, the month after their arrival on the western heights of Balaklava.

			Strength.	Admissions.	Deaths.
On Plateau before Sebastopol.	January, 1855,	Grenadier Guards .	415	268	26
	"	Coldstream Guards	429	182	35
	"	Fusilier Guards .	530	169	34
			1374	619	95
	Being a ratio of Admissions to strength per month of				45·05 per cent.
	And of Deaths to strength		"		6·91 per cent.
On Western Heights of Balaklava.	March, 1855,	Grenadier Guards .	325	68	0
	"	Coldstream Guards	326	101	10
	"	Fusilier Guards . .	725	106	2
			1376	275	12
	Being a ratio of Admissions to strength per month of				19·98 per cent.
	And of Deaths to strength		"		0·08 per cent.

The sickness and mortality in the Coldstream Guards were increased during the month of March by their occupation of some huts at the head of the harbour, near the Turkish burial-ground, which had been objected to by me, and there some cases of spotted

typhus fever occurred amongst the men before they were removed to the heights above.

The health of a wing of the 2nd battalion Rifle Brigade, which was quartered on the eastern heights of Balaklava during the winter, was comparatively good, while the other wing, which was stationed on the plateau in front of Sebastopol, suffered severely. The wing above Balaklava, which was 321 strong, lost only two men by disease during the quarter ending 31st March, 1855. One, a case of dysentery, and the other a case of apoplexy.

The light division, (which was encamped on the plateau in front of Sebastopol, had a fair share of the toil and privation which the army underwent during the winter of 1854-5, and was not more unhealthy than its neighbours,) may be contrasted with the cavalry division which was encamped in the Kadekoi valley, and two troops of horse artillery, one of which was encamped with the cavalry division in the Kadekoi valley, and the other close to Balaklava.

In the month of December, the cavalry division, consisting of the 4th and 5th Dragoon Guards, 1st, 2nd, and 6th Dragoons, 4th and 13th Light Dragoons, 8th and 11th Hussars, and 17th Lancers and C and I troops of Horse Artillery,

Out of a strength of		2586	Admitted	750	and Lost	16	by Death.
1855 January	. .	2434	,,	537	,,	16	,,
,, February	. .	2328	,,	330	,,	20	,,
,, March	. .	2268	,,	274	,,	11	,,
		9616		1891		63	

which gives a ratio of 78.66 per cent. of admissions to mean strength, and of 2.62 per cent. of deaths to mean strength, during the four months; but it must be borne in mind that these regimental returns merely embrace the medical transactions in the Crimea, and do not include the deaths in general hospital at Scutari. The same rule applies to the following statement, regarding the light division for the same period.

Regiments:—7th Fusiliers; 19th Regiment; 23rd Fusiliers; 33rd Foot; 34th Foot; 77th Foot; 88th Foot; 90th Foot; left wing 2nd Battalion Rifle Brigade; and, in February and March, the 97th Foot.

December, 1854	. . .	Strength	5090	Admitted	1663	Died 258
January, 1855	. . .	,,	5061	,,	1742	,, 305
February, ,,	. . .	,,	5337	,,	1327	,, 182
March, ,,	. . .	,,	5391	,,	851	,, 97
			20879		5583	842

which gives a ratio of 106.95 per cent. of admissions to the mean strength, and of 16·13 per cent. of deaths to mean strength.

I have entered more at length into this subject than may be deemed necessary by some; but I was anxious to show that dirty as Balaklava was, it was not, even during the very worst period of its wretchedness, the focus of disease that has been represented by Dr. Sutherland in his Report and Reply. Nor can I believe he could ever have seriously thought it was so, or he would never have permitted the Army Works Corps to place one of their hutted encampments in the bed of the Balaklava valley, not more than 200 or 250 yards from the head of the harbour, and close to the Turkish and British burial-grounds, which have been so graphically described by him. It was not only near to these two burial-grounds, but close to, if not partly on, the burial-ground which was used by the Turks for a time after that at the head of the harbour had been closed in consequence of the Report of the Mixed Board which was assembled to take its condition into consideration. The encampment of the Army Works Corps was, in my opinion, placed in about as objectionable a site as it was possible to select; and I remember recommending the medical officer in charge to protest against its continuance. The medical officers of the Army Works Corps were not placed under my direction, nor did they report to me for the Commander-in-Chief's information, until March 1856, and beyond supplying their wants from the general medical stores of the army, I had no control over them; but on one occasion I recollect the medical officer in charge of the encampment complaining to me of the amount of sickness in the division, and my remarking I was not surprised at it from the site of their camp, which was in every way objectionable, and he ought to protest against it.

Now, it may be fairly asked, what could the Sanitary Commissioner have been thinking of to permit such a contradiction to his own expressed opinion to be carried out under his very eyes? I challenge him to produce anything more at variance with the laws of sanitary science in the whole army arrangements than this was; and in this case there was not even the plea of necessity to be advanced, as the Army Works Corps were not, like the army, compelled to be placed wherever military reasons required them.

At page 24 of his Reply, Dr. Sutherland says, "The country occupied by the allied forces at the commencement of the siege operations had been several times described by travellers and residents as peculiarly unhealthy, and their descriptions would certainly have led civilians to have adopted more than ordinary sanitary precautions in such a country."

This sentence must have been written for mere effect, as Dr. Sutherland cannot surely mean seriously to assert, that the ground occupied by the allied army before Sebastopol was peculiarly unhealthy. He knows, or ought to know, perfectly well that it was not so; and lamentable as the condition of the British army encamped there was in the winter of 1854-5, it was not owing to locality, or want of ordinary camp sanitary arrangements, which were enjoined by General Order, and in force when the army took post there, but to the depressing effects of constant exposure to wet, inclement weather, want of proper clothing, fuel, and shelter, and excessive duty, and insufficient means of cooking the rations which were issued to the men. These were the true sources of disease in the British army in the Crimea, and they were pointed out by me to Lord Raglan as early as November 1854, in as forcible language as I could use. I not only pointed them out, but I ventured to predict the result that would probably ensue if immediate measures were not taken to remedy them. I received for answer, through the Adjutant-General, "that Lord Raglan was as well aware of the condition of the army as I was," and General Estcourt added, "there are only two courses open to us in our present position, either to abandon the siege altogether for a time, or to conduct it with a certain loss of human life until the defects you mention are removed." During the hardships of the winter of 1854-5, when it was a bare struggle for existence with every one, ordinary camp regulations were to a certain extent overlooked in the general misery, and perhaps this was a circumstance of little importance so long as the country remained locked up in frost and snow; but immediately there was an appearance of open weather, I deemed it expedient to call attention to the necessary sanitary rules in camp, which were in abeyance, and the letter of the 24th January, 1855, to the Adjutant-General, at which Dr. Sutherland sneers, was written.

The doctor says, that as the country had been described by travellers and residents, as peculiarly unhealthy, more than ordinary precautions should have been taken. I admit this, if it had been found to be so on our arrival, but such was not the case. I had no means of access to the works of travellers. I was not certain the army was going to the Crimea until near the period of its embarkation, and I had no time to spare from important daily pressing duties, to draw up theoretical instructions to meet imaginary contingencies; but I did what was a better thing, I placed at the disposal of the medical officers of the army the following works, which had been considerately sent out for their instruction by the Director-General of the Army Medical

Department, and I informed them by a department circular memorandum, in November 1854, that any officer who chose to apply at the medical store, would be supplied with a copy of any one, or all of them:—

"On Premonitory Diarrhœa in Cholera, by Dr. M'Lauglin."
"On the Diseases in Turkey, in reference to European Troops, by Dr. Shulkof."
"On the Personnel and Materiél for an Army of 30,000 men sent out to Turkey."
"On some Specialities in the Remittent Fever of the Levant, by Dr. Bryce."
"On the Prophylactic Influence of Quinine, by Dr. Byrson and Mr. Drummond."

It must be borne in mind, when the army landed in the Crimea, it was generally believed that an attempt would be made to carry Sebastopol by a *coup de main;* and when it broke ground before the place, no one supposed the town would hold out more than a week, and until after the battle of Inkerman, on the 5th of November, few had any idea the army would have to winter on the plateau in front of Sebastopol. It was certainly very inadequately provided for such an undertaking; even the elements warred against the enterprise, and the result was very disastrous. I was absent from the Crimea from the 1st to the 23rd of October, 1854, but Dr. Dumbruck, an active, intelligent, and very energetic officer, who officiated as principal medical officer in my absence, did all in his power to further the sanitary concerns of the army; but the power of military medical officers in such matters, as is well known, is limited to suggestions and recommendations. They are not accompanied by engineers, inspectors of nuisances, and scavengers, as Dr. Sutherland was, or they would in all probability have effected as much as he did, had they been invested with the same power; but even he, I suspect, would have accomplished little, had he arrived in the first bustle of disembarkation and military preparation, when every man in the army was fully occupied with his own duties, and civilians could not be obtained for either love or money; indeed, judging from what I saw of Dr. Sutherland in comparatively quiet times, I think he would have been as helpless as any man breathing under such circumstances.

At page 21, Dr. Sutherland says, "The next sanitary proceeding was in some respects a remarkable one, both as regards the time when it took place, and the result of it. The commission of Sir John M'Neill and Colonel Tulloch, with the Sanitary

Commissioners, arrived at Constantinople on board the French mail packet, on 6th of March, 1855, and on the 8th Dr. Hall recommended Lord Raglan to appoint a Board of Health, to consider the sanitary state of the army." The inference here implied I do not object to. It is a legitimate deduction from what was stated in my observations, but it is not correct for all that. Sanitary matters had, long previous to the appointment of that board, been the subject of official correspondence with the Director-General of the Army Medical Department, and of consultation and correspondence with the military authorities on the spot, as far back as August 1854. It was in consequence of the conflicting opinions of medical officers, elicited in collecting material to enable me to furnish the statement Dr. Smith requested in January 1855, that I came to the conclusion, the general and uniform sanitary arrangements of the army would be most effectually secured by a board of superior medical officers assembled by order of the Commander-in-Chief, the proceedings of which, if approved by him, would have the support of his authority. Under this impression, my letter of the 8th of March, 1855, was written; but at that time I was not aware of the arrival of the Sanitary Commissioners at Constantinople on the 6th of the month, nor indeed, do I even think that I had then heard of their appointment, so that their arrival at a distant port could not possibly have influenced my application to the Commander-in-Chief. In my observations at page 52, there is an error in the date of the arrival of the Sanitary Commissioners at Scutari, which I beg to correct; it ought to have been the 6th of March, 1855, instead of the 26th, as printed in the observations.

At page 18, in his Reply, Dr. Sutherland makes a greater mistake than this, about the period of signing the armistice with Russia, and in his anxiety to convict me of error, he departs from his usual courteous and guarded style of writing, and indulges in stronger expressions than the case exactly merits. I stated in my observations, "that it appeared the privies themselves at Scutari were left in their original state, until March and April 1856, when, after the armistice with Russia had been signed, and it was known to all the world that peace would be proclaimed, they were fitted with patent water-closets, which was a wanton waste of public money." Dr. Sutherland says, this is "simply contrary to fact." "The original state of the drainage was improved twelve months before, by temporary means well known to sanitary engineers, and the first soil-pans were put up in February 1856, while the real fact being, that the armistice was agreed to in the middle of March." Unfortunately for the

doctor's *real fact*, the armistice was agreed to early in February 1856, and was officially notified to the army in the Crimea on the 28th of that month. My observations had reference solely to the privies within the hospitals, and not to the hogsheads placed outside the walls of the building for flushing the drains, and it scarcely merited the harsh term applied to it, as I meant one thing and Dr. Sutherland another. With regard to the patent water-closets, I admit having overlooked the following observation in Mr. Unsworth's Journal, of work performed at Scutari, during the month of February 1856. "Some of the private quarters, at the barrack hospital, were provided with soil-pans and flushing cisterns, and *six* soil-pans were also fixed at the south-west angle of the barrack hospital, with a supply of water from the Turkish cistern." These, though overlooked by me, were not put up until after the armistice had been agreed to, on the 1st of February.

In his Journal for March 1856, Mr. Unsworth says, "At the barrack hospital thirty-six soil-pans with new seat boards, and six urinals, were put up in the north-east angle of the building; down pipes and stench traps being also provided."

In the month of April 1856, when peace had actually been proclaimed, Mr. Unsworth continues:—"During the month of April, the greater part of the labour at the disposal of the Sanitary Commission was employed *in replacing the Turkish privies* at the barrack hospital with soil-pans, with the requisite fittings, and connections to afford them a good and plentiful supply of water." If this, considering that active measures were then being taken to remove the sick from the hospital as speedily as possible, without any chance of their being replaced by others from the Crimea, does not prove a useless and extravagant waste of public money, I have nothing further to say.

At pages 25 and 26, in his Reply, Dr. Sutherland says the Commissioners recommended "surface draining of the ground around huts, ridge pole ventilation, and lime-washing all huts externally to keep them cool." "The plan proposed for ventilating huts by louvered turrets, which was well carried out by Dr. Alexander in some hospitals in the light division, we have described and figured in our Report as the best method we found in use, although we recommended ventilation by raising the ridge boards of the huts instead, as being simpler."

The drainage of huts and tents had been adopted from the commencement of the campaign, and the temporary expedient of piling stones or earth against the huts when they were first erected, was to prevent them from being blown over by the wind, and

perhaps more importance has been attached by the Commissioners to this plan than it merits, for the interior of the huts was influenced more by the surface drainage, than by this expedient, which was continued to the very last without much detriment to the men's health. This plan of external protection to the huts was not only continued, but during the winter of 1855-6 it was much extended, and many huts were cased with rough masonry up to their very eaves, to the comfort, not detriment, of their inmates.

The plan of lime-washing the huts, recommended by the Sanitary Commissioners, was mischievous in its results, as it destroyed the texture of the felt covering, and rendered them leaky. Having this probable result in view, and conceiving that the temperature of the huts depended as much on the free circulation of air through them as on the colour of their roofs, I made that objection to the Commissioners' plan, when it was submitted for my opinion by the Quarter-Master-General.

The louvre turreted plan of ventilation, which was carried out in the light division by Mr. Alexander, and figured in the Commissioners' Report, was recommended by the Military Board of Health, and the ridge board plan, which Dr. Sutherland says the Commissioners recommended to be adopted, was also actually in use on their arrival in the Crimea; and Dr. Jephson, surgeon at present of the 1st King's Dragoon Guards, who suggested it from what he had seen at one of the hill stations in India, will be astonished at the doctor's assumption of credit for a recommendation that is due to himself. It is the more surprising that Dr. Sutherland should have overlooked this mode of hut ventilation, as it was adopted first at the castle hospital, Balaklava, where he had many opportunities of seeing it.

At page 32, in his Reply, Dr. Sutherland says, "The Commissioners are called to account for making certain supposititious statements, in regard to the general hospital in camp, which they are not aware exists in their Report. The condition of the ground and of the huts at the date when the inspection was made, was such as they have described."

This may be true, but the Commissioners must have selected the period when the huts, which composed the general hospital, were in a transition state from barrack to hospital use, and they must have wilfully shut their eyes to their improved condition, whenever they passed them afterwards. Their Report was not published until the spring of 1857, two years after the event described; and although the statement served well enough to make a point in it, it was neither just nor generous to resort to such an expedient, to the prejudice of their professional brethren in the

army; but as they have spoken of the undrained and imperfectly ventilated condition of these huts, we will see what the opinion of the civil surgeons employed in the general hospital was. These gentlemen are all eminent in their profession, they are men of high honour, and have no interest in the question beyond the cause of truth, and they write as follows to Mr. Mount, who was the principal medical officer of the establishment. Civil surgeon Dr. Macleod says:—"As to the question of ventilation, I may remark, that if by good ventilation is meant a free supply of air, then the arrangement at the general hospital could not be complained of, as though the urgency of the service often forced us to admit into our wards many more patients than any of us would have countenanced, except as a matter of necessity, still by means of the apertures cut in the walls, and the numerous holes and crannies which existed between the planks, together with the high position of the hospital, a deficiency of air was not felt."

Dr. Lyons, pathologist to the army in the East, says, "In reply to your letter of the 11th June, 1857, asking my opinion respecting the condition of the hospital huts of the general hospital in camp before Sebastopol, as to ventilation, I do not know whether I could add anything to what I have already stated in my Report to Lord Panmore (at p. 101). Having had opportunities of observing the arrangements of this hospital after the affairs of the 7th and 18th of June, 8th of September, 15th of November, and all intermediate periods, I cannot conceive that *want of ventilation* should be at all urged as a charge against the huts in question. The fragility of their construction rendered them almost self-ventilating; and independently of this, I am aware that particular attention was directed by you, and all the medical officers of the hospital, to the establishment of free ventilation, by the removal of plankings here and there, and the construction of valvular flaps. By these, and similar means, much was done towards mitigating the effects of the excessive temperature of the hot summer months of the Crimea. I have already borne my testimony officially to the great success attending the treatment of the wounded in the English hospitals, and the absence of gangrene in any epidemic form." Mr. Rooke, civil surgeon, says, "I have great pleasure in answering your questions concerning the efficiency of the general hospital in camp in the Crimea, of which you were principal medical officer. As I was appointed one of the surgeons of your medical staff before any patient had been received into the hospital, and having remained on duty until it was broken up, a period of more than twelve months, I may, without presumption, say that I had the

best opportunity of judging of the arrangements you made for the reception of the wounded,—the measures you adopted for the proper ventilation of the hospital huts, and of the unwearied zeal you daily evinced for the well-doing of the patients. I can bear my testimony to the healthy state, and efficient arrangements of the hospital with the greater pleasure, that being now unconnected with the military medical service, it cannot be supposed that any approbation I may express, is given in order to stand well with the powers that be. I can truly state that you availed yourself of every means in your power to make the huts as suitable as such buildings could be for the reception of the wounded. That the ventilation of the huts was not deficient, is sufficiently proved by the almost total absence of erysipelas in the hospital. After the affair of the 18th of June, I had a larger number of wounded under my care, than any other medical officer. Those whose wounds were not fatal, mostly remained until they were convalescent, a period of several weeks. I had not a single case of erysipelas attacking a wound, or following an operation, nor after the attack of the 8th of September, although my patients were as numerous as those of the other medical officers. The circulation of air through the huts was constant. I never found my wards close or disagreeable, even when all the beds were full." Such is the honourable testimony borne by these gentlemen to the condition of the general hospital in camp, and it may be well contrasted with the Sanitary Commissioners' paltry subterfuge to throw discredit on the medical department of the army. But it is in keeping with the tenor of both his Report and Reply, which are written with a species of special pleading cunning, which is intended to damn by implication, rather than by direct open manly accusation. It was not creditable for the Commissioner to creep into men's confidence, by professions of friendship and approbation, and then to throw them aside when it suited his purpose to do so.

At page 32 of his Reply, Dr. Sutherland says, I have made an unfounded statement about the two letters he wrote to me on the 16th May, 1855, concerning the removal of the Buffs, 48th and 71st Regiments, to new encamping ground, and the early treatment of the diarrhœal stage of cholera. I do not exactly know what he means by using such a term, as I merely stated his letter of the 16th May, 1855, recommending measures that he saw being carried out on the 14th, could only have been written *pro forma*, so far as the removal of the camps was concerned; and as I had mentioned to him the precautions I had recommended on the 30th April, 1855, to be observed by medical officers for

the detection and treatment of cholera in its diarrhœal stage, his second letter, and the only one to which he alludes in his reply, appeared to me to be equally written *pro forma*, as the measures he recommended were inapplicable to the circumstances of the case. At page 35, Dr. Sutherland insinuates that he had been misinformed by me regarding the measures directed to be taken for the detection of cholera amongst the men. I may therefore be permitted to quote part of a Medical Department Order, which I issued on the 22nd July, 1854, when cholera first broke out in Bulgaria. The first portion of the order relates to the distribution and use of cholera belts, which it is not of importance to insert here; but the part which I wish to quote is as follows, and was addressed to the principal medical officers of divisions:—"I beg you will be careful that medical officers of corps, now that cholera unhappily prevails, *make diligent inquiry daily* about the health of the men, and endeavour to impress on them the importance of immediately reporting any looseness of their bowels, and applying for appropriate remedies for checking it." Again, on the 30th April, 1855, when cholera re-appeared in the Crimea, the following circular memorandum was issued by me to all superintending medical officers:—"As cases of spasmodic cholera have occurred in different quarters within the last week or ten days, Dr. Hall requests superintending medical officers will call the attention of regimental medical officers to the subject in a manner not to create alarm, but sufficiently explicit to put them on their guard. It is of the utmost importance not to allow the first, or diarrhœal, stage to pass over without treatment, for if collapse once set in the result is doubtful, whereas in the diarrhœal stage it is for the most part amenable to medical treatment."

There was no reluctance on the part of the men to report their ailments, and the plan, without creating unnecessary alarm, was found to work well,—better, certainly, than that of frequent additional parades for inspection, recommended, I dare say, with the best intention by Dr. Sutherland and others, would have done, for the doctor is mistaken if he thinks suggestions to Government on sanitary matters were confined to himself and the other Sanitary Commissioners. They were not so, and the following extract from a paper of suggestions, sent out by authority, will show that the doctor's own sewage routine is viewed in pretty much the same light that he sees the sanitary labours of the medical officers of the army:—"The public is aware that a sanitary commission has been sent out to investigate the state of the hospitals at Scutari, and to employ scavengers to cleanse the camp at the Crimea. It is not our object to criticise the appointment, but there cannot be

a doubt that in this case, '*routine*,' as in so many other cases, will be likely to mar useful results. The three commissioners have been long accustomed to one certain 'routine' of so-called sanitary operations, namely, *sewers*, *sewer-pipes*, and *sweeping*. We can scarcely expect them to travel out of what they have always practised; and if proof of this be wanted, it is to be found in the fact, that they have specially employed a staff of overseers, selected from Liverpool, who have been always accustomed to remove all nuisance from the streets, &c., by sweeping it up, and carting it away." "Any one who observes a scavenger's operations in sweeping even a paved court or lane, where filth has been thrown, will fully understand that the atmosphere has perhaps more power of producing evil *after the sweeping* than before it." This description, which is more graphic than complimentary, is shown, by their own published Report, to be substantially true of the labours of the Sanitary Commissioners at Scutari and Balaklava. The additional inspection parades, recommended by them and others for the detection of cholera, setting aside the alarm they would have created, must have been made without any consideration, or perhaps knowledge of the punishment they would have been, to men already worn down by duty. At home, in peaceable times, even one additional parade a day is considered a punishment; and I should like to know what any military man would have said to three additional parades a day in the Crimea, as was recommended by one gentleman, in a communication addressed to the Secretary of State for War. And as for Dr. Sutherland's grand scheme, which he takes so much credit to himself for suggesting, of setting men to watch the number of times soldiers obeyed the calls of nature in the open camp, or in the trenches, where about a third of them were daily employed, it is scarcely necessary to characterise it.

No army in this world was ever favoured with a greater number of suggestions from well-intentioned individuals, than the English army in the Crimea was; but, unfortunately, most of them were inapplicable to the wants of the period. For instance, one gentleman recommended vapour baths to be used in the Crimea for personal cleanliness and the destruction of vermin, at a time when there was insufficient fuel to cook the men's food with, and nothing but canvass cover to protect them from the inclement weather of the winter of 1854. Other suggestions that were made were of about the same value, in point of practical utility. And as for the remedies and specifics for cholera that were either recommended, or sent out by parties interested in their result, they were too numerous to mention, and ranged from extract of

arnica to burnt shoe leather! A munificent and kindly-intentioned gift of "Dalby's Carminative" was even included amongst the remedies forwarded for the use of Her Majesty's Army in the Crimea.

At page 35 in his Reply, Dr. Sutherland says I appear to have derived comfort from the comparison drawn between the sanitary condition of Balaklava and certain districts of London and other towns, in his letter to Lord Shaftesbury which was published in the *Times* newspaper. It was certainly a comfort to find such a candid statement, and I have no doubt the impression under which it was written was perfectly sincere, though the doctor seems now to be ashamed of it from the small portion he has quoted in his Reply. In the original, Dr. Sutherland stated for the information of his two friends, for whom he says the letter was written, "It will assist you further to estimate our sanitary condition if I compare it with things at home familiar to you. Balaklava harbour is much sweeter than the Thames, and the town is cleaner than *nine-tenths* of the lower districts of London, Manchester, or Liverpool. Liverpool dock basins smell worse every day than Balaklava did at the worst. When the town itself was held up to the reprobation of the civilized world, from its unburied carcasses and filth, it was not worse than entire villages I could name in our own country; and it was about on a par with the districts where knackers' yards, and private slaughter-houses, and unwholesome trades exist in the Borough, and where cholera was so fatal last year. I think it right to mention this comparison that the truth should be known."

"The same may be said of the sanitary condition of the camp. Putting out of sight the local malaria, the camp is in a much better state than the towns and villages at home, out of which the men have come."

Dr. Sutherland, in his Reply, confines himself to the last part of the first sentence above, which is confessedly the most unfavourable; and he adds that Balaklava, from neglect of sanitary precautions, had descended in six months to the unhealthy position that those at home had only attained after long years of neglect. Oh, Dr. Sutherland, fie! have you no shame in making such a statement?

Scutari.

At page 10, Dr. Sutherland says I ought to have stated that the cleansing and whitewashing of the barrack rooms at Scutari were written about at the request of Lord Raglan, and that there

appears to have been no sanitary advice given by any one regarding the Kulali palace, or stable hospitals.

It is necessary I should state that nearly one of the first things I did when I joined head-quarters at Varna, in June 1854, was to recommend to Lord Raglan that the upper part of the west front, and one half of the south front of the main barrack at Scutari, should be given over to the medical department, in order that the rooms might be purified and fitted up for the reception of sick. I also requested that the hospital at Abydos might be completed, and that application should be made to the Turkish Government for the remainder of the general hospital at Scutari, and for the upper wards of the military hospital at Kulali.

The barrack and riding school hospitals at Kulali were fitted up under the immediate superintendence of 1st Class Staff-Surgeon, Dr. Tice; and those of the stables and Hyder Pasha palace at Scutari, under the supervision, I believe, of the principal medical officer there.

I had no personal knowledge of these buildings, and my duties in the Crimea were so constant and laborious, that, after October 1854, I had no time to visit them; but this was the less called for, as early in 1855 they came under the supervision of an old and experienced officer of my own rank, who, I have no doubt, will be able to give explanations of many things that are stated in Dr. Sutherland's Report. After October 1854, my control over the economy of the hospitals at Scutari was merely nominal, as the principal medical officer reported direct to London; but, in my capacity of principal medical officer of the army, I was to a certain extent held responsible for their condition, and of this I have no right or wish to complain.

The conversation with Lord Raglan, quoted in my letter to Dr. Menzies of the 13th August, 1854, and referred to by Dr. Sutherland, was evidently given to add weight to my instructions; but it can hardly be adduced as a proof, nor would it be so taken by any one acquainted with the forms of official military correspondence, that the idea originated with Lord Raglan, which it certainly did not.

The subject of hospital accommodation had been matter of conversation between us on several former occasions, and when the barrack rooms at Scutari were finally given over to the medical department, he directed me to urge on Dr. Menzies the necessity of taking immediate steps to get them purified. He also instructed me to desire him to apply direct to the principal dragoman of the embassy at Constantinople, for anything he might require from the Turkish Government, in place of sending

his applications through other channels; and in the same communication I pointed out to him the portion of the barracks which I thought he ought to avoid, on account of its faulty drainage and want of repair.

At page 11, Dr. Sutherland quotes from a letter of mine to the Director-General of the Army Medical Department, under date of the 28th October, 1854, and makes me say that the hospitals at Scutari "were in a very satisfactory condition." In the copy of my letter of that date I cannot find this expression; but I see I pointed out to him the discomfort that was occasioned, on the first opening of the barrack hospital, by the non-arrival of boards and tressels, which I had ordered on the 3rd of September, 1854, to be sent down from Varna, and mentioned that 500 sets had then been received, which had enabled us to put the whole hospital establishment at Scutari "in a very creditable state," and that the sick and wounded were all doing as well as could possibly be expected. I further stated, that by the strenuous exertions and unceasing labours of 1st Class Staff-Surgeon Dr. Menzies, and the medical officers under him, our difficulties had, in a great measure, been surmounted, and in a short time, I flattered myself, we should have an hospital establishment that would bear a comparison with any other of the same magnitude, formed under similar disadvantages.

Such was my opinion at the time, and such it still remains, notwithstanding the popular indignation, which, Dr. Sutherland says, "was at that very time roused throughout all England concerning them;" and I think I was borne out in my statement. Each patient had a comfortable bed and bedding all perfectly new, the rooms and galleries were clean and not overcrowded, as there were 600 spare beds in the hospitals at Scutari at the time my letter was written. The privies and drains, of which so much was subsequently said, were not then in any way offensive, and distant as the privies were from each other, and separated as they were by a room and passage from the corridors, and placed as they were in a distinct building at the inner angles of the barrack which measured 840 feet by 630 feet, it is difficult to conceive how, with an outfall of the drainage of 148 feet in less than 200 yards, they could under almost any circumstances have become so offensive and pestilential as they are represented to have been by the Sanitary Commissioner, for it must be borne in mind that the lower floor of the barrack was not occupied by sick. I am censured by Dr. Sutherland, and accused of ignorance and incompetency, for having allowed sick and wounded men to be placed in wards at the barrack hospital, Scutari, which

measured on an average 49½ feet in length, 31¾ feet in breadth, and 15½ feet in height, each ventilated by three large windows opening outwards, and a door and two or more windows opening inwards into a corridor 18 feet wide, running the whole length of the building, which had numerous windows, and communicated with the inner square by means of large well staircases at certain intervals. With favourable weather, a class of patients by no means severe, and the regulated allowance of five feet of surface wall for each, few medical men, I fancy, will think there was anything so very faulty in this arrangement as a temporary expedient, nor will they perhaps consider that the necessity of resorting, in the first instance, to the more elaborate and scientific alterations of the building which were subsequently carried out by the Sanitary Commissioners, was so urgent as has been represented; but even had it been so at the period of its first occupation, there was neither time nor means to effect them.

In the course of the winter of 1854-5, the hospitals at Scutari became more crowded than was desirable, from the great influx of sick sent down from the Crimea; but that was matter of necessity, not choice, and the privies and their approaches may occasionally have been rendered dirty and offensive by the negligence of the hospital servants, but this could only have affected the corridors in their immediate neighbourhood, and not the whole of the 28 wards opening out of them, as one would be led to infer from reading Dr. Sutherland's statement, which leaves an impression as if the privies opened directly into the wards where the sick were. Whereas, the privies were placed in the barrack hospital in detached buildings, in the inner angles of the square, and in the general hospital, in detached buildings at the outer angles of the square; and I can hardly imagine the principal medical officers at Scutari would have allowed such a nuisance, as is described by Dr. Sutherland, to exist in the hospitals there.

Unfortunately, much sickness, and lamentable mortality, occurred in the British army, during the winter of 1854-5; but when the Sanitary Commissioners arrived at Scutari, in March 1855, sickness was diminishing rapidly, and the cases of diseases which presented themselves, were of a much milder character than they had been during the winter. The Sanitary Commissioners, in their Report, gave a table showing the decrease of sickness and mortality in the Scutari hospitals after their arrival, which they ascribed to their own sanitary labours in and about the buildings; but as this did not strike me to be a correct deduction, I stated in my observations that the diminished number of sick, and milder nature of the cases of disease sent down to the hospitals at Scutari

from the Crimea, after their arrival, might have influenced the results more than their flaps and traps in the privy drains; and as an example, I mentioned the number that had been embarked, and the number that had died on the passage during two periods, the one immediately preceding, and the other immediately following the arrival of the Commissioners. I put this in as plain a manner as I could, and I thought it would have been intelligible to every one, but Dr. Sutherland has so mystified it by his subtle reasoning, that I can scarcely recognise my own statement; and the shortest way I suppose will be to admit, that, because the Sanitary Commissioners trapped the privy drains in the barrack hospital at Scutari, sickness and mortality diminished in the Crimea.

To prove that deaths on board the hospital ships had no relation to the deaths in hospital at Scutari, Dr. Sutherland instances the month of December 1854, when a number of the sick embarked at Balaklava were labouring under cholera and its sequelæ; and the month of February 1855, when the hospitals at Scutari were filled with fever cases that had been accumulating during the previous month. In the one case it was reasonable to expect death to occur more speedily, and in the other, in addition to the chances of serious fever cases sent down there for treatment, the worst cases of those embarked for Smyrna and Abydos were removed from the ships as they passed Scutari. This alters the doctor's proposition very much, and in his comparison between the Crimea and Scutari he leaves out of sight the fact that every slight as well as every serious case of disease admitted into hospital is included in the former, whereas during the winter of 1854-5 only serious cases of disease were sent down to the latter.

In my abstract of admissions and deaths in the Crimea, from December 1854, to August 1855, I omitted the strength of the army, to save figures, which I admit I ought not to have done; and the doctor is quite witty on the subject: but, respectable as the increase of the British force in the Crimea was, it bore no relation to the comparative numbers of 25,000 and 2,500,000, which have been adduced as an example by Dr. Sutherland.

At pages 14 and 27 of his Reply, Dr. Sutherland gives two of what he calls corrected statistical tables, both of which are erroneous in almost every particular, but taken even according to his own showing, they tell against himself, and prove that sickness and mortality had begun to decrease in the army before the arrival of the Sanitary Commissioners at Scutari, and continued to do so until the month of May 1855, when they began to increase again; but it would be as unjust to charge this increase to the Commissioners, as it was unfair for them to claim the merit of the

decrease which had commenced before their arrival in the country, for both these changes were owing to causes over which their trifling sewage operations at Scutari had not the remotest influence. I do not know from what source Dr. Sutherland obtained information for the two Returns which he has given in his Reply, but the annexed tables, copied from documents in my possession, will show how erroneous they are, and what little reliance can be placed on conclusions drawn from such false premises.

No. 1.—*Copy of Return, inserted at page* 14 *of* Dr. Sutherland's Reply.

Months.	Sick embarked at Balaklava.	Died on Passage.	Deaths per 1000 on Sick Embarked.	Hospitals at Scutari and Kulali.		
				Mean Sick Population.	Deaths per 1000 of mean number.	Period of Sanitary Improvement.
1854.						
September	3,987	311	78	. .	. .	
October	1,721	76	44	2,016	128	
November	1,902	103	54	3,119	115	
December	3,339	314	94	3,457	144	
1855.						
*January	2,144	172	80	4,440	316	
*February	2,178	41	19	4,178	427	
*Three weeks ending March 17th	1,067	5	4·6	3,779	315	Three weeks ending 17th March, 1855.
April 7th	860	4	4·6	3,306	144	April 7th.
„ 28th	793	8	10	2,803	167	„ 28th.
May 19th	471	—	—	2,018	52	May 19th.
June 9th	415	1	1·6	1,504	48	June 9th.
„ 30th	890	8	9·0	1,442	22	„ 30th.

No. 2.—*Return compiled from original documents furnished to the* Inspector-General *of* Hospitals in the Crimea.

Months.	Number of Sick embarked from the Crimea.	Died on Passage.	Deaths per 1000 of Sick Embarked.	Return of Sick treated in the Hospitals at Scutari and Kulali.						Remarks.
				Remained in Hospital at the beginning of the Month.	Admitted.	Total treated.	Discharged.	Died.	Deaths per 1000 of cases treated.	
1854.										
September .	4030	357	88	..	..	..	..	..	..	Wounded from the Alma, and cases of cholera.
October . .	1774	77	43	2277	1401	3678	1311	211	57·36	
November .	1996	113	56	2256	3611	5867	1716	289	49·25	
December .	4393	325	74	3867	3101	6968	1911	504	72·32	Cholera prevailed, and very fatal this month.
1855.										
January . .	3440	230	66	4548	3900	8448	2046	1207	144·17	
February .	1884	23	12	5195	2688	7883	2204	1328	168·46	
March . .	960	5	5	4351	2833	7184	2637	555	77·25	
April . . .	1162	5	4	3792	1767	5559	2509	201	36·15	
May . . .	824	2	2a	2858	1878	4736	2333	95	20·05	
June . . .	1167	12	10	2308	1847	4155	2187	46	11·07	

a. Included as casualties in my observations, but on more minute examination of the Returns, I find they were sick Croat labourers, and ought to have been omitted, which would have made the number of deaths in the second period 17, instead of 19, as stated.

Return No. 2, shows so marked a decrease in the number and mortality of cases sent down from the Crimea to the hospitals at Scutari, for treatment, during the month of February 1855, that it is almost superfluous to state, that a favourable change in the health of the army had commenced before the arrival of the Sanitary Commissioners at Scutari; but if anything further were required to establish the fact, I might be allowed to quote the following extract from a communication of mine to the Director-General of the Army Medical Department, which was written on the 23rd February, and had no reference to any inquiry of this kind, so that it may be fairly taken as an unbiassed expression of my opinion on the subject:

"You will be pleased to learn that an improvement has taken place in the health of the troops of late, though I am sorry to say our sick list still continues very heavy."

"The type of fever which prevailed in the general hospital at Balaklava, and in the 93rd and some other regiments, has changed from the typhoid to the remittent, and even intermittent character. For a week or ten days preceding the 19th, the weather was mild and genial, and the men began to regain their health and spirits, but on the 19th, the wind changed to the north, and we had a violent snow storm during the 20th, but as yet I cannot observe that it has done much injury to the sick."

At the end of the month, in my weekly report to the Commander-in-Chief, I find the following observation on the same subject:—"It was wonderful to see the cheering effect the few fine days had on the health and spirits of the men; and as the winter may now be considered nearly at an end, I am full of hope and confidence."*

In the 2nd part of Dr. Sutherland's Return, it will be seen that the deaths per 1000 of cases treated, is calculated from the sick in hospital at certain fixed periods, and not from the whole number treated, which makes the mortality, that is lamentable enough in reality, appear excessive.

At page 27 of his Reply, Dr. Sutherland gives the following Table of admissions and deaths in the whole army, from December 1854, to May 1856:—

Months.	Admissions to Strength per 1000 per Annum.	Deaths to Strength per 1000 per Annum.	Months.	Admissions to Strength per 1000 per Annum.	Deaths to Strength per 1000 per Annum.
1854			1855		
December .	3888	721	September .	2004	121
1855			October . .	1380	49
January . .	4176	1173	November .	1176	52
February . .	2760	979	December .	1332	32
March . . .	2316	561	1856		
April . . .	1716	223	January . .	1116	21
May . . .	1944	202	February . .	924	9
June . . .	3396	318	March . . .	972	10
July . . .	2832	152	April . . .	840	8
August . .	2760	181	May . . .	720	7

From what data Dr. Sutherland has calculated the above table, I do not know; but it is at variance with the following per centages, which are taken from authentic documents.

In the following statement, the admissions are confined to those of a primary kind, as the transfers to general hospitals were only multiples of the same; but the

* In my sanitary observations on the Adjutant-General's Monthly Return for February 1855, the subject is entered on at greater length.

deaths include the whole mortality of the army, whether in general or regimental hospitals, or on board ship at sea.

	Per Centage of Admissions to Strength in the Crimea.	Per Centage of Deaths to Strength in all Places.	
April, 1854	3·9	0·07	
May „	10·2	0·09	
June „	9·3	0·06	
July „	17·5	1·33	
August „	28·2	2·84	Cholera in Bulgaria.
September „	22·3	3·10	Battle of the Alma, and Cholera.
October „	23·6	2·49	Battle of Balaklava.
November „	27·8	4·16	Battle of Inkermann, and Cholera.
December „	32·4	6·01	Cholera prevalent.
January, 1855	34·8	9·78	Fever.
February „	23·0	8·16	Ditto.
March „	19·3	4·68	
April „	14·3	1·86	
May „	16·2	1·69	
June „	28·3	2·65	Assault of Redan, and Cholera.
July „	23·6	1·27	Cholera.
August „	23·0	1·51	Cholera.
September „	16·7	1·01	Assault of Redan.
October „	11·5	0·41	Relieved from Trench and Night Duty.
November „	9·8	0·48	
December „	11·1	0·27	
January, 1856	9·3	0·18	
February „	7·7	0·08	
March „	8·1	0.09	
April „	7.0	0·07	
May „	6·0	0·06	
June „	3·6	0·02	

The above Table exhibits a gradual increase of sickness and mortality from April 1854 to January 1855, when, from the improved condition of the men, they began to decrease; and after the capture of Sebastapol, in September 1855, which relieved the men from trench and night duty, a marked improvement in the health of the army took place, which was never interrupted so long as it remained in the Crimea.

The doctor is indignant at the sewage operations of the Sanitary Commissioners being undervalued; and, at page 11, he gives a table of the works performed, in which he allows it to be understood that they were all carried out before the 30th of June, 1855, the date to which my observations allude. But if the reports of others be taken, it will be found that some of them were not carried out for eight or nine months afterwards, and others not at all.

The Sanitary Commissioners brought out with them skilled engineers and workmen, and were invested with almost unlimited

authority to hire labourers to carry out their views, and yet, according to their own showing, it is astonishing how very little they accomplished, and how many months elapsed before their more important works were completed—for to talk of so many hand carts or baskets full of rubbish removed from one place to another, is ludicrous to any one who knows what that really means amongst Eastern labourers. I say, with these advantages at their command, and knowing how little they really accomplished, and with what difficulty they accomplished that little, one might have thought they would have had more consideration for their brethren of the military profession who were less fortunately situated, and whose powers were limited to recommendations, which had to be regulated by the exigencies of the service, and due respect and consideration for those in command.

The system of what is called putting on record recommendations and demands that you know those in authority have no means of carrying out, only creates embarrassment, without serving any useful purpose, and ought to be discountenanced and despised by all upright men.

Dr. Sutherland, at page 1 of his Reply, says that I seem to think gaining of credit is the main aim of public service. I have certainly lived long enough to be very sceptical about the philanthropy of mankind. Most men have some object in view—something which they are anxious to obtain—whether it be mere credit or more solid advantages; and, from my intercourse with Dr. Sutherland, I should say he was no exception to the general rule.

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SOME REMARKS
ON
DR. SUTHERLAND'S PAMPHLET
ON THE
MILITARY HOSPITALS ON THE BOSPHORUS.

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ON

THE BOSPHORUS.

BY

ALEXANDER CUMMING,

INSPECTOR-GENERAL OF HOSPITALS.

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SOME REMARKS,

ETC.

I HAVE recently seen a pamphlet by Dr. Sutherland, in reply to Sir John Hall's observations on the report of the Sanitary Commission despatched to the Seat of War in the East, of which Dr. Sutherland was the principal member; and to the statements in this pamphlet I shall, as much as possible, confine myself; on my own account, as by implication affected by them, and as I conceive that sanitary improvement will not be benefited by what I consider to be misstatements, and by, if not unfair, at least erroneous conclusions.

I had hoped that all controversy respecting Crimean matters had long since ceased, and that quite enough had been said when it was admitted by those occupying positions enabling them safely to judge that the chief cause of all our difficulties was the state of unpreparedness in which we undertook the campaign; and I may add, that the hurried measures we were consequently called on to adopt in order to overtake and remedy defects, proved, in no small

degree, productive of embarrassment. For my own part, my only desire connected with the subject has been that the department to which I belong should be rescued from the neglect it has heretofore experienced, and rendered to the fullest extent capable of contributing to the health and efficiency of our troops.

Before proceeding further, and as it appears to me that no one who was not at Scutari during the winter of 1854 and 55, and indeed but few of those who were there, has perfectly realized what the hospitals were, I shall endeavour to give, briefly, some idea of the Sultan Selim Barrack, better known as the Barrack Hospital.

This building is of great extent, the corridor being about the third of a mile, and capable, it was said, of containing nearly 10,000 men. A good many years ago, a considerable part of it was burned down, and the whole of the western side of the quadrangle, and half of the southern, being the parts destroyed and subsequently rebuilt, afforded much better accommodation than the eastern and part of the southern sides; the rooms in the former being larger, and not encumbered with wooden galleries and other fittings, which rendered those of the latter much less spacious and less airy.

As occupied by us the building has always been spoken of as an hospital, and no doubt that, by most persons, it has been strictly considered as one. It might, however, with equal correctness have been

called a barrack; but even that term is too restricted; and considering the heterogeneous composition of its inmates, a military colony would perhaps be a more appropriate name.

In addition to the great number of sick and wounded, it afforded accommodation to the men composing the dépôt, varying in strength from a few hundreds to upwards of a thousand, and also to about two hundred women and children; the former the wives of soldiers serving with their regiments in the Crimea, or the widows of men who had died or fallen in action.

The basement being constructed for storage, one part of it was appropriated to the extensive supplies belonging to the Commissariat, and to the apothecary and purveying departments. In another part were deposited the stores belonging to regiments in the Crimea, consisting chiefly of heavy baggage of different kinds. Near this were the Canteen and several other temporary wooden buildings, and a large Turkish kitchen, in masonry, in course of construction, which continued slowly progressing for months. Besides these were the daily provision stores of bread, meat, rice, &c. &c., for the whole of the troops and others entitled to receive rations at Scutari; the Engineer's stores and workshops, including a blacksmith's forge; various offices, amongst others a post office, which soon became of equal magnitude to one in a considerable country town. In the upper corridor of the north side, was the Provost prison,

in which men under sentence of court-martial, or otherwise, were confined; and adjoining, some rooms where divine service was performed. In the corridor immediately below, were a guard-room and a large armoury, where arms were stored and repaired. The wards opened on the corridor, both spacious, having a height of over 15 feet, and the latter a breadth of about 16 feet, communicating with one another and the quadrangle by means of very wide and lofty stone staircases, affording with the numerous windows of the corridor, perfect ventilation. Interspersed amongst the wards, generally betwixt every two, were officers' quarters, consisting of moderate-sized rooms looking outwards, and a small ante-room looking on the corridor. These quarters were for the most part occupied by sick and wounded officers, or by the medical officers and others doing duty at Scutari.

In the Barrack Square which never had been properly constructed or levelled, and part of which had been much cut up by the enormous deal of traffic connected with the establishment, wooden huts were erected in January, 1855, sufficient to accommodate temporarily, from 600 to 800 men; but they never were occupied by sick or wounded, and were only in part used by duty men, and by convalescents previous to their final discharge.

The eastern side of the building, and part of the southern, were, up to December, 1854, comparatively a ruin, and altogether unfit for occupation;

the sashes of the windows broken, the flooring destroyed, and the paving of the galleries so broken and displaced, looking more like a torn-up street than anything else I can compare it to, that the repairs which were required seemed so formidable, that the officer of engineers had some hesitation in undertaking them.

It will, no doubt, immediately strike every one, that the great defect here was the presence of the dépôt with its numerous accompaniments, which, in a measure, necessitated the building being made a public thoroughfare, and once within the gates, there was a ready access to every part of the establishment. This was, in fact, our chief embarrassment; the presence of so large a number of men, women, and children, in the midst of so many sick and wounded, not only deprived us of the hospital space so much required, but created an amount of inconvenience I need not allude to. But it was a choice of evils. What was to become of the stores? Where were the duty-men and convalescents to go to? Where were the women and children to be lodged? No doubt there were numerous buildings in the village of Scutari, but they were wooden ones; and considering the numbers of discontented Greeks by whom we were surrounded, and who preyed on our stores, doubly liable to fire; a possible occurrence which I believe haunted the minds (certainly never absent from my own) of those responsible for, or interested in the safety of the establishment, and

which, at that time, would have been a dire calamity, and one from which possibly our mere numbers saved us.*

The Inspector-General of Hospitals did everything in his power to effect the separation so much desired. He strongly urged it both in January and February, 1855, before the Sanitary Commission was heard of; in the latter month he assisted in the choice of a site on the adjoining common, for the erection of huts, which were commenced as soon as possible; and he did not cease to hasten their completion, both verbally and by letter, until they were fit for occupation. Now, I ask, is Dr. Sutherland justified in the statement that the Sanitary Commissioners removed all soldiers from the hospital? These gentlemen arrived on the 6th of March, the huts were commenced in February, but were not ready to receive the dépôt until the first week in July, and I cannot conceive in what way they either led to their erection, or hastened their completion.

* Those who have lived for any time at Constantinople must have been struck with numbers of fires constantly occurring, and to which the Asiatic side of the Bosphorus is not an exception. The French had one of their largest hospitals, situated near Pera, capable of containing 1,200 beds, entirely consumed, and it was said that several of the patients perished. Our hospital at Kulleli, early in 1855, had a very narrow escape, and at a later period a large collection of forage stored there was destroyed. A commissariat store further down the Bosphorus was much injured. Part of Hyder Pasha, when used by us as an hospital, twice caught fire; and the Harem Hospital, when turned into a barrack in 1855, was burned to the ground.

Connected with the removal of the dépôt from the hospital, I may here mention that in May, 1855, cholera made its appearance at Scutari; and, from the manner in which the Sanitary Commissioners allude to it in their report, it should seem that they view the moving of the dépôt and the disappearance of the disease as cause and effect. As this outbreak of cholera, although comparatively trifling, had something about it rather remarkable, and perhaps instructive, I shall here give a brief account of its appearance and progress.

On 20th May, 1855, an Italian seaman was admitted into the Barrack Hospital from a Greek vessel laden with Government stores. He was in a state of collapse, and died the same evening. On the 22nd two cases, one the steward, the other a patient, appeared in the Harem Hospital at Hyder Pasha, about a mile and a half distant, both proved fatal, one the day of attack, the other on the 24th. No more cases appeared there. On the 25th a case appeared in the Barrack Hospital, and died in a few hours. The disease then showed itself at the General Hospital, and carried off five men. After an interval of three or four weeks it made its appearance at the Barrack Hospital, where we lost in all six or eight, partly amongst the men composing the dépôt, and partly amongst those in hospital; but it is difficult to localize them, for a man might be to-day in the hospital, and to-morrow at his duty; the last occurring on 30th June, when it may be said to have

terminated. The dépôt commenced moving into the huts on 2nd July; but it appears to me that it is carrying the "post hoc ergo propter hoc" mode of reasoning a great deal too far to attempt to connect the two events, and that it would be more philosophical, and in the end more conducive to a better knowledge of the disease, at once to confess our ignorance, than to trust to such logic as this. By similar reasoning I might prove that the very severe outbreak which occurred in November following was dependent on the attempts made to improve the sanitary condition of the hospitals during the previous six or eight months.

Let any one for a moment consider the amount of daily débris necessarily arising from an establishment such as I have described, and the quantity of rubbish, so carefully noted, cannot, I think, be considered large. After a week's work, the Inspector of Nuisances had removed two hundred and two hand carts, or baskets, of sweepings from the *village of Scutari*, the Barrack, and General Hospital; and, from the complaints he made of the laziness of the Turks (who had taken the place of the ordinary fatigue parties), and the difficulty he had in making them work, it is not to be presumed that the baskets were overloaded. I perfectly well remember to have seen that removed from the Barrack, not from the Hospital proper, which was deposited about twenty yards from the eastern gateway, and where, by the bye, it was allowed to remain. Had the Sanitary

Commissioners found it there, it is possible that it might have been noted as a nuisance. The dirty little streamlet which ran a few yards farther eastward, at the bottom of the ravine, was severely animadverted on, and ordered to be covered over; but I believe this was never done, certainly not up to the end of 1855. The fifteen dead dogs which were found in the neighbourhood will astonish no one when made aware that dogs in Turkey, although very numerous, are without masters, feeding solely on what they can pick up; that they congregated in packs on the adjoining common and the precincts of the Barrack and hospitals, and that they were constantly being shot down, from the time of our arrival, as disturbers of the peace. In one respect, however, they may have been of service; for the least particle of decaying animal matter of any kind was never to be met with.

Where there were so many cavalry-horses, of course several died, and I can hardly conceive that the officer in charge would have allowed them to remain unburied, and I presume that those mentioned by the Inspector of Nuisances were some which, had he not been there, would have been buried by others. Such is the usage everywhere; and had it been different at Scutari all England would soon have heard of it. I remember Mr. Wilson coming to me about a complaint which had been made, that he had buried one not sufficiently deep, and my going and satisfying myself that there were no grounds for it.

To show, however, to what extent the exigencies of the service interfere with and control the most important sanitary arrangements, I must not omit to mention that, although the dépôt was removed from the Barrack Hospital in July, 1855, it was found necessary again to occupy it in November with a battalion of the German Legion: perhaps a more objectionable occupation than the previous; and which took place, I rather think, when Dr. Sutherland was resident at Constantinople.

I should be very sorry to have it for a moment supposed that it is my intention to deny that the hospitals admitted of improvement, or to disparage in the slightest degree the importance of sanitary arrangements. I know their value too well, and have had too often occasion to notice the want of them, to think of doing anything of the kind; and I am all the more anxious that facts should be correctly given, and just conclusions drawn from them. I do not, for instance, like to see a construction which ensured perfect ventilation altogether ignored, and then the conclusion come to, and given to the world, that certain effects followed from a cause which had no existence. In what I have further to say, therefore, I shall not only have to correct some other statements, but to question deductions drawn from premises which may be allowed to be true. With the very best intentions we are all liable to error, and it is not surprising that those who devote themselves to a speciality should, with

a natural desire to support it, be unconsciously, in some instances, led astray even as to facts, and disposed to push their views a little too far.

The gentlemen composing the sanitary commission arrived at Scutari on 6th March, 1855; and in a letter dated the 8th, Lord William Paulet informs Lord Panmure, "that Drs. Sutherland and Gavin, after making an inspection of the hospitals, expressed themselves agreeably surprised at their cleanliness and comfort, and state that there will be very little for them to point out here." Of similar purport, but in stronger terms, were the remarks made to myself by Dr. Sutherland when he accompanied me round the Hospital the day of his arrival.

In a letter to Lord William Paulet, dated 10th of March, in which the Commissioners enter into more detail, and remarking that the hospitals showed that much had been done for them, they observe,—

1st. "One special reason for the defective state of the former [the Barrack Hospital], is the want of a thorough draught, the ward windows being all on one side." This is altogether incorrect; every ward having not only windows opening outwards from the building, but two or more, according to the size of the ward, opening on the corridor. Coming from a Sanitary Commission, this statement is so extraordinary that I cannot even now comprehend how it could have been made; but I can readily understand Dr. Sutherland and others arriving at the conclusion, that

rooms so constructed must necessarily be imperfectly ventilated, and so far likely to be unhealthy. Had the Commissioners referred to the Report on the Hospitals in the Crimea and Scutari, they would have seen it there stated that the lighting and ventilation were the same in the Barrack and General Hospital; and, should they have any doubt of the grave error into which they have fallen, I dare say that, whatever alterations the Turks may have made in the Sultan Selim Barrack, they have not shut up the windows of which the Government Commissioners deny the existence.

2ndly. They state that "the flooring of the corridors consists mainly of unglazed tiles, perhaps one of the worst substances that can be used in an hospital." Now, this observation applies only to a very small part of one of them, time not permitting the officer of Engineers to procure a material similar to that with which the other corridors were floored; and he had therefore recourse to Malta stone for the eastern corridor, and to unglazed tiles for a very small part of the southern requiring repair.

On accompanying Dr. S. round the Hospital, when we came to this eastern end of the southern corridor, the flooring of which had been somewhat worn, a very small quantity of water was observable in one or two of the slightly hollowed tiles: he noticed this, and, possibly, concluded that the other corridors were flagged with the same material.

Alluding to the privies, and briefly describing

their structure, Dr. S. says, "There was a direct communication betwixt the out-buildings and the interior, so that the sewers were ventilated solely into the Hospital." This is incorrect, and much calculated to mislead, although not perhaps to the same extent as ignoring the windows of the wards. In going into those places from the corridors, one entered a room or antechamber of moderate size, with windows on both sides, the glass of which was in some instances absent,* and in many the sashes partly removed; and without going further, the use for which the building was intended might not have been discovered. A door, not opposite to the entrance but near the remote angle, led to the latrines, the construction of which I shall not attempt to describe, further than that, although both extensive and spacious, they were unsuited to European habits. By order of the Sanitary Commissioners, an opening was made through one of the false arches directly into the latrines,—not into the antechamber,—just opposite and within a few feet of the windows of the corridor; and standing here one day, which adjoined my own quarters, with the officer of the Royal Engineers, I expressed my surprise that the efflu-

* It was a very general practice with the Turks, to fix the glass in the window frames with a few common pins instead of putty; the consequence of which was, that the breakage was so enormous that it became a matter of consideration; and therefore, when panes were once broken, unless in wards where the want of them interfered with the comfort of the patients, they were not replaced—in the latrines never.

vium complained of had not been removed. He pointed to this opening as tending to increase it; and I must admit, whatever importance may be attached to the observation, that a more ready communication was thereby afforded with the corridors than previously existed. The truth is, that the latrines had been improved as much as they were susceptible of early in March, and it appeared very doubtful to me whether tampering with the drainage, as frequently happens, did not do rather more harm than good. Of one thing I am quite certain, that parts of the Hospital which had previously been inoffensive became the reverse.

In a note, Dr. Sutherland gives a summary of the sanitary improvements effected by the Commission, by which he would lead us to suppose that a marked abatement of the mortality followed. The table he gives, which I believe to be very incorrect, shows, according to his view, when this abatement took place; but it does not state the time when, and the extent to which, the sanitary improvements, to which the decrease of the mortality is attributed, were carried out.

Perforated zinc plates, one into each window, began to be introduced into some of the wards of the Barrack Hospital in April; into the southern side, with the exception of the lower wards, and into some in the western side; but into the eastern side, the worst part of the Hospital, not a single zinc plate was ever introduced, nor were they introduced

into the greater part of the northern side, nor into the lower wards of the western side.

The formation of ventilating shafts, of course, took a longer time, and up to the end of October I do not think that more than two or three existed in the Barrack Hospital.

To show to what extent the attempts made to remove the effluvium were successful, I here give an extract from one of the periodical reports of the Barrack Hospital, by the medical officer, Dr. M'Gregor, then in immediate charge of it. After alluding to the main sewer, extending from the building to the beach, for so long a time open and undergoing repair, and anticipating benefit from it when finished, he says, "Nevertheless, with all the care and ingenuity displayed, there exists from time to time a most offensive effluvium from the privies in this house, and which is most marked when the wind blows across the Bosphorus, or from the sea of Marmora. I have suggested that a small steam-engine be sent out to throw sea water into the privies, so as thoroughly to carry away any soil and other matters lodged in the pipes, and which, in my opinion, would tend more than any mechanical means, or disinfectants employed, in rendering these places clean and wholesome; for, with all the means in use, and care taken, it still seems that there is something wanting to remedy so great an evil." This report is dated 31st August, five months after the arrival of the Commissioners, and when flushing

tanks, and trapping of the sewers were in operation and stated to have worked so satisfactorily. A report dated 31st Dec. 1855, four months later, by another medical officer in charge of the hospitals, he says, "Since the privies adjoining the officers' quarters have been bricked up, one source of offensiveness, and probably a cause inimical to health, has been removed, but the general drainage of the Hospital is still very incomplete, and must continue so until some plan of drainage is devised and carried into execution, as nothing more than partial amelioration can be expected from local or partial repairs, deodorizing may destroy the offensiveness without destroying or neutralizing its deleteriousness."

From what I have stated I think it will be seen that the endeavours of the Commissioners were attended with no better success than those of the officer of the Royal Engineers during the winter.

It is worthy of remark, that although the structural arrangements varied in the different hospitals, and may have been more or less objectionable, it will be found that the rate of mortality in all was very much alike. At Kulleli, where the drainage was perhaps most defective, cholera never made its appearance to a noticeable extent, and when it did show itself it manifested no tendency to spread. Of the many hundred sick sent to Smyrna in February, the mortality during the first month, as usually occurred elsewhere, was even greater than on the Bosphorus, notwithstanding that the Hospital there

was for the first time occupied by us, and when a morbific influence could scarcely be supposed to have been generated.

At page 13, Dr. Sutherland says, that "the Commissioners did not overlook the probable influence of the improved health of the army in the Crimea, on the condition of the sick at Scutari, although not attaching to it very great importance, as they held it to be a self-evident proposition, that if the constitutions of the sick brought down from the front for shipment to Scutari had been ever so weakened by the causes of disease to which they had been exposed, they would be all the more liable to suffer from foul air, or similar defects, whether on board the transports or in the hospitals." This is no doubt in principle true, supposing the hospitals to have been the pesthouses Dr. S. appears so desirous of showing them to have been; but the conclusion he arrives at is very far from satisfactory, and I cannot help thinking that he would have done well to have carefully inquired whether there were any disturbing influences likely to interfere with it. He takes no notice whatever of the character of the diseases which then existed in the hospitals; and it would almost seem he entertained the opinion that the mortality was not at all due to any other causes than the want of proper sanitary arrangements; and he leaves it to be supposed that the difference in the mortality betwixt January, February, and March, and that in April and the succeeding months,

to be entirely due to the few sanitary measures introduced by him.

Without including the four or five thousand *wounded* sent from the Crimea to Scutari, it would vastly alter the rate of mortality had the sick brought down at one period been men not only weakened by the causes of disease, then so rife in the Crimea, but also labouring under complicated affections, such as extensive intestinal lesions, entire or partial loss of extremities from frostbite, or in an extreme state of emaciation and debility from cholera and fever, combined with a marked scorbutic diathesis; almost all certain to prove fatal under the most favourable circumstances;—or, at another period, chiefly men still debilitated, but convalescing, and who only required rest, shelter, clothing, and wholesome food.

There was another cause which added to the mortality at the latter end of February and beginning of March. About, I think, the middle of the former month six large steamers arrived off Scutari with sick for Smyrna. They were necessarily detained a short time, for the purpose of disembarking a considerable number of sick officers and receiving supplies of different kinds. This delay was of course taken advantage of to have the vessels inspected; and at the same time orders were given that the worst cases should immediately be sent on shore and admitted into hospital. As far as I recollect, upwards of forty of the most urgent were disembarked, even from one vessel, so late as the 20th or 21st of the month. All were in a very hopeless condition, and such was the character of the diseases that the greater part soon proved fatal.

Had Dr. Sutherland seen the men who arrived from the Crimea in January and February, as compared with those who arrived later, he would most probably have observed that almost all the former required to be carried, or assisted, to the hospitals, and that the latter were chiefly able to walk to them. This manifest sign of improvement was immediately remarked by every one, and justly attributed to the true cause—the improved sanitary condition before Sevastopol, which necessarily resulted from better shelter, food, and clothing, and in no small degree to milder weather.

In their report, the Commissioners state, that "both wards and corridors were used for sick at the time of our inspection, and the corridors had two rows of beds close together." This observation is ambiguous, and at variance with their letter to Lord William Paulet, of the 10th March, in which they restrict the two rows of beds to "*most* of the corridors." But if it means that the bedsteads touched one another, or nearly so, it is unquestionably incorrect, and which a paragraph a little further on corroborates; for they say, "At the time of our first examination the Barrack Hospital cannot be said to have been much overcrowded, as the estimated cubic space for each patient was from upwards of 850 to

1000 feet." Now, referring to the estimated accommodation made by my order early in March, the cubic space was in all the corridors, with the exception of one, in which it was 960, above 1000 cubic feet; and in all the wards, with the exception of eight, in which it was a little below, considerably over 900 feet, with 5 feet from centre to centre of bed. But the Commissioners add, "Overcrowding is, however, a relative term, the meaning of which must be settled with reference to other considerations besides the amount of cubic space. Lofty wards, such as were the corridors, may have apparently a large cubic space allotted to each patient, and may nevertheless be overcrowded, if the beds be too close together, and the cubic space mostly above them; the corridors had at the time two rows of beds, and we were of opinion that they were overcrowded, from this circumstance. Again, the capabilities of an hospital for thorough ventilation, also affects the question of overcrowding. A well-ventilated ward will accommodate safely a larger number of sick, than one of the same dimensions not well ventilated." The two concluding sentences were evidently written under the impression (delusion I may call it) that the wards had only windows on one side.

It is quite true that our necessities obliged us to place two rows of beds in the corridors, but a great deal will depend on how the beds were arranged if longitudinally, and not opposite to one another,

which was adopted as soon as diminishing numbers enabled us, there would, in my opinion, be no overcrowding; and, in fact, the only objection to the corridors was, that they were not so suitable as the wards, for men requiring quiet and rest; and for that reason they were as much as possible, latterly always, occupied by those out of bed, and those labouring under disease of little urgency.

It will probably be observed by those who have read the reports of the Commissioners that, in objecting to their use, they did not point out, or afford to us, any other available accommodation whatever for our sick and wounded, and the corridors were therefore used, as from the first intended, so long, and no longer, as they could not be dispensed with.

The relative mortality in the hospitals, and on board transports, is not to be depended on as showing the defective or improved sanitary condition of either. To ascertain this, it is also necessary to show the time vessels were on the voyage, whether they were sailing or steam vessels, and the time the men were actually on board. A low mortality on board a transport might be dependent on either the less gravity of the cases, or the shortness of the voyage, and *vice versâ*. For instance, to give an extreme case, a sailing vessel left Balaklava in January, 1855, and was so long on the passage, in consequence of some injury to her rudder, that fears were entertained of her loss. She had comparatively few sick on board, but I regret to say many casualties.

In dealing with figures, circumstances like those must be carefully attended to, otherwise they lead to the most fallacious results. Here is one of them. In a note, Dr. Sutherland says, "As nearly as we can ascertain from the data at our disposal, the approximate number of sick treated in the Crimea between 1st October, 1854, and 30th April, 1855, amounted to 38,786, and the deaths to 5,531, or 142 per thousand; while the mortality among the sick at Scutari, where they ought to have had every advantage, was 227 per thousand during the same period." Had the number of sick treated in the Crimea, as stated above, been cases of the same severity as those admitted into the hospitals on the Bosphorus, during the same period, this comparison, overlooking their conveyance from before Sevastopol to Balaklava, and thence to Scutari, might have held good; but as the admissions into the hospitals were composed of the very worst cases from the above number, including all the wounded from the Alma, Inkerman, Balaklava, &c., for longer or shorter periods under treatment, and who, moreover, underwent much privation and suffering before arrival at Scutari, the comparison is altogether unworthy of being entertained; and had Dr. S. wished to mislead, which I am far from supposing, he could not have had recourse to a more suitable statement; and I am not a little astonished that one so accustomed to deal with statistics did not see its fallacy. He ought to have known, likewise, that the 28,786

must necessarily include the many trivial cases which swell the daily sick state of a regiment.

There is one thing which the Sanitary Commissioners, looking at the hospitals from their special point of view, entirely overlook, and without which no sanitary arrangements, had they even existed from the commencement, and however perfect they might have been, could make amends. I mean the want of skilled hospital servants. The ambulance corps selected from the enrolled pensioners, men all more or less broken down from long service or previous disease, and no doubt many of them of intemperate habits, and all without previous training, had, I believe, disappeared soon after the army landed in the Crimea, and it became necessary to fall back on men from the ranks; not easily managed even as regimental hospital orderlies, but vastly less so when detached from their respective corps. Besides, they had all been recently in hospital, many only convalescing; and so great was the pressure for men to rejoin their regiments before Sevastopol, that no sooner had they acquired a slight knowledge of the duties required of them, and their health restored, than they were removed to proceed to the front—or, perhaps, which was a very common occurrence, dismissed for irregular conduct, or readmitted into hospital with relapses of fever or bowel complaint. So that, I think, I may safely say during the winter there was scarcely an orderly of two or three weeks'

standing as such. This remark applies still more strongly as regards the cooks,—bad cooking being a defect which runs through the whole army; and had it not been for the assistance we obtained from other sources, to which I need not further allude, we should have been much worse off than we were. Looking back, therefore, and reviewing the causes of our greatest difficulties, I have no hesitation in declaring my belief that the want of efficient orderlies was by far the most important, and that, had we possessed a corps of even partially trained and well-conducted servants, matters would have been very different from what they were, and the services of the Sanitary Commissioners in all probability never thought of.

Dr. Sutherland alludes to the occurrence of fever amongst the orderlies and patients; but I can hardly think he believes that, in the most satisfactorily constructed and best regulated hospitals, it would be possible where hundreds, week after week, in every stage of fever, were disembarked and admitted from the vessels conveying sick and wounded from Balaklava, that the attendants and others should escape; more especially when it is recollected that the orderlies had recently been patients, and had laboured under fever or some varieties of bowel complaint, and were therefore so much the more liable to relapse if overworked or intemperate.

Instead of merely alluding to a case of fever amongst the nurses, he ought to have made us

acquainted to what extent it prevailed amongst them. The number of these excellent women was considerable; and as they were employed, as a matter of course, in attendance on the worst cases, lived in the hospital, were very seldom absent from it, even for exercise, and, although carefully looked after, but indifferently lodged, their sanitary state ought to be no unfair test to what extent those buildings were deserving the character Dr. S. gives them. As far as I remember, there was only one death amongst them from fever, and but few attacks; and some of those, to my own knowledge, of a remittent type, which is always more or less prevalent on the Bosphorus.* Amongst the women and children, who for so long a time inhabited the barrack under more disadvantageous circumstances than the nurses, there was, I believe, not even one casualty from fever; and, as far as I recollect, not more than one or two from any other disease. Of gunshot, and other wounds and injuries, there were admitted into the hospitals on the Bosphorus nearly 5,000; and that number was almost exclusively received into those at Scutari, principally during the period they were most crowded. Amongst them fever can scarcely be said to have shown itself, and sloughing and erysipelas, no bad tests of the sanitary condition of hospitals,

* I have made inquiry respecting the liability to fever and the mortality amongst the nurses at the London Fever Hospital, and I am informed, from a source in which I have perfect reliance, that it exceeds very considerably that amongst those at Scutari. The average number employed is about 20, and in one year 14 died, and in another 9.

to a very limited extent. I very much doubt whether these diseases would have been less prevalent, or the casualties amongst the wounded less numerous, had the same number of gunshot wounds, under similar circumstances, been admitted into the hospitals of this city.

With regard to the supply of water, I am not aware that any want of it ever existed at Scutari, although apprehensions were at one time entertained; but I have no doubt that the measures adopted by the Commissioners may have tended to augment it. The quality was good at all the hospitals, although it may have contained more or less of impurities. At Kulleli some means of filtration were adopted, at the suggestion of the Commissioners; but at Scutari, nothing of the kind, so far as I am aware, (and I used the water nearly twelve months,) were had recourse to, with the exception of a few patent filters for the dispensaries, sent out in 1854, although Dr. Sutherland mentions amongst the improvements introduced by him, "covering tanks and filtering water for the sick," which I naturally conceive to apply to the other hospitals as well as at Kulleli. If the tank alluded to means the one in the Barrack Square, and I know of no other, covering it, as I observed at the time, was an unnecessary expense, as any water it contained, (it was for the most part empty, except after rain,) was never used either by ourselves or the Turks for potable or culinary purposes.

Respecting Kulleli, where more extensive alterations were made than anywhere else, and old barracks converted into hospitals, many of which were fortunately never required, the presence of the Sanitary Commission, having it in their power to initiate such arrangements as they suggested, was no doubt of advantage; but I must, at the same time, observe, that, perhaps, the very best hospital there, the Riding School, was laid out and occupied previous to their arrival, and that the latrines, which they allude to, constructed in the Barrack Square, were from the plans of the medical officers, similar to some they had seen in India, where there were difficulties in the way of efficient drainage.

Dr. Sutherland appears to attach blame to some one, because the hospitals and barracks were not rendered perfect as to sanitary arrangements previous to their occupation. I had something to do with obtaining possession of Hyder Pasha, and I know that there was both difficulty and delay in effecting it, and that it was impossible, with the time and means at our disposal, to do more for it than was done; and Dr. S. must know that the Turkish cavalry did not, however objectionable their presence there might be, leave the barracks at Kulleli until the summer of 1855. This difficulty in obtaining possession of buildings is not to be wondered at, as, since the Turks, who as well as ourselves required barrack and hospital accommo-

dation, were being displaced from every building they occupied, by the French and Sardinians on one side of the Bosphorus, and ourselves on the other, until they scarcely possessed one.

It has been with much reluctance that I have at all noticed Dr. Sutherland's pamphlet, but it contains statements so calculated to mislead, and so wide of the facts, that I felt myself called on to do so. I am not indisposed to admit, however, that the Commission may have been in the right direction; and although I do not attach much importance to its labours in the east, I hope it may prove the commencement of endeavours for the removal of defects in our barracks and hospitals, as well as in other matters relating to the wellbeing of our troops, which officers of the medical department have long been aware of, and have not failed to notice over and over again.*

I believe, however, that many of the diseases which prove fatal to our soldiers do not originate in their quarters, although I well know that they stand in need of great improvement; and their life is so exceptional and artificial, so monotonous, and to many so depressing, that, in constitutions having the least tubercular taint, consumption is certain, sooner or later, to be developed.

* About twenty years ago Sanitary Reports commenced to be sent annually from foreign nations, by order of the Secretary at War, for his information, and I believe they are still continued.

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II

HOSPITAL SERVICE

OF THE

FRENCH ARMY IN THE EAST.

(*Translated from the* MONITEUR DE L'ARMÉE *of the 20th of October.*)

THE *Journal des Debats*, quoting the correspondents of English newspapers, gave us two days back a painfully interesting narrative of the sufferings to which the wounded in Lord Raglan's army had been subjected, as well as the wounded Russians entrusted to the care of that army. When we recollect the attention that is bestowed by our neighbours on the other side of the channel, upon every necessity of the soldier, and even on superfluities for his comfort (*confort*), it is impossible to deny that the serious inconveniences pointed out in the accounts that have just been made public, are the results of an improperly adjusted financial arrangement, or of a negligence that painfully contrasts with that liberality which is the characteristic of the English administration of the affairs of the army and navy.

On the other hand, but a few months since, the organiza-

tion of the English medical and hospital service, was cited as a model for our imitation: our attention was especially directed to the fact that the English military surgeons had complete control over everything that related to the supplies and to the administration of their hospitals, and that as a consequence all would go on admirably well; and persons were not wanting who wished, when the question of re-organizing our medical staff was raised, that we should adopt this plan, so perfect, and so precise in its workings.

If affairs are really so well ordered in England, and if the reports that have arrived from the East are correct, we are forced to come to the conclusion that the English medical pre-arrangements were insufficient, not only in respect to the staff attached to the army, but also in regard to dressings, and to the material, and means of transport. In short, what would have been the result if a sudden hurricane had arisen, and separated the English even for a short time from their ships; if, in the absence of litters, the brave sailors had not been present to offer their oars; and if, moreover, their wounded countrymen had not found on the decks of these vessels an asylum, and some attention, though, as we see in the accounts of the overcrowding of the wounded, very incomplete!

It is consoling to the relatives of the brave soldiers of France, to find by the side of this recital of the sufferings which have weighed so cruelly upon the English army, evidence of the active and intelligent care which has preserved our own wounded. Thanks to the admirable organization of ambulances and hospitals in the medical service

amongst our troops, no sooner does a man struck in the ranks fall, than he is carried to the rear, where the regimental medical officer (*officier de santé regimentale*) pays the first attention to his wounds by the aid of the dressings which are at hand in charge of a soldier. If it is a severe wound, the sufferer is led or carried to the provisional post, where the chests of the regimental ambulance are established, and, if necessary, to the ambulance of the division. A sufficient number of attendant soldiers (*soldats infirmiers*), of seats (*cacolets*) fixed on pack-saddles borne by mules, are always in readiness to carry the wounded from the field of battle, and convey them to this ambulance, under the immediate direction of the officers of administration entrusted with that duty, and under the active *surveillance* of the deputy military intendant, in whose hands this important part of the duties of the administrative service is placed.

The English surgeons, it would appear, do not sufficiently appreciate the advantages presented by this plan of removing and transporting the wounded. They prefer to *cacolets*, which have answered so admirably in Africa, and which are at this moment doing such good service in the East, a species of ambulance waggon, upon which the London press, some few months since, delivered a pompous eulogy. We have seen a coloured plan of this carriage, and we are far from allowing it the merit which has generally been attributed to it.

The front part, divided from the rest like the *coupé* of our public conveyances, holds three sick men * who are capable of

* This is a mistake; the front part holds six, instead of three men.

sitting upright, but the seats are placed sideways, as in omnibuses. The back part of the waggon is arranged for the reception of four sick or wounded men, who are laid horizontally on frames made to slide in like drawers: two being placed at the bottom of the carriage, and the two others above, an arrangement similar to the berths in steam-boats.

This painful method * of transporting the sick soldier presents a number of inconveniences, especially for those placed in the lower frames. Moreover, the waggon cannot turn in every direction with the same facility as our pack-saddle mules; and thus the latter are infinitely superior in the field of battle, and also in a mountainous country, or in one which is difficult of access.

In our army, when it is required to transport such of the sick as a horizontal position is necessary to, litters are employed, which are also carried by mules. For the discharge of the sick and wounded from the provisional ambulance into

* It is very evident that the writer of this article had never seen the waggon which he professes to describe with so much accuracy, or he would not have used the expression "*painful method.*" All means which human ingenuity could devise were employed, in order to obtain an easy motion; and it was acknowledged by all those persons who subjected themselves to the experiment of being conveyed in the waggons that Mr. Holmes, the well-known carriage-builder, had been eminently successful in his efforts.

The writer also shows that he was unacquainted with the construction and capabilities of the vehicle, when, in the next paragraph, he gives it to be understood, at least by implication, that the wounded transported therein will be denied the benefit of pure air and daylight—an impossibility, inasmuch as each compartment is fitted with a Venetian shutter, extending its entire length, so that the interior may be aired and lighted to any extent that is considered desirable.

a regular hospital, our military waggons (*caissons*), hung on springs, are employed, with still more success than the English vehicle; for in ours, the sick soldier has at least the benefit of pure air and daylight.

We have said that at all times the attendant soldiers (*soldats infirmiers*) remove the wounded from the field of battle under the direction of the officers of administration for the hospital service, and under the *surveillance* of the deputy military intendants; and we think that a few more special particulars on this important subject will not be out of place here.

In our army, the surgeons are not required to burden themselves with any care relative to the organization and administration of the material of the hospitals and ambulances. Devoted entirely to the exercise of their noble calling, they practise it with a power the most supreme. The dispenser is at their side, ready to make up their pharmaceutical prescriptions; the officer of administration directs the employment of the material, and carries out alimentary prescriptions, of which he bears the responsibility.

The *infirmiers* (attendants), selected from the best-intentioned men amongst the troops, or from the young soldiers of the annual contingent, previously instructed in the military hospitals in all the duties of the holy mission which is entrusted to them, are all men of intelligence and feeling, all robust and well-framed: they are really the choice soldiers (*soldats de l'élite*).

Over all these, is the superintending military officer (*officier de l'intendance militaire*), who, according to the

orders which have been transmitted to him, directs the movement of the staff and the material of the ambulance, and orders the wounded to the temporary or permanent hospitals established by the military administrative, which are likewise under his authority.

In this organization, as complete as it possibly can be, every one has his share of action, of authority, and of responsibility. The man of science, as he should be, is the absolute master at the bedside of the sick. The dispenser and administrative officer, whilst they are called upon to comply with the prescriptions of the surgeon within such limits as the regulations have marked out, are, however, in no way subordinate to his authority, for they are both of them accountable and responsible. If they are involved in doubts, or disputes, they must refer to the deputy military intendant, whose decision is law to each.

Hitherto the *service*, and that is the essential, has worked well in France under these regulations of duties, against which only a few irritable grumblers have raised their voices. Let us compare the results in the two armies, and then pronounce an opinion on the respective merits of the two systems that are followed.

We will complete our explanations by giving a rapid summary of the resources which our military administrative has allotted to the army in the East, for carrying out the hospital arrangements.

Each corps possesses a surgeon and an assistant-surgeon, who have at their disposal for each battalion, or for two squadrons, an ambulance bag (*sac*), capable of being carried

wherever it is most needed, and a pair of chests furnished with drugs, lint, and everything necessary for the treatment of two hundred wounded.

If the corps makes any prolonged stay in camp, or elsewhere, a regimental infirmary is formed, and the magazines of reserve furnish for that purpose all the elements of organization.

Each division, or each detached brigade possesses, in addition, and in conjunction with the materials above mentioned, a regular ambulance, the materials of which belonging to two different sources, have been combined upon the spot, by the competent authority, in such a manner as to answer to the wants of the regiment consequent upon the greater or lesser amount of movement in the corps forming the division, or the detached brigade.

One of these sources is the organization of the ambulance of the army of Africa, the *materiel* of which is transported on the backs of mules; the other is the organization of the regular ambulances borne on waggons. In the combination of these two means, the latter serves as a reserve to the former, and is more particularly attached to the service of the advance post, or of the first line. The conjunction of these waggons forms a species of temporary hospital.

The moveable ambulance of Africa for a division of ten thousand men is composed of the following staff and material:—

Staff in its different ranks.

16 Surgeons and Dispensers.
7 Officers of Administration.
104 Hospital Attendants (*Infirmiers*).

Material.

8 Surgical chests, each containing 338 dressings.
4 Medical chests for drugs.
4 Chests of administration for material.
18 Reserve chests for the service of health.
22 Chests for the administrative service.
26 Chests (personal), for medical and administrative officers, &c.
10 Casks of Ptizan.
20 Hand litters (*brancards*).
200 Blankets.
50 Cart tilts for the sick, &c. (*bâches pour les malades, &c.*)
30 Tents.
24 Litters.
250 Pairs of seats (*cacolets*).

The whole resources amount to 6,500 dressings, distributed in the various chests for actual use, and in those of the reserve. The transport of all this material requires 364 pack-saddle mules.

The material of a regular ambulance for a division of ten thousand men is composed of five waggons, each carrying 2,000 dressings, and all the elements of a small hospital. The ambulance of a division of cavalry is only composed of three waggons. Each waggon is drawn by four horses.

The military administration of the army in the East possesses twenty-five waggons of ambulance so furnished.

To sum up, the total medical and hospital staff attached to the French army in the East is composed of—

276 Surgeons and Dispensers.
54 Officers of Administration.
50 Sisters of Charity (nurses for hospitals).
751 Infirmiers.

With respect to the material, independently of the resources of the interior service of the corps, and active ambulances, there has been already despatched from France, for the establishment of permanent hospitals at different places, a complete material for 7,700 sick; and this is irrespective of the establishment of a hospital at the Piræus, capable of accommodating five hundred sick. At the present time, a complete material for the organization of two new hospitals, for the reception of five hundred sick each, is being despatched; five hundred being the number chosen to represent the unity of each hospital. In short, large reserves of various objects have been organized, and more especially dressings.

With the aid of these supplies, we may reckon upon resources sufficient to provide 200,000 dressings. Nevertheless, from day to day ships leave France, to the reserve store established at Constantinople, with new supplies for the use of the service.

In the first instance, 1,000 iron bedsteads only were sent out, the temporary hospitals merely carrying mattresses, furnished with sheets, coverlids, &c.; but in consequence of successive supplies, the number of iron bedsteads amounts at present to 4,000, and will soon reach 8,000 or 10,000; so that the hospitals in the East have no cause to envy those of Europe.

The dispensing service is organized in the same manner as the administration, and is provided not only with drugs, but also with every material that is requisite. A central depôt, established at Constantinople, is furnished with every provision for replenishing the local stores.

The arrangements made for some years past by the military administration for regulating the method of packing the different classes of *materiel* required for hospital service, gives moreover every facility for determining before-hand the nature and importance of the means of transport required by each supply. The dimensions, the contents, and the weight, of each case are settled, hence results great facility for the rapid and sure despatch of this material. Thus, for a temporary hospital of five hundred sick, are required:—

Administrative material in all, 55 metres cube.* Total weight, 15,000 kilogrammes.†

Pharmaceutical material in all, 9 metres cube. Total weight, 1,800 kilogrammes.

Every hospital of five hundred sick is provided with drugs for three months.

As for the alimentary requisites, which the administration of the hospitals procures in a great measure upon the spot, the central administration occupies itself with the means of procuring for the sick a proper allowance of such special food as agrees with them, by establishing at the reserve depôt at Constantinople considerable stores of vegetables, preserved by Chollet's process.

* A metre is 39·3702 inches.

† A kilogramme is 2lbs. 3oz. 5dwts. 13gr. avoirdupois.

These details, the interest of which will doubtless excuse their length, bear the highest testimony to the enlightened care bestowed by his Excellency the Minister at War upon the perfect performance of the important duties of the hospitals, and upon the health of the troops, an object of constant solicitude to the Emperor. They prove, also, that the administration of war in all its movements justifies the confidence of the minister, and that in that respect, also, it is enabled to present to foreign armies some principles worthy of imitation, and examples worthy to be followed.

HAUSSMAN.

Printed by Stewart and Murray, Old Bailey.

LIBRARY OF THE MEDICAL DEPARTMENT OF THE ARMY.

II

NATIONAL SOCIETY

FOR

Aid to the Sick and Wounded in War.

From the Times Newspaper.

LETTERS

RELATING TO

OPERATIONS OF THE SOCIETY

IN THE

RUSSO-TURKISH WAR

25th *OCTOBER*, 1877.

LONDON:
PRINTED BY SAMUEL GOLDSTURN, 76, PRINCES STREET,
COVENTRY STREET, W.

National Society for Aid to the Sick and Wounded in War.

RUSSO-TURKISH WAR.

Extracts from Letters by J. S. Young, Chief Commissioner in Turkey, of the British National Society, and by Doctor Armand Leslie, Doctor Harry Crookshank, and Mr. Schofield; also the Report of Mr. J. Furley's visit to Montenegro; and Letter from A. K. Loyd respecting Aid to the Russian Army:—

"*To the Editor of* "THE TIMES," *and other Morning Papers.*

"SIR,

"I have the honour to request that you will be so kind as to insert the enclosed letter from Mr. Young, Chief Commissioner of the National Aid Society in the Black Sea. Your readers have hitherto received harrowing accounts of the miserable and destitute condition of the wounded soldiers engaged in the East. They will be glad to learn some details of the endeavours being made by this and other societies to relieve the great sufferings described by your correspondents and others at the seat of war. This is my excuse for sending you Mr. Young's letter, which

clearly describes the plan of operations which he has laid out for carrying on his work. You will see that he is in hearty co-operation with the agent of the Stafford House Committee, which is obviously to the advantage of both societies, and for the good of the cause which we have in common. In a future letter, by your indulgence, I shall hope to show what has been done by the society on the Russian side, but clearly at present the wants of the Turks are far greater and more pressing than those of their adversaries, and the first movements of the society are consequently made on that side.

"I am, Sir, yours, &c.,

"R. LOYD-LINDSAY.

"30*th July*, 1877."

"CONSTANTINOPLE,

"*July* 19*th*, 1877.

"DEAR COLONEL LOYD-LINDSAY,

"Our passage from Malta here was not so quick as anticipated, as we had from stress of weather to put back and lie for best part of a day under the shelter of the island of Eubea. We reached the Scutari anchorage about midnight on the 14th. Next morning, on proceeding to the Embassy in Pera, I found that the Ambassador and staff had removed to summer quarters at Therapia, where I at once proceeded and obtained from Mr. Layard every information as to the sad state of affairs throughout the Turkish dominions, and he advised our rendering assistance in Asia Minor, at Erzeroum. I saw Hobart Pasha the same day, and received from him information and advice which have been most valuable. Mrs. Layard I also saw, and she expressed her gladness that we should have arrived so opportunely when applications for help, especially at the scene of active operations, were continuous from all sides. Mrs. Layard also said they would assist us with supplies in kind hereafter.

"Next day, the 16th, I went to visit his Excellency Said Pasha at the Sultan's Palace, and at once he accorded such assistance as has enabled us already to send a portion of our medical staff, with complete equipment, to the scene of active operations at the Balkan front. He arranged, before my visit terminated, that special instructions should be issued to the President of the Ottoman Red Crescent Society, which the Sultan directly interests himself in personally, to obtain from the Government Department the requisite authorization for every facility in carrying out the object of our mission to be afforded by all Turkish authorities, and these instructions were actually sent by a special messenger, who was directed to take us to Arif Bey, the President of the Red Crescent Society. Arif Bey and several members of the Executive Committee of the Red Crescent Society were found hard at work, and received Dr. Armand Leslie and myself with the greatest cordiality. On my making known specifically in writing my wishes as regards the authorizations to be obtained from the Government Department, so energetically were steps taken to comply that between nine and ten next evening I was placed in possession of special authorizations from the Grand Vizier, Seraskierate, and Custom authorities, giving every one of our staff fullest facilities for carrying out the object of our mission. This result shows that energy is not wanting in our sister society here.

"By means of these special authorizations I was enabled to despatch Dr. Armand Leslie and Mr. Meyrick, with an interpreter and four field *infirmiers* and an equipment so far complete as to enable him to work at once at the front, this morning to Adrianople, thence to join the army on the Balkan front under Raouf Pasha. I enclose a copy of my instructions to Dr. Armand Leslie, from which you will see that I have arranged with Mr. Barrington Kennett, who arrived here from Varna the same day as we reached here, that as we are equipped to undertake work at the front at once, the front should be the special sphere of operations of this society, and that we should evacuate our wounded or sick to the

Red Crescent or Stafford House Committee's Hospital where practicable, and in this way avoid the different voluntary working on the same ground or sphere.

"I received your letter of July 6th, with enclosures, the Russian Authorities' reply as to our rendering aid to them. I note, also, the substance of Captain Trotter's telegram from Erzeroum. Regarding the latter, my telegram of to-day would acquaint you with my determination to render assistance there. I purpose sending Mr. Hope and Ralph Leslie there with as large a convoy of supplies (including warm clothing for the winter, which commences, I learn, about the beginning of September) as I can find transport for. I have engaged the young man strongly recommended by Mr. Hanson, Banker here, to proceed with this division as interpreter, and in charge of the convoy and transport arrangements. He has a knowlege of all that part of the country.

"Unless difficulties of clearance of the vessel may occur, owing to to-morrow being the Turkish Sabbath, I hope to leave for Varna to-morrow to endeavour to establish communications with Dr. Crookshank, copy of whose letter to you of the 26th of June I received with your letter of the 6th of July. I much fear that he is in Rustchuk, and that communication from Varna is now cut off, in which case I shall do nothing at Varna, but proceed without delay to Trebizonde, as the Stafford House Committee and Red Crescent Society are already at work in and about the neighbourhood of Varna. Should I, however, find Dr. Crookshank, I will equip and place him on that side in the same way as I have equipped and placed Leslie on this side.

"I attended, with all our medical staff, a meeting of the Red Crescent Society held at the Palace of Dolmabaghtché yesterday, where our mission was referred to in the most grateful terms. I also conveyed to the meeting our grateful thanks for the very great assistance and energy shown by Arif Bey, Dr. Sarel, Dr. Bartoletti, and Dr. Vitalis, and the Committee of the Red Crescent Society,

in obtaining for us our special official authorizations. On every side there are appeals for help, but unfortunately the distress that is daily becoming more and more felt amongst all classes throughout the country prevents the possibility of the inhabitants being able to do anything in the way of adequately meeting the need of the daily-increasing numbers of suffering soldiers, and I was glad to hear that the Aid Society of Berlin had decided to send a moiety of a grant voted for the sick and wounded in war to Turkey.

"An hospital is now being equipped by the Red Crescent Society at the mouth of the Bosphorus, Black Sea, for 400 patients. I have contributed 200 blankets.

"These have been our first four days' work, and I hope soon to be able to send you further accounts of good progress.

"Yours sincerely,

"J. S. YOUNG."

"TREBIZONDE,

"27*th July*, 1877.

"DEAR COLONEL LOYD-LINDSAY,

"I take the opportunity of a French steamer leaving at once for Constantinople to apprise you of our arrival here from Varna.

"As I was on the point of leaving Varna information reached me that H.M.S. *Rapid* was leaving the same night with H.M. Vice-Consul and the Civil Governor of Varna, to visit some villages on the coast not far distant, at which it was reported that some of the inhabitants had been killed and wounded. As it was reported that the wounded were in considerable numbers, and the only medical assistance available being the surgeon of H.M.S. *Rapid*, I determined to follow the *Rapid*.

"At Kaliakra Point, the inhabitants of many of the surrounding villages were found bivouacked together, having fled from their homes, but one wounded man only was found, from whom

a bullet was extracted by the surgeon of the *Rapid*, and taken on board that vessel for conveyance to Balahjick. Kavarna was next visited, and found to be a scene of complete desolation; what was once a considerable village having been pillaged most completely; not a house but what was wrecked and the contents burnt or destroyed. The churches were destroyed, fire having been applied to them, and only the outside walls left standing. The inhabitants had fled, but there were a few stragglers, strangers to the place apparently in almost every case, whom we met. Not a woman or child was to be seen, only dogs, cats, and, strange to say, some hundreds of geese, showing that the plunderer had had other material more valuable and portable. But the worst remains to be told. In the yards of some of the houses were the dead bodies of men who had evidently been massacred, the spectacle being in one or two instances most revolting. As the Vice-Consul and the Captain of H.M.S. *Rapid* visited the scene, they have doubtless made an official report, and it would scarcely become me to trench on this their particular province. Circumstances parted us without our party meeting theirs before we both finally left Kavarna, they for Balahjick and we for Trebizonde, whither I determined without any delay to proceed, there being no probability of finding wounded in the neighbourhood of Kavarna. I may perhaps, however, be allowed to give you my own impression that the massacring should not, as far as I could form an opinion, be too hastily assumed to have been done solely or at all by the Circassian force of 3,000 or so, which visited the village some days previously. The pillage was effected by that force, I have little doubt, but the massacring, I cannot but think, was probably done as much by Bulgarians as Turks, for one wounded man, whose wound was dressed by our Dr. Hope, stated that the wound was sustained in an attack made by some Bulgarians on his party (Turks), who were at the time asleep. Further, one of our seamen visited a house in company with an inhabitant, and was there shown the bodies of two women, and from the description he gives that there was a piece of white cloth round about the head, I gather that these women were Turkish. Thus much I think it right to say, but I will not dwell on the subject, and I mention it chiefly to show that we desired to render succour to wounded, though they were not properly so-called combatants.

"We have just arrived here, and from information I have received I have determined instead of sending up a division to Erzeroum now to go off at once to Batoum, as fighting is expected there; while on the other hand, if a division were to go to Erzeroum, as the fighting is now removed to a great distance from there, the pressure for medical assistance must to some extent be mitigated, and the Stafford House Committee are here before us with a supply of medical stores. If, however, I find our services are not urgently required for wounded in the neighbourhood of Batoum, I will return here, and go up with a division to Erzeroum, returning myself thereafter to Constantinople as soon as possible, to get news of the other two divisions under Dr. Armand Leslie and Dr. Crookshank.

"I visited the hospital here to-day; there were 400 wounded and 350 sick, all of which have been sent here from Batoum, not one from Erzeroum and that side; and the garrison of the town being but a handful of men, furnishes an insignificent quota. The hospitals, though crowded, are well placed, and the wounded are fairly comfortably situated, while there are 12 doctors in attendance, with one *infirmier* for every six men. These particulars I gathered personally from the medical staff, so they may be depended upon, and show that our assistance is not needed here just now.

"You will probably, ere this reaches you, have heard from me by telegram from Batoum, if we find the work there which I now anticipate.

"Letters should at all times be sent to Constantinople, whither I shall always rendezvous.

"Yours very truly,

"J. S. YOUNG."

"RASGRAD, NEAR SHUMLA,

"*27th July*, 1877.

"DEAR COLONEL LOYD-LINDSAY,

"At Constantinople the first Permits and Passes for Doctors Leslie and Meyrick were granted to Mr. Young in little more than 24 hours after we had applied for them: this almost unexampled despatch on the part of the Turkish Authorities was no doubt largely due to the influence of the Ottoman Red Crescent Society.

"Dr. Sarell, the President, Dr. Dickson (Physician to the British Embassy), Dr. Bartolani of the Board of Health, and many other members showed us the greatest courtesy and kindness. We were invited to one of their meetings in the Dolmar Butschi Palace, and on this occasion Dr. Sarell introduced us and explained most admirably the objects of the expedition sent out by the National Society, expressing the hope that in common with the Stafford House Committee and the Ottoman Red Crescent Society we would work for the relief of the wounded and sick. After this meeting one of our stretchers and an iron swinging cot were shown, and next day Mr. Young was enabled to send off Drs. Leslie and Meyrick with an ample supply of all necessary stores and appliances; an interpreter and four *infirmiers* (furnished by the Government) by train to Adrianople.

"The following day Doctor Bartolani took us to see the hospital which is being fitted up near Yeni-Male on the Asiatic shore, a short distance from the Black Sea entrance of the Bosphorus.

"It is beautifully situated in a little nook sheltered by hills on all sides by the N.W. where it looks out over the Bosphorus. There is a supply of spring water from the hill side. The hospital buildings consists of 5 detached blocks of various sizes, beautifully clean, and well ventilated, with accomodation for about 180 beds, and other blocks for storehouses, kitchen, and washhouse, &c., and extra beds in case of need, altogether there is ample accommodation for about 220 patients, and doubtless this would form an excellent convalescent hospital.

"At dawn on Sunday, July 22nd, we weighed anchor for Varna. After a farewell visit to Mr. Layard the previous evening, we had a very calm passage, and arrived in Varna Bay about midnight, carrying with us stretchers and stores for the Ottoman Society's Hospital at Varna.

"Next morning Dr. Crookshank came on board looking wonderfully well after nine months' work in Turkey.

"The work of selecting the necessary stores was at once begun, and the same evening he and I were landed with an ample ambulance equipment, including one of the Woolwich ambulance wagons and three large marquees, while the *Belle of Dunkerque* started at sunset for Trebizonde, with Mr. Young, Doctors Hope and Ralph Leslie, an interpreter, and Mr. Kerr, on board.

"Our instructions were to proceed at once up country to join the army under Mehemet Ali Pasha, and we accordingly started by rail for Shumla Road. Here Dr. Crookshank left me for the camp at Shumla, while I brought on the stores to Rasgrad.

"Next morning the ambulance wagon was put together, and yesterday Dr. Crookshank returned from Shumla here with all necessary orders from Mehemet Ali for horses, arabas, and servants.

"There is a large Turkish force concentrated near here, and fighting is expected between this and Rutschuk in the course of the next few days. The orderly behaviour of the Turkish troops is most remarkable.

"July 28th.—On the evening of July 26th there was some fighting about six miles from here on the high road to Rustchuk. About 300 wounded arrived at Rasgrad yesterday, among them one of the Turkish Commanders of a division. Dr. Crookshank went down at once to see him, and we sent down the ambulance wagon in which he is coming up in the morning. Yesterday evening the 300 wounded were brought up to the station in an immensely long cavalcade of about 100 creaking arabas drawn by oxen. One, a major, very badly wounded near the shoulder-blade with fractured arm, which we put up in splints. One or two more we dressed; all the rest had already been dressed in Rasgrad by the Turkish surgeons. We gave brandy and water and lime-juice to a good number, medicine and calves'-foot jelly to a few. Two of our stretchers were fitted up very comfortably as beds on which two of the worst cases were taken to Varna. The train started for Varna (full of wounded) about 11 p.m.

"Mehemet Ali Pasha is here, and we are just preparing for real hard work, as severe fighting is expected very soon.

"The two more ambulance wagons for which Dr. Crookshank telegraphed yesterday will be most useful.

"I cannot conclude this letter without expressing my thanks to the Hon. Mrs. Lindsay and yourself for your kindness in putting the lending library on board the *Belle of Dunkerque*. We certainly all of us fully appreciated the books, which enabled us to pass pleasantly many hours that would otherwise have proved tedious.

"I am, sincerely yours,

"R. HAROLD SCHOFIELD."

"RASGRAD,

"*28th July*, 1877.

"DEAR SIR,

"I have forwarded the usual Report sheet for the week to Mr. Young, at Constantinople, but as he will not be there for some time, I direct this letter to the head office, knowing the Society will be glad to have an early account of the first operations of the ambulance under my care. On the evening of my arrival here a serious engagement occurred at a village named Esirdshe, about eight miles from Rasgrad. The Turks had 150 killed and 350 wounded; the latter were brought into the town, and remained during the night in a large building which has been converted into a temporary hospital by the military authorities. Early next morning they were forwarded to the station, about 2½ miles from the town, to await a special train to Varna.

"Mr. Schofield and myself received the wounded at the station, and attended to all those who required dressing a second time—many being in a very exhausted condition. Brandy was freely administered, and the medical comfort cases supplied to me by Mr. Young did good service. As water was in great demand, I made a quantity of lemonade with the lime-juice forwarded me, and administered it freely to the men; giving those who needed it a supply for the long journey they were about to undergo. Many and deep were the thanks of the poor sufferers, numbers of whom came direct from the field, and had been travelling four hours in the springless country arabas: and never did an ambulance so well supplied with stores arrive more opportunely. I fitted a railway wagon with two bed stretchers for the use of the two majors who were desperately wounded, and our ambulance wagon, which was the only one in this division (Aziz Pasha's killed in the field) I immediately placed at the disposal of the military authorities to convey Fazley Pasha (Brigadier-General) who is dangerously wounded in three places, from the town to the station. I took the opportunity of telegraphing, through the *Herald* correspondent, who was sending off a special courier, a request for two light ambulance wagons with light cord harness. The one I have at present being too heavy and requiring four horses of this country, is only available where there are large

well-made roads. I am now with head quarters, between Rasgrad and Hazanlar, and expect a great battle to-morrow.

"Yours faithfully,

"HARRY CROOKSHANK."

"KARABOUNAR,

"*August 1st*, 1877.

"DEAR COLONEL LOYD-LINDSAY,

"Raouf Pasha has shown us the greatest kindness since we arrived at Yeni-Zaragh on July 21st. He gave us four horses, two arrabas, and placed me at the head of the medical department of his *corps d'armée*. On July 27th, we left Yeni-Zaragh with the whole army, minus two battalions, in all 12,000 men, and had a skirmish the very same night at a place called Youlla Mahallassé. Amongst the killed on our side were two brothers, Circassians: their countrymen swore a deadly revenge. On our return to the same village the following evening, July 27th, Meyrick and I found 175 people murdered and lying *pêle mêle* in the church of Youlla Mahallassé. The bodies were those of women, children, and old men. I entered the village at 7 in the evening, as Col. Lennox had sent for me. Whilst he and Mr. Chermside were in the camp informing Raouf Pasha of the occurrence, the massacre began *de novo*. I was alone in the village during twenty minutes, and heard and saw the Circassians butchering.

"A squadron of Turkish dragoons arrived, and I directed the commanding officer to the places needing the presence of his men. Meyrick attended the wounded women and children diligently, and was fired at twice by the Circassians. On his return to camp, Col. Lennox, Mr. Chermside, Dr. Meyrick, and myself, were instrumental in stopping the massacre. The dead and wounded were found lying together, some of them having been placed side by side during two days. Children were found lying weeping on the bodies of their mothers. I could not describe to you any thing more relating to this cruel and bloody work. We buried the dead on the next day, July 28th, and again attended the wounded Bulgarians.

"We returned to Yeni-Zaragh on July 29th, and left again

on the next day for Eski-Zaragh. On July 29th we saw 25 Turks, mostly women, who had been wounded and mutilated by the Bulgarians. We attended them.

"On July the 30th, we came up with the Russians near Eski-Zaragh. The enemy retreated. We followed him up, and on the next day took place a severe battle, lasting from 8 a.m. until 6 p.m. It resulted in our complete defeat; the whole Turkish army were seized with a panic. We lost our field-case and part of our baggage. One of our *infirmiers* had his horse shot under him, and another of our men was hit whilst attending to the wounded. The Russians must have seen our very large Red Cross flag, but they shelled both the Crescent and the Cross ambulances with great *impartiality*. We galloped off with the artillery. I performed, with Mr. Meyrick, as many operations on the field as possible, the number amounting to five. The Turkish ambulance, as usual, were useless, and many of them, Christians in the Turkish service, completely lost their presence of mind. Whole batallions of Turkish men were mowed down like grass; the defeat was attributed to want of cavalry and want of ammunition. We arrived here in Karabounar this morning at 5, and are hard at work. We have the whole thing—the attending to the wounded—in our own hands, and have seen five hundred wounded during the last two days. Men, at a moment like this, are more valuable than stores of no matter what description, and Meyrick and I are continually engaged—the one giving chloroform, the other amputating in sight of innumerable and awe struck ignorant Bashi-Bazouks and Christian surgeons in the Turkish service.

"No medical men belonging to any other Society have as yet joined Raouf's army.

"Sincerely yours,
"ARMAND LESLIE."

"KARABOUNAR,
"*August 3rd*, 1877.

"DEAR COLONEL LOYD-LINDSAY,

"One of our hospital tents was pitched here yesterday, it is filled with wounded, amongst them are some Turkish women, one of them badly shot by the Bulgarians at Eski-Zaragh.

"We are distributing blankets to the wounded, and the latter are attended to in our tent, and then sent by rail to Adrianople.

"I remain,
"Sincerely yours,
"ARMAND LESLIE."

"YENI-ZARAGH,
"*August 8th*, 1877.

"DEAR COLONEL LINDSAY,

"We arrived here yesterday, and shall to-day join Sulieman Pasha's army. Whilst at Karabounar we attended wounded of both sides, at the rate of 200 a day during one week. The suffering and misery of the fugitives are great; nearly all are badly shot, some of them are *hacked*. Children are seen dying of thirst, every railway station is filled with starving wounded women and children from the neighbouring villages. The latter have all been burnt. Wounded are brought in to us in batches of 200. You may therefore imagine how utterly powerless two medical men are under such circumstances. Our number is much too small. There is work here for 12 surgeons. We remain in Adrianople.

"The Turkish Red Crescent Society has not sent any surgeons to this front, in fact, the wounded here are totally uncared-for. The Turkish field ambulance, consisting of one doctor and five dressers, without a single bandage, dissolved on the 31st of July, some of them having been shot, the others terrified.

"Believe me, sincerely yours,
"ARMAND LESLIE."

"CONSTANTINOPLE,
"*8th August*, 1877.

"DEAR COLONEL LOYD-LINDSAY,

"My last letter to you was from Trebizonde, dated 27th July, apprising you of my intention of proceeding thence to Batoum, instead of sending an ambulance up to Erzeroum. I

am glad I went on to Batoum without delay, as I have thus been enabled to render aid to the wounded just when it was most needed, and without the loss of a moment. At Batoum I found about 1,000 sick and wounded, with only seven surgeons in attendance, and the climate bad, as the town lies very low, with marshy land adjacent, and hills rising all round at a distance of about a mile from the shore. The town is, in fact, appropriated to a large extent for sick and wounded, the army being encamped some 15 miles north-east over the mountains, the route to the camp being along the coast by water for an hour's run by steamer, and thence on land over hilly country for six or seven miles. The day after my arrival I proceeded to the camp, to Dervish Pasha's head-quarters, where the Pasha received us most warmly, saying that we were the most welcome guests he had had since he came there. It was most pitiable to see on our ride to or from the camp, the poor sick and wounded wending their way down from the camp to the landing-place on the shore, thence to be transported in open sailing-boats, as opportunity offered, to Batoum. Means of transport for the sick and wounded there are positively none that I could see, but some very sick men were mounted on mules, with but the roughest of pack-saddles on them, so that their seats must have been anything but soothing of pain or sickness. Such were the exceptions, however, the majority having to trudge their weary way on foot for six or seven miles under a burning sun, with a bough of a tree for support, and the hardest of black biscuits for nourishment. And when they had reached the landing-place, what was their fate? Often to lie for hours waiting for a boat which might have the good luck to be towed by a steamer to Batoum, but oftener had to make its way slowly against wind and sea for many more hours, and all this time no medical aid to mitigate the suffering of the poor patient souls! I determined to establish the third and last field hospital here, and had the satisfaction of seeing it virtually established close to the head-quarters of a staff officer, placed in direct communication with Dr. Hope, the surgeon in charge, in case of future requirements. With this hospital there are litters and cacolets, which I trust will prove a blessing in the transport of the sick and wounded from the camp to the landing-place on the sea shore. The establishment of this hospital left me without any medical officer on board, but I determined, while having come

so far, not to leave that side of the Black Sea without visiting Soukhoum Kali, and I accordingly proceeded thither, reaching on the morning of 1st August. I found a scene of great excitement. Orders had been received for its evacuation, but only after all the Circassian families in the neighbourhood had been transported to Turkish territory in Asia Minor. 20,000 or 30,000 families may avail themselves of the offer, and it is easy to imagine the magnitude of such a task as transporting such a number. Wounded had been waiting for some time for transport to Trebizonde or Constantinople, but none could be given, and in the urgency of the strait in which affairs stood on our arrival, our help to remove such of the wounded as we could take to a place of safety was earnestly asked for. I, of course, at once consented, for it was taking poor helpless creatures from what might at any moment be destruction, on condition of medical assistance and hospital attendants being sent with the wounded. By three o'clock on the day of my arrival I had completed all arrangements with the Pasha—Fazli Pasha—to take on board next day between 60 and 70 wounded. By one o'clock next day the embarkation commenced. And what a scene! The hospital—formerly the military hospital of the Russians—was situated close to the shore, but as there was no pier alongside of which our steamer could go, the poor wounded men had to be taken to the beach, then placed in men-of-war's boats, and rowed off at least half a mile under a burning sun before our steamer could be reached. Here, as elsewhere on the Asiatic side, the hospital equipment may be described as *nil*, the appliances being roughly constructed from the means provided by nature nearest at hand. Some of the wounded were brought on board on shutters, some on doors, others on stretchers made out of an old sack roughly tied with rotten bits of cord or rope to a couple of branches of trees, and some even on the rude wooden bedsteads on which they had lain in the hospital from which they could not be moved. When the first three or four boatloads came I began to be afraid I had undertaken too much, but determined to use all the means to fulfil my promise, and by five o'clock, with the willing help of many hands, we had the steamer filled from saloon to forecastle with our suffering freight, and put to sea without a moment's delay in order to get away from the stagnant heat of the harbour. The moanings, groanings, and odours that afternoon and evening were dreadful, for the men had

suffered intensely in the embarkation, and the wounds had been dressed very early on shore, some not at all, I suspect, to enable all arrangements to be completed before daylight failed. It was past midnight before our work of settling the patients was complete, and then all was as comfortable as we could make them, all having had a good meal of warm soup with meat in it, and then a dish of rice boiled with butter—the like of which they stated they had not tasted since they knew not when. Five o'clock next morning our surgeon was at work dressing the wounds, but I soon saw that it was more than he could accomplish single-handed, so I put into Batoum and obtained two assistants and two more servants. After leaving Batoum matters assumed a more cheerful aspect, and my anxieties, except as regards the weather, almost entirely disappeared. One poor man, on going my rounds, I noticed seemed suffering intensely, and found he had a fearful lacerated wound of the calf of the leg, besides a bullet through the thigh of the same leg. I had him at once moved into the best position in the ship, and it was decided by the medical men to amputate his leg, but the poor man himself said, 'Sooner my head than my leg,' and, as it turned out, the amputation would not have saved him, for ere another sun had risen his spirit had fled. This was the only man we lost, and we parted company with our patients yesterday morning, sending them not only in better health and spirits than we received them, but with proper appliances in the shape of splints and dressings for ensuring their ultimate recovery. Each received a packet of tobacco and cigarette-papers as he went over the side, and all expressed their gratitude—some asking our names. Sixty-five wounded in all were brought, and on disembarkment were taken to Scutari, to what used to be the English Military Hospital during the Crimean War.

"After the disembarkment of our wounded had been completed I went on shore and found your telegram as to credit for additional £1,000, and as to Crookshank's want of carbolic acid and ether, which I have arranged to send him by special messenger leaving the day after to-morrow for Varna. I am very glad to be able to say that his division at Rasgrad has already done good service. He and Mr. Schofield 'attended 300 wounded at railway station. Supplied all with lime-juice and water, for which we received great thanks. Made patients as comfortable as

possible in the wagons. Have fitted up a room in station-master's house as a resting-place for wounded officers. Ambulance wagon (I gave him one of the two we brought from Woolwich) did good service, but much too heavy for this country. Request two light ambulance wagons for field service to be sent out at once, and forwarded from Varna.'

"From Leslie's division, on the south side of the Balkan front, I have had no communication; but no wonder. I have heard otherwise accounts of wonderful and noble work done by him and his assistant, young Meyrick. He, in an extract shown me yesterday from a communication, dated the 5th instant, from a correspondent of the *Daily Telegraph* at Karabounar, says:—'For the whole army of 40,000 men there is only one ambulance, attended by two doctors, who have dressed some hundreds of wounds in the last few days, many of the wounded being women; but doctors are only mortal, and these two, although they have worked hard, are unable to grapple with one eighth of the cases which are brought to them. It is something to know that this one solitary ambulance which was at the front was sent out by the English Red Cross Society, and that the two medical men are from our own shores, the names being Doctors Leslie and Meyrick. All honour to them.'

"From yet another source I learn 'Doctors Leslie and Meyrick working day and night;' 400 wounded from Suleiman Pasha were sent to Adrianople, besides hundreds of starving refugees increasing hourly, I now hear, to thousands—so a telegram stated, which Mrs. Layard showed me last night, at the Embassy. I accordingly sent you a telegram, summarising the good work our society has thus, in an incredibly short space of time, been the means of doing in aid of the wounded, and I suggested that more 'qualified Surgeons should be sent out.'*

"Our countrymen here are hard at work in doing what they can to help, and at our Embassy at Therapia I found Mrs. Layard, with other ladies, surrounded by hundreds of beds, pillows, and bandages, all made by their own hands, supplies having already reached Batoum to my knowledge, which came from them.

"I have been told, not once, but many times, by Turks,

* Six more Surgeons were immediately sent out.

Greeks, and Armenians, as well as by our own countrymen here, that the seed being sown by our efforts in aid of Sick and Wounded will bear good fruit hereafter, not only for the cause of humanity, but for the cause of civilization and toleration in religion. I must now conclude, as the mail closes in a few minutes. I leave for Adrianople to supply Leslie's wants after the strain made upon him.

"I am, Sir, yours, &c.,

"J. S. YOUNG."

"CONSTANTINOPLE,

"29*th August*, 1877.

"DEAR COLONEL LOYD-LINDSAY,

"It is with the very deepest regret that I have to inform you of the death, on the 23rd inst., of young Meyrick.

"By all who knew him his loss is most deeply felt, and as for myself I have felt the blow most keenly, for I was absent at the Shumla front at the time of his death, having left Constantinople on the 23rd inst. The last person I spoke to before leaving the shore for the steamer was Doctor Meyrick, as I came straight from spending an hour or two by his bedside. He at the time of my visit seemed so much better than when I saw him on the day before, and spoke so cheerfully of coming on board the steamer when I should return from Varna, that I left him in the sure hope of seeing him on my return in improved health. Had I thought otherwise, I certainly should not have left him, but would have remained to see personally that no endeavour was neglected by which he could be saved. You may imagine, then, what a shock it was to me to receive, when I was on the point of starting from Varna, a telegram informing me that he was dead. As I did not reach Constantinople until the 27th inst., I was not present at the funeral, but I learn that it was conducted under instructions and arrangements made by Doctors Bartoletti and Sarel, of the Red Crescent Society, and by Mr. Barrington Kennett, of the Stafford House Committee, in a manner showing the deep sympathy of all here connected in any way with the work of our Society. I enclose two notices which have appeared, referring to Doctor Meyrick, one in the *Levant Herald* of the 24th inst., and the other in *La Turquie* of 28th inst., which may perhaps be of interest to you, and to Doctor Meyrick's relatives, to whom

I may perhaps be allowed to offer my own personal sympathy in their sad bereavement, and my own testimony to the real worth of my young friend.

"His remains have been interred in the British Cemetery at Scutari, and there has been a desire expressed that some tablet should be placed over his grave.

"Yours sincerely,

"J. S. YOUNG."

"CONSTANTINOPLE,

"8*th September*, 1877.

"DEAR COLONEL LOYD-LINDSAY,

"In continuation of my letter of 29th August, I now enclose two letters from the Red Cross Society—one for yourself and one for Mrs. Meyrick—regarding Doctor Meyrick. The flag which covered the coffin I will endeavour to send by same post, but if this should not be possible I will put it in with his effects which will be brought home in the *Belle of Dunkerque*, when she is discharged from the Society's employment.

"Since writing my letter of 29th August, I have been verbally informed by Doctor Sarell, of the desire of the Red Crescent Society to share in the erection of a memorial over Doctor Meyrick's grave. I accordingly drew up the following inscription for the memorial, which has been agreed to by the Red Crescent Society, and which is being translated into Turkish characters. This translation, as soon as received, I will transmit in order that you may have it inscribed on the memorial tablet with the English inscription :—

"In Memory of

FRANCIS GETHLEY MEYRICK,

Surgeon during the Russo-Turkish War, 1877, in the Service of the British National Society for Aid to Sick and Wounded in War,

This Tablet is erected

By that Society, and by the Ottoman Society for Aid to Sick and Wounded in War, as a tribute of admiration of devoted services rendered to the Turkish Wounded, men, women and children, from the battles and massacres of Yeni-Saghra, Eski-Saghra, and Karabounar. In the performance of these services Doctor Meyrick fell a victim to disease brought on by over-exertion, to the deep regret of all his fellow-workers, and all who knew him.

Born in London 8th September, 1855.

Died at Constantinople 23rd August, 1877."

"I shall be glad to hear when the memorial may be expected to arrive here.

"Yours sincerely,
"J. S. YOUNG."

"SHIPKA,
"*August 30th*, 1877.

"DEAR COLONEL LINDSAY,

"Attwood, Hume, and Sandwith work most diligently, but I doubt whether any one of them can withstand the hardships to be encountered in the present campaign. When the rainy season commences I shall, in all probability, be left alone.

"I have, necessarily, witnessed many atrocities since my arrival at the front. Sometimes the Bulgarians are butchered, sometimes the Turks mutilated. The massacre of 175 Bulgarians in the church at Goula Mahalé I have already described, also that of Turks at Khodwibeck.

"On August the 4th I attended to a girl who had been violated by 18 Cossacks.

"At Karabounar I saw a Bulgarian who boasted of having killed 15 Turks—men and women.

"On August 17th I visited 2,000 Turkish women and children, 12 of them were wounded; the women were all old or ugly, the young and pretty ones having been carried into the mountains by the Bulgarians.

"On August 18th we passed Oflanki, where 177 people—Mussulmans, principally women—were found murdered. The wells were filled with bodies.

"On the same date we passed Mouflis, a Mussulman village, the population of which had fled on being decimated by the Bulgarians. The number of people massacred here, we were told, amounted to 400.

"At Mouflis a Bulgarian girl was brought to our ambulance, She had been severely wounded and left for dead by Circassians.

"No pen could even attempt a description of the scenes and atrocities witnessed here. They simply 'beggar description.'

"The women and children, the latter especially, are most to be pitied. I have very frequently seen little children wandering, nobody would claim them. Large numbers die of hunger or thirst.

The women are frequently demented, and all are completely paralyzed by shocks. Their looks are haggard, their mind a blank.

"The health of the troops here is excellent; no epidemic whatever.

"There is at present abundance of good food, but no bread or wine. I sleep *à la belle étoile*. The government allows us large quantities of the invariable biscuit, and we frequently get sheep.

"The country is clad everywhere with vines and covered with forests of rose trees. The corn has not yet been gathered in. The sky is intensely beautiful—blue during the day, lurid at night from the incessant fire of flaming villages. The latter are, like graveyards, inhabited by the dead only.

"I remain, sincerely yours,
"ARMAND LESLIE."

"SHUMLA,
"*1st September*, 1877.

"DEAR COLONEL LOYD-LINDSAY,

"Since I last wrote to you from Rasgrad, nearly a month ago, we have had a good deal to do, and I take the opportunity now of sending you a short account. We came here from Rasgrad, bringing up all our stores, on Saturday, August 4th, leaving however at Rasgrad one large hospital marquee and one small marquee, for the use of the four surgeons of the Stafford House Committee who are there, and sending back our large ambulance wagon to Varna to be used for transporting sick and wounded from the station to the hospital. We found it was too heavy for the country roads here, as the horses in Bulgaria are very small; but at Varna it will doubtless be of great service.

"On the morning of August 23rd we received an urgent message to come forward at once to Eski-Djuma, as there had been fighting in that neighbourhood. We accordingly packed our four arabas and started immediately, arriving there the same evening. Dr. Crookshank, who drove on ahead in an araba, arrived in time to give first dressings to 30 wounded who had just arrived, amputating two fingers which were badly smashed. In dressing these cases he was assisted by Dr. Roz, who, as soon as

our arabas arrived, started again with me to the hospital, where we put up two or three fractures and dressed a few wounded. The Turkish doctors said they were then going to their dinner, and would meet us in an hour's time at a large Bulgarian school, where 30 or 40 more wounded were expected shortly to arrive.

"After dinner we accordingly started out again with our large operating lamp and some stretchers to the Bulgarian school. Outside this a number of wounded were lying, and more arrived in arabas. No one was there to receive them, so we at once set to work, and with the aid of three Correspondents, littered down a quantity of hay in a spacious hall, and got in the wounded. The Turkish surgeons did not appear, so we went down to the hospital to look for them. Here a poor fellow was lying with a large piece of intestine protruding from a wound in the abdomen, which I replaced and stitched up the wound.

"At length we managed to get one Turkish surgeon and one dresser to work, and with their aid we dressed all those who had not already fallen asleep. They were dreadfully hungry and tired, poor fellows, as they had been transported 15 miles under a blazing sun. Next morning Mr. Young arrived and made some arrangements for their being supplied with food. We were told subsequently that a young Pole had been lying all the time in the hospital with both feet carried off with a shell. This man the Turks did not show, knowing very well that we should have amputated on the spot, which would doubtless have given him a fair chance of life. Dr. Roz saw him the next day, and wanted to amputate at once, as one leg was already in a state of gangrene, but they would not allow it, and the poor fellow died next day.

"Such disgraceful conduct on the part of the medical officers I felt it my duty to mention, though I am reluctant to do so. We were obliged to leave next morning (August 24th) for the camp at Yenikoi, were we arrived the same evening, it is in a most beautiful wooded valley about 15 miles in advance of Eski-Djuma on the road to Popikoi.

"We pitched near the bottom of the valley, close to Head-Quarters, and next day had a number of sick soldiers to attend to, and one or two wounded.

"On the following day, August 26th, we had about 5 hours hard work treating 75 cases, which came to us from all the surrounding battalions. Some of the battalions, we were told by

the soldiers, had not even a dresser, there seemed to be no medicine at all, and so all the sick came to us.

On August 27th we had 85 patients.
" 28th " 75 "
" 29th " 55 "

"August 30th.—We heard cannonading early in the morning, and so mounted our horses, taking lint charpie, &c., in our saddle bags, and rode up to the top of a spur which commanded a splendid view of the whole plain as far as and beyond Popikoi. Here we stayed all day watching the fighting, the battery just above our heads poured shell into the Russian battery opposite, and compelled them to retire, leaving one gun disabled. Towards evening, 4 Russian columns were in full retreat on Popikoi; we descended to our camp, arriving just in time to dress the first wounded man that arrived.

"August 31.—Early this morning I left Yenikoi and rode over to Shumla. Colonel Borthwick (Mahir Bey) has kindly procured some arabas, and I am just about to start them to Yenikoi, and return thither at once, for by this time no doubt the wounded will have come in, and there will be plenty to do, even if there is no more fighting for some days.

"In the engagement which we were watching, the heaviest fighting was near Karahassankoi in front of Rasgrad, and there I believe the Turks have 300 wounded and more are at the village of Yenikoi close to us.

"I remain, sincerely yours,
"R. HAROLD SCHOFIELD."

"Constantinople,
"*September 9th*, 1877.

"Dear Colonel Loyd-Lindsay,

"From all divisions of our Medical Staff I continue to receive accounts of splendid work done for the Sick and Wounded.

"Dr. Leslie's division, during the fighting at Shipka, was continuously at work among the thousands of wounded resulting from the daily engagements fought there, and from the 14th to the 20th August he visited the numerous refugees, women and children, some of whom were wounded, and among whom he distributed Liebig's extract of beef.

"Dr. Crookshank's division, which, on the 1st September, was with the Turkish forces before Popikoi, treated, in the week ending that date, 495 sick and wounded, and after the fighting on August 30, visited, with his transport, the scene of the engagement, bringing in the wounded.

"Dr. Hope's division at Head-quarters, Dervish Pasha, near Batoum, has its hospital tents full of wounded, and the litters and cacolets, with which he is provided, have proved of immense service in mitigating the sufferings of the wounded in the mountainous country there.

"From Varna I have transported, on two occasions, sick and wounded to Constantinople, the buildings at the former place having been overcrowded with the wounded sent down from the front.

"Large numbers of wounded are pouring into Constantinople daily, and the Red Crescent Society are hard at work, endeavouring to meet the immense needs of the wounded, not only in the capital, but at the front, by means of flying ambulances, transport, &c. The last wounded I brought from Varna were placed in a hospital established by the Red Crescent Society and Stafford House Committee, in the Palace of the Sultan, at Beylerbey.

"The soup kitchen, established by Barrington Kennett for the wounded, while being transported long distances by rail, having proved of great benefit, I continue to give him supplies of preserved soups, which, he tells me, have been of the greatest service, owing to their being easily prepared for use on the shortest notice, and often wounded arrive at the stations where the soup kitchens are without previous intimation of their coming being given. Other supplies of medical comforts I have given for use of the sick and wounded under the care of the surgeons of the Stafford House Committee.

"Having had from the first the intention of sending supplies to the hospitals at Erzeroum, Kars, and that direction, I am now on the point of proceeding to Trebizonde, to carry out that intention before the winter sets in.

"Yours sincerely,

"J. S. YOUNG."

[Telegram.]

The following telegram, dated from Varna, September 25th, at 4.30 afternoon, reached Craven Street the same evening at 9 o'clock:—

"From Doctor Crookshank to Colonel Loyd-Lindsay.

"Fighting all day. Turks attacked Russian position. Pitched hospital marquees on a large vacant space in a village near the fountain; cleared out mosque, two large houses, large barn filled with straw. Mead arrived same afternoon; during night we received five hundred and twenty-seven wounded; working incessantly two nights and days we transferred three hundred, remainder are under treatment. Twenty-one amputations, and more yet. Patients supplied night and morning with a large plate of hot boiled mutton. 10 days ill with enteric fever.

"HARRY CROOKSHANK."

Report by Mr. Furley relating to Sick and Wounded at Montenegro:—

"Zara,

"*August 30th*, 1877.

"Dear Colonel Loyd-Lindsay,

"Having been requested to proceed to Montenegro on behalf of the British National Aid Society, in order to report on the state of the sick and wounded soldiers of that State, and, if necessary, to make arrangements for their relief, I left England on the night of Wednesday, the 15th inst., arrived in Paris on the 16th, Turin on the 17th, and Trieste early on the morning of the 18th. An Austrian Lloyd's steamer was to leave for Cattaro in two hours' time, and thanks to the kind and courteous attention of Mr. Brock, the British Vice-Consul, and Messrs. Morpurgo and Parente, for whom I had letters, I was able to complete all my arrangements, and to be on board at the appointed hour.

"Four days later, between 7 and 8 o'clock in the evening I landed at Cattaro. Here Mr. Jaxic, agent of the Austrian Lloyd's Company, came to my aid, and within half an hour we had engaged a dragoman, a man to carry my limited supply of baggage, and two horses, and punctually at 3 o'clock in the morning I commenced the ascent of the mountains by the Scala.

"If I record at some length my personal experiences of this journey, I think I shall best fulfill the purpose of my mission. The difficulties in the way of organizing any regular system of relief for the Montenegrin sufferers in the present war can only be appreciated when the actual state of the country, and its means of internal communication are known. Cattaro and Risano form the principal markets for Montenegro, and all merchandise must be carried by horses or women. The Scala di Cattaro is a narrow gallery running in zigzags on the very face of the mountain, and in many places there is not room for two horses to pass without some manœuvring. At a height of several hundred feet a stone might almost be dropped on the starting point close to the quay at Cattaro.

"About 7 in the morning I reached an oasis in the midst of the barren gray rocks. This was Niegush, a cluster of poor cottages, surrounded by small patches of potatoes, Indian corn, barley, &c. Over one of the largest of these houses a Red Cross flag was flying, so I sent to request that I might be allowed to enter. This hospital is managed by a Russian doctor and three sisters. At present it contains 25 wounded men. I was informed that nothing of absolute importance was wanting, but it would add to the comfort of the patients if some tobacco were sent to them, and to this wish I promised to attend. Mount Louvchen being close at hand, a good supply of hard snow is obtainable, and this is a great luxury in the present extreme heat.

"Continuing my way, I reached Cettinjé between 10 and 11 a.m. The capital of Montenegro stands in the midst of a small plain, encircled by limestone rocks, and it consists of a single street very much resembling an Irish village. I did not see a single shop, or anything but fruit for sale. During my stay here I was most kindly treated by M. Wassiltchikoff, the delegate of the Russian Red Cross Society; M. de Speyer, Secretary of the Russian Consul-General, and other gentlemen who are established here under the Geneva flag. M. Wassiltchikoff accompanied me over the hospital, in which there are about 150 patients. Some of these are in two large buildings, while 30 or 40 are under canvas. The Russian Staff is large and very complete, and quite equal to all present requirements. I think it would be impossible to find a man better suited than M. Wassiltchikoff for the post of ambulance director under such very abnormal circumstances. He

combines courtesy, tact, and devotion to his work, and all the qualities which such a position demands, and as long as he remains here I feel confident that the work he controls will succeed as well as it is possible to do in such a country as Montenegro.

"I also had an interview with the Archimandrite, who is the President of the Local Red Cross Society—a body which has no existence except in theory, and I also received many useful hints from M. Duby, a Swiss gentleman, and private Secretary of State.

"I might have been satisfied with the information gathered from these various sources, but I felt I should not properly discharge my mission unless I went to the scene of actual hostilities, more especially as I could only in this manner understand how the transport of wounded is effected.

"A great want at Cettinjé, and one that no society can supply, is that of water. The heat is intense, and not a drop can be procured in the place except of a thick and nauseous quality. It is true some is brought from a long distance, but unless rain should fall within the next few days, it is probable that all sources will fail.

"I spent one night at Cettinjé, and the following evening, having engaged fresh horses and guides, I started for the camp at Niksics. A perianik of the Prince's Body Guard was ordered to accompany me. The first halt was at Rieka, a village in a fertile valley, with abundance of water. Here I remained from 11 p.m. until 4 a.m. During the next eight hours we plodded up and down the bare rocky sides of the mountain, meeting a few women, but scarcely a single man, and unable to find a drop of water. About noon we stopped at a cottage, but as the shelter which this afforded was shared by cattle, and in other respects was not of an agreeable character, it was suggested that I should take some rest in a church in the neighbourhood. In this modest sanctuary, which consists of bare, loop-holed walls, there were about 80 Liége rifles, and several cases of ammunition, one of which served me for a pillow.

"After a halt of three hours we continued our journey, and towards evening had the pleasure to look down on the fertile plain in which stands the town of Spuz. In descending towards the valley I met a Russian doctor, with about 30 wounded men, whom he was taking to Cettinjé. The horses were picking up such tufts

of scanty herbage as they could find between the rocks, while the men were lying about on the ground. The doctor told me he intended to reach Rieka at midnight, remain there until 5 in the morning, and then to proceed to Cettinjé. He evidently was ignorant of the road, and I assured him he would require at least two days. It is sad to contemplate what an amount of agony must be caused by such a journey, and had these men belonged to any other European State I should have said they could not survive it.

"Between 9 and 10 p.m. I reached Danilograd, a single street of small hovels. During 27 hours I had been unable to procure any nutriment but two or three pints of milk. Here I was met by the Secretary of the President of the Senate, who gave me all the hospitality circumstances would allow. Most of the people were sleeping in the street or in the fields behind the houses, and, rolled up in their grey blankets, it was very difficult to distinguish them from the rocks.

"A short ride between 6 and 7 in the morning brought us to Orialouka, one of the houses of the Prince, at present occupied by Bozo Petrovich, President of the Senate, and Commander of the Army of the South. This gentleman was educated in France, and he is a man of remarkable intelligence and energy. After half an hour's conversation, which enlightened me as to the objects of the present struggle from a Montenegrin point of view, my small caravan continued its march through a narrow and very pretty valley, watered by good springs. We soon came upon traces of Suleiman Pasha's recent march, from Niksics to Podgoritza. Every house is in ruins, and here and there we found the unburied bodies of human beings and horses.

"On leaving the valley the way was very similar to that we had followed on the preceding day. Nothing but bare rocks, and the heat was so great that the leather of our boots literally broke into chips like charred wood. At length, after most laborious climbing, we came in sight of the plains of Niksics, with the little fortress at its furthest extremity, and in the middle of the afternoon we reached the camp of the Prince of Montenegro. Mr. Stillman, an American gentleman, who has been with this army, and has a perfect knowledge of the country, received me most kindly, and introduced me to the seven or

eight gentlemen who were attached to the Head-quarters. A little later his Highness gave me an audience. He expressed his acknowledgments to the British National Aid Society, and added that he hoped the English were not only actuated by feelings of charity towards the Montenegrins, but felt a real sympathy with their cause.

"At the Prince's table, to which I had the honour of being invited, and which was spread in a small enclosure formed of branches of trees, there were Colonel Boyolyoubof and Captain Gesler, of the Russian Army; Lieutenant-Colonel Thoemmel, the Austrian Diplomatic Agent, and his secretary, Capt. Sauvervald; Mr. Stillman; the Russian Consul-General, M. d'Ionine; the Italian Consul; M. Durando, the Duke Pasqua Vivaldi, an Italian volunteer, and Dr. Feuvrier, of the French army, at present attached as medical attendant to the Prince. Later I had another conversation with his Highness over a camp fire, when he entered fully into the difficulties of hospital administration in this country.

"The Russian field ambulance here is very complete, and the wounded are draughted from this to Joupa, about three hours in the rear.

"There not being a house in the neighbourhood, everybody sleeps under canvas, huts formed of branches, or *à la belle étoile*. A Turkish *tente d'abri* was pitched for my use; but I found the night severely cold, and the grass was damp with heavy dew.

"At 6 o'clock on the following evening, having all the information necessary for my purpose, I left the camp. While here I received much kind hospitality; but my obligations were especially due to Mr. Stillman and Dr. Feuvrier, both of whom did their utmost to be useful to me.

"I had proceeded on my journey for about an hour, when I saw a cloud of horsemen sweeping over the plain at full gallop. One of them detached himself from the rest, and my perianik observed that it was the Prince coming towards me. I went to meet his Highness, who expressed his regret that he had been compelled to leave the camp in the morning by a report of a Turkish movement behind Niksics. He desired me to convey his thanks to the National Aid Society for its good intention. Having confided me to the care of the perianik and wishing me *bon voyage*, he continued his way back to the camp.

"On leaving the plain, and losing sight of the Montenegrin fires, we again began to climb the mountains and moved onwards until 11 o'clock, when we reached a small hut. Around this were lying several men, women, children, horses, and cows, and as there was no hope of better accommodation, we settled ourselves in the same manner, and remained until the cold drove us off about 3 in the morning. As I was determined, if possible, to arrive at Cattaro in time for the steamer on Tuesday morning, we kept steadily on during the next eight hours, and at 11 o'clock descended on the little plain of Grahovo. Here, in a house better than any we had seen since we left Cettinjé, we remained until 4 p.m. Soon afterwards we crossed the frontier of Dalmatia, and followed the military road recently constructed by Austria. Upon this gallery, which winds along the rocky and precipitous side of the pass, we met long strings of women and horses bearing provisions, chiefly coarse bread and sides of bacon, to the Montenegrin camp. Still, there was no water to be had; from the time we left Grahovo until we reached a fountain close to Risano, we were unable to obtain a drop that was drinkable. At the latter place we arrived at 9 o'clock, after a forced march of 27 hours, with the short intervals to which I have referred. I need only add with regard to the journey, that at midnight I engaged a rowing boat, which put me on board the Austrian Lloyd's steamer *Malta* at Cattaro about 4 in the morning, and in this vessel I am now on my way to Fiume.

"I fear I must have wearied you with these details; but I have already given you my reasons for troubling you with personal experience, so I will make no further excuse. I think it necessary that you and the Society should have as accurate an idea as possible of the difficulties which must be met in organizing hospital relief in Montenegro.

"During my six days' march I was 61 hours on foot and in the saddle. With the exception of the very short time I was on the plains, I did not see 50 yards of road where two people could ride abreast, nor did I meet with a wheeled carriage of any kind or description. It is true I found one wheel on my path near Rieka, but this was a phenomenon to be noted.

"I am well aware that our Society would be deterred by no obstacle that could arise, if its assistance were wanted; but in this case personal aid is not required. I will now briefly state my reasons for this conclusion, and then I will indicate the manner in

which a small expenditure of money will materially contribute to the object we have in view. The entire hospital arrangements of the Montenegrin army are now in the hands of the Russian Red Cross Society; nominally there is a sister Society in Montenegro, but virtually it has no existence. The total number at present in the hospitals is 300, and the strong staff of Russian surgeons, dressers, and nurses, is quite adequate to a larger number, even should a battle be fought on the eastern side of Montenegro, where at present, I believe, they have no representative.

"The Russians have, in fact, complete possession of this field of charity, as far as the inhabitants will allow them to occupy it, and they are doing good work. Any other Society that might send out surgeons or nurses must inevitably enrol them as volunteers under Russian direction. I cannot estimate, even approximately, the number of wounded men who have returned to their homes. In Montenegro, if a man is wounded and can crawl, he will hide himself away somewhere, and leave his cure to God and to his native air. The Prince told me that he had met a man with a fractured thigh, who insisted on being lifted on a horse, and he was moving away regardless of the agony he was suffering. These men have a horror of surgical operations, and prefer to die rather than to lose an arm or a leg. As churches, schools, and tribunals are all closed, and every civilizing influence has for a long time past given place to war, there is no way of ascertaining what loss of life the country has sustained, and how many men are now hidden away victims of wounds and disease.

"The means of transport are most defective, but I think I have given ample reasons for this, and I would not even by implication attribute the least blame to the Russian Society, which has already undertaken more work than it can reasonably be expected to do.

"The transport of the wounded must, I think, be left to the people themselves. I have bestowed a great deal of consideration on this subject, but I fail to see how it can be improved by a foreign Society without an expenditure of money which would be out of all comparison with the magnitude of the war in this province. Every seriously-wounded man now requires eight men to carry him to a hospital—four as bearers, and four as reserve. This is a great drain upon the combatants, but we have nothing to do with this side of the question. The French cacolet would be

useless here; in the first place, the small native horses are not sufficiently strong to bear two men over these rocky mountains; and, secondly, there would not be room enough for them on the roads. The excellent plan of carrying wounded men in a mountainous district invented by Baron Mundy would also fail here. No man could carry another for any distance over Montenegrin roads. Nothing then remains but the ordinary canvas stretchers, left to the inhabitants themselves.

"One suggestion I ventured to make both to the Prince and to the Archimandrite, if adopted, would afford much relief. I have described the roads and the distances that have to be traversed before a drop of water or a piece of bread can be found. Now, if here and there a church or a school-house were converted into a station where the wounded might rest for a few hours and be provided with at least bread and water, a great deal of unnecessary suffering would be avoided. I have already devoted a small sum to this purpose, and the Archimandrite promised to use his best endeavours to carry out my recommendation. Fever is beginning to make great ravages, and among the articles of absolute necessity which I have promised is quinine.

"There remains one way in which our Society may render great service, and that is the matter of clothing for the wounded. The men have now been fighting for two years, and the women are daily employed in provisioning the army. The patients, when they leave the hospitals, are often literally without clothing, and it is painful to contemplate what the suffering must inevitably be during next autumn and winter. For such clothing as is most indispensable I shall also ask on my return to London. I have thus endeavoured, with as little delay as possible, to accomplish my mission, and to ascertain the actual position of the sick and wounded Montenegrins. You will have observed that the number of these is comparatively small, and that this ought not to be beyond the resources of a State which undertakes to go to war. But everything here is exceptional, and, unfortunately, fighting seems to be the main object of the men who are all soldiers and receive no pay; and of the small proportion of cultivable land to be found in Montenegro, the larger portion is now lying waste. The blessing invoked on a boy when he comes into the world is that he may not die in his bed, and a pistol is the first plaything put in his hand.

"I shall remain a day or two at Trieste in order to purchase and forward to Cettinjé a few articles I promised to give on behalf of the Society. I leave all other details until I have the pleasure of seeing you.

"Hoping to arrive in England almost as soon as this letter,

"I am, dear Col. Loyd-Lindsay,

"Yours very sincerely,

"JOHN FURLEY."

Letter from Mr. A. K. Loyd, respecting Aid to the Russian Army:—

"Hotel du Boulevard,

"Bucharest,

"*Sunday Evening, September 23rd*, 1877.

"My Dear Colonel Loyd-Lindsay,

"Very shortly after writing you a line from Suczawa, I reached Paskani, the junction at which the Russians were arriving from Jassy. The station was a scene of great confusion, full of officers and men coming down to the front; there was a scramble for dinner in the restaurant, and then a scramble for seats in train. At Roman we had to change carriages, and the authorities of the railway refused to forward our three trucks of goods, alleging various reasons, which we at length, with the aid of the Russian General coming down with a regiment of Guards, induced them not to insist upon. The whole train was kept waiting one hour and a half while telegrams were exchanged between the various departments, Roumanian and Russian; and at last, all the other objections being over-ruled, we had to pay the full fare for the goods (£106), as we persisted in bringing them forward with us.

"When the train started from Roman for Bucharest, it was about 9 p.m., and the General who had assisted me, and I found ourselves sharing the same compartment, the third occupant being my Russian courier. The compartment was small, and crammed with the General's kit, and our own lighter baggage, and as it was not possible to stretch ourselves out to sleep for the night, we sat up talking till we could not keep awake any longer. His name was General Etter of the suite of H. M. the Emperor. He had been, up to 15 days ago, at St. Petersburg, since

when he had been coming forward with his Guards. We asked him if 27,000 *hors de combat* was an over-estimate of the Russian losses, and he said he thought that was about the number. 'But,' he added, 'we reckoned that the passage of the Danube would cost us 15,000, and that of the Balkans another 15,000, so that at present we have not exceeded our estimate!' As to Osman Pasha it was a mistake to say he was Bazaine, for in point of fact he was a Belgian. He had great hopes they would reduce Plevna this campaign. It had been resolved now no longer to attempt to take it by assault, but to surround it. The Russians would entrench themselves upon the ground they now occupied, and the cavalry would continually harass the communications in rear, and, if possible, cut the Turks off from Sophia. The Turks, he said, stood their ground generally, 'till it came to the hurrah,' but then they were seized with panic, and ran; their new repeating rifles enabling them to fire several shots in succession, with their rifles almost at the *slope* (as we should say) over their shoulders. This *grèle de balles*, he said, would be very disastrous to us if they held their rifles with their muzzles lowered, but they forget to do this, and if our men can get within 300 or 400 yards they hear the shots whiz over their heads as they follow the Turks. The Russian soldiers constantly heard, when they came to close quarters, the exclamation in Russian, 'Come on you Russian pigs!' which showed the presence of a number of Poles in the Turkish ranks.

"We talked a good deal of course upon indifferent topics but these were some of the scraps of conversation when it happened to turn upon the war: The General and I became great friends as you predicted, and I insisted upon his trying the semi-circular air cushion round his neck, when we were endeavouring to 'shake down' for the night, he laughed very good-humouredly at the Englishmen's notion of making themselves comfortable, and handed it back, saying it was a capital invention.

"As daylight dawned, we could see truck loads of men belonging to his regiment, in the siding to let us pass. He always leaned out of the window and called out to each carriage full 'How are you my men?' and they all stood up and *shouted* 'Good morning, General,' in a sort of chorus. As he drew in his head he would say laughing, '*Qu'ils sont gais ces gaillards là.*'

"About 7 or 8 a.m. we reached Ploesci, where the Emperor's

Head Quarters were, till he crossed the Danube. Here amongst the many officers upon the platform was one of the Grand Duke's *aides-de-camp* who had been 'galloping' between Chipka and Head Quarters, and Plevna and Head Quarters. He had now got leave to come up country for a time, to shake off a touch of fever. He was addressed as Colonel and had a great deal to say to the General. When he heard that I had come to assist the Russian wounded, he came and shook hands, and said he was very glad to see that the English sympathized with their wounded. He came the rest of the way in our carriage. If I wanted to know where my stores would be useful, he could tell me that there were an enormous number of wounded now gone to the rear (and in fact they all suggest the rear as the best field for any exertions on our part). The Colonel said the Chipka was a terrible position to hold with the force they had there, as the Turkish musketry could command their positions from the heights around, and make it fearfully uncomfortable, even when they did not succeed in dislodging them. As to Plevna, the Russians were in future going to take a leaf out of the Turks' book, 'Ces diables là quand ils ont occupé une position quelconque, avant de mettre un morceau dans leur bouche ils cherchent de la terre et se mettent à l'abri de notre feu. C'est une excellent methode et nous allons profiter de leur example.'

"At about one o'clock yesterday afternoon we rolled into Bucharest station, about five hours behind time. Considering the state of disorder in which the line was, the conflict of authority between the Russian military authorities and the Roumanian railway authorities, and that our own goods had led to a delay of 1½ hours on the road, I did not feel disposed to complain.

"Both couriers had been fully employed up to that point in looking after our stores, and one of them (Sostino), I sent off at the Jassy branch to deliver the Countess Schouvaloff's parcel. Unfortunately for me they had so effectually directed their attention to the various conflicts with the customs and railway authorities, in respect of the heavy goods, that they left my portmanteau behind, heaven only knows where. Sostino has returned from Jassy and reported himself to me here this afternoon, and I have sent him back along the route to try and find it, as I am without the comforts of life. When I got to this hotel, after trying in vain at other places for rooms, I had travelled

since Monday night with only three hours in bed at Breslau, so I slept for the rest of the afternoon. To-day I commenced operations, a detailed account of which I will give in some future letter devoted to those subjects on which you may wish to publish a record of our work on this side. The substance however of it is, that I called on the British Consul-General, Colonel Mansfield, who it appears telegraphed to Lord Derby the very day I left England, asking him to get the National Society to send help to the Roumanians. He was therefore very glad to see me at this moment.

"We went over some six hospitals in different parts of the town, at one of which there is actual need, at two of which need may arise if more wounded come in, and at the rest they want nothing. At the one where they want aid they also asked for a surgeon, and as Colonel Mansfield had already ascertained that the Roumanians were in urgent want of surgeons along the route by which the Roumanians return their wounded; I telegraphed to you this afternoon asking you to send surgeons (three to begin with), speaking German or French (English no use out here), to report themselves to *British Consul* on arrival, as I may be, and hope to be engaged out of Bucharest when they arrive, if you decide on sending them.

"I called after leaving Colonel Mansfield, and left my letter of introduction to Prince Gortchakow, who however was ill in bed and sent a polite message asking me to see Baron Stuart, the Russian Consul-General, at whose house the Prince is at present laid up. I accordingly saw the Baron, who seemed rather disposed to say that the best thing I could do with my things would be to add them to the central depôt here, from which he said the Russian authorities would distribute them, and that in that way they would reach Russians, Bulgarians, and Roumanians alike who had suffered in the field. I did not fall in with this suggestion, and hope I may yet have facilities afforded me for a tour of inspection into the real needs of the Russo-Roumanian side, but of this I will write further when I know what shape my plan is allowed to assume. I have not much faith, from what I learn on the spot here, in Russian organization, &c., and think that more good can be done by not putting the cases, *of which I know thoroughly the nature and contents*, into a general jumble or depôt unless the opposition to my going any further proves too strong for me. This place is very full, hardly a room to be got.

I could hardly get along the streets to day at one time as the three guns taken by the Roumanians from the Turks at Plevna were being drawn through the streets behind the Princess of Roumania in her carriage, and accompanied by a detachment of Roumanian infantry and a mounted body guard.

"Russian troops are passing through daily, and may be in time to prevent Mehemet Ali from succeeding at Biela, and marching on Sistova, and so cutting off the Russian retreat. They say out here that Todleben was left behind owing to a misunderstanding with the Grand Duke, but that now he has been called to the front to reduce Rustchuk, which he undertakes to do if the Government will give him 150 siege guns to be available all at the same time, and not sent up to him in tens and twenties. I have just renewed my acquaintance with Grant, who is staying at this hotel recovering from illness. He was correspondent for the *Daily News*, as colleague to Forbes at Belgrade last year, and succeeded Kelly on *The Times*. He is now employing a deputy at the front to do his work for him. Forbes is going home on Wednesday, knocked up. Colonel Wellesley is here, also unable to come up to time. I must try to see him as he will be able to tell me all sorts of things. I have done and seen so much to day that I feel as if I had been here a year, and am getting quite fond of the old place, if it was not so crowded and hot.

"I put *Croix Rouge Anglaise* on my telegram and letter to avoid the delays and obstructions which I already see arise out here if anything irregular is suspected.

"If the surgeons come, they should come by Brussels, Cologne, Berlin, Breslau, Cracow, Lemburg, Czernowitz, and leave the other more tempting but less certain routes alone. They can do it, without luggage like ours, in four days.

"Believe me, etc.,

"A. K. LOYD."

[TELEGRAM.]

"From A. Kirkman Loyd, Bucharest, to Col. Loyd-Lindsay.

"*September* 23*rd*, 1877.

"Four surgeons for Roumanians much wanted. Should start immediately, *viâ* Berlin, Crannova, and report themselves at British Consulate, Bucharest. Must speak German or French."

Surgeon-Major McNalty and three other surgeons are already on their way to Bucharest.

"HOTEL DU BOULEVARD,
"BUCHAREST,
"*Saturday Evening Sept. 29th*, 1877.

"DEAR COLONEL LOYD LINDSAY,

"It is nearly a week since I wrote to you announcing my arrival here, but I have been busy from morning till night every day and have had no time to myself. There are so many authorities here, none of whom like to act without referring you to the others, that I have had to devote much time to interviews, and to obtaining the opinions of persons in various positions of responsibility.

"With very few exceptions, I have been welcomed. In many instances (chiefly of persons bearing the Red Cross) my reception has been most cordial, and I have arrived at a considerable knowledge of where and how to give relief to sick and wounded of the Russian and Roumanian armies.

"In Bucharest the hospitals require but little; the oiled silk for which I telegraphed being the only thing not procurable for them on the spot. The Roumanians not having contemplated more than armed neutrality at first, had given up their accommodation to the Russians to a great extent, and when the wounded first came in, shortly before my arrival, they were considerably exercised to know how to lodge and tend them. They made great efforts to meet the emergency, and private benevolence has now found house room and medical attendance for the patients. The Roumanian army had not stood so long an exposure, nor undergone so much fatigue, before the late fighting at Plevna as the Russians; consequently the general health of their wounded is good, and there is a look of warmth and strength about them which is not observable in the Russian hospitals. There is, however, a lack of surgical aid which the surgeons for which I telegraphed will to some extent meet, though it takes time to find out where the surgeons actually engaged are willing to admit that they are not sufficient for the work and to receive a foreign coadjutor. If I see my way to placing any more surgeons, I will let you know. Another want is that of *infirmiers* and hospital attendants,—ladies and ladies' maids doing, at of course a great effort to themselves, what could be more efficiently done with a less waste of power by trained nurses or experienced attendants. Monsieur Halfon, the banker, told me he tried his hand at sitting up all night and administering medicines at prescribed hours, but found that sleep

was apt to come upon him unawares in spite of his anxiety to do the best for his patients. I do not, however, see how we can do anything in this respect, as untrained persons are to be found on the spot, and will be gradually put into places as they acquire aptitude; whereas an attempt to supplant the volunteer staff would not be acceptable, and the crisis in this respect is passing over.

"The Princess of Roumania has had two baraques specially fitted up, in which she receives 36 patients, selecting from the other hospitals the most serious cases in order that they may have the quietude and fresh air of the neighbourhood outside the town. Colonel Mansfield presented me to her yesterday, and I was much impressed by the devotion with which she enters into the management of these comfortable baraques: for instance, she mentioned several instances in which various appliances or remedies had been found effectual. I ought not to omit that she said she was very grateful to the English people for thinking of sending aid to the Roumanians who have suffered in this war. Near the Princess's baraques is the hospital of Mons. Georges Philippesco, the only one where any need was acknowledged to exist. Here I have been able to send a supply of linen and socks for 200 patients, and also drugs and surgical instruments. One of our surgeons will probably be attached to this hospital.

"With regard to aid outside Bucharest, I must tell you first the system adopted in transporting the sick and wounded from the front, and then you will understand what I have done, and what I propose to do in meeting the wants of the various points of transit.

"All the wounded and sick of the Russian army are sent across the Danube by the bridge from Sistova to Zemnitza; from Zemnitza they come by road in country carts along the north bank to Fratesti, Giurgevo being occasionally bombarded by the Turks. Fratesti, you will see by the map, is a station on the line from Giurgevo to Bucharest, and is about five miles from Giurgevo. From Fratesti they pass to Bucharest, and thence by Braila and Jassy into the interior of Russia. The Roumanians are sent across the river at Turno-Margorelli, and there are various stages on the road from there to Bucharest or other parts of Roumania, at which they are received in temporary hospitals on their way to their homes; so that following the line of the river from east to

west, we have three cardinal points:—(1) Fratesti; (2) Zemnitza, with the opposite town of Sistova; (3) Turno-Margorelli. I have resolved that the stores shall be deposited at these three points, and then by personal inquiry, so far as possible, into the need existing at the places dependent on those points, to find out which cases of goods (they are all numbered, and the numbers noted in the invoice) had better be given to the surgeons, doctors and sisters of charity in charge of the various places where there are wounded.

"I have already visited Fratesti. The route I have indicated being that which is also taken by the officers and men going to the front, and the line being a single pair of rails with loops at the stations for trains to pass each other, the progress along the railway is very slow. I started for Fratesti on Wednesday morning last; numbers of guards were going forward by the same train, and among other distinguished travellers I may mention General Skobeleff and the veteran General Todleben. Arrived at Fratesti at about 2 p.m., I was introduced to Mons. Pisareff, the head of the Red Cross, who took me into his hut, gave me bread and cheese, and was hospitality itself. The state of things here was very serious. The Russians could not foresee that Fratesti would be called upon to play any part in the service of the sick and wounded. If Rustchuck had fallen, their depôt would have been Giurgevo, and in fact it was not till the Turkish shells threatened to set fire to the town that they made Fratesti the terminus for commissariat purposes of that line. Then came the obstinate defence of Osman at Plevna, and the fighting at Chipka, and the wounded came back upon their hands in shoals. At Fratesti, therefore, they were unprepared, but by building five or six long wooden sheds and putting up tents, they succeeded in getting shelter of an indifferent kind for five or six thousand men; but the wounded arrived every day, 1500 and 2000 at a time for some days, and now they are coming in hundreds at longer intervals. Consequently Fratesti has never been more than a stage at which the patients are lodged and their wounds or ailments attended before they are passed on. Inside the sheds and in most of the tents there is no sort of furniture, and the men that have mattresses are fortunate, the greater part being on straw. As if to give me an opportunity of judging beforehand of what Fratesti will become when the rains set in, we had a heavy downfall the

two nights before I started. The effect of this was that as we approached the low ground we could see at midday a layer of mist along the ground, and could feel the damp cold air in spite of warm clothing and overcoats. The wounded and sick were in great want of blankets, and I came to the conclusion, in which Mons. Pisareff entirely concurred, that hospital appliances and medicines in any quantities would be out of place there, and that the best thing I could do for them was to leave them invalid diet and cases of dressing materials, and buy them blankets; in fact, make it a more comfortable halting place. I succeeded in sending them 700 blankets next morning, all that I could lay my hands upon at Bucharest. I have heard of some more, and have ordered them. I also sent down a supply of Liebig's Extract, &c. &c., and left with them 40 cases of different useful kinds of diet to use themselves, and also to forward with ambulances passing between neighbouring points. The completeness and arrangement of these cases has already become celebrated in Bucharest, where the depôt of the Russian Red Cross Society is presided over by the sister of Mons. Pisareff—Madame Demidoff.

"Madame Demidoff I found to be thoroughly acquainted with the chief wants of the different districts, and to be as able as she is zealous in supplying those needs. I have therefore handed over to her a large supply of quinine and a quantity of invalid diet, from which she can supply her brother at Fratesti, or other deserving persons.

"With regard to Sistova and Zemnitza, I have to-day despatched by road nine country carts of goods in charge of Mr. Berg, the Courier from the Russian Embassy whom Count Shouvaloff kindly allowed to enter the service of the Society for this expedition. He is assisted by the other Courier whom I brought out with me. They will proceed by road to Zemnitza, where they will arrive in three or four days to await my instructions at the Red Cross depôt there. In the meantime I proceed by a speedier route, taking rail to Giurgevo and going thence through Zemnitza and Sistova, into Bulgaria, to inquire personally the needs of that district. I shall then, having in my pocket a a list of the cases which I have chosen for this district, be able to give each medical authority an order for so many cases, which will be delivered from Zemnitza or Sistova by the transport already in use for the service of their ambulances. If this plan succeeds, a

supply of the best and newest materials will be placed at the disposal of the sick and wounded at the precise points where they are.

"I have to start early to-morrow morning, so as it is very late, I must conclude.

"Believe me, &c.,

"A. K. LOYD."

"Foreign Office,

"*8th October*, 1877.

"Sir,

"With reference to your letter of 25th August, I am directed by Her Majesty's Secretary of State for Foreign Affairs, to transmit to you to be laid before the Committee of the National Society for Aid to the Sick and Wounded in War, a copy of a Despatch from Her Majesty's Ambassador at Constantinople, conveying the expression of the sincere thanks of the Porte, to the Society for the assistance and relief it is affording to the Turkish wounded.

"I am, Sir,

"Your most obedient, humble Servant,

"TENTERDEN.

"Henry J. Ker. Porter, Esq.,
"*National Society for Aid to the*
"*Sick and Wounded in War,*
"3, Craven Street, Strand."

"Therapia,

"*22nd September*, 1877.

"My Lord,

"With reference to your Lordship's despatch, No. 470, of the 30th ult., desiring me to communicate to the Porte the names of six surgeons who had recently been sent to Constantinople by the Red Cross Society, I have the honour to state that I have received a note from Servir Pasha, in which His Excellency requests that the sincere thanks of the Porte may be communicated to the Society for the assistance and relief it is affording to the Turkish wounded.

"I have, &c.,

"A. H. LAYARD.

"The Earl of Derby."

(By Telegram from Bucharest.)

From the Times *Correspondent at the Russian Imperial Head Quarters.*

"Gorny Studen, *October 4th*, 1877.

"As soon as Mr. Loyd had seen the proper authorities, he met with the most cordial reception at Bucharest. The Russian Ambulances, up to the heavy fighting in the Shipka, and at Plevna, were well supplied with lint; but the unexpectedly serious losses sustained rendered the English aid most acceptable. General Richter, the head of the Russian Red Cross, expressed his admiration of the mode in which the stores had been selected, and said they came most opportunely. M. Pisareff, at Fratesti,

received a supply of blankets and other material with gratitude; and Madame Demidoff, who presides over the depôt, accepted a present of a large quantity of quinine of the value of £200 sterling, for distribution in the various districts where the Russian fever patients most need it. She has placed a portion of her depôt at Mr. Loyd's disposal for the reception of part of his stores. On Sunday Mr. Loyd started for the Imperial Head-quarters at Gorny Studen, and reached the camp on Monday afternoon. On Tuesday he was presented to the Emperor, who received him very graciously, and expressed much gratification at the sympathy thus shown by the English people for the sick and wounded of his army. His Majesty said that Prince Tcherkassky would give all instructions for carrying out the benevolent intentions of the Society, and has commanded that Mr. Loyd should be a guest at the mess during his stay in the camp. Mr. Loyd has to-day completed his arrangements with Prince Tcherkassky, and returns to Simnitza to forward him the necessary stores. On taking leave of the Emperor this morning, His Majesty graciously thanked the Society for the good work they had undertaken."

LONDON:
PRINTED BY SAMUEL GOLBOURN, 76, PRINCES STREET,
COVENTRY STREET, W.

Library Table
II

NATIONAL SOCIETY

FOR

Aid to the Sick and Wounded in War.

LIBRARY OF THE
SURGEON GENERAL'S DEPARTMENT
OF THE ARMY.

From the Times
Newspaper

LETTERS

RELATING TO

OPERATIONS OF THE SOCIETY

IN THE

RUSSO-TURKISH WAR

1*st APRIL*, 1878.

London:
PRINTED BY SAMUEL GOLBOURN, 76, PRINCES STREET,
COVENTRY STREET, W.

NATIONAL SOCIETY

FOR

AID TO THE SICK AND WOUNDED IN WAR.

PATRON.—HER MOST GRACIOUS MAJESTY THE QUEEN.

PRESIDENT.—HIS ROYAL HIGHNESS THE PRINCE OF WALES.

Chairman of Executive Committee:

Lieut.-Colonel LOYD-LINDSAY, V.C., M.P.

RUSSO-TURKISH WAR.

Extract from a Letter of

SURGEON-MAJOR MCNALTY, M.D., F.R.C.S.

"TURNU-MAGURELE,

"22*nd November*, 1877.

"DEAR SIR,

"On the 21st, accompanied by Baron D'Hogguer, the Dutch Vice-Consul, who is going on a mission to Turnu-Magurele, in the morning, I visited the wards under our charge in the hospital, 'Independinteo,' and the granaries that Messrs. Conolly and Pattison were so active in fitting-up, and which are now full of sick, the patients have been latterly transferred to the care of a Roumanian Physician, as there was found to be a difficulty for a foreigner in treating sick that does not exist in the case of wounded men. There are now only 143 wounded in Turnu-Magurele—they are principally cases that cannot be moved on account of their severity—there are 500 sick, and some of these will shortly be sent to Bucharest.

To-day, the 22nd, I was introduced to Director-General Dr. Davila, the head of the Roumanian hospitals in the front. He said that he would be delighted to have our assistance. I

shall leave with him to-morrow for Gravitza and Poradin to see where and how our services may be best given. The opposition against foreign surgeons crossing the Danube has been happily removed, in a great measure, through the representation of Surgeon-General Davila. Messrs. Conolly and Pattison will join me if there be an action impending at Plevna, and Mr. Stephens has instructions to follow us up with covering for the sick and wounded.

"On the 22nd November I left Turnu-Magurele with Surgeon-General Dr. Davila, one of his staff and Baron D'Hogguer, the latter proceeding to Parodin, we crossed the Danube by the bridge of boats to Nicopolis, where there are a few tents to accommodate sick and wounded should the bridge be broken. Skirting the Danube on the opposite side is a very bad road which led us to a field hospital at Mussalim-Salo, a resting-place for sick and wounded from the front—the hospital consists of thirty tents, which are deeply trenched round for drainage, the walls and sides of the entrance being well protected with dried maize stems, leaves, and matting. The situation in the valley of the Danube is objectionable, being damp and cold, and no doubt malarious.

"Thirty kilometres from Nicopolis on a higher altitude we arrived at Metchka, where the most has been done to render the place fit for the accommodation of sick and wounded, as many of the sick as possible will be sent to Turnu-Magurele immediately. There is accommodation in tents and huts for about six hundred patients. There are three or four tents of the Roumanian Red Cross Society, in one of them, the store tent, I saw some of the society's stores sent on a former occasion from Turnu-Magurele; driving along the military road, and gradually ascending till we came to a kind of plateau on the further verge of which we reached Gravitza. On the way we could see dimly in the distance the outline of the mountain range where the Shipka Pass and Lovatz are situated, some one hundred kilometres distant. Although it was twilight, not to lose time, Surgeon-General Davila kindly showed me over the field hospital, and gave me many interesting particulars regarding the field hospital service; these, with my notes from personal observations must be deferred to a future opportunity. Suffice it to say that the hospital camp was well arranged, exceedingly clean, and well drained, that all sanitary details were well carried out,

and the welfare of the sick secured thereby. I explained to Dr. Davila that our work at Bucharest and Turnu-Magurele was coming to an end, and he agreed with me that the National Aid Society could render the best assistance, by some of us being at Gravitza, there to await events; it was felt strongly that very shortly personal aid would be badly required, and it was not so much that I offered, but that he asked me to remain, should there be an unsuccessful attack on Plevna, or the place be taken by storm, or should the town surrender, in any case our aid would be most valuable. I was told in the case of a surrender that a portion of the Roumanian medical staff would immediately enter the town to afford relief to the Turkish sick and wounded, and I resolved that we English Surgeons should form part of that contingent. An arrangement was entered into that a section of the English ambulance should share in the work at Gravitza, that the medical officers of it should be independent as regards the treatment of cases, but of course be under the order of Surgeon-General Davila. Baron D'Hogguer kindly offered his services if necessary, in bringing stores from Bucharest, and it was resolved that the plan should be laid before Prince Charles for his approval. I was accommodated in an underground hut, being the place of honour for guests. Now I have a strong prejudice against underground huts, which my occupancy of this one did not dispel. There is an appearance of snugness in the hut in an exposed place like Gravitza, which makes one involuntarily exclaim how comfortable; but when lying on a stretcher near the margin of the surface, and the embers in the impromptu stove are no longer glowing, a damp earth-like feeling grows around, and the cold wind sweeping across the hill chills from head to foot, then one feels that there is nothing so good as a tent when other shelter is not available. On this particular night the firing was loud and incessant, and there was the tantalising feeling that an attack might occur at any moment, and kept one on the alert all night; but nothing came off.

"To-day, the 23rd, in a cold driving mist we crossed the chalk hills to the head quarters at Poradin, where I had an interview with Prince Charles and explained my views; he, knowing what had already been done by the National Aid Society, gave his warm approval to the scheme, at the same time informing me that a convention existed

between the Russians and Roumanians, regarding the disposition of the Red Cross, and that he would speak about the matter to the Grand Duke, and appointed the following day at noon to see me at the field hospital at Gravitza. Subsequently I made my way to Colonel Wellesley, the military *attaché*, whom I met at the hospital at Bucharest, when he paid a visit there. He had been confined to his hut for some days through indisposition, but was now nearly well, and happily did not require any advice; calling at the telegraph station I found from a message just received, that I had to return immediately to Bucharest.

"Before leaving Gravitza I took the opportunity of finding out accurately what articles were most needed at the front. These were medical comforts, warm covering for beds, and hospital personal clothing were also specially required. Tents are difficult to warm, and there was hardly any firewood, the few trees in the neighbourhood had already been cut down, and the fuel consisted chiefly of dried maize stems and brushwood, which soon burn away. Surgical appliances and instruments were not required. The way I found out about the need for medical comforts was, Doctor Davila, I remarked, you have given me a description of the equipments of the Roumanian field hospitals. Now about the dietary, what does it consist of? 'Well,' the reply was, 'you shall taste the soup; as to other diet, we give what we can!'

"Travelling across the hills in the raw morning air we reached Metchka at noon. Here I must take the opportunity of stating that I am much indebted to the hospitality of Roumanian medical officers while on the other side of the Danube. Crossing the bridge of Nicopolis once more, we traversed the stretch of the low lying land between the Danube and Turnu-Magurele, passing by some wounded coming from the action at Rahova. It will show how heavy the roads were when it is stated that there were no less than six horses harnessed to an ambulance waggon, the latter being lighter in draft than one of the English pattern; however, on the other hand, it is to be admitted that the distance was considerable and the horses not over powerful. On arrival at Turnu-Magurele I gave final instructions to Messrs. Conolly and Pattison with regard to stores for the front and hospital work, and left as soon as possible for Slatina.

"Madame Rosetti was returning to Bucharest for a short respite from her labours, I overtook her carriage on the road, and

her name procured me a bed in the only village we could stop at for the night.

"On the evening of the 26th, I arrived at Bucharest, at the railway station, where I met Colonel Mansfield and Messrs. Stephens and Reid. I proceeded directly to the hospital and found everything in admirable order. All the instructions given to Mr. Stephens had been implicitly carried out. He had displayed tact and discretion beyond his years. At the hospital I saw Mr. Vachell, of the Stafford House Society, who, with Mr. Douglass, was taken prisoner by the Russians, and whose case is no doubt by this time well known in England. He was, I am happy to record, well taken care of, and was located in the resident surgeon's room, although looking worn and feverish, I had strong hopes that nursing, diet, and rest would soon restore his strength.

"On the 27th I was glad to meet my friend, Surgeon-Major Fraser, who had been sent by the National Society to relieve me. It is arranged that he will carry out the plan of operations already initiated, and with which he is in full accord. Mr. Conolly will be recalled to take charge of the hospital at Bucharest. Dr. Fraser will proceed as soon as possible to the front and follow out the scheme arranged with Surgeon-General Davila. Mr. Stephens will take the materials now ready for the sanitary train at Braila, and hand them over to the proper authority. As one of the Roumanian sanitary trains is very badly off in the way of warming apparatus, twelve pounds have been given from the funds of the Society to complete a subscription headed by the Princess, for stoves. Her Highness, who has won the admiration of all by her devotion to the wounded, had expressed a wish to see me on my return from the front, but unfortunately she happened to be ill, and I had to forego the honour of waiting on her, as it was my duty to return to England with all possible speed; this Colonel Mansfield kindly represented for me through the proper channel. Some wounded, when I was leaving Bucharest were expected at the hospital, and everything was ready for their reception. There are many vacant beds now at Bucharest owing to the fact that the stream of sick and wounded have been for the last two weeks diverted to Moldavia; but the hospitals there are nearly full, and the Roumanian Government are feeling the expense, and the Bucharest hospitals will soon have again to take their share in providing accommodation.

"I cannot conclude the letter without stating that the surgeons of the National Aid Society are deeply indebted to Colonel and Mrs. Mansfield for their uninterrupted kindness for the last two months. Colonel Mansfield has taken deep interest in our affair, and by a judicious firmness smoothed over many difficulties that arose. Mrs. Mansfield has worked constantly at the hospital, sometimes day and night when a bad case required careful nursing, and many a soldier, both Roumanian and Turkish, has reason to be thankful to her. She also undertook the selection of infirmiers, and kept a surveillance over them, and when necessary purchased various articles of equipment required for the hospital. I cannot speak too highly of Mr. Conolly, he is a cool and expert operator. Messrs. Pattison and Stephens deserve great praise for their constant energy, and desire to carry all my instructions into effect. Dr. Marcovitz, the Civil Director of Hospitals in Bucharest, and who is a highly accomplished surgeon, has done everything in his power to help us, and seeing how badly we were accommodated in hotels, gave up one of the largest rooms in his house to our use, besides dispensing his hospitality otherwise. There are many points connected with Red Cross work that suggest themselves both generally and with reference to this particular ambulance that I had the honour of conducting, but they must be deferred for the present.

"Believe me, yours very truly,

"GEORGE W. M'NALTY.

"COLONEL LOYD-LINDSAY, V.C., M.P."

From SURGEON-MAJOR FRASER, M.D., F.R.C.S.

"BUCHAREST,

3rd December, 1877.

"MY DEAR SIR,

"In my last letter I stated that Surgeon-Major McNalty had not yet returned from Bulgaria. He reached Bucharest on the night of the 27th, whilst the unfortunate necessity which existed for his immediate return to England, only admitted of his remaining here for one entire day prior to his departure.

"I took advantage of this short delay to have long and

earnest conversations with him on the following subjects. We entered into the general plan of action he has hitherto pursued in carrying out the wishes of the Society during the last two months. He then detailed to me, as fully as possible, the particulars of the work which has already been completed, and of that which is at present being carried out. Finally, we agreed as to the general programme, which it is most desirable, in the interests of the sick and wounded, should be followed for the future.

"The circumstance of Dr. McNalty's hurried departure rendered it impossible to enter fully into minute details; but I believe I learnt enough to place me, *au courant*, with the position which the Society now occupies here, and also enough to enable me to carry out, I trust, in a satisfactory manner, the work which he has hitherto performed in a way so highly creditable to himself, and so evidently beneficial to the interests of the sick and wounded, both Russians and Roumanians.

"Since I last wrote, the number of these in the hospitals of Bucharest has been further reduced, and, at present I am within the mark when I state, that only about 25 per cent. of the accommodation is in use, 75 per cent., at least, remaining to meet the requirements of the future.

"This is so far satisfactory; but, unfortunately, a sudden change for the worse in the state of the weather, which has hitherto been comparatively fine and mild, or a vigorous attempt on the part of Osman Pasha to force his way out of Plevna, would at once materially alter that state of affairs.

"I considered it right last week to bring Surgeon Conolly back from Turnu-Magurele to Bucharest, where he has resumed duty in our Military School Hospital, having serving under him Messrs. Stephens and Reid.

On the 30th November I again visited the Roumanian Hospital Malmaison. This building, as has been already stated, was formerly a barrack, converted, after the declaration of war, into a hospital (450 beds), mainly through the assistance of funds derived from voluntary contributions. The amount of money available for this purpose has all along been limited, and a good deal still remains to be done before it can be rendered a really suitable residence for sick men during the winter months. I therefore considered it right to hand over five hundred francs from the funds of the Society, towards the completion of the necessary

alterations which are now being carried out. After leaving the wards in which the sick and wounded Roumanians are being treated, I proceeded to another part of the building where a number of Turkish prisoners, amongst whom are several Arabs, are confined. A few of the men are sick, suffering from diarrhœa or dysentry; of the remainder, a small number are beyond middle age, whilst all the rest appeared to me to be strong, well-built men, in the prime of life, and apparently equal to service and continual physical exertion.

"In addition to the above, there were also in the same building several of the wives and children of the prisoners, who had elected to accompany their husbands and fathers into captivity.

"Tobacco is almost a necessity to the Turk, the supply of this, allowed by the Government, is by no means equal to the demand, I was, therefore, glad to be able to provide from the funds of the Society, a moderate allowance of tobacco for each man: I likewise gave a small sum in money to each family to assist in purchasing any articles they might stand in need of. It was touching to notice the expressions of gratitude with which these presents were received.

"Since my arrival here I have been much impressed by the constantly repeated reports of the great necessity which now exists for large additional supplies of hospital comforts, and warm hospital clothing for the sick and wounded at the Head Quarters of the armies in the field. I have, therefore, during the past few days, completed my arrangements for proceeding to Plevna to-morrow, and then personally inspecting the field hospitals. I shall take with me two cases of brandy, and four large boxes containing Leibeg's extract essence of beef, preserved soups, &c. I have likewise ordered to be prepared in time, twenty complete suits of warm hospital clothing, and twenty blankets. The amount of clothing is small, but more could not be prepared at such short notice. Time is, at the present season, of especial importance, and should I, on my arrival at Plevna, find that the requirements of the sick are really so urgent as they are stated to be, I shall not hesitate to do everything in my power to meet them with the least possible delay.

"Drs. Douglas and Vatchell are still living in our hospital here: the health of the latter is improving daily. It has been decided by Russian authorities that these gentlemen should be conducted under escort, and without unnecessary delay to the Roumanian frontier, whence they will be at liberty at once to return

to England. Dr. Douglas will proceed ere long on his journey, whilst Dr. Vatchell will follow him, as soon as the state of his health will permit of his doing so with perfect safety.

"Yours very truly,

"D. A. CAMPBELL FRASER.

"Colonel LOYD-LINDSAY, V.C., M.P."

"TURNU-MAGURELE, ROUMANIA,

"10*th December*, 1877.

"MY DEAR SIR,

"In my letter of the 3rd inst. I intimated to you my intention of proceeding forthwith to Plevna.

"I forwarded a case of medicines to the Hospital of l'Ecôle Militaire, near Guirdzion, whence I had received a request for help.

"I left Bucharest on the 5th inst., taking with me the stores, medical comforts, and hospital clothing, previously noted; to these I added thirty warm waterproof blankets.

"On the same day I reached the town of Slatina, on the Ottu, a river which rises in the Carpathian Mountains, and flows into the Danube, about 3 miles above Turnu-Magurele. Here there are five military hospitals, which I visited, along with the *Médecin-en-Chef*.

"The sick and wounded under treatment appeared to be well cared for; it was mentioned to me that the supply of sheets and warm socks were frequently found to be too small to meet the demand, I therefore gave instructions that the necessary number of each of these should at once be provided.

"The country between Slatina and Turnu-Magurele is flat, bleak, thinly wooded, and at all events during this season of the year, uninteresting to a degree, which I have never seen surpassed; the roads are execrable, and covered with mud a foot deep for the greater part of the distance, which for miles is simply a track, through apparently a succession of ploughed fields. It is not difficult to imagine that under such circumstances travelling must of necessity be both slow and monotonous. There were no houses of public refreshment by the way.

"I therefore considered myself most fortunate on finding that I was able to put up for the night in the house of a *proprietaire*, who resides about half-way on the road to Turnu.

"In course of conversation this gentleman mentioned to me

the very general opinion which exists amongst the country people, that Osman Pasha's army is officered chiefly by Englishmen. I may add that I could not fail to perceive that the speaker himself was equally impressed by the same belief.

"Turnu-Magurele was reached by me the following evening, but my baggage, which left Slatina at the same time as I did, is still on the road, although the conveyance which contained it was drawn by four horses.

"The first news which I received was the bridge over the Danube had given way, and that there was no prospect of its being again available for traffic under a period of ten days.

"The delay consequent on this has given me time to visit the thirteen different hospitals in the town—in all of these I found a large percentage of vacant beds—the accommodation is probably sufficient, but in other respects much still remains to be done before these hospitals could be pronounced to be on a par even with those in Bucharest; warm blankets and hospital clothing are especially needed. I have requested the *Médecin-en-Chef* to furnish me with a list of what he still stands in need of; on the receipt of this I shall at once give the necessary instructions for the supply of these.

"The news that Plevna had fallen arrived to-day; as the number of sick and wounded now there must be very great, I have arranged to leave for the front to-morrow morning, taking with me Mr. Pattison, whose services are not urgently required here. Our destination will, I expect, be reached the same evening.

"Yours very truly,

"D. A. CAMPBELL FRASER.

"1*st January*, 1878.

"Early on the morning of the 16th December, I left the Bulgarian cottage in the town of Plevna, in which I had passed the previous night, for Gravitza. On my way there, I passed the 4,000 carts in which the Turkish families in Plevna, numbering, in all, from 10,000 to 12,000, had followed the army of Osman Pasha on the day of the sortie: these carts were closely packed together on a piece of ground near the road, the whole convoy being under the charge of a Russian guard. I am informed that about 100 women and children out of the original number were killed accidentaly during the battle on the 10th December, but regarding this the evidence it is not conclusive.

"Gravitza was reached about mid-day. I ought previously to have stated that on the 15th December, the day before I visited Bagot, I sent telegraphic instructions to Bucharest, at once to prepare 100 flannel suits, complete, including a warm blanket with each suit.

"At the same time I telegraphed to Turnu-Magurele, authorizing the purchase of a large supply of rice, with tobacco and brandy, for the use of the numerous Turkish wounded who had already begun to arrive there. To complete the history of these different articles, I may add, that on my return to Turnu, on the 17th, I found that the purchases had at once been made, that they were received at the different hospitals at the very time they were most needed, and that already they were being extensively used.

"The flannel suits were forwarded from Bucharest in eight packages, two days after my return, by special messenger. By the same messenger I sent two packages of sheets and warm socks to Slatina, in answer to an urgent appeal from the *Médecin-en-Chef*, in favour of the wounded in the hospitals in that town.

"Having an hour to spare, prior to leaving Gravitza for Metchka, I paid a visit to the Gravitza Redoubts; No. 1 it will be remembered was captured by the Russians and Roumanians some weeks prior to the capitulation; No. 2, was held by the Turks to the last, many unburied bodies lay between the two Redoubts, several of which had evidently been there for weeks. On the Turkish side many soldiers lay dead, apparently where they fell. Beyond the Turkish Redoubt are two covered ways, connecting Gravitza No. 2 with the Redoubt behind it on the sides of each way; the Turkish dead had evidently been buried, by laying the bodies close to, and parallel to the way, and then throwing a light coating of earth over them from the "way" or ditch itself; the original covering was slight, and portions of it had fallen into the ditch prior to my visit; heads, arms, legs, trunks, hands, and feet, were exposed to view, and protruded in all directions; within a space of thirty yards I counted 40 bodies. This portion of the covered way was, in fact, largely composed of the remains of the very men who had, up to the time of their death, so successfully defended that little Redoubt against the most determined attacks of their enemies, repeated again and again.

"I passed the night of the 16th at Metchka, and there found about 500 Turkish wounded officers and men, all of whom had arrived there the day before, those whom I had seen in the same

hospitals on my previous visit, on the 13th January, with the exception of a small number who were too ill to travel, had been sent on to Moslem, Seli, and Turnu. These men were being treated with great kindness and attention by the Roumanian Medical Staff.

"On the 17th I reached Turnu-Magurele, and left next morning for Alexandria, on the way snow began to fall, and my destination was reached the same evening with difficulty, the snow being then more than a foot deep, In Alexandria, I found 4,102 Turkish prisoners, officers and men, *en route* to Bucharest under an escort of Roumanian soldiers, about 100 prisoners out of the total number had been sent to hospital on arrival, the rest were distributed in the different Bulgarian and Roumanian houses in the town. I visited the Commandant; I learnt from him that each man was allowed by Government, one loaf of bread a day, with either meat or cheese.

"The Roumanian officers are, as a rule, kind hearted, whilst between them and their prisoners, the feeling displayed might almost be termed friendly. Prisoners are not, I believe, intentionally neglected, nevertheless a want of system in distributing the food, struck me forcibily during the four days I was storm-stayed along with the Turks in Alexandria, the result of which absence of system and proper organization being, that although full issues may have been made, some were served more than once, and others, I fear, were not served at all. Meat no doubt was provided in sufficient quantity, but, given that each man received his allowance, which is in the highest degree improbable, it is equally improbable that a prisoner in a strange land, talking Turkish only, could make known his wants, and procure the means of cooking, &c., when these were required. I cannot doubt, that owing to this, many of these poor Turks suffered from want at that time.

"The Major, commanding the escort, informed me that he had purchased all the sandals he could procure, 500 in number, and distributed them amongst the most needy, he added that many of these men had shortly afterwards sold them for a few coppers, a report to that effect had doubtless been made to him, but as to its correctness I have the very gravest doubts.

"The Turk is very fond of honey, which he uses as treacle, his usual method of carrying this about with him is as follows, he breaks his loaf of bread in two, digs a hole in one half with his fingers, in this he places the honey, then replacing the other half of the loaf, he is enabled to carry his honey about, eating some of it with his

bread when hungry. Hard dry bread, is by this means rendered palatable and pleasant to the taste. I purchased on the 20th, enough honey to allow of each prisoner having a reasonable quantity, I also, at the same time, purchased a packet of tobacco for each man, neither the one nor the other had any of these poor fellows tasted for weeks previously. The issue was made as follows; each Turkish captain brought ten men with him to a large room in the hospital, the men carried dishes in which was placed quantities of honey, in proportion to the number of men in the respective companies; another officer then came with three men for each company, to whom were given a suitable proportion of packets of tobacco, the general distribution was thus rapidly made, the whole being finished in less than an hour.

"The feelings of delight evinced by all, when it became known that these issues were to be made, were very marked. As the list of the different companies were being made out, the Turkish officers crowded round the table where I was writing, and on my saying to one of them, that I would like to possess a regimental coat button as a little souvenir, one and all of them tried to beg or borrow a knife or pair of scissors, and if I had not without delay explained that I wished for one button and one only, I believe the poor fellows, who had little else to give away, would eagerly and with pleasure have cut off every button they possessed, and have presented the whole to me in a bundle.

"During the whole of the 20th snow continued to fall, the weather was very cold, and a cutting wind was blowing. To each of the prisoners as I considered required it, I gave warm articles. One Turkish captain who was shivering with cold, appeared also to me to look very ill, I beckoned to him, and on coming up to me repeated the word "Capitan," more than once to indicate his grade, then still shivering, he pointed to his thin well-worn coat which he wore over a very light and old Jersey, we had no difficulty in understanding each other. I took him at once across the street, and purchased for him a good warm over-coat, lined with sheepskin, which he immediately put on, then taking my hand in both of his, he pressed it repeatedly, at the same time addressing me in Turkish, the only word that I could make out was "Allah," this he used more than once, the tears were in his eyes as he left me.

"That evening I visited the Civil Hospital to which the Turkish sick had been sent. These all appeared to be well cared for.

"On the 21st snow was still falling, and the ground was covered to the extent of about 2½ feet. That day I went about the town distributing bread and tobacco in small quanties; there was no difficulty in finding out those who were in need of bread, opposite each baker's shop I usually found about a dozen Turks, some with perhaps two or three coppers in their hands, all anxious to purchase a loaf of bread, the price of which was fourpence. On these occasions my rule was at once to purchase enough of bread to allow each man present to carry off a loaf for his own use, many men thus obtained a meal, who otherwise would, I much fear, have gone without food for that day.

"The distribution of tobacco was carried out with equal facility; it was only necessary to stand on a given spot, and present a small packet of tobacco to one or two Turks, when, before the second man had been served, a crowd of thirty or forty at once collected. These being supplied, the same plan was again followed on a spot a little farther on; and thus all through, until the store was exhausted. On the 22nd an attempt was made to march the prisoners to the next station. A few reached their destination, but the larger proportion was obliged to return to Alexandria, after being absent about four hours. Out of these one hundred had to be sent to a temporary hospital, which had been hired for the occasion. Here I visited them, and found that there had been some delay in issuing their bread, which was brought to them late in the evening. These poor fellows were all footsore, weary, and thoroughly done up—many of them were coughing violently, whilst one man, who had returned that day, lay dead in the room. I at once issued to them biscuits all round, nothing else being purchasable at the time. I likewise provided them with a lantern and candles.

"On the 23rd, before leaving Bucharest, I again visited this hospital, and again issued biscuits to each patient. I found them then comparatively comfortable, after having had a good night's rest.

"I left Alexandria for the railway station of Fratesti at 2 p.m., on the 23rd, in an open sleigh, and reached my destination at 9 a.m. on the 24th; the whole night was passed in the sleigh, the temperature at the time being about 22°. This journey, which is usually accomplished in five hours, occupied on the present occasion nineteen hours. Bucharest was reached on the evening of the 24th, by train from Fratesti. The sum of

£100 was handed to me by Colonel Mansfield, two days ago; the amount in question, he informed me, had been remitted by you, in answer to a telegraphic communication fowarded by him to you, during my absence in Bulgaria. This application was unnecessary; ample funds being available at Bucharest, from first to last, to meet all legitimate demands.

"Yours very sincerely,

"D. A. CAMPBELL FRASER.

"Colonel LOYD-LINDSAY, V.C., M.P."

From SURGEON-MAJOR FRASER.

"HÔPITAL DE L'ÉCOLE MILITAIRE,

"*January 9th*, 1878.

"MY DEAR SIR,

"Prior to the 23rd of December only a few Turkish prisoners had arrived at Bucharest. On that date 432 wounded men came in, most of them in a weak and exhausted state. I was then *en route* from Alexandria, but Mr. Conolly during my absence made all necessary arrangements, and issued to each man at the railway station soup, bread, and wine. In doing this he was ably assisted by Mrs. Mansfield, wife of the English consul.

"Fifty-six of the most serious of these cases were brought to our Hôpital de l'École Militaire, were there was at the time seventy vacant beds. Since then the number of Turkish wounded under our immediate charge has been increased to sixty-four, including three officers. Several of the later admissions are bad cases of frostbite of the feet, the men in question having been injured whilst marching through the snow, which lies thickly between Turnu-Magurele and Bucharest. Symptoms of erysipelas appeared in the case of a man who had been wounded by a rifle ball in front of the right temple, which passed out in the right side of the nose, entirely destroying the right eye. This patient is now doing well.

"A tendency to diarrhœa has been noticed amongst several of our wounded—in one instance only was serious dysenteric symptoms observed. This case I considered it right to have removed at once to the medical hospital at Malmaison.

"On the 3rd of January Mr. Conolly amputated the shattered right arm of a man who had been wounded on the 10th of December; several other operations of a minor character have

also been performed within the last few days; all are doing well; in fact, notwithstanding the quantity of wounds from which so many of these men suffer, and the hardships and privations which they all underwent prior to the capture of Plevna, and subsequently on their way to Bucharest, I am happy to be able to state that our efforts on their behalf have hitherto shown most satisfactory results. All our patients wear warm flannel clothing. One death has occurred amongst the Turkish wounded in the Hôpital de l'École Militaire. The man's right hand had been severely lacerated by a rifle ball, tetanus supervened two days after his admission, and of this he died, after being five days under treatment.

"Immediately after the arrival of the Turkish wounded I engaged an interpreter for duty in the wards. The services of this man have daily proved most valuable in assisting the medical officers to arrive at a correct history of each case, as well as in enabling the Turkish patients to communicate readily, without chance of mistake, and with the hospital attendants. This interpreter also acts as ward master, superintending the issue of clothing, the dieting the sick, the purchase of extra diets, &c.

"The number of different nationalities represented in Bucharest is remarkable; in the Hôpital de l'École Militaire alone four different languages are spoken, *viz.*, English, French (by the Sisters), Roumanian, and Turkish; notwithstanding this, matters have been so arranged that all the duties are carried on without difficulty—there is never any confusion.

"On the 1st January the Prince and Princess of Roumania visited the sick and wounded in this hospital. After going round each of the wards they both informed me that they felt highly pleased and well satisfied with the manner in which the sick and wounded were being attended to. Finally, the Prince expressed his thanks for the very valuable assistance which he said had been rendered by the National Aid Society to the sick and wounded from the commencement of the war until now.

"Before leaving he presented each Roumanian soldier with a war medal, which the Princess pinned on the breast of the recipient.

"On the 2nd January I had an interview with the Russian general, Leitzoff, who has the entire supervision of the Russian hospital establishments, on this side of the Danube, and learnt from him that the necessity for warm flannel clothing in the large hospital in Simnitza was urgent.

"On the 4th I forwarded, in three sleighs, clothing for 200 men, complete, and 960 tins of preserved milk, to the address of '*Le Capitaine de la Garde*, the superintendent of hospital stores, Simnitza.' These sleighs ought to reach their destination on the 7th day.

"To other and smaller Russian hospitals I have also sent warm flannel clothing, brandy, and preserved milk.

"When I was at Bagot, General Kossinsky, inspector-general of all the Russian hospitals, asked me under what conditions the National Aid Society made these and similar donations. My reply was that they were free gifts, and that the only conditions were that they should be distributed freely, and without reserve, amongst those of the sick and wounded who were under their care, and who were most in need, whether these might happen to be Russians, Roumanians, or Turks.

"On the 4th I visited the Malmaison Hospital, which is now fitted up with 600 beds; not one of these is vacant. I found the Roumanian sick and wounded in it to be fairly well off, both as regards clothing and the warming of their wards. Their number is at present 200. The remaining 400 beds are occupied by Turks, of whom 120 are wounded, all the rest suffer from bronchitis, diarrhœa, and dysentery.

"By far the larger portion of the Turks were thinly and poorly clad, the bed covering supplied to each man consisting of a sheet and a thin rug. In each was a stove, which did not suffice to keep it heated up to a suitable temperature. The allowance made by the government for the support of each man is, in my opinion, quite insufficient, while, through the private funds of this hospital having latterly fallen so low, extras, such as milk, cannot sometimes be purchased at all. The sick men, in fact, suffer from insufficient clothing, and often from insufficient food.

"Considering the case a very urgent one, I, the same evening, sent up, for use in this hospital, 225 blankets, 700 warm knitted jackets, 400 pairs of warm socks, 500 nightcaps, and 250 shirts. At the same time I likewise forwarded 480 tins of preserved Swiss milk.

"It ought to be understood that almost all the wounded I mention come from Plevna to Bucharest by ambulance and rail, whilst the other prisoners marched from Plevna in convoys, which

began to leave that place on the 13th December. Overcome by fatigue, and want of suitable food in sufficient quantity, and by exposure to a temperature frequently below zero, the more weakly of these men either fell out on the road, or shortly after their arrival at Bucharest, when the worst cases come to hospital.

"In the Malmaison alone the number of deaths amongst the Turks has, during the last week, averaged from seven to eight daily. The number of prisoners now in Bucharest is from 10,000 to 12,000.

"It is difficult to give these figures with absolute correctness, because, although the vast majority, if not all of these men, must arrive here, those for Russia are simply *en route*, and pass on as rapidly as transport can be secured for their removal; hence it may happen that the numbers on any given day may be either considerably higher or much lower than those of the previous day. The men about whom I have been writing, represent a considerably larger number who left Plevna on or after the 13th December.

"I now propose to give a short sketch of the history of Osman Pasha's army, from the hour when the white flag was raised on the field of the Vid, to the present time.

"Edhem Pasha, whom I had the pleasure of meeting at Gravitza, informed me that on the morning of the 10th December the Turks marched out to the sortie, 32,000 strong. The number of prisoners may be roughly stated to have been 30,000; of these it was arranged that 20,000 should go to the Russians, and the remainder to the Roumanians. The route for all was by the way of Nicopolis and Alexandria to Bucharest.

"This circumstance became ere long, one of the gravest importance. It was midwinter, but the weather at first was most favourable. Unfortunately, on the 18th snow began to fall; that evening the whole country was covered to a depth of about 12 inches. On the 19th the storm continued, and a bitter wind was blowing all day long. On the 20th and 21st this continued, but in considerably diminished force, the snow being then nearly three feet deep.

"On the 22nd things began to mend, and attempts were begun to beat down pathways, and to render the roads, which in the meantime had become blocked up, passable; traffic became general on the 23rd, since then there had been short intervals

of thaw and slush, followed by intense cold, and the thermometer below zero.

"This sudden change in the weather, when so many thousands of Turks had been already for several days on the march, was a misfortune, the greatness of which can scarcely be exaggerated. It was the duty of both Governments—Russian and Roumanian—through their officials, to strain every nerve to meet the difficulty, and, above all, to supply and issue to each man the requisite food daily, with suitable lodgings and fuel each night, all of which are equally essential during this bitterly cold season.

"The responsibilities of all concerned were very greatly increased by the fact that they had to do with prisoners, who were strangers in a strange country, the natives of which spoke a language which they did not understand, amongst a people with whose fathers and brothers they themselves had been in deadly struggle only a few days before. Prisoners so circumstanced are of necessity as dependent as little children, if neglected or forgotten they are utterly helpless, and nothing remained for them but to lie down and die.

"Having given a general idea of the conditions which could not fail to affect these convoys of prisoners during their march, I return to Plevna.

"On the 10th December the men who were engaged in the sortie had previously been well and abundantly fed, each man receiving daily up to the very last an abundant allowance of bread, soup, and wine. For some weeks prior to the 10th tobacco was seldom issued, and the absence of this is, no doubt, felt by the Turks to be a great privation. These facts have been repeated to me again and again by the numerous prisoners with whom I have conversed since my return to Bucharest.

"These statements are confirmed by the appearance of the large number of Turks whom I myself saw at Plevna four days after the capture. All were healthy and strong, no man among them looking as if he had been on short rations for any considerable length of time.

"Edhem Pasha, with whom I again conversed this afternoon, confirmed all these statements. He says that all were fed well up to the last, so as to have them strong and equal to great exertions on the day of the sortie.

"'But,' he added, 'all our provisions were exhausted; all

that remained to us of bread was issued the day before the battle; each man then had rations of biscuits for six days. If,' he continued, 'we had had provisions for two years, we should have remained in Plevna for two years.'

"All the prisoners with whom I have conversed agree in declaring that after the battle of the 10th, and on the night following, the whole of the wounded lay where they fell; 'no one came near them;' and that, so far as is known, no assistance of any description was offered by any one to a single wounded Turk on the field of battle until the 11th December.

"General Davila's statement, recorded in a previous letter, will be remembered, probably. He was engaged on the night of the 10th on another part of the field, out of the view of the men whose evidence on the subject I have just given. These men add, and they all tell one and the same story, that on the 11th most of them received soup, and that the removal of the wounded began the same afternoon. These wounded were passed on from station to station, and received, I believe, throughout, the same amount of care and attention which is usually bestowed upon the Roumanian wounded.

"As regards the different convoys, it will be impossible for me to follow each. I shall specially refer to two only, each numbering over 4,000 men. The first of these I come up with at Alexandria on the 18th December. Regarding the history of this convoy during its stay at Alexandria from the 18th to the 23rd of December I have already written. I shall therefore only repeat now that I was impressed by the kindly, almost friendly, feeling which seemed to exist between victors and vanquished of all ranks, the two majors in particularly appearing to be specially anxious on all occasions that every justice and fair play should be done to the prisoners.

"Notwithstanding this there was evidently a want of system and of organisation suitable to the circumstances of the case, and many of the Turks suffered grievously in consequence. I saw this same convoy on the 27th at Bucharest, and learnt that on the march from Alexandria they had 'only' lost seventy men.

"The following, which was furnished to me by a highly respectable German whom I had employed to take a large supply of warm clothing to Turnu-Magurele, refers to another convoy, which was passing through that town on and after the 31st of December.

"Dr. Felix, the *Medecin-en-Chef* at Turnu, informed me that the convoy in question was a Russian one, which was marching through Roumania under a Roumanian escort. The Russians, he added, were in duty bound to provide all the requisite supplies for this convoy. Many of the men were thinly clad, and the weather was bitterly cold. Mr. Pattison, therefore, accompanied by this German agent, Mr. Sturm, proceeded at once to distribute the different articles amongst the most needy.

"After visiting the hospitals, which were crowded, Mr. Sturm says they both went to the open spaces in the town, where large numbers of men were collected in tents, and on the ground at one place there were twenty tents, and in each tent several dead men; in one in particular he counted six corpses. In a few of these tents an attempt to make a fire had been made with a few sticks and straw. The stench from the sick and the dead was very great. In another set of tents which were visited, the same melancholy sights presented themselves.

"A large proportion of the prisoners in this convoy were frost-bitten. Few were supplied with sufficient nourishment; and had it not been for the assistance afforded by the National Aid Society and certain of the townspeople in furnishing warm clothing and food the loss of life, great as it was, would have been much greater still. Mr. Sturm returned to Bucharest by the Alexandria road. He reports having seen by the way very many bodies of dead and dying Turks, more than one hundred lying in the snow, which was then about two feet deep. Sometimes an arm only was visible; sometimes a head; sometimes a whole body; and the dogs and ravens busy picking the bones.

"The above is Mr. Sturm's report of what he himself saw. Mr. Pattison's report has not yet reached me. I believe that out of the original number of prisoners who left Plevna thousands have fallen out by the way, that very many of these died shortly afterwards, and that the remainder are now crowding the towns and villages between Turnu-Magurele and Bucharest, very many of the latter being, at the time, they fell out very seriously frost-bitten or starving. Whatever may be the cause, there can be no doubt of the fact, that these prisoners when on the march were scarcely half fed.

"It is reported, and I believe this report to be correct, that typhoid fever has broken out amongst the sick who fell out by the

way, and that already many poor fellows have been carried off by this disease.

"As already stated, all the prisoners come by the same route; there are still convoys on the way, and each as it passes will leave its per centage of dead men, and men sick unto death. These latter will, of course, help still further to crowd the houses in the different towns and villages, which are too full already.

"Efforts have been made to meet the various demands, but the result of them have fallen far short of the requirements. In almost every case I have endeavoured to assist to the utmost with the funds of the Society wherever I found I could do so with effect. For example, the Prefect of Fratesti came in yesterday with a pitiful tale of 800 sick and frost-bitten Turks being under treatment in his little town, where they had only been able to supply warm clothing for a certain number; the rest, he stated, the town was quite unable to provide for. This morning I have already handed over to him for immediate conveyance to Fratesti 300 warm blankets, 325 warm knitted jackets, 120 woollen jackets, 400 pairs of warm socks, 250 shirts, 250 pairs of drawers, 300 pairs of slippers, and 400 night caps.

"Thanks for the two sums, amounting to £800, already received. More is required. I shall therefore feel obliged by your sending me an order for £500 on receipt of this letter.

"I await the arrival of your letter regarding my extension of leave.

"Yours very sincerely,

"D. A. CAMBPELL FRASER.

January 1878.

"In my last letter I tried to point out the conditions under which the Turkish prisoners marched from Plevna, and certain of the disastrous results of that march; it now remains for me to add, before bringing the matter to a close, some further notes on the same subject.

"On the 20th and 21st of December, between Moslem, Seli, and Nickopolis, in Bulgaria, the dead bodies of Turkish prisoners lay on each side of the road, in the snow, to the number of at least 200. I questioned my informant as to the correctness of these figures, and he replied that he rather under than over-stated them; he and his friend, he said, as they passed along, began by counting

the bodies, but when the numbers reached fifty, they found these lay so thickly, that they gave it up in despair.

"From the dates, it appears that the dead then seen belonged to one or more of the latter convoys, those which came afterwards must have lost a still greater proportion of men, seeing that they were exposed to the extreme cold which set in after the 18th of December, almost from the commencement of their march.

"At Nickopolis, there was subsequently to the 23rd of Dec., difficulty in purchasing bread, this was very greatly increased after the bridge over the Danube broke down for the second time, on the 26th of December the river could then only be crossed in boats, an undertaking often attempted unsuccessfully, and one not free from danger.

"An eye-witness informed me that he saw a number of Turks who had succeeded in crossing, after having been detained at Nickopolis for two days, reach the left bank of the river just as some Roumanian soldiers had killed some sheep, and immediately on landing these starving men rushed forward with their knives, cut off pieces of the raw flesh, which without more ado they at once began to tear with their teeth and to eat ravenously.

"At the same landing place Turks have been seen to offer pieces of gold for a loaf of bread.

"All along the line each convoy fared worse than its predecessor, because the earlier prisoners having got over a considerable portion of their journey before the 18th of December, were comparatively reduced physically when the snow storm set in, and were therefore more able to undergo the hardships to which they were exposed during the rest of their march to Bucharest. Moreover the country people in the different villages through which the convoy passed, were at first disposed to act by them in a more friendly manner than was subsequently the case, when they found that their private supplies of food were being used up whilst it was yet mid-winter, and when they had fully realized the fact, that apparently an interminable stream of thousands of half-starving prisoners, many of them suffering also from frostbite, diarrhœa, and dysentery, was being quartered in their village day after day, to their very great inconvenience and discomfort. Again, the amount of accommodation which was available at first, was soon partially taken up by those sick men who were left behind, the balance only remaining for those who came afterwards, hence, also it happened that whilst all suffered

very severely, the sufferings of those who came on later exceeded by a hundredfold that of those who preceeded them.

"As this march of death progressed, the soldiers who guarded the prisoners, and who might themselves have had at first feelings of pity for their captives, became, as difficulties increased, daily more hardened and reckless in their conduct; there cannot be the smallest doubt that very many of these wretched, frost-bitten, half-starved creatures were struck or kicked by their guards, who pushed them on voilently with the butt end of their rifles, or pricked them with their bayonets when they showed any signs of lagging behind.

"At the end of a day's march it has frequently occurred that the bread was not ready to be issued, although the carts for transporting it were all up in good time, or that the bread being ready at the bakeries, there were no carts to be had to carry it to the place of issue.

"This actually occurred at Turnu-Magurele within a period of three days, during which, between 400 and 500 Turkish prisoners, *en route* for Russia, were detained there. Individuals, as for example Baron Bencendorff, Chief of the Russian Red Cross Society at Putenieu, exerted themselves to the utmost to relieve the wants of the prisoners, but the carelessness, the absolute indifference displayed by most of the officials whose duty it was to furnish the requisite supplies, was very general. If possible, more blame attaches itself in this matter to the Russian than to the Roumanian Intendance.

"Between the date of my last letter and the 14th of January, I visited at different times the Turkish prisoners in Bucharest, most of these men are quartered in the Alexandra Barracks, or in the cavalry stables near the Malmaison Hospital.

"Those whom I first saw were in stables which had been hastily prepared for their reception, in each room I found there were four rows of beds, consisting of layers of straw covered with matting. Each is heated by means of iron stoves, which are kept at a fair temperature throughout.

"The buildings were large, but there was already some overcrowding. Many of the prisoners were engaged in trying to mend their worn out clothes and sandals; almost all seemed to suffer from coughs, in fact, from the time I entered each room until I left it, the sound of coughing never ceased from one end to the other.

"Outside each building a certain number of Turks were engaged

in cooking the rations issued for themselves and their comrades, under the superintendance of a few Roumanian soldiers. I examined the soup which was being prepared, and found both it and the meat it contained it to be of good quality. As to the amount of each man's rations, that day I had not an opportunity of judging.

"I reached these temporary barracks shortly after the arrival of a convoy of prisoners, numbering about 4,000. No rations had as yet been issued to these men, but on enquiring, I was told that the full allowance had been ordered, and that its delivery was expected immediately.

"I visited the Alexandra Barracks after the prisoners had had their mid-day meal; about four thousand men are detained in this building. By means of my interpreter I conversed with at least a hundred of them, and by them I was told, without a single exception, that the amount of food issued was insufficient. The allowance is three loaves of bread between four men, with a small tin of soup, and a very small piece of meat, per man, twice daily.

"No clothing or bed-covering has been issued to any of the prisoners; each man sleeps covered up with his great coat. I have arranged to supply a certain quantity of warm clothing to those men who seem to require these most.

"The two governments, Russian and Roumanian, have not as yet done much for their prisoners, and I think I have shown that during the march from Plevna their officials sadly neglected their duties in very many instances, but it must not be supposed that individuals amongst the natives here are not disposed to act in a most friendly and charitable manner towards individual prisoners. For example, it is common to see Turks, in the streets of Bucharest, in a state of the greatest destitution. Cases of this sort I see daily, and these I invariably try to relieve, either by the present of a little money, or of some article of clothing.

"A few days ago, the weather being then bitterly cold, I met two Turks, neither of whom wore stockings, their ankles, above the low shoes they wore, were quite bare. I at once beckoned to them to follow me into a shop, where I purchased for each a pair of long warm stockings. Just as these were being fitted on, a Roumanian gentlemen came hurriedly up to the door, with two pairs of socks in his hand. He had seen these poor men probably

about the same time as I saw them, and had at once gone and bought for them what he thought they most required. Similar instances to this are by no means rare.

"The Hôpital Indépendentia, at Turnu-Magurele, having recently been closed, Mr. Pattison returned to Bucharest, where Surgeon Conolly is ably conducting the duties of the Hôpital de l'École Militaire, assisted most efficiently by Mr. Stephens and Mr. Reid.

"Additional professional aid is not, in my opinion, required here at present, nor is there any reasonable probability of there being any need of it for the future. I, therefore, considered it right that Mr. Pattison should return to England; he left for London on the night of the 17th.

"With reference to this I have great pleasure in stating that Mr. Pattison has, throughout, performed his duties in a manner most creditable to himself, and to my entire satisfaction.

"I have applied for an extension of leave to the 2nd of March, and shall write to you more fully as to this in a few days.

"I have just learnt that between 20,000 and 30,000 Turks, taken prisoners near the Shipka Pass, are being marched through Bulgaria to Russia."

"Yours very sincerely,

"D. A. CAMPBELL FRASER.

"Colonel LOYD-LINDSAY, V.C., M.P."

From SURGEON-MAJOR FRASER.

"BUCHAREST,

"*January*, 1878.

"MY DEAR SIR,

"I sent you a telegram asking for an immediate credit of one thousand pounds; I at the same time stated that I should be obliged to leave Bucharest on the 13th, and that if no one was to be sent from England to relieve me, I consider that Mr. Conolly should take my place. He is in every respect equal to taking over the present duties, which as circumstances now are, and are likely to be for some considerable time to come, consist in superintending the Red Cross Hospital, and in supplying warm clothing, &c., where that is found to be most needed. I write to catch the post, and intend sending you another letter ere long, in

the meantime I will only add that opportunities now exist, and are likely to do so for the next fortnight of doing much good, and of saving many valuable lives by the judicious issue of articles of warm clothing to the wounded, as well as to the sick, who are beginning to come into hospital here in large and increasing numbers.

"11*th January*, 1878.

"I have written to the Roumanian War Minister intimating that it is the intention of the Society to withdraw from the Hôpital de l'École Militaire at an early date.

"On the day I wrote there were seventy-five vacant beds in the Malmaison Hospital; fourteen in the Hôpital de l'École Militaire, and about forty in the two other hospitals in which Turkish sick and wounded were being treated.

"All pressure had long ago passed, and the Roumanian hospital establishments are now more than equal to meet the ordinary daily requirements of the sick and wounded in Bucharest.

"Our hospital is being closed because the object with which it was opened, has been attained. At a critical time it did excellent work, but now it is no longer required.

"I shall send you a letter prior to leaving this country, as also a telegram, informing you of the date of our withdrawal from l'École Militaire.

"Yours very sincerely,

"D. A. CAMPBELL FRASER.

"Colonel LOYD-LINDSAY, V.C., M.P."

"BUCHAREST,

"1*st February*, 1878.

"MY DEAR SIR,

"All the Russian sick and wounded, as well as the Turkish prisoners, *en route* to Russia, cross the Danube at Sistova to Zimnitza; their journey is then continued *viâ* Alexinatz Alexandria, and Putenien, to Fratesti, whence the line of railway passes directly *viâ* Yassy, into Russia.

"About a fortnight ago I resolved to visit the hospitals at these stations, and on the 21st inst. all my preparations for doing so were completed; packages of warm flannels, and warm socks, as also several cases of brandy, were packed in a railway waggon

ready for the start on the following morning, the 22nd January, when, at the last moment I found it impossible to proceed on my journey; this alteration in my plans was caused by an attack of indisposition, fever, &c., from the effects of which I have now nearly quite recovered.

"Under these circumstances I was glad to be able to forward the supplies in question without any delay. Whilst referring to this subject I ought to mention that I am in receipt of a letter dated Simnitza, 20th January, from Nicholas de Briantchamnoff, *Capitaine aux Gardes Impériale de Russie* who is at present doing duty in the Government Hospitals there; in that letter he acknowledges with 'profonde gratitude,' the generous gift, or, to use his own words, 'le generoux don,' which had only just arrived from the National Aid Society for the use of the sick and wounded at Simnitza.

"This gift consisted of the warm hospital clothing, &c., complete for 200 men, and the eighteen cases of preserved milk, forwarded by me on the 4th of January. These articles he promises will be distributed amongst the sick and wounded without distinction of nationality.

"These stores reached their destination on the 20th of January. Between the 21st and 27th of that month about 27,000 Turkish prisoners from the army of the Shipka Pass passed through Simnitza *en route* to Russia. Some of these men were wounded, others sick, and others insufficiently clad. This clothing, therefore, which was sufficient to supply the probable necessities of at least from four to five hundred men, most fortunately arrived, it will be noticed, at the very time it was certain to be most wanted.

"The following general information relative to the principal hospitals already mentioned may prove interesting. The Hospital Etapen, at Fratesti, which consists partly of wooden huts, and partly of tents, contains accommodation for nearly three thousand patients. The duty in the different buildings is nearly equally divided between the Russian Military Medical Department and the Russian Red Cross Society.

"At various periods there has occurred temporary overcrowding, but on an average each division has seldom contained more than from seven to eight hundred men at any one time. For some weeks past, fever of a typhoid type has prevailed here,

the deaths from this and other causes latterly averaging in the Red Cross Division only from thirty to forty a day.

"There can be no doubt that about the same proportion of deaths was recorded during the same period in the other, or Military Division.

"The site occupied by this hospital is low, whilst its sanitary conditions have from the first been most unsatisfactory. The Russian Government has theretore acted wisely in deciding either to close these buildings altogether, or to use them as seldom as possible, from the date on which the Fratesi-Simnitza Railway is opened for traffic.

"At Sistova, on the Bulgarian side of the Danube, there are at present six thousand sick and wounded. Here there has for many weeks been great and dangerons overcrowding; here also fever of a low typhoid type prevails amongst the patients in hospital. The daily number of deaths I am unable to state.

"The hospitals in Simnitza can accommodate over 5,000 sick and wounded; here, likewise, there is, at present, great overcrowding.

"Deaths from typhoid fever are common. The total number of deaths in Simnitza, on the 25th of January, was, I learnt from a very high and reliable authority, six hundred.

"The fact that so many thousands of the prisoners from the army of the Shipka Pass, with their sick and wounded, passed through Simnitza, as already stated, between the 21st and the 27th January, must not be forgotten when these figures are being considered.

"As regards the mass of the prisoners themselves, all accounts tend to prove that these from the Shipka army were incomparably better attended to, and looked after than those who came from Plevna.

"After passing through Simnitza, the former were marched in convoys, as already explained, through Alexinatz, Alexandria, and Putenien, to Fratesti. A gentleman, who passed many thousands of them on that road, on the 25th and 26th January informed me that, with very few exceptions, they all appeared to march vigorously and well, and that those exceptions first appeared towards the end of his journey, as he neared Fratesti. He added that he did not see a single dead Turkish soldier on the way, and that, out of the whole number, he only noticed two

men who were lying down by the road side, apparently unable to proceed any further.

"At Alexinatz and Putenien there are only, at present, a small number of sick and wounded. Typhoid fever prevails at both these places.

"I omitted to state, in a previous letter, that the twenty-five ambulance covers, with bedding complete, which were delivered ready for use last month, were handed over by me to the Russian Red Cross Society. This gift, on the part of the National Aid Society, was very highly prized, and a reply, expressive of this, was transmitted to me.

"Immediately on the receipt of these covers, twenty-five carts were, without delay, equipped, and at once sent off to the Danube. In these carts were conveyed thirty-three Sisters of Charity, who had been for some time at Bucharest, awaiting transport to Simnitza, and the other hospitals, to which they had been told off for duty.

"Although not well enough to travel on the 22nd of January, I have been able since then to enquire into, and to supply many of the necessities of the prisoners in Bucharest.

"On the 25th I visited that portion of the Central Military Hospital which is occupied by a hundred and eighty Turks. I found the wards generally close and ill-ventilated. In three there are no bedsteads, the patients sleeping on bedding laid on the floor. In one room were several cases of typhoid fever.

"The majority of the patients stood much in need of warm clothing. I, therefore, next morning returned to this hospital, and distributed, amongst those who required help, one hundred warm flannel shirts, and one hundred pairs of warm socks. I also gave to each man a supply of tobacco.

"These temporary wards, in the Central Military Hospital, were only brought into use when sick and wounded were being brought into Bucharest in very large numbers daily; the pressure from this cause has ceased. During the last ten days not a dozen fresh cases have been brought into the town. In consequence of this, the Central Military Hospital is being very rapidly evacuated of Turks.

"For example, on the 25th January there were a hundred and eighty Turkish patients under treatment. To day, 1st of February, there are ninety, and the day after tomorrow, 3rd of

February, it is intended to close these wards altogether, any sick who may remain on that date, being then removed to the Malmaison Hospital.

"On the 25th I also visited the Malmaison Hospital, in which there were five hundred sick and wounded Turks, besides a small number of Roumanians.

"During my inspection of the different wards I was impressed by the decided improvement which I noticed in the arrangement made during the past six weeks, for the comfort of the sick.

"There is no overcrowding; each ward is fairly well, warmed, and ventilated. The sanitary arrangements are not good, but these, also, are being carefully attended to, with a view to improvement. The sick have now two blankets each, besides flannels, jerseys, warm socks, and night caps. The vast majority of these different articles have been supplied, directly, by the National Aid Society. Including an outbuilding, the Malmaison Hospital has accommodation for seven hundred and fifty patients.

"On the 26th of January I visited the prisoners who occupy the buildings adjacent to the Malmaison Hospital, and described in a former letter. Here also I found that something had been done by government since my last visit, and that blankets had been issued to all. The rooms were warm, and the prisoners had already begun to "settle down," and make the best they could of their present position. One man, for instance, was playing on a Turkish instrument, not unlike a banjoe, to what appeared to be a well-pleased and highly appreciative audience. Another had established a small coffee shop, where he invited his friends to come and refresh themselves at a not unreasonable charge, and so on, through the different buildings occupied by the Turks.

"Here I distributed a few articles of clothing, but my opinion is that the best means of getting at the real wants of individuals is through the hospitals. In the present instance I have supplied the hospitals with a sufficient number of suitable articles to allow of the sick being warmly and properly clad, and also to admit of each man taking with him when he is discharged, at least one warm jersey, and one pair of warm socks, as also whatever else beyond this he stands in need of.

"Very large numbers of men are at present being admitted

and discharged weekly. Each man admitted is at once properly clad, whilst each man discharged takes a sufficiency of warm clothing away with him, hence it results that in a remarkably short space of time the wants of all who have not already been provided for in a suitable manner are amply supplied. With a view to arriving at this result, I sent to the Malmaison Hospital within the last ten days:—

"600 Knitted Jackets.
"230 Flannel Jackets.
"480 Pairs of Socks.
"250 Night Caps.

"Besides this I handed over to the management 500 frs. to purchase meat for beef-tea, and 144 frs. worth of Leibeg's essence of beef.

"As regards the question of the probable demands which may for the future be made for hospital accommodation in Bucharest, and the facilities which exist to meet those demands, I repeat, that during the last ten days not a dozen fresh cases have come into this town, and that there is not, in my opinion, any probability of that proportion of arrivals being to any extent increased for the future.

"The central military hospital is to be closed on the 3rd of this month to Turkish sick, after that date the prisoners will only be treated in the Maimaison Hospital, the Hôpital de l'École Militaire, and two other smaller hospitals, which are less than half full. The amount of local medical attendance is now ample.

"A few cases only of typhoid fever have been treated in the hospital in Bucharest within the last fortnight. I am in receipt of Mr. Ker-Porter's letters, dated the 17th, 22nd, and 23rd of January. After some delay the three hundred pounds were forwarded to Lady Strangford, by the Russian Consul here.

"I shall endeavour, as requested, to intimate to Lady Strangford that the receipt of the above sum is not to be published in the papers, as it is not the gift of any individual. I fear, however, that I may not be able to do this for some time to come, as messengers are now seldom sent in the direction of Sofia.

"Mr. Halfous, the banker, told me three days ago that he

had in hand a like sum for Lady Strangford's use. I have heard nothing of Messrs. Leslie, Neville, and Greenwood, except through the English papers. The instructions relating to supplying them with funds I shall not fail to execute if this at any time becomes possible. Mr. Leslie's sister, who resides in Bucharest, has hitherto heard no news from Turkey of either of her brothers.

"Thanks for the eight hundred pounds (viz. £300 and £500), duly received on the 27th January.

"When I last visited the Alexandra Barracks, a Turkish prisoner, a captain in the line, asked me to forward the enclosed telegram to his family, this cannot be done from here, possibly you may be able to transmit it by letter or otherwise. It is written in Turkish and French.

"Yours very sincerely,
"D. A. CAMPBELL FRASER.

"Colonel Loyd-Lindsay, V.C., M.P."

From Mr. J. Naylor Stephens, Surgeon (*St. Thomas's Hospital*).

"Bucharest,
"*26th November*, 1877.

"Dear Sir,

"During the past week I have been working alone, in the Hôpital de l'École Militaire.

"Doctor M'Nalty left on the 19th for Turnu-Magurele, with the intention of transporting wounded from that place to Bucharest.

"We have only about twenty wounded in the hospital, they are principally gunshot wounds, and all are progressing favourably. There is one very curious case, where a man, when in the act of firing his own rifle, received a wound in the right arm; the ball passing through the back of the forearm, emerging in front of the elbow joint, entering again above the joint, and passing out at the back of the arm, thus wounding him in four places. The man is doing well and will shortly be dismissed.

"The two cases which appeared so nearly approaching to hospital gangrene, mentioned by Doctor M'Nalty in his last letter, I am pleased to say are progressing favourably, and all symptoms of that malady rapidly subsiding.

"On the 20th instant I took a case of Liebig's Extract of Meat, and a box of chicken broth, to the Malmaison Hospital, as requested by Doctor M'Nalty. They were very grateful, and I feel sure it will prove of great assistance.

"During the week Messrs. Vachell and Douglas, surgeons of the Red Crescent Society, who were taken prisoners at Tiflis, arrived in Bucharest. They were to proceed direct to St. Petersburgh, but Mr. Vachell was too ill to continue his journey. I called to see him by request of Colonel Mansfield, and did all that was in my power for him. After two days he was ordered to continue his journey, but was totally unfit to do so, and it would most certainly have endangered his life; however, it was not until after he had been taken to the railway station that permission was obtained for him to remain in Bucharest until he had sufficiently recovered his health. I then conveyed him to our hospital where he is now convalescent.

From Mr. J. Naylor Stephens, Surgeon (*St. Thomas's Hospital*).

"*February*, 1878.

"We continued to have very few patients until the 23rd of December, when the first sanitary train, transporting Turkish wounded from Plevna, arrived.

"We met the train, and distributed soup, bread, &c., to each man, and conveyed about 60 of the wounded to the Society's Hôpital de l'École Militaire. They arrived in a most deplorable state, apparently half starved and exceedingly dirty, but, after a short time, we got them tolerably clean. The wounds of these men were generally much more severe than those of the Roumanians treated by us. Shortly after we received several cases of frostbite, and amputations had to be performed.

"I visited the prisoners, and found that they were treated very kindly by the Roumanians, in fact the two nations appeared quite friendly.

"Before leaving Bucharest I paid another visit to the Malmaison Hospital, and was much pleased to find that great improvements had taken place since my previous visit. They had then 500 Turks in hospital, and all were apparently well cared for. Nearly all the clothing, both for the patients and the

beds, and the greater part of the medical comforts, had been supplied by us; indeed, had it not been for the National Society, I do not think that the hospital could have existed.

"All our Turks were warmly clad, and each man had five francs given him; the poor fellows hardly knew how to sufficiently express their gratitude. When we left Bucharest there were only about twenty Turks in hospital.

"These were to be taken care of by a Roumanian surgeon, and by Mrs. Mansfield, whose personal attention to the sick and wounded proved most valuable.

"I remain, dear Sir, yours truly,

"J. NAYLOR STEPHENS.

"Colonel Loyd-Lindsay, V.C., M.P."

From Mr. St. George Reid, Surgeon (*St. George's Hospital*).

"Dear Sir, *March*, 1878.

"Upon my arrival at Bucharest on the 25th of November I proceeded immediately, in company with Surgeon-Major Fraser, to the English Consul, where, having reported myself, I returned to the hospital established by Dr. M'Nalty, in the Strada Tarkgovisti. It is a long building, used during peace, as the Military School (which name it bears). The building forms three sides of a square, a fourth being occupied by recreation grounds for the students, a few of whom, for the present, reside in the right wing; the left wing contains two wards, kitchen, and offices. The centre building consists of five wards, on each of the upper floors, occupied by the National Aid Society, under the charge of Surgeon-Major M'Nalty and of Mr. Stephens; the ground floor being used for a hospital formed by the Tobacco Monopoly Company, employing German surgeons. The wards were in beautiful order, spacious and well lighted, but opening one into the other. The ventilation was faulty, there being a dead wall on one side, with doors opening into a corridor. The water was impure, and there was great difficulty in carrying out the necessary sanitary arrangements. The nursing staff was good and the patients doing well, including a bad case of pneumonia and of hospital gangrene. The nursing is superintended by Mrs. Mansfield, the wife of the the British Consul, to whose care and devotedness we were deeply indebted during our stay

in Roumania. There is a nurse to each ward (which office was filled by Roumanian ladies), and, working under them, two infirmiers, supplied by the Government from the Dorobani regiment.

"A certain number of beds belonging to the Military School had been permitted to remain, but these were shortly after requisitioned. As a temporary arrangement I took up my quarters at an hotel, pending Dr. M'Nalty's arrival; he was daily expected from Plevna.

"On Tuesday, the 27th inst., Dr. M'Nalty delivered charge of the hospital and stores to Dr. Fraser, and the next evening started for England. I now took Mr. Stephens' place as resident at the hospital, as it was the rule that some one should be at hand in case of need.

"Affairs remained in the same state till the 21st of December, Surgeon-Major Fraser being then at the front, Mr. Conolly having returned to Bucharest from Magurele and Mr. Stephens had returned, when news was received that the first batch of Turkish wounded would arrive from Plevna at 2 o'clock the next morning; so having seen that everything was ready at the hospital, about 1.30 a.m. we started for the station, where we found the ambulance waggons ready, and Mrs. Mansfield, with three nurses, having a plentiful supply of soup and wine; but at three o'clock a telegram was received that the sanitary train was unable to proceed, but would arrive at six in the morning; at six, however, it became 11, and at 12.30, three, until the train began to assume a very indefinite existence. However, at 3.30 word was brought that it had arrived; so starting for the station, which we found had been strictly enclosed by a double cordon of sentries, who seemed quite uncertain whether the English Red Cross was to be kept off at the point of the bayonet or allowed to pass; but we, having insisted with some success on the latter view of the case, found that we were in time to see the sanitary train steam slowly in, with its vans something like horse boxes, having communication at either end.

"It was a little time before any men appeared, then one by one the wounded crawled or were carried out of the waggons. All were in the most deplorable condition, having been delayed for some time on their journey, there being the most intense cold, many were so weak that they could hardly stand; all seeming perfectly stupified with exposure and pain. Each man as he passed down

the long line of sentries received a cup of soup or wine. Never did food come more opportunely, and I have no doubt that in the terribly exhausted state of the men it saved many lives, when it is borne in mind that there were no fewer than 600 sick and wounded. Having seen them safely placed in the carts, which many of them were quite unable to do for themselves, we followed them quickly to the hospital, where Mr. Conolly had received them and portioned them out to the different wards, where all they could do was to crouch round the fire and beg for a little water. We seemed to have a sample from every part of the Turkish Empire, Kurds, Abyssinians, Babylonians, Salvonicans, Arnauts, and the true Arab to the true Turk; but all appeared to agree that warmth and water were the only things worth living for then. As soon as possible the wounds were washed, dressings applied, and above all, clean hospital clothes given to the men, who, when warmed, shaved, with something to eat and in bed, seemed different people.

"There were several bad cases, some so bad indeed that it seemed only a question how long we could keep them alive, it appeared more from the want of nourishment, cleanliness, and from cold, than from the dangerous character of the wounds themselves.

"The first thing that struck you on examining the men was the number of wounds some had received, many being hit twice, some three times, and one man in five different places. The great demand was for water to wash with, the Turks being religiously clean; in future it was left in the wards in some quantity, and always used. After a time the Roumanians began to fraternise with the Turks, though very shyly at first; it was impossible to be for any time with the latter without learning to respect them. They appeared men of splendid constitution, inured to hardship, with whom pain was quite a secondary consideration; and they were intensely grateful for the slightest service rendered to them.

"With Mr. Stephens I visited the hospital at Malmaison, where there are a large number of Turkish sick and wounded, under the charge of Roumanian surgeons. The wards are clean, but badly ventilated, and the patients happy, though greatly missing tobacco, which, according to a regulation of the government, is allowed to the prisoners, but not to the men in hospital.

This, however, I believe was shortly afterwards altered. A very large number of patients pass through this hospital in the week, and each, as he leaves, is supplied by our Society with sufficient clothing for warmth.

"This building, in peace time, forms a barrack, standing at some distance from any other habitation, outside Bucharest; it affords large accommodation, which, however, has not been found sufficient, and a church, at a little distance, is being fitted up as a temporary hospital.

"In company with a Roumanian sergeant we next visited the Turkish prisoners, of whom, at this place, there were several thousands. They occupy large stables, in which straw had been placed along the sides and up the middle. On this the Turks lie as close as possible, leaving a path to right and left. All rose as we entered, and, on hearing we were English, regarded us with an awe and respect that was very suggestive, many evidently never having seen an Englishman before. Passing on we entered a long low building, also stables, in which a large number of Turks were located. It was provided in the same manner with straw, being, however, totally devoid of ventilation, with the exception of the door at one end, and the place was shrouded in a nasty foul mist. It is to be hoped that this will be altered before a thaw sets in, as there is no accommodation to render it habitable.

"Here the Turks had quite settled down, and were trying to earn a few bani; one was pursuing the trade of cobbler, with a very curious pile of boots and shoes before him, others that of tailors, and a good deal of talking regarding a pair of trousers which ought to have been finished, but were not. The most lucrative business, however, I understood was the coffee stall, where coffee was sold at 5 to 10 bani (a bani equalling a centime) per cup, which the Arab, who presided, assured me was very good. The men appear to be happy, and directly they seem ill are removed to the hospital. As there was nothing more to be seen we returned to the town shortly afterwards.

"I had an opportunity of visiting the officers quarters at the Alexandritz barracks; they all appeared cheerful, though finding the time pass slowly, their chief employment being playing dominoes and calling upon Allah. Dysentery and severe diarrhœa broke out several times in the hospital, though fortunately with the loss of only one man; most of the patients suffered from

malarious fever; we lost only one patient from the disease, though we had some very severe cases. We now began to discharge the men to make room for others. Each one as he left received shoes, stockings, a flannel jacket, waistcoat, and a vest, for which nothing could exceed their gratitude; a few francs in money was also given to each man. On two occasions the Princess visited the hospital, the latter time accompanied by the Prince, who decorated the wounded Roumanians that were in hospital, and approved of all he saw, expressing his thanks to Dr. Fraser.

"The cold still continued its ravages amongst the Turks, and with our new patients we received two men perfectly moribund, one of whom died an hour after his reception, the other a few hours later. The death of these men was simply due to exposure and want of nourishment, there being nothing else the matter with them; of some other men who came with these, but whom we were unable to receive, two, as I afterwards learnt, died before they could reach the other hospital, distant about a mile and a half. The war was now drawing to a close—the Russians had reached Adrianople, and our services in Roumania were less needed than formerly—under these circumstances Surgeon Major Fraser thought it advisable, that as soon as we could bring the number of our patients to a minimum to close the hospital. We were not however to be so fortunate as to leave; one of our nurses was attacked with typhus, and another was soon seized with the disease, the former seemed to be in a fair way to recovery, but I am sorry to hear has since succumbed to a relapse, the latter had not reached the climax of the disease when we left. One of the Turkish officers died from a combination of asthma and bronchitis, but the rest of our patients rapidly got well, and upon leaving there appeared only one man whose life was in danger, who has since had his arm amputated and is doing well. The few that we were forced to leave behind were removed to the lower floor and taken charge of by Roumanian surgeons. The Turks were very unwilling that we should leave them, and certainly we could not desire better patients. Some of the wounds appeared to have an inclination to hospital gangrene, which, however, was arrested in all cases by the application of carbolic acid and attention to the general health. Doctor Markovitz, civil director of hospitals in Bucharest, did all in his power to render our stay there agreeable.

Having been embraced by the Turkish officers, and our deceased relations having received the blessings of Allah, we bid adieu to Bucharest, the scenes in which will be long remembered.

"I am, dear Sir, yours truly,

"ST. GEORGE REID."

"Colonel LOYD-LINDSAY, V.C., M.P."

From SURGEON-MAJOR FRASER.

"BUCHAREST,

"20*th February*, 1878.

"MY DEAR SIR,

"On the 5th February the Central Military Hospital in this town was closed to the Turks, and on the same day the number of beds, for the accommodation of Turkish sick and wounded in the Malmaison Hospital, was increased by 130. The latter establishment now contains more than 700 beds.

"Between the 1st and 9th of February, scarcely any fresh patients arrived in Bucharest on the latter date, the number of empty beds in the Hôpital de l'École Militaire was fourteen, whilst the other two smaller hospitals, in which Turkish sick were being treated, were two-thirds empty.

"A review of the whole circumstances of the case made it abundantly evident that all pressure had there permanently ceased, and that the Roumanian hospital establishments were more than equal to meet the requirements of all the sick at the time in Bucharest, as well as of those likely to arrive there for the future.

"The object, then, with which the Society had established a hospital here having now been accomplished, I, on the 9th of Feb., informed the Romanian War Minister that the Society intended to withdraw from the charge of the Hôpital de l'École Militaire at an early date.

"This hospital which originally contained accommodation for about eighty patients, was opened by Surgeon-Major M'Nalty, on the 10th October, 1877. Four English Surgeons did duty in it; three Sisters of Charity attended in the wards.

"A cook, with assistants, prepared the food for the sick.

"A staff of Roumanian orderlies was established and trained, and from the date of the arrival of the Turkish wounded of the

23rd December, 1877, an interpreter, who also acted as ward-master, was appointed, and every patient was dressed in warm flannel clothing.

"The number of sick and wounded treated from first to last is as follows:—

	ROUMANIANS.	TURKS.	
	N. C. O. and Privates.	Officers.	N. C. O. and Privates.
Admitted	128	9	79
Discharged	114	6	57
Died	3	1	7
Remaining	11	2	15

"The causes of death were:

ROUMANIANS.		TURKS.	
Fracture of skull, followed by Abscess	1	Tetanus	1
		Pyalinia	1
Dysentery	1	Fever	1
Double Pneumonia	1	Dysentery	2
		Admittted Moribund, no Diagnosis	2

"The cause of the death in the case of the Turkish officer, was Low Fever and Dysentery.

"During the three weeks prior to the date on which the hospital was closed, feverish symptoms with a typhoid tendency presented themselves amongst a certain number of the patients. Two of the nurses suffered also at the time from Typhoid fever of a very aggravated character.

OPERATIONS.

"1 Ligature of Caroted Artery.
"11 Amputations.
"1 Excision of Humera. (Head).
"1 " Raduis. "
"1 " Malon.
"1 Outer end of Clavicle.
"Extractions of bullets.
"Division of Median Nerve.

"When discharged from the hospital the Roumanian soldiers

of course return to regimental duty, whilst the Turks were sent to the barracks or other buildings in which the prisoners were confined. When the latter were admitted into hospital it was almost invariably found that the clothing worn was scanty, and ill suited to protect the owner from the severe cold of a Roumanian winter, on discharge, therefore, *each* Turk received whatever extra warm clothing he was considered to require; this, in every instance, consisted of at least:—

"One warm Flannel Jacket.
"One Shirt.
"One warm Knitted Jacket.
"Two pairs of warm Socks.
"One pair of Ankle Boots.

"Each man also secured five francs in money, as on the day of discharge no rations were issued to him in barracks, he also received and took away with him, one loaf of bread, two eggs, and a piece of meat.

"Each Turkish officer on being discharged from the hospital received whatever warm clothing he stood in need of.

"As regards the arrangements under which the Hôpital de l'École Militaire has been conducted from the commencement, I ought here to state that the Roumanian Government supplied the building and a certain number of untrained orderlies, they further allowed a small sum daily amounting to about 6½d. for the support of each patient. Every thing else was provided from the funds of the Society, viz.—The entire furniture of the hospital; hospital clothing and warm clothing on discharge; medicines and surgical appliances. All the numerous extras, such as special diets, wines, lemons, tobacco, &c.

"The Society also provides the entire medical attendance, as likewise the medical subordinate attendants, and the trained personel of the hospital, including the interpreter and ward-master, the trained nurses, cooks, &c.

"As previously stated, I, on the 9th February, informed the War Minister that the English Red Cross Society proposed to withdraw from l'École Militaire at an early date, on the 14th I wrote to say that that date had been finally fixed for the following 20th, on this day accordingly 28 patients, 11 Roumanians, and 17 Turks, besides one of the nurses above referred to as suffering from Typhoid Fever, were transferred to Sang's Hospital.

"This hospital, which was at the time nearly empty, occupies a portion of the ground floor in the block of buildings known as l'École Militaire.

"On the day of transfer, each of the Turkish patients received the allowance of warm clothing and the donation of money, invariably given to men discharged, in addition to this, Mrs. Mansfield, wife of the British Consul here, has kindly promised to visit these sick daily, and attend to their wants. To the lady I therefore handed over, before leaving Bucharest, the sum of 550 frs., to be expended as follows for their benefit:—

	Frs.
"10 pairs Ankle Boots for Turks...	100
" 1 Nurse, one month, wages and subsistence	100
"Extras and supplementary Diets...	350
	Frs. 550

"As half of these twenty-nine sick cannot fail to be discharged before the second week in March the above sum of 550 frs., ought to prove amply sufficient to meet all real requirements up to the latter end of that month.

"I now propose devoting a few remarks to the Malmaison Hospital.

"From the 23rd of last December, the date on which the Turkish sick and wounded began to arrive before Plevna, this building has been rapidly changing to a Turkish hospital: at present it contains accommodation for over 700 patients, or 50 of whom are Roumanians.

"Although nominally supported by Government, the hospital, with the exception of the allowance per head of 6½d. per day, is entirely sustained by voluntary subscriptions, by far the largest amount of these contributions has been received from the English Red Cross Society from first to last, the donations from all other sources combined have been trifling by comparison.

"Each patient on admission received from the Society:—

"1 warm Knitted Jacket.
"1 warm pair of Socks.
"1 Night cap (an essential of all Turkish sick).

"In addition to this each man in the *Manège*, which is attached to the Malmaison, had issued to him from the same source, one pair of Drawers, and one pair of Slippers.

"These extras I considered necessary in consequance of the *Manège* being warmed with more difficulty than the Malmasion. Beyond all this it was solely owing to the Society that many hundreds of patients in these two hospitals, who, in the depth of a bitterly cold winter, had only one blanket apiece, were each supplied with a second good warm blanket.

"Finally, the Society supplied the following articles for issue to the sick daily, in such quantities as were considered necessary by the medical attendants—

"Fresh beef tea, Leibig's extract, preserved milk, rice, brandy, port wine and lemons. As the medical history of each man subsequently discharged must greatly depend, particularly during the winter months, on the circumstances of his being warmly clad, or otherwise. After leaving hospital I supplied periodically sufficient warm underclothing to meet the necessities of each man discharged.

"On an average from sixteen to twenty Turks left the hospital daily, each of these had issued to him, from the supplies furnished by the Society, one cotton sheet, one warm knitted jacket, one pair of warm flannel drawers, and one pair of warm socks.

"Many of these men were shoeless, and to each of these one pair of sandals was also issued.

"The number of sick discharged from the Malmaison Hospital, who did not possess any shoes of their own, was considerable; one example in proof of this may suffice.

"On the 17th February I inspected the twenty men discharged on that day, all of them had been supplied with the usual amount of Society's warm clothing.

"Of these twenty men, seventeen would have been made to march from the hospital wards to their barracks, through the snow and slush in their stockings only, had it not been that the hospital authorities were able to issue to each of them one pair of sandals, supplied by the Society.

"Cases of a similar character might be cited by hundreds.

"In a previous letter I stated that I had decided as a rule, to endeavour to supply the necessities of the Turks through the

various hospitals; I further notified the issues I had made at different periods for that purpose, I shall now give a list of articles furnished to the Malmaison Hospital since the 1st of February, inclusive, by the English Red Cross Society:—

"Knitted Jackets	574.
"Woollen Drawers	460.
"Warm Socks (pairs)	800.
"Shirts	200.
"Night Caps	250.
"Slippers (pairs)	104.
"Money for tobbacco	500 frs.
"Packets of do.	300 frs.
"Money (cash)	425 frs.
"Liebig's Extract	450 frs. (value).
"Preserved Milk	2 cases (48 tins per case).
"Rice	3 sacks.
"Brandy	1½ case.
"Port wine	½ dozen.
"Quinine	99 frs. (value).

"Having the above in view, and taking into consideration the assistance already so liberally granted, I consider I am fully justified in expressing my conviction that, without the aid of the English Red Cross Society, the Malmaison Hospital, which was the principal, and is now the sole refuge of the sick and wounded Turks, could never at any time have really been regarded in the light of what it has actually been made, viz., an efficiently conducted hospital for the relief of the Turkish prisoners.

"I have so arranged that the hospital can for a time be conducted as heretofore, but in order to meet all future requirements I must strongly recommend that the sum of £60 be transmitted to the British Cousul at Bucharest to be expended under the supervision of Baron d'Hogguer, President of the Hospital Committee, for the benefit of the sick and wounded in the Malmaison, and in the following manner:—

"£20 for purchasing fresh meat for beef tea, and a moderate quantity or rice.

"£20 for clothing.

"£20 for tobacco.

"It may appear curious to some that when the emergency is so pressing, the issue of a supply of tobacco should be strongly urged. In explanation, I can only affirm, from large personal observation that tobacco is almost as essential to the Turk as his daily food.

"Even when death was close at hand I have frequently seen these poor creatures look up piteously in my face, and heard them in faint accents murmur over and over again in their own language the word 'tobacco.'

"The unfortunate Turkish prisoner has no luxuries, and but few pleasures, therefore it is hard to deny him, what is his chief solace living or dying.

"The hospital being closed on the 20th of February, Mr. Conolly, as well as Messrs. Stephens and Reid proceeded to England immediately afterwards.

"I have pleasure in stating that Mr. Conolly, under my general supervision, conducted throughout the important duties in the wards of the Hôpital de l'École Militaire to my entire satisfaction, and that both Messrs. Stephens and Reid deserve equal credit for the manner in which they fulfilled their varied daily duties.

"This letter was begun in Bucharest, and finished since my arrival at 'Hotel de la Medeterranée,' San Rems, *3rd March*, 1878.

"Yours very sincerely,

"D. A. CAMPBELL FRASER.

"Colonel Loyd-Lindsay, V.C., M.P."

From Commissioner J. S. Young.

"3, Craven Street, Strand,

"*24th November*, 1877.

"Dear Colonel Loyd-Lindsay,

"The following is a brief outline of the work done by our Society for the sick and wounded of the Turkish armies to the present time.

"Arriving in the Society's steamer *Belle of Dunkerque* at Constantinople on 15th July, with the Medical Staff, consisting of Doctors Armand Leslie, Hope, Rolph Lesslie, Schofield, and Meyrick, it was more than gratifying to find that the proposed efforts of the Society in the cause of humanity were so gratefully appreciated in the highest quarters, that all official routine was set aside in order to provide us with every authorization necessary to carry on, as we deemed best, the work of aiding the sick and wounded, and the evening of the 17th July found us in possession of the requisite documentary authorizations.

"Armed with such facilities, and having at instant command the services of the Society's steamer, *Belle of Dunkerque*, carrying *matériel* of every description in abundance, *viz.*, surgical instruments, dressings and appliances, medicines, provisions and comforts, stretchers, tents, and other field ambulance equipment, within the short period of fourteen days three field ambulances, liberally and completely provided with equipment needed, were established in three widely distant spheres of action, namely—

"The First, under Dr. Armand Leslie, with Dr. Meyrick; attached to the army under Raouf Pasha, operating on the plains adjacent to the Shipka Pass.

"The Second, under Dr. Harry Crookshank, with Dr. Schofield; attached to the army of the Commander-in-Chief, Mehemet Ali, operating on the banks of the Lom, and:

"The Third, under Dr. Hope, with Dr. Rolph Lesslie; attached to the army of Dervish Pasha, at Khousouban, in Asia Minor, near Batoum.

"Within seven days more the *Belle of Dunkerque* brought its first suffering freight of wounded to Constantinople, and within

the same short space of time—three weeks from date of arrival at Constantinople—all three divisions of the field ambulances had brought succour to many hundreds of sick and wounded amidst scenes of danger and 'horrors of war' beyond description in many cases.

"In an outline, details (of which pages might be written) cannot be given; but the work thus begun has continued to be quietly, but not the less efficiently, performed with noble self sacrifice by the medical staff up to the present time, and an instance of the work done will suffice. On the 21st September, in the advance of Mehemet Ali's army beyond the Lom, a battle was fought near Vodica. The Society's Ambulance under Dr. Crookshank with Doctors Cheyne, Jolly, and Mead, having prepared a Mosque, two houses, and a large barn, received therein during the night of the 21st no less than 527 wounded, performing operations, extracting bullets, and dressing the wounds continuously for two days and two nights. On the evening of the third day, after having transferred all this large number of wounded, with their wounds attended to in a most complete and satisfactory manner, to the hospitals in the rear, and when looking forward to a well-earned repose, the order for retreat was received. In darkness, and under a pouring rain, tents had to be struck and packed, stores got together and placed in waggons not forthcoming immediately or all at one time; and, drenched to the skin, for hours the ambulance wended its weary way through roads knee-deep in mud. Yet another day's marching had to be gone through ere a halt was made, only to find more humane work waiting to be done.

"Is it to be wondered at that one after another of the surgeons succumbed in health under the effects of such work, and that the ambulance with Dervish Pasha's army had to be recalled from Asia Minor to avoid the good work of these field ambulances from coming to a stop?

"While the surgeons were thus on land carrying aid to thousands of sufferers, the Society's steamer, *Belle of Dunkerque*, continually sped her way in the Black Sea, leaving gifts of instruments, appliances, medicines, comforts, bedding and clothing behind, wherever such were needed, and conveying many poor sick and wounded from spheres of danger, disease, and unavoidably insufficient care, to places of safety, health and comfort.

"By means of the Staff of the Stafford House Committee,

considerable quantities of comforts belonging to the National Aid Society have been distributed, and many a welcome basin of soup has thus reached the poor wounded, and often, at the same time, hungry soldier, while being transported long distances under circumstances of suffering and hardship.

"In the centre of Asia Minor too, a large quantity of surgical appliances, medicines, comforts, warm bedding and clothing has been placed in Erzeroum, and before the recent disasters to the Turkish Armies in that part of Asia Minor, an important contribution from these stores was despatched to Kars, to the care of Lord Blantyre's chief surgeon, Doctor Casson, doubtless now proving of the greatest value. The remainder in Erzeroum, comprising as it does a selection of the widest range, must under the present grievous state of affairs there, and in view of the rigours of winter endured in these regions, prove of priceless value to many sick and wounded in that place.

"Now that the period of charter of the *Belle of Dunkerque* has expired, two depôts for the Society's stores taken out in her have been opened, one at Constantinople and one at Varna, and the field ambulances are now as follows—

"First at Shipka, Doctors Armand Leslie, Neville, and Rolph Lesslie.
"Second at Silistria, where as yet no other Society has rendered aid, Doctors Hope, Cripps, and Lightfoot.
"Third at Rasgrad, Doctor Jolly.

"At Varna, Doctor Crookshank, whose health gave way under over-exertions in the field, remains for the present as agent for the Society in charge of the depôt, and to relieve any pressure on the Turkish Medical Staff there, in the event of accumulation of sick and wounded.

"The grateful facilities and assistance of all Turkish authorities have been at all times afforded; but no outline of the operations in Turkey of the British National Aid Society for the Sick and Wounded would be complete without a thankful record and acknowledgment of the valuable aid and advice ever willingly given by Her Majesty's Ambassador, and of the energetic assistance and most important material aid afforded by Mrs. Layard personally, and as President of the Ladies' Association for the Relief of Turkish Sick and Wounded.

"Thus, in one shape or another, the Aid of the British National Society has been carried to the poor sick and wounded Turkish soldier in every part of the Turkish Empire, and will, let it be hoped, continue so to be carried to many a poor sufferer so long as this war may unfortunately last.

"Yours sincerely,

"J. S. YOUNG."

Extract from a Private Letter of
Mr. Robert W. Jolly, Surgeon (*Charing Cross Hospital*).

"Rasgrad,

"28*th November*, 1877.

"My Dear ———,

"I am still located at the Station here, supplying soup, *en route*, but feel very anxious to take the field. There seems every prospect of a winter campaign, and could we only manage an ambulance to the front, I have no doubt it would be of the greatest possible service.

"During the last few days there have been two minor engagements at Kadikoi, near Rustchuk, and although I would willingly have gone up by early morning train, and done my best for the wounded, the first intimation of anything occurring is a telegram that so many wounded are *en route* from Tchernavoda for Varna. Only to-day a Turkish officer, wounded, said to me, 'Should so much like you to come up to attend to the wounded;' but of course, as my orders are Rasgrad, any visit there would only be of a flying nature.

"The weather at present is very fair, but every day now we may expect to have a fall of snow on the ground.

"There is a conscription going on now to fill up the losses during the summer, but they will not come up to the standard of the many fine hardy fellows who have perished in this cruel war. We see the poor fellows almost in rags—one wonders how it is they fight, and yet they are always light-hearted—it is quite a treat to see how they relish our soup and rice, and many is the poor fellow who imploringly entreats a second plate, under the plea that biscuits (and I know the taste of them) have been his only food for many days.

"Yours, &c.,

"R. W. JOLLY."

From Mr. James L. A. Hope, Surgeon (*St. George's Hospital*).

"British Ambulance, Silistria,

"16*th December*, 1877.

"Dear Colonel Loyd-Lindsay,

"Our opportunities in Silistria for communicating with Constantinople are so very rare, as the Turkish post is quite unreliable, that I take the opportunity of a European Doctor's going to Constantinople, to write a few lines to let you know what we are doing here.

"On my arrival here, 29th October, I informed the commandant, Selami Pasha, that I had been sent by the orders of the Society to give him every help possible with regard to his sick and wounded soldiers, and on his receiving us well, and being apparently very glad to have us, I communicated at once with Dr. Crookshank, at Varna, and received from him sixteen araba loads of stores, which with the twelve araba loads I brought with me from Yenikoi, near Rasgrad, made a total of twenty-eight arabas comprising a good deal of provisions and warm clothing, with 250 blankets. I opened, as soon as the necessary cleaning and disinfecting had been done, an hospital of twenty-nine beds in a very large house, and have had it in full operation ever since, and have everything ready at a moment's notice to open another one of forty beds in a large school opposite our present one. As however the fighting has not been very serious up to this date, we find that our present hospital, which is for purely surgical cases, unless others are specially sent in, or extremely urgent, is sufficient, and we can of course treat a very large number of out-patients as there are so many soldiers in the town itself.

"There have been only two affairs close to this place since our arrival, the wounded from which have all been sent to us, amongst them a Cossack prisoner, who is doing well and is apparently very happy, and surprised to have fallen into English hands.

"The sickness here is still principally intermittent fever, but the town is so extremely dirty that I shall be surprised if we do not have a great deal of sickness as soon as the frost forces the inhabitants to use the town wells.

"The roads across Bulgaria are getting quite impassable for anything on wheels, and to-day we have a fall of snow which, if its continues, will shut us out entirely from the rest of the world.

"Cripps left us a week ago, having got orders to proceed immediately to Rasgrad, leaving Lightfoot and myself together here.

"The Danube is rapidly rising, and the weather is cold and foggy.

"Lightfoot desires me to send his remembrances, and

"Believe me, yours faithfully,

"JAMES L. A. HOPE.'

From Doctor HARRY CROOKSHANK, M.R.C.S., L.K.Q.C.P.

"VARNA,

"17*th December*, 1877.

"DEAR COLONEL LINDSAY,

"The same day that I received your answer to my telegram, instructing me to wait Commissioner Young's arrival in Turkey, before undertaking the responsibility of working an hospital here, I was informed by the correspondent of the *Standard*, who had just arrived from Osmanbazar, that medical assistance was much needed at Kesrova, a few hours from Tirnova, where Kerim Pasha's division was without surgeons or even dressers, I therefore collected a few necessaries together from the *dépôt* under my care, and started with Dr. Cripps on Saturday afternoon, 15th inst., for Rasgrad, arriving there soon after midnight. We were leaving next morning for Eski Djuma, when a telegram came from Rustchuk, announcing that 400 wounded, from Kadikoi Tchernavoda, would arrive at Rasgrad in the course of a few hours, and would have to remain there during the night, on account of a great military movement which is now taking place. The military hospital at Rasgrad having been nearly emptied of its beds and bedding for the sick and wounded at Osmanbazar, there was no place ready for the reception of the 400 from Kadikoi, except the warehouse and *depôt* belonging to the National Society, and used as a soup kitchen, I therefore communicated to his Excellency Suleiman Pasha my willingness to accept the charge of the wounded for the night, and at his request have undertaken to shelter, feed, and attend to them during the time that the railway is monopolised by the transport of the military, which will be for a week or ten days. Dr. Jolly, having

just returned from Kadikoi, we all set to work clearing the rooms, whilst the cook prepared the food to be given to the wounded on their arrival. Gradually the adjoining warehouse was nearly emptied, and having taken possession of it we littered down a quantity of hay and straw for beds, and reckoned on being able to give shelter to 350 men. As soon as the train came in it was drawn up in front of the soup kitchen, and about 100 men were immediately set down to their dinner, the slightly wounded being selected, so that when fed and rested they could walk or be carried in arabas to the military hospital, the remainder being left under our care. Having seen that the wounded had all received a good dinner and a packet of tobacco each, and fifty of them started off for the military hospital, I left Drs. Jolly and Cripps to attend to the wounds of those which needed dressing, and got into a train which was just starting for Varna, arriving here at 2·30 a.m. this morning. Having selected an additional supply of stores, medical comforts, and bedding, I return by train this afternoon to Rasgrad, hoping to reach there early to-morrow morning (18th), and will remain there a few days in charge of the wounded; Mr. Dillon, the chief accountant of the Railway Company, having kindly consented to forward my letters and to attend to anything we require. As many of the cases are very serious, I propose placing 100 beds in one of the two warehouses I have on hand, and make it a temporary hospital, under Drs. Jolly and Cripps, and will evacuate the more slightly wounded as soon as possible; by this means we shall be doing good work at a very small outlay. I am, however, anxiously looking forward to Commissioner Young's return, as the future seat of war will be removed from the Lom to Sophia and its neighbourhood, and all help possible will be required in that direction. My last accounts from Dr. Hope, in Silistria, are very favourable, and both he and Dr. Lightfoot have plenty to do, so that I can confidently assert that, given the same limited number of men, the work done by the employés of the British National Society will compare very favourably with that done by any other Aid Society,

"Believe me, Dear Sir, yours sincerely,

"HARRY CROOKSHANK.

"Colonel LOYD-LINDSAY, V.C., M.P."

From Doctor HARRY CROOKSHANK.

"VARNA,

"*26th December*, 1877.

"DEAR COLONEL LINDSAY,

"I arrived here late last night from Rasgrad, having been snowed up there for nearly ten days, during which time I established a temporary hospital, in connection with our soup kitchen at the railway station. Assisted by Drs. Jolly and Cripps I was able to give shelter, food, and medical attendance to 100 wounded soldiers, from the last battle of Kadikoi and Pyrgos, for upwards of a week at a time, when the difficulties to contend with were great, and in consequence of the movement of the troops the authorities were at a loss to know what to do with the poor fellows. I arrived at Rasgrad in the night of the 15th, in company with Doctor Cripps and a fair assortment of stores, purposing to proceed to Kesrova, where I had been informed that Kerim Pasha's division was in great need of medical assistance and stores. Early next morning I called on Husin Pasha, General-in-Chief of the staff, for letters of recommendation to Kerim Pasha, and when there I heard that upwards of 400 wounded were to arrive at the station during the day, and the military hospital having sent most of its staff to Osmanbazar, and having already upwards of 800 sick and wounded under their care, were at a loss to know what to do with the fresh arrivals. I therefore proposed to house them for the night, and at the further request of His Excellency Sulieman Pasha consented to take temporary charge of 100 of them until the transport of military was over, and the pressure relieved. I therefore took over the magazine adjoining the Society's, and Doctors Jolly and Cripps immediately set to work clearing it out, and the *idarè Commisariat* having given us a quantity of hay we made the store rooms as comfortable as the circumstances allowed. As soon as the 400 arrived they were told off to the warehouses, and after partaking of a substantial hot meal, about 230 of the more lightly wounded, and most of those who could walk without assistance, were started off for the military hospital at Rasgrad, about two miles and a half to the station. I then left by the night train for Varna, and returned next day with an abundant supply of preserved meats, palliasses and blankets.

"On the 17th and 18th it snowed continually, and the

weather set in very cold—the wind gradually increased in force, and during the night of the 19th and on the 20th blew a regular hurricane, accompanied by snow and sleet—the result was, that the drifting snow collected in the cuttings, were it lay nearly four metres in depth, and all communications by rail, telegraph, or road between the station, the town, or Varna was severed. This continued until the 25th, when a snow plough with a few carriages came to our relief. The warehouses not being wind and snow proof, and fearing lest the wounded should suffer unnecessarily from the cold, which was extreme, I had an interview with the medical authorities as soon as the road to Rasgrad was practicable, and insisted on the wounded being removed to the town, where houses could be procured for them. On pressing the matter, His Excellency Fazli Pasha ordered sledges and arbas to be sent for them, and next morning (Sunday, 23rd), after they had been well fed, and had their wounds properly attended to, they each received a woollen comforter and pair of flannel drawers, and left our establishment in a much better condition then when they arrived, in spite of the difficulties we had to contend with. During the time the wounded were under our care they were entirely supported by the stores of the Society, the authorities at Rasgrad not even granting us bread or biscuits, and the supply of food and comforts I brought with me from the Varna *depôt* more than sufficed for all our need. I was also fortunate in being able to make a contract with a baker connected with the railway company to supply us with 100 loaves of bread per diem as long as we required any. The wounded received a substantial meal night and morning, had their wounds dressed every day, and were allowed tobacco, tea, brandy, milk, and cocoa as extras. The Government allowed us a fatigue party of ten men to assist in attending to the wounded and distributing the food; these men, together with the cooking establishment, were under the orders of our dragoman, Mr. Jacob Zelovitz, who has worked all through in a most exemplary manner. The greatest difficulty we experienced was the want of water, and when our reserve stock was run out, we were obliged to resort to the plan of melting down snow. Altogether during the week upwards of 2,000 rations were distributed.

"Believe me, Dear Sir, yours sincerely,

"HARRY CROOKSHANK."

Extract from a Letter of
Mr. Robert W. Jolly, Surgeon (*Charing Cross Hospital*).

"*26th December*, 1877.

"I rode into Rustchuck for the night, leaving instructions for any tents, &c., to be brought up from Tchernavoda Station.

"Next morning the every day bombardment was my *reveille* To ride through a town with shells whisking above one's ears is not the most pleasant amusement; but I am now quite accustomed to Russian pills. Every day the firing commences about seven, and only closes with dark, so you may imagine what a state they are reducing the town to. . . . . Returned to Rasgrad Station.

"On the 15th December everybody was surprised to hear that 12,000 troops were immediately to be sent from here to Varna *en route* for Constantinople, of course the explanation was that the Russians had taken Plevna. All night long trains kept arriving, loading, and going away. Next day we were informed that 420 wounded would arrive from Tchernavoda, and that owing to the scarcity of trains, although *en route* for Varna, they must be taken out here. I was asked could we shelter such a number, and feeling that it could be done, offered to keep them two days to oblige Suleiman Pasha. When they arrived we strewed our magazines with hay, and managed by turning the horses out of the stable to take every one in. After all had been served with soup, we picked out the lightly wounded and sent off about 200 to the hospital in the town, leaving the remainder on our hands to feed and dress; fortunately, Crookshank and Cripps had come up from Varna. On the 19th a violent snow-storm came on, so that by next morning the snow in some places was ten feet deep, all communication with Varna was stopped and the telegraph wires broken. Fortunately, we had plenty of tinned provisions to feed our 200 wounded, sixty alone in one half-underground stable. Those in the up-stairs magazine were little better off, as although the air was tolerably good, they were nearly frozen with cold, despite our serving out blankets and covering them over with tarpaulins. With it all the poor fellows were very grateful and called down every sort of blessing on our heads.

"On the 20th snow ceased, and by twelve o'clock on the 23rd all had been removed.

"R. W. JOLLY."

From Commissioner J. S. Young.

"Pera,

"*4th January*, 1878.

"Dear Mr. Ker-Porter,

"The mail with letters from London to 26th December, has arrived to-day, but brought with it nothing from you.

"I start to-morrow for Adrianople and Phillipopolis direction, having heard that Dr. Armand Leslie's ambulance, which was last heard of at Kamarli, near Sophia, and which it was thought was cut off from this side by the Russians, may have managed to get this side of the Russians again with Baker Pasha, who it is said, has broken through the Russians. If unfortunately they should get taken prisoners by the Russians they will want money as they had very little, having expended more than I anticipated in removing from Shipka to Kamarli; of course, if they should not be taken I will supply them very shortly. I only mention the fact of their being in want of money in case they should be taken prisoners, and an application for money reaching you.

"In the event of their being captured by the Russians I would recommend the doctors—there are three—Armand Leslie, Rolph Lesslie, and Thomas Neville, being directed by telegraph to endeavour to arrange with the Russian authorities to remain with the Turkish wounded at Sophia, of whom there are 6,000, who must apparently inevitably fall into the hands of the Russians before many days, if indeed at the time I write Sophia has not already fallen.

"Yours very truly,

"J. S. YOUNG."

"Constantinople,

"*11th January*, 1878.

"Dear Colonel Loyd-Lindsay,

"I have just returned from Phillipopolis, and it would seem just in time to escape the probability of being made prisoner. I had intended going to Tatar-Bazardjik, and on my return journey to have visited Shipka, with the view of ascertaining whether I could profitably remove thither two of our surgeons from the Varna side, where, owing to the removal of troops thence to this

side, active operations, except at the fortresses, will not take place for some time to come. At Phillipopolis, when on the eve of starting for Tatar-Bazardjik, Dr. Rolph Lesslie there turned up, and from him I learnt, that almost to a certainty our ambulance under Armand Leslie, with Dr. Neville, had fallen into the hands of the Russians, as he (Dr. Rolph Lesslie) only escaped by being employed actively with Baker Pasha's division in the fighting which took place on the 31st of December, in the covering of the retreat of the Turkish army from Kamarli, and by having accompanied these troops during their night march after the fighting. His baggage remained with the ambulance at Kamarli. Fighting again took place on the 2nd January at Peterischevo, where the rear guard, under Mustapha Pasha, was attacked by the Russians, and again Dr. Rolph Lesslie attended many wounded on the field of battle, thus rendering good service.

"My object in going up was to supply Armand Leslie with money, which I understood he was in need of. I therefore telegraphed to you to-day as follows:—

"'Armand Leslie and Neville almost certainly taken prisoners at Kamarli. They will require money. Dr. Rolph Lesslie escaped and attended wounded during fighting in Turkish retreat, 31st December and 2nd January.'

I hope, therefore, that ere this reaches you, you may have communicated with British Consul at Bucharest or Dr. Fraser, with a view to Leslie's wants being met at Bucharest at latest.

"At Dr. Rolph Lesslie's request I despatched him again to the front, *viz.*, Otlokeni, near Tatar-Bazardjik, but it is not improbable that the Turkish army there, if it should not effect an immediate retreat on Adrianople, may also be cut off, and Dr. Lesslie be also a prisoner, and I think this eventuality might be provided for by communicating the probability to the British Consul, Bucharest, and Dr. Fraser, in order that if he should be made a prisoner they may assist him.

"There are a large number of Turkish wounded in Sofia, and our surgeons taken prisoners might perhaps do good work amongst these.

"Here matters are assuming the aspect of a panic, and I consequently await a definite turn of affairs before I move any of our staff or take any steps of any kind, as nothing of real good can be done otherwise.

"Dr. Featherstonhaugh, who was at Erzeroum as one of Lord Blantyre's surgeons, goes home by this mail, and I have asked him to call on you, as he will give you information of much interest as to work of aid to sick and wounded in these parts, and particularly as to the blessing which the stores sent by our Society to Erzeroum proved to large numbers of the unfortunate wounded since the Russians approached the city.

"Yours sincerely,

"J. S. YOUNG.

"P.S.—I left at Phillipopolis an assistant of mine, Mr. Albert Greenwood, to follow me next day, but as he has not reached here yet, he may be cut off and made a prisoner; please therefore communicate his name to British Consul, Bucharest, and Dr. Fraser, with a view, in case he should be made prisoner, to his being sent back here by Vienna and Trieste. He will require funds."

Extract from a Letter of
Mr. Charley C. Cripps, Surgeon (*University College Hospital*).

"Rasgrad,

"18*th January*, 1878.

"My Dear ———,

"Many thanks for the letter I received from you last week.

"I am in charge of the soup kitchen here for a short time, Jolly being at Varna, and am patiently waiting to perform any necessary operations on the wounded who may turn up to be fed, on their way to the war. There is great excitement in Turkey just now, there being no certainty about the armistice or England's intentions. Colonel Maitland, Her Majesty's Military Attaché, and Lieutenant Churmside, his Aide-de-Camp, having returned from Silistria last night, have just paid me a visit, under the erroneous belief that they would thus obtain all the latest intelligence; however, I believe I was the one who most profited, since I learnt, besides other things, that the armistice, about which I have heard such conflicting accounts, is not yet decided upon. The Turks have evacuated this place, and were it not for a few troops who still hold positions in the neighbourhood, the Russians would be foraging all over this country. They are amusing themselves just now by resorting to stratagem. At Sarnasufflar, last week, during an attack on some Turkish positions near, they sent

a flag of truce, at the head of four battalions, evidently with the hope that they would find the place nearly deserted, and that they might then pocket the flag and carry the position by assault; however, the Pasha sent a messenger to meet them, and say that as a flag of truce was never accompanied by more than a few men, they would immediately open fire upon them if they did not at once retreat, when, of course, the Muscoves quickly made themselves scarce. We have got some pieces of the shells that were fired into the hospital at Rustchuk here; they are about seven and a half inches in diameter, over a foot and a half long, and three inches in thickness, so you can imagine the panic they caused bursting in a room full of wounded; but it is astonishing what comparatively little harm these large shells do. Stevens and Beresford were in the ward when the first shell bust, both having a narrow escape, but it was not until the smoke and dust had cleared off a little that they were able to find one another. We have received orders to hold ourselves in readiness to leave Bulgaria at a minute's notice. All our surgeons the other side of the Balkans are taken prisoners, and I should not be surprised to find myself in the same predicament, as the Russians might walk in here at any moment, or cut the line at Pravady, as they have done before. Captain Young, who has just returned from Tatar Bazardjik to Constantinople, reports that the refugees are flocking into Adrianople and Constantinople in thousands, many of them riding on the roofs of the railway carriages, and others in open trucks, the trains are so crowded. The progress of these large trains is necessarily very slow, and the stoppages long and frequent, so that they often take nearly two days to accomplish a journey which the 'Flying Dutchman' would do in a few hours. The slow travelling in a country where provisions are scarce and the temperature constantly below freezing point, is of course a very serious matter to people who are chiefly but very indifferently clad, the result is, frost bites are very numerous, to say nothing of those who are frozen to death: eighteen sentries were found dead at their posts, from cold, a short time ago at Rustchuk. The temperature registered on several occasions was 30° Far.

"Constantinople,

"*2nd February*, 1878.

"I have been on the move almost perpetually since I commenced this letter. I should have endeavoured to have sent it on had I not been under orders to come here myself. I have had a rare and exciting time of it lately, but I cannot now stop to give you an account of all I have seen, being in a great hurry, as you may observe, by my writing to catch the mail, just before leaving Varna.

"We had a narrow escape from the Russians the other day near Rasgrad. I have not had a wink of sleep for the last two or three nights; there are a good many English doctors here just now.

"I had stores and everything prepared to start for Tchatalfdia yesterday, when the news of peace upset all our plans. I should not be surprised if we are on our way home in a week.

"Your affectionate brother,

"C. C. CRIPPS."

From Commissioner J. S. Young.

"Constantinople,

"*23rd January*, 1878.

"Dear Colonel Loyd-Lindsay,

"With the Russians at Adrianople, and the only active field force of the Turks, *viz*, that under Suleiman Pasha, cut off from communication direct with head quarters here; also with the prospect of an immediate armistice, leading ultimately to the conclusion of a peace, there is, for the present, nothing to be done but await a definite movement in the tide of events.

"If an armistice, with a view to peace, should be concluded, I will send our medical officers back to England at once, and arrange thereafter for the distribution of the stores on hand, and for the closing of our operations finally.

"From Doctor Hope the following has been received under date, Silistria, 7th January—

"We are all going on well, our hospital always full, and we have now another house, which is the big one opposite to our own, which we are on the point of filling too.

"The Pashas keep us well employed, so that our list is a large one. Our Cossack left us yesterday, quite well and cured, and goes to Varna to morrow.

"We have now a lot of out-patients, besides officers, coming to consult at all times during the day, and we are

certainly doing good work, and may be besieged at any moment, as the Russians are showing signs of activity on the other side of the river.

"The Society's Depôt at Rasgrad, under Dr. Jolly, continue to render most excellent aid to the sick and the wounded. The following is Dr. Jolly's report for the month of December—

"During the month of December no less than 1385 wounded and 278 sick have passed through the Society's Soup Kitchen and Depôt, and a large number have been housed for several days in the store houses, which were converted into tempary hospitals. The wounded were attended to daily, and in this service I was assisted by Drs. Crookshank and Cripps, who came up from Varna for that purpose.

"The soldiers have received soup, bread, and medical comforts, also a packet of tobacco when leaving, the total number of rations thus supplied, was 3264.

"Dr. Crookshank, agent for the Varna district, also reports that as the weather was very cold, blankets and warm clothing were distributed amongst the most necessitous and suffering cases.

"Dr. Rolph Lesslie whom I despatched when at Phillipopolis on 7th January, to rejoin the army under Suleiman Pasha, operating in the neighbourhood of Tatar Bazardjik, has, I hear, joined the division under Redjib Pasha. As no communication has for some time been had with the army, I have no report from Dr. Lesslie, but as the army has been heard of as having made good its retreat towards the sea coast, to a place called Gumedjiné, after heavy fighting at Tatar Bazardjik and Phillipopolis, I am sure that Dr. Lesslie, if not taken prisoner, has brought surgical aid to many a poor wounded sufferer on these frozen battle-fields, as he did in the retreat from Kamarli and Patrischevo, on the 31st December and 2nd January.

"Yours sincerely,

"Colonel Loyd-Lindsay, V.C., M.P." "J. S. YOUNG.

From Doctor Harry Crookshank.

"Varna,

"Dear Mr. Young, "*26th January*, 1878.

"On the morning of the 24th I was informed by the Varna station-master that he had received orders to withdraw the

whole of the railway company's materials from Tchernavoda and Vetova stations to Rasgrad. I therefore sent word to Dr. Jolly, to forward here by the first train (which were not in actual use or likely to be wanted), such as tents, instruments, splints, and medicines; and further, to hold himself in readiness to leave at a short notice.

"The surplus supply of stores arrived next day (25th), and the same afternoon I was shown a telegram from Fazli Pasha, ordering the line to be evacuated from Rasgrad to Caspidjan within thirty-six hours. I therefore telegraphed immediately to Drs. Jolly and Cripps to abandon the soup kitchen at Rasgrad station and to join me here, bringing all the stores with them. I also received your telegram the same day, ordering me to proceed with Dr. Cripps by first boat to Constantinople.

"On receipt of your telegram I wrote to Ibrahim Bey, the chief medical officer of the military hospital, informing him that I had been recalled to Constantinople, and therefore was obliged to resign the work I had been engaged in at the hospital. This latter consisted of three soldiers and one officers ward; in the surgical division contained altogether eighty-three beds, which were entirely under my care. During the fortnight that I was working at the hospital 123 patients were under my treatment.

"This afternoon (25th), about 2 p.m. Drs. Jolly and Cripps arrived with the whole of the stores from Rasgrad, having been travelling all night, and I am glad to report that not a single bale or case belonging to the Society's stores has been lost. The ambulance horses were sent by road to Shumla in charge of you servants and a few soldiers.

"Dr. Cripps leaves this evening by the Austrian Lloyd, and Dr. Jolly will remain at Varna in charge of the *depôt*.

"Constantinople,

"*3rd February*, 1878.

"I left Varna with Dr. Cripps on the evening of the 26th and after a rough passage and a few hours delay at Bourgas to take some refugees on board, we arrived here on the 28th at noon.

"Immediately on landing we proceeded to the *depôt*, where I delivered over to Mr. Kerr the few stores you had telegraphed for, *viz.*, stretchers, bed covers, preserved soups, and instruments, and received from him your letter of instructions. As you had left for

Gallipoli with a supply of stores, and expected to find Dr. Rolph Lesslie there on your arrival, but who in the meantime had crossed you on the way, and had returned to Constantinople, I gave him instructions to proceed direct to Gallipoli by first boat and meet you there, at the same time we telegraphed to you, to that effect, next morning (29th).

"I proceeded by train with Mr. Kerr to Chataldja station, leaving Dr. Cripps at Constantinople; we arrived there in the evening, and walked to the village where we slept that night. Next morning we visited the commandant, and also the civil governors, from whom we learnt that the two battalions of soldiers stationed there had left during the night, and that they themselves were going to abandon the village the same afternoon.

"As therefore there was no work to be done here, Mr. Kerr returned to Constantinople, leaving me at Hadem Keni, where I made inquiries with a view to establish a hospital or ambulance.

"According to your written instructions, I saw the Commander-in-Chief, Mouktar Pasha, and also the commandant of the place, Fakir Pasha, who thanked me for the offer of assistance and would gladly avail themselves of it if there was any need, and promised at the same time to give me all the assistance that I should require. As however the terms of an armistice were being discussed, they advised me to remain quiet for a day or two and await the tide of events. I therefore remained at Hadem Keni a couple of days, assisting the military medical officers in attending to the sick who arrived from the various batteries in the neighbourhood. As soon however as it was positively known that an armistice was signed, I returned to Constantinople by last night's train, expecting to find by that time that you had returned from Gallipoli.

"VARNA,

"*Wednesday*, 13*th February*, 1878.

"Your last letter was not delivered by the Turkish Post until Sunday morning, although I called there myself on the arrival of the boat Saturday morning, and they assured me there was no letters for me bearing a Red Cross. I have been there again to-day for letters by this mail, but with the same negative result. I have heard nothing of Doctors Hope and Lightfoot, but, as the telegraphic communication with Silistria was established last night, I telegraphed to Dr. Hope to evacuate the hospitals at once, and retire on Varna with all the material. I have been following out your instructions as far as possible, and have distributed a large number of stores, especially the clothing among the sick and wounded in the military hospitals here. A large number of wounded Egyptian soldiers have arrived from Bazardjik Hospital, and as they suffer exceedingly from the effects of the present frost and snow, I have distributed, among the Egyptian hospitals and ambulances, a quantity of warm clothing for their sick and wounded, for which they were very thankful, their supply of clothing and medical comforts having completely run out. I have also handed over to them the few medicines we have on hand, as well as a supply of ether, chloroform and bandages, to the medical officer (Egyptian) who has charge of the transport of the sick and wounded from Varna to Constantinople. I have given six cases, each containing four dozen tins of condensed milk, and a few cases of preserved meat for the use of the patients on board ship, as the Government only allow them a loaf of bread each for the journey.

"The Soyer's store and culinary utensils have been borrowed by the Compassionate Fund Varna Committee, for making and distributing soup among the refugees.

"I believe a special train, with the director of the line, will run to Rustchuk to-morrow. I propose accompanying him to Shumla, and visiting the Turkish Military Hospital there, with a view of distributing amongst the sick and wounded there, the goods which I expect from Silistria. As I shall only be away two days I expect to be back before Hope turns up, but, in case I am delayed, will leave instructions for Hope to leave his stores in the *depôt*, and proceed at once to Constantinople with Lightfoot and the Dragoman.

"16*th February*, 1878.

"I beg to enclose you a complete list of the stores I have distributed among the sick and wounded Turkish and Egyptian soldiers in the Varna military hospitals. I heard this morning that His Highness Prince Hassan intended sending me a letter of thanks to be forwarded to the National Society for the assistance they had given. It has not yet arrived, but I hope to forward it to you by next mail.

"His Highness also begged me to send him one of our medical comfort cases, which he had heard highly praised, as a sample for the Egyptian ambulances. This of course I immediately responded to.

"Yesterday I received a reply from Silistria to my telegram to Dr. Hope. The hospital is being evacuated there, and the medical officers expect to be in Varna on Tuesday or Wednesday. If they arrive in time for the boat they will leave direct for Constantinople, and I shall await further orders. There is at present nothing doing here, and the hospitals are now well supplied. I hoped to have been able to visit the Shumla hospital yesterday, but the railway engine was unable to proceed up the line on account of having received no guarantee from the Russian Commander that it would be allowed to return through the Russian lines. * * * *

"Yours very sincerely,

"HARRY CROOKSHANK.

Extract from a Letter of
Mr. Robert W. Jolly, Surgeon (*Charing Cross Hospital*).

"Varna,

"*26th January*, 1878.

"Dear Mr. Young,

"On the morning of the 24th I was informed by the station master at Rasgrad that he had received orders to close the station within twenty-four hours, and that all working above Shumla-road would cease. Knowing full well what a scramble there would be for seats as soon as the news became generally known, I immediately packed up all the stores, &c., at the *depôt*, and had them placed in an open truck; our three horses were sent down to Shumla by road, in charge of an Ox-bushie and Ali the groom. Towards evening a few refugees came to the station, but as the train started about 11 p.m. we managed to get away before the confusion commenced.

"Sixty-four sick and wounded, who had been in the Society's temporary hospital during the day, were all comfortably settled in the train before we started. After a tedious journey we arrived here about 12 a.m. yesterday morning. The last train from

Rasgrad has just come in, and was nearly taken by the Russian cavalry, the Turks making no resistance whatever to stop this advance. Our temporary hospital did good work to the very end.

"January 5th.—Twenty-six sick arrived from Tchernavoda in Rasgrad military hospital at 10 p.m. It was a particularly cold night, and it was quite a pleasure to see the poor fellow's expressions of delight when they found comfortable beds, a good fire, and hot soup after their cold ride; but more than anything did they appreciate the tobacco. Next morning they all received a substantial breakfast before starting off in arabas to the town. No sooner had they left than 160 wounded arrived from the military hospital, *en route* for Varna; as the train did not start till 7 p.m. they fully appreciated resting in a warm room to lying for hours in the cold station, which must inevitably have been their lot had we not been here. They were all fed, and those requiring surgical assistance attended to.

"13th January.—Twenty sick arrived from Tchernavoda about 5 p.m.; as there were no arabas to convey them to the town (two miles and half), they were fed, and remained with us all night, leaving next morning after breakfast. The same day ninety-two sick and sixteen wounded arrived from the town for Varna; the train should have started about 3 p.m., but a blinding snowstorm came on suddenly, rapidly blocking the line, consequently they remained in the hospital all night; next day all the wounded were dressed, and medicine supplied to all those requiring it, and they all left at 5 p.m. for Varna.

"21st January. Thirty sick and thirty-four wounded arrived from Rasgrad for Varna, remained all day and left the same evening by train. On the 24th sixty-two sick arrived from Rasgrad, being the only patients remaining.

"Notwithstanding the hurry and bustle of evacuating our *depôt*, they were all fed and attended to, leaving at 11 p.m. for Varna. I cannot conclude without expressing my indebtedness to the station master, M. Castiorelli, for his courtesy and his earnest endeavours to further the Society's work.

"I remain, yours very sincerely,

"R. W. JOLLY.

"P.S.—I omitted to mention that the warm clothing was most fully appreciated—many times have the poor fellows arrived

with nothing but a thin coat to shield them against the cold—the jerseys were considered an especial prize, as also the woollen wrappers, blankets also were given away when necessary."

"*3rd February*, 1878.

"My Dear ———,

"I can only send you a few lines by this mail as my hands are so full of work. Owing to the advance of the Russians, refugees had come crowding into the town, and at present we have more than 25,000. The sights at the railway stations were fearful, trains coming in loaded with refugees, riding inside, outside on the steps, or anywhere. Knowing that many who thus arrived had been without food for many hours, I went late on Sunday night (27th January) and volunteered to start a soup kitchen at the station. The Governor was very thankful for my offer, and by 12 p.m. we had started working, then we continued for two days and two nights without intermission, when we obtained some rest. On the last day of January the Russian cavalry made a raid on the first station from here, Gubedjie, and blew up the line, since which time no further trains have run. The Governor then asked me to transfer my services to the conack (a sort of town-hall), containing about 1,000 refugees. We started yesterday at 4 p.m. and fed every woman and child before leaving. They lay packed like herrings in a barrel, and my head was really unbearable from the *mauvais odeur*, but still I was determined to carry out the old adage 'if a thing is worth doing at all it is worth doing well.' Drs. Crookshank and Cripps left for Constantinople a week ago, so that the whole work falls upon me. Such abject misery exists, so many deplorable sights have I seen in the last few days that the time of my sojourn in Varna will always be fresh in my memory.

"R. W. JOLLY."

From Mr. F. N. Hume, Surgeon.

"Pera,

"Dear Sir, "*5th February*, 1878.

"I have much pleasure in reporting to you that the stores which you gave to us for the use of the sick and wounded on board S.S. *Sultanich*, proved to be of great service.

"In many cases the clothing of the patients under our care had been to some extent destroyed, worn out, or lost, and to these the most excellent flannel shirts and jackets which we received from you were most valuable; the general cleanliness and comfort were not a little increased by the change of linen, which your under shirts enabled about one hundred of our men to make.

"You will be able to estimate the value and importance to the patients of the soup, bread, and brandy which you gave to us, when I tell you that the authorities were unable to supply them with anything except biscuits, and that it was with great difficulty that we obtained for them even an inadequate supply of water.

"The bandages were most useful at the moment, when owing to our losses, during the hasty march from Philippolis, our own stock was nearly exhausted. With many thanks for your courteous consideration.

"I remain, yours faithfully,

"F. N. HUME.

"*Stafford House Ambulance.*"

From Commissioner J. S. Young.

"Constantinople,

"*6th February*, 1878.

"Dear Colonel Loyd-Lindsay,

"When it became known here that Sulieman Pasha's army had effected a retreat to Guniedjini, and would proceed to Kara Ajach on the sea coast for embarkation, I felt sure from the hurried and forced nature of the retreat, and in view of the difficult and mountainous country over which the retreating forces had to march in weather the most severe experienced during the winter, the sufferings of the sick and wounded, if it were possible that they could be transported with the army, must have been very great, and I therefore determined if the means of getting to Kara Ajach were obtainable, to proceed there with stores for the sick and wounded. By the courtesy of Manthorp Bey, commodore of the fleet of men-of-war and transports, ordered to convey the army from Kara Ajach to Gallipoli and elsewhere, I was enabled to proceed in the ironclad frigate *Osmanich*, with a quantity of stores,

consisting of fresh bread, rice, soups, medical comforts, bandages, materials for dressing wounds, and warm clothing, and I left Constantinople on the 24th January. The bandages and a portion of the clothing were furnished to me by Mrs. Layard, who very kindly allowed me to draw from the stores at her disposal, the bandages, of which I had none, and added thereto a gift of most excellent clothing, which proved afterwards of the greatest comfort to the deserving and grateful recipients.

"Arriving at Kara Ajach on the 28th January, I learnt that so far as could be ascertained, all the wounded and sick had been already embarked on board the transport *Sultanich*, to the number of 250, and that on board the same vessel were four surgeons of the Stafford House who had accompanied the army in its retreat from Tatar Bazardjik. From them I learnt that everything was wanted for the unfortunate wounded, for whom there was only biscuits to eat, and not a single bandage wherewith to dress their wounds, the surgeons having lost, or been obliged to abandon all their stores on the march over the mountains. I also learnt that many wounded must have remained in the villages on the line of march, the roads over the mountains being in many cases mere paths, and being steep and frozen were impracticable for any but strong and healthy men. The few who could be transported through such difficulties suffered very much, and many were frost bitten.

"It was indeed a great satisfaction to me that the stores I brought met such cases of emergent distress, and I may say completely, so far as the circumstances would allow. I placed almost all the stores at once on board the *Sultanich* under care of Dr. Hume of the Stafford House Committee, who at once distributed the warm clothing, and I enclose a letter I have just received from him on the subject of the aid I placed at his disposal.

"Just as the *Sultanich* was leaving Kara Ajach a further detachment of wounded, mustering 100 arrived, and were received on board the *Osmanich*, which ultimately left Kara Ajach on the 31st January, carrying besides the wounded, 200 sick, and over 4,000 soldiers for Buyouk Tchekmedjé. For the sick and wounded on board the *Osmanich*, I gave to the surgeon in charge the remainder of my stores, and most beneficial they proved, providing most opportunely for wants which otherwise would not have been met, conveying comfort, and saving life.

"At Buyouk Tchekmedjé I landed and proceeded thence by land to Constantinople; but though the distance is short it took me two days, under very miserable circumstances, to complete the journey. At Buyouk Tchekmedjé after some difficulty I procured a pack mule, on which at a walking pace I reached Kutchouk Tchekmedjé the same evening. The road and adjacent country were covered with fugitives trudging wearily along, or bivouacking in the open, amongst snow, slush, and mud. Some had been as long as a couple of months on the road from their homes, which were distant even as far as near Plevna, and dead and dying horses, oxen and donkeys were strewn in all directions, thus making in but too sad a manner the extreme sufferings, loss, and hardships to which these miserable creatures had been subjected in their flight during the rigours of winter. At Kutchouk Tchekmedjé the entrance to the village, by means of a wooden bridge over an entrance to a small lake was completely blocked by fugitives, and it was with the greatest difficulty I made my way through the village, the streets of which were filled with a sea of mud, thronged with arabas, men, women and children, the latter crying most piteously, some for food, and we parted with what crusts of bread we had.

"Next morning I made my way to Makri Keni, fortunately finding a military train leaving there for Constantinople in a couple of hours, by which I completed my journey.

"*6th February*, 1878.

"I have only time to send a line by this mail. I have been away at Kara Ajach for a fortnight, with aid for the sick and wounded of Sulieman Pasha's army, after its retreat to that part from Phillipopolis. The aid I took was most opportune, being the only aid rendered, where everything for the sick and wounded was wanting.

"Dr. Cripps proceeds to England, as I have no employment for him.

"*8th February*, 1878.

"Dr. Armand Leslie arrived here yesterday morning, having since his capture at Kamarli, on the 1st January, suffered most abominable treatment at the hands of the Russians.

"He, with three other Englishmen, who shared his vicissitudes, have sent in a written statement to the Ambassador here,

giving details of the treatment they experienced. This statement goes home to the Foreign Office by to-day's mail, and is deemed so important that Mr. Layard has asked me to direct Dr. Leslie to proceed to England at the same time. Dr. Leslie will, accordingly, leave for England by to-day's mail, and I need not therefore go into any details regarding his treatment by the Russians.

"I enclose a copy of Mr. Layard's letter to me, also a closed letter for yourself, which he asked me to forward to you.

"I have no occasion for Dr. Leslie's services here, and, in fact, I am taking steps to close the Society's operations in Turkey, having already sent Dr. Cripps to England.

"Yours sincerely,

"J. S. YOUNG."

"P.S.—I have since writing the foregoing, learnt that Armand Leslie could not leave to-day. On sending for him I learnt that he feels done up, and having missed his portmanteau, which went astray yesterday, he says he cannot go.

"I regret this very much, as he had arranged with me last evening that he should go to-day, as the importance of his going at once was that he would be enabled to lay before you, and if you thought it advisable, before Her Majesty's Govèrnment, particulars regarding his treatment by the Russians, in corroboration of the written statement which goes to the Foreign Office to-day, which particulars might possibly, at the present moment, be of great value, and which might lose in value in proportion to the delay which may occur in his getting to England to relate them personally, as the chief actor in the whole circumstances from first to last. He will, as arranged to-day, leave by the Marseilles mail on the 13th inst.

"J. S. Y."

From A. H. LAYARD, ESQ.

"BRITISH EMBASSY, CONSTANTINOPLE,

"*7th February*, 1878.

"DEAR MR. YOUNG,

"It seems to me that if Dr. Armand Leslie could conveniently proceed at once to England to place before the Council of the Red Cross Society, a statement with regard to his treatment by the Russians, and that of the other English medical men captured by them, he would be doing a great deal of good, and might be the means of inducing Her Majesty's Government to take steps to prevent other Englishmen being dealt with in a similar manner. If you could therefore direct him to leave for England by the first opportunity, should his services be no longer required here, I should be very glad.

"Believe me, yours truly,

"A. H. LAYARD."

From MR. C. C. CRIPPS, SURGEON.

"ENGLISH CLUB, PERA,

"*Feb. 8th*, 1878.

"DEAR ———

"The Red Cross Society are beginning to send their surgeons home.

"It is impossible to telegraph from here just now, as the Russians have cut the line on this side the Bosphorus, and the one on the other side is said to be broken in several places; besides which, even were the communications complete, telegraphing has become so expensive and uncertain, owing to the enormous amount of work which has to be done, that eight pounds are now charged for a message that would have cost but ten shillings and sixpence a few weeks ago.

"Lake, one of the Stafford House surgeons, from Rustchuk, has just returned here, and reports some fearful massacres in Bulgaria; 200 only escaped of 2,000 refugees from Eski Djuma; very much the same occurred at Osmanbazar; and there is every probability of a similar disturbance arising in Varna, where, at the present moment, there are nearly 100,000 fugitives, and scarcely any food within their reach.

"On the 25th ult., while in charge of our establishment at Rasgrad, Jolly arrived at one o'clock in the morning, with instructions for me to proceed immediately to Constantinople; but it so happened that the railway people had received orders from the Military authorities to evacuate all the stations down the line as far as Shumla Road that very morning; and as we heard that the Russians were rapidly advancing, and many of the villages within a few miles were already in flames, we determined to clear

out, and make the best of our way to Varna without delay, it being impossible that any fighting could occur about Rasgrad, as the positions had long since being evacuated by the Turkish soldiers. We accordingly packed up all our stores and prepared out wounded (sixty-four in number) for the journey. However, it was not until 11.30 p.m. the same night that we succeeded in leaving the place. The scene at the station all day was most interesting. The whole place was thronged with fugitives, who continued to pour in even faster than they could be taken away by the trains leaving in quick succession. These trains consisted chiefly of luggage and cattle vans, mostly filled with corn and stores which the authorities were making every effort to remove, so that, many of the people had to ride in open trucks, crouching down on heaps of miscellaneous articles which comprised all the worldly possessions remaining to them. Others, less fortunate, were compelled to clamber on to the roofs of the carriages, in order to avoid being left behind altogether. In this uncomfortable and dangerous position many of these poor people were obliged to remain for fourteen or fifteen hours, the rate of travelling being necessarily unusually slow. The weather was extremely cold at the time, so you can imagine how glad some of these people must have been to arrive at their destination.

"The last train from Tchernavoda brought the news that a string of arabas, some miles in extent, were making the best of their way to Rasgrad. However, when I left, the majority of these had not arrived, although many had come within sight, and been compelled to camp in the valley or on the surrounding hills, owing probably to fatigue or the darkness of the night. The scene from the station, which stands on a considerable elevation, was most picturesque, the country being lit up for miles round by the numerous watch fires.

"On my arrival in Varna at 2 p.m. the following afternoon, I heard the Russians had entered and taken possession of Rasgrad, so that we evidently cleared out only just in time. Our horses, with those of Colonel Maitland and Lieutenant Churmside, who were then at Varna, we sent on early in the morning on foot in charge of Turkish servants, but they were, I have since heard, cut off and taken by the Russians. The same evening Crookshank and I left Varna for Constantinople, leaving Jolly in charge of the *depôt* there.

"However, we had great difficulty in getting away that night, it being very dark and a considerable sea on, so that we were unable to obtain a boat to put off to the steamer which lay anchored about the centre of the bay, until we made them an offer of about twelve times the ordinary fare. I heard a day or two ago that the Russians have come down from the Dobrudscha by Bazardjik, and cut the railway at Guberjie, which is about ten kilometres from Varna, causing great excitement in the latter place.

"We left Varna by the S.S. Tritone at 12 p.m., and arrived at Bourgas the next morning. This place we found deserted by the Turks, and all the civil authorities, who had taken refuge in an ironclad at anchor in the bay, Circassians being in undisputed possession of the town, which they had already ransacked of everything portable and worth taking away, besides having massacred many of the inhabitants of villages in the neighbourhood. All the Bulgarians (some hundreds) had taken refuge in a large Greek church, and it was quite expected that they would soon meet with the same fate.

"The Italian consul, whom we brought away, stated that the only thing they left untouched in his house was the piano. This they probably thought was some dangerously explosive machine, and consequently let it alone. Our steamer was soon surrounded by boats loaded with refugees. These we took on board until the deck could hold no more. All the men I noticed were armed with guns and knives. Most of the former appeared to be very ancient and were so curious in shape that I am sure they were quite worthy of a place in the British Museum. The last time this steamer touched at Bourgas a Circassian came on board, and swore that one of the sailors had stolen his coat, and demanded £1 from the captain for the same. This at first was refused, when the villain called all the deck passengers round him and swore he would shoot the captain the first opportunity. In this way he succeeded in extorting the money he required, and then returned to the town, which he afterwards left loaded with plunder. I need scarcely add that the tale about the coat was a pure fabrication.

"A friend of a gentleman I know here bought a sack of corn from one of these fellows for twenty *piasters-caimé* a few days ago, in order to avoid being bothered. Some time after, upon turning out the contents, he discovered a small bag of gold, about 400

liras. This had probably been hidden in the sack by the original owner, who had possibly been murdered, and the sack, together with other property, brought away by the Circassians.

"Constantinople at the present moment is crowded with these devils. They walk in here as openly as possible, laden with the plunder they have collected about the country. The Russians show them no mercy when they fall into their hands. The Turks themselves are quite disgusted with them, and are sending them across Dasia as fast as they can get them away. They are so numerous here at present, and the place is so crowded with refugees, that there is great danger of a disturbance occurring, in which case there is no knowing what might be the result. However, the few ironclads here have received orders to be in readiness to protect their corresponding nationalities at a moment's notice.

"I have been visiting the various mosques in Stamboul last week. They are all of them very fine buildings, and well adapted for the use that is now being made of them. San Sophia is a magnificent building. Its dome must be nearly if not quite as large as that of St. Paul's. Near this is another large mosque, in front of which, in the centre of a large open space, a large obelisk is situated. All these large buildings are now full of refugees, so closely packed together that there is scarcely room to walk round them. The habits of these people are so utterly devoid of all hygienic principles that were cholera to break out there is no realising the result.

"The last severe epidemic occurred in 1864, when the condition of everything must have been infinitely less favourable to its occurrence, but nevertheless even then 4,000 died per day. What the mortality would be now it is impossible to guess. At present small-pox is the only disease which causes uneasiness here.

"Varna also appears to be full of it, and the refugees there are so anxious to get away that the last steamer before leaving had to steam about the bay for hours in order to avoid boats full of fugitives, who would have forced their way on board in spite of every available part of the boat being already occupied.

"The English Club here is a very convenient and well-conducted establishment. It consists of reading, card, and billiard rooms, and a somewhat small dining room. . . . . I have met with an old friend of mine from the Bristol medical school, named

Crook, of Keynsham. He is attached to Baker's division, and has come in for a great deal of fighting. He witnessed a horrible instance of Turkish barbarity the other day. While he and Captain Burnaby were sitting with a Pasha in his tent, a Bulgarian was brought in and accused of shooting at a Turkish soldier. The Pasha turned to the captain and said, 'What would you do with him if you were in my place?' Burnaby said, 'Have him shot.' Whereupon the Pasha spoke a few words to the guard, who immediately dragged off the poor Bulgar—yelling for mercy—to a convenient spot, and then hacked him to pieces with their swords. Crook, who followed them out, was an eye witness of the whole scene.

"The Government here appear to have been signing the preliminaries of peace wholesale. They have evacuated all the line of fortifications built for the protection of Constantinople, so that the Russians, who are now about Buyouk Tchekmedjé, scarcely twenty miles from here, can walk in whenever they feel disposed. Silistria and Rutschuk are also being evacuated.

"The Russians who are encamped on the coast near here, are buying up all the provisions they can get. The landlord of my hotel, who also keeps a store, has just paid them a visit in a steamer and sold a large quantity. I wonder the authorities don't put a stop to it, as they will have quite enough to do to feed their own people with the thousands of fugitives on their hands.

"The English fleet has been reported to be on its way here some half-dozen times; in fact to-day they even went so far as to say they had prepared 120 guns to salute it on arrival, and sent the news about in order that the people might not be alarmed at the firing. The vascillation and inaptitude shown by the English Government all through the war has already done away apparently with every feeling of respect which the Turks may possibly have entertained towards us as a nation, and one can scarcely be surprised that many noble Britons here are almost ashamed to acknowledge their nationality.

"Leslie and Neville, Red Cross Surgeons, who were taken prisoners seven weeks ago, have just returned from Adrianople, having been released only a few days ago upon the intervention of the British Consul. They have been compelled to cross the Balkans two or three times on foot, confined in prison, almost without food, grossly insulted, and altogether most shamefully

treated. Nobody knew exactly what had become of them. It was supposed they had been sent back by a roundabout way to England, or were employed on the other side, until one day they were recognized while being marched up the street by a citizen who reported it, when it was not until the Consul had threatened to pull down his flag and leave the city that he obtained their release. There were altogether four surgeons in custody, and they were never left without a guard of twelve men.

"A printed placard was posted on the British Embassy this afternoon stating that the British Fleet had been lost somewhere in the Sea of Marmora, and offering £1,000 reward for information that would lead to its discovery.

"The first part of this letter I wrote atthe Club, and on my way home I had my pocket picked in broad daylight by a fellow, who, to put me off my guard, pushed against me and nearly knocked me down. However, although this was the third attempt he was not successful without my becoming aware of the theft, and as he immediately made off, I took the law into my own hands, and succeeded in recovering all I had lost, namely, 500 *piastres caimé*, part of this letter, and also the letter I had just received.

"C. C. CRIPPS."

From Mr. Charles W. Kerr.

"Gallipoli,
"10*th February*, 1878.

"Dear Mr. Young,

"I arrived here this morning with the stores, which I have had safely warehoused in the Custom House till they are required. After seeing to this I called on Captain Fife, and we went to see Suleiman Pasha, but finding that he had gone to the fortifications, and would not be back to night, we decided to call on Reshad Pasha the Civil Governor. He received us very cordially and expressed his thanks for the help we offered, saying that they had very great need. At present they have nine small houses in use as hospitals, holding about fifty patients each, miserable places and far apart from each other. On mentioning to the Pasha the inconvenience of this, he made inquiries if there were any larger houses to be had, when he was told of some which he said I might go and see. I at once accepted the offer, and went with the head

military doctor. We examined two large houses, near each other, each capable of holding 100 patients, which will suit very well. Another house also was shown us close by, which they said would hold 200 beds.

"We did not go into this as there were some people living in it, but the Pasha, afterwards, on our seeing him again, said, he would have them turned out if necessary. To-morrow they are going to clean out the first two, and get them ready for receiving patients so that by degrees they will give up the other nine hospitals.

"There were 460 sick and wounded when I arrived, but ninety wounded were sent off to Constantinople by an Austrian Steamer this afternoon, and the remainder are mostly sick.

"I visited some of the hospitals, and found most of the patients in a most pitiable state.

"The Pasha would have made no difficulty about having the mattresses made up, but, unfortunately, there is no straw to be had for love or money. I saw some they were getting made with chopped straw, but they were very hard and uneven, and would be anything but comfortable.

"I think it would be a good thing if you could send a few bales of compressed hay, by first steamer, as it would be a great blessing, and would not cost much, besides serving well.

"The only objection to this, is the time it would take before you could send it; so please telegraph as soon as possible whether it is feasible—care of English Consul—I will write or telegraph to you later on whether there is need of drugs or other stores.

"I have made arrangements that Lesslie should take over as many patients as he can manage in one of the hospitals, as soon as they are in working order.

"Yours very truly,
"CHAS. W. KERR."

From Mr. Robert W. Jolly, Surgeon (*Charing Cross Hospital*).

"Constantinople,
"11*th February*, 1878.

"Dear Mr. Young,

"Not having been able to send you a detailed account of our work of relieving the fugitives at Varna from want of time, I now take the first opportunity of sending in my report.

"On Sunday evening, the 28th ult., the Mustarserif sent round to Mr. Reid, H.M. Consul, to say that great distress existed amongst the fugitives, and that he would be glad of any help. Having first ascertained from Mr. Reid that I should in no way be interfering with the working of the Refugees Fund, I at once went to the Mustarserif and offered the services of the Red Cross Society. He expressed his warm thanks, and pointed out the railway station as a very good central point to commence working. Having obtained arabas and Zapticks we started off at 11 p.m. to the railway station, and found that about 800 refugees had just arrived, with no alternative but to wait there all night; many of them had been travelling to the different stations for days, and were in a most pitiable condition. Soup we very soon had ready, and we continued working all night, and had the satisfaction of satisfying many hungry mouths by daybreak. At 10 a.m. another train came in with its living freight, crowding every available vacant space; all the women and children received a full supply of soup and bread before starting on their weary trudge, to find a resting place for the night.

"The next train was expected about 7 p.m., but owing to delays, &c., we were kept up all night awaiting its arrival, which did not take place till 6 a.m. In this particular train were a number of refugees, more especially unfortunate, *viz.*, those from Tirnova and the surrounding villages. These unfortunate people, driven from their homes at an early period of the war, have managed to keep up a bare existence during the summer, but now being penniless they present a deplorable appearance, and seem utterly to have given themselves up.

"One poor girl, in the last stage of consumption, especially attracted attention, wasted to a shadow, and of course utterly unable to eat the course food of the country. They were all lodged as well as circumstances would permit in a tolerably comfortable sort of barn. We then obtained some rest, and afterwards continued our work for two days longer, when the Russians having cut the line all trains ceased running. In all, during our four days work at the station, we supplied 2,520 refugees, many of them being children. The Mustarserif then asked us to transfer our materials, &c., to a place where about 900 refugees were temporarily housed, crowding the passages, empty rooms, and even the staircases. Many children were lying huddled

together with small pox at its height, and the bad air caused by the overcrowding was so oppressive that after three hours work one's head became quite unbearable. We continued our work for three days, by which time houses having been found in the town the place was cleared. In all we fed there 2,400 refugees. One poor boy, an orphan, quite lame from disease of the different bones, was admitted into the Red Crescent Hospital, for which I have to express my thanks to Mr. Missachian, Special Commissioner of the R.C.S.

"From that place we transferred to a house with a mosque and school in the vicinity, both crowded with refugees. Here we continued working for three days longer, when the work was discontinued. The total number fed by one particular soup kitchen amounted to 6,270. The Mustarserif supplied Zapticks to maintain order, who worked uncommonly well, and he also supplied us every day with rations of bread, so that the cost of feeding such a large number was comparatively small. In conclusion, I must add, that owing to all telegraphic communication being interrupted there was no means of becoming acquainted with your wishes, and that the work we have untertaken alleviated a great amount of suffering that existed at the time. Now the Refugees Fund is in full working order, and most of the refugees have been comfortably housed.

"I remain, yours very sincerely,

"R. W. JOLLY."

"*13th February*, 1878.

"I have some good work to report, but have had my time so occupied during the last week that I cannot send you an account of it till next mail.

"Dr. Armand Leslie leaves for London by the Marseilles steamer to-day, and he will give you a report of all his doings, which I have not thought it worth while to trouble him for, seeing that he is going home.

"I am gradually closing our operations here, but have still a considerable quantity of stores to dispose of.

"Will you kindly by return of post inform me when I may expect the tombstone for Dr. Meyrick's grave,* as I hope to be able to close all our operations here by the end of March, and if the tombstone should not be shipped at once, I might be kept here to wait its arrival.

"Yours sincerely,

"J. S. YOUNG."

From Mr. ROLPH LESSLIE, Surgeon.

"CONSTANTINOPLE,

"18*th February*, 1878.

"DEAR SIR,

"In a letter written from Tatar Bazardjik, I explained the causes which separated me from my colleagues during the battle of 31st December, at Taskeshan and Kamarli, and reported upon the work I had done there during the fight at Petricheno, and upon the march to Otlukeni.

"As you have never received this letter, I will briefly summarize that part of its contents relating to the wounded.

"At Taskeshan I formed a part of the first line of surgical assistance, being engaged until the close of the battle, at nightfall, in extracting bullets, applying bandages, or whatever was necessary to enable the wounded to be transported to the rear, where they were received by other surgeons. There were no stretchers to be had, and although the best use was made of the extempore appliances. We were compelled to abandon to the enemy the most seriously wounded, when the Rear Guard was ordered to retreat.

"The sufferings of these men, deserted on the heights behind Taskeshan, during the depth of winter, were terrible, and were in no way relieved by the surgeons who remained with the wounded at the village of Stugli, a place six miles distant.

"We marched all that night across the mountains, arriving next morning at Petricheno, where I assisted Doctors Gill and Rook, of General Baker's division, in attending to the wounded we had brought with us.

* The monument has been sent by the *Mary* steamer, and is by this time placed in the Cemetry at Scutari.

"At daybreak, on the 2nd January, the Advance Guard of the Russian army appeared in sight, and three hours afterwards attacked the positions held by Redjib and Mustaphar Pashas. As I was not attached to any division I accompanied the Tirnova battalion into action, and remained with them until an hour after sunset, when the fighting ceased, occupying the advanced left of our position, where the chief attack was made, but nine of the wounded were abandoned, owing to the close vicinity of the village of Petricheno. Here they were conveyed, and placed in temporary hospitals, where their wants were attended to.

"After a night's march, and a day's rest at Metchka, the army took up a position at Otlukeni, and on the 5th January I rode into Tatar Bazardjik, to report myself to you.

"In accordance with your instructions after that I attached myself to Suleiman Pasha's army, which I accompanied in its retreat to the sea. At the battle of Codikeni I remained with the Rear Guard, which suffered severely. The few wounded I dressed, with many others, were abandoned on the field, as it was impossible to bring them over the mountains with us.

"The army fell back from Codikeni in three columns. The left, which I accompanied, was not afterwards engaged, and was separated from the centre, under Shakir Pasha, by a large body of the enemy's cavalry, which prevented my being present at the battle of the following day. In company with Campbell I tried to join Shakir Pasha, but we were chased by Cossacks, and very nearly taken. The rest of the retreat consisted of forced marches, over mountain passes to the sea, during which the sick and wounded who accompanied us suffered greatly.

"Little could be done to relieve them, owing to the incessant marching, and scarcity of food.

"Believe me, dear Sir,

"Yours respectfully,

"J. S. YOUNG, Esq." "ROLPH LESSLIE.

"CONSTANTINOPLE,

"DEAR MR. YOUNG, "20*th February*, 1878.

"In continuation of my last letter to you, from Gallipoli, concerning the work for the Society there, I beg to give you an account of the work done since that time.

"As soon as the sick and wounded were removed to the new hospitals, I began to distribute the blankets, serge suits, flannels, &c. They were much needed, as the weather was intensely cold, and were very thankfully received by the patients, the authorities also expressing their thanks for the timely help. The soldiers were nearly all suffering from the effects of their long march from Tartar Bazardjik, having had to bivouac without tents, during frost and snow, and many had their hands and feet frostbitten. Before leaving I saw three of the new hospitals completely equipped, one with 85 beds, one with 93, and another with 50, making 228 beds in all. We did not get the one that would have held 200 as we expected, but three other houses were being got into readiness, close to these, which would be able to contain all the rest of the sick.

"The number of patients in the hospitals, while I was at Gallipoli, was from 400 to 500, and the deaths were from six to eight a day.

"The medicines, splints and dressings, I handed over to the Turkish doctors, together with the disinfectants, which were very much needed, as the authorities had made no provision of this kind, and considering the sick of the army at the Lines, which numbers about 22,000 men, were all sent to these hospitals, the arrival of these necessaries was most opportune.

"The English Consul paid a visit to the new hospitals on the morning I was leaving, and was very much pleased with the marked improvement which had taken place in the arrangements, the old hospitals having been kept very untidy, and with no regard to cleanliness.

"In accordance with your instructions to Doctor Jolly, the medical comfort cases and remainder of the clothing were handed over to H.B.M. Consul who kindly consented to distribute them according to such necessity as might hereafter arise, and I cannot conclude without expressing to you my indebtedness both to him and to Captain Fife, H.B.M. *Attaché*, for the valuable assistance they gave me in carrying out the objects of the Society.

"Yours very truly,

"CHAS. W. KERR."

From Commissioner J. S. Young,

"Constantinople,

"22*nd February*, 1878.

Dear Colonel Loyd-Lindsay,

"In my letter to you of the 6th instant I gave you an account of my first visit to Kara Agatch, with stores for the use of Sulieman Pasha's Army, after its retreat from Phillipopolis to the sea coast.

"When I left on that journey there seemed every probability of a further resistance to the advance of the Russians being made by the Turks at the lines of Tchekmedji and Gallipoli, and before leaving Constantinople I recalled Drs. Crookshank and Cripps from Varna, with directions that Dr. Jolly should take charge of the *depôt* at Varna, as I had previously learnt that our *depôt* at Rasgrad, of which Dr. Jolly was in charge, would by that time have ceased to exist, on account of Rasgrad having been evacuated by the Turks. These directions I conveyed by telegram as I had but a few hours' notice in which to make arrangements before leaving for Kara Agatch, and I left behind me written instructions for Dr. Crookshank, immediately on arrival in Constantinople, to proceed to the lines at Tchekmedji, and there establish an ambulance. Almost coincident, Dr. Crookshank's arrival at Tchataldja on the lines of Buyoak Tchekmedji the armistice was concluded, and very shortly after the outer lines were evacuated. I enclose Dr. Crookshank's report, dated 3rd instant, showing the action he took to carry out my instructions.

"I also enclose a letter from Dr. Crookshank reporting the evacuation of the Rasgrad *depôt*, and from this letter you will observe that he had been doing good work at Varna in having had under his charge and treatment upwards of 120 sick and wounded in the Military Hospital there. This good work he had been performing for some time previously, thus relieving the great pressure on the Turkish Medical Staff which existed, owing to the evacuation to Varna of an immense number of sick and wounded from the advanced posts on the Lom, and from the fortresses of the Quadrilateral.

"On my return from Kara Agatch I found Dr. Crookshank had also returned from the Tchekmedji lines, and as there was no prospect for any immediate work for him on this side, I sent him

back to wind up the work on the Varna side, and to distribute warm clothing, which I understood was much needed, especially amongst the Egyptians, who suffer very much from cold. I enclose two reports from him dated 13th and 16th February, showing that he has been doing a very great deal of good work since his return to Varna, and you will observe that he was daily expecting the arrival of Drs. Hope and Lightfoot from Silistria. I have, however, received a further letter from him this morning, dated 20th instant, in which he says—

"'Drs. Hope and Lightfoot have not yet arrived; from inquiries I made yesterday, I believe the garrison of Rustchuk and Silistria are at Schumla, waiting for the opening of the railway line, to be transferred to Varna.'

"You will recollect that in my letters to you of 11th and 23rd January I referred to the good service rendered by Doctor Rolph Lesslie to the wounded in the retreat of Shakir Pasha's army from Kamarli, so gallantly covered by Baker Pasha's force against an overwhelming Russian force at Tashkassen. After I saw him at Phillipopolis and despatched him again to the front, he rejoined Sulieman Pasha's army, and accompanied it in its retreat across the mountains to the sea coast, again rendering to the wounded on the field of battle at Kadikeni: and I now transmit herewith a brief sketch, dated 18th inst., which he has given me of the work he was enabled to do in these two retreats.

"I have had so much to occupy my time lately, and the post closes in a few moments, that I must now conclude this present letter. I have some good work to report in regard to Gallipoli, where Dr. Jolly is now stationed, but I must defer details to next mail.

"Yours sincerely,

"J. S. YOUNG.

"Colonel LOYD-LINDSAY, V.C., M.P."

Extract of a Private Letter of
Mr. ROBERT W. JOLLY, SURGEON (*Charing Cross Hospital*).

"GALLIPOLI,

"*23rd Feb.*, 1878.

"On arriving here last Thursday morning my first endeavour was to secure a decent house. Our last domicile was a very dirty

one. I succeeded beyond my expectations, finding a large newly-built residence, Bulgarian fashion, and very clean. Being situated high up one avoids the unpleasant odours so prevalent in the lower parts of the town.

"There are about 400 sick, mostly consisting of poor fellows worn out by the late privations they have undergone.

"We have distributed a large quantity of clothing amongst them, and at present I am taking charge of a hospital containing fifty beds.

"The 'Agincourt' and 'Hotspur' are lying at anchor in the bay, Admiral Commerell commanding. I have not chanced to meet the Admiral, but one of the officers told me to-day that he took great interest in the National Society, so probably we shall soon become acquainted.

"Mr. Young thinks we shall not continue out here more than three weeks longer, but of course I may at any time receive instructions to return home.

"R. W. JOLLY."

"*24th February*, 1878.

"DEAR MR. YOUNG,

"As the mail leaves to-morrow, I just write a short account of the work here.

"On my arrival the authorities at once acceded to my request of having a separate hospital, and gave me one containing about forty-six beds. It is quite full, the cases consisting chiefly of slight frost bites and diarrhœa, besides a few cases of cough and rheumatism.

"All the poor fellows are very weak from their late long marches and privations, but with plenty of food they will no doubt soon recover their strength. Small pox seems to have diminished considerably, and I have not as yet seen any epidemic disease among the troops. Yesterday I made a further distribution of clothes, for which they all seemed grateful. All the flannel shirts have been given away, and a further contribution would be a great boon, as yesterday sixty-six only received drawers, of which we have still about 100 pairs left. Altogether there are about 400 sick and wounded in the hospitals.

"I remain, yours very sincerely,

"R. W. JOLLY."

"*3rd March*, 1878.

"DEAR MR. YOUNG,

"I do not know that I have any news much to tell you this mail; my hospital continues full, and they are opening another one, but a large number are to be sent to Constantinople as soon as the transport arrives, which will very materially reduce the number. Sorry to say I am feeling very seedy, and could not go to the hospital to-day, this place is so very unhealthy.

"One meets rotting carcases of horses and bullocks at every turn, and with a south wind the place is most pestilential.

"Hope to hear from you on Thursday that there is no further occasion for staying here. Here we have absolutely no news, but suppose peace was signed last Saturday. Excuse haste, as mail is just off, and I have only just turned in to write.

"Yours sincerely

"R. W. JOLLY."

From Commissioner J. S. YOUNG.

"CONSTANTINOPLE,

"*6th March*, 1878.

"DEAR COLONEL LOYD-LINDSAY,

"Since I last wrote I have been laid up with a very severe bronchial attack accompanied with fever, which besides putting me *hors de combat* deprived me for the first time in my life of the use of my voice.

"In my last letter I referred to our having done good work at Gallipoli. Almost immediately after my return from Kara Agatch I was made aware by the Ambassador, who is ever desirous of assisting the work of humanity, that the sick and wounded at Gallipoli, the wounded having reached there from Kara Agatch, were in want of almost everything, and to convey an idea of the sad state of affairs existing there, I cannot do better than give you the following extracts from the report made to the Ambassador, who has kindly given me his permission so to do.

"'The hospitals have just been extemporised in private houses, and are still wanting in nearly everything. There are no medicines, disinfectants, and appliances yet; but a small supply of some of them is temporarily available from

chemists in the town. There are no beds, or mattrasses, or bed clothing, with the exception of an occasional blanket. Some of the men are lying on what cushions can be collected in the Turkish houses, others on great coats or single blankets. The men are still in the uniform in which they made the campaign, and which is generally worn out . . . . . .

"'There were 260 wounded and sick in hospital, and the admissions are at the rate of about fifty daily . . . . . There are only three medical officers . . . . .

"'It would be a great benefit to the cause of humanity if the supply of beds, mattrasses, and bed clothing, and a full supply of medicines, instruments, &c., could be quickly sent.'

"Within thirty-six hours of the receipt of this information I despatched, on the 8th February, my assistant, Mr. Kerr, with a complete supply of bedding and clothing for 200 beds, also a full supply of well assorted medicines, disinfectants, splints, materials for dressing wounds, bandages, compresses, and medical comforts, directing him to see the bedding and clothing brought into actual use at once, and to distribute underclothing amongst the most necessitous cases. Dr. Rolph Lesslie had previously been sent to Gallipoli, and took a number of patients under his care.

"I enclose two reports, dated 10th and 20th February, from Mr. Kerr, showing what good work he has done, by getting three large hospitals, containing in all 228 beds, equipped by means of our stores, opened in place of the nine small houses previously used for the reception of the sick and wounded, and how our aid has thus completely alleviated the necessities of the case, and revolutionised for the better the previous sad state of distress.

"Dr. Jolly relieved Dr. Rolph Lesslie at Gallipoli, from 13th February, and I enclose two reports from him, dated 24th February, and 3rd March. As a treaty of peace has been signed between Russians and Turks, and as the Turkish medical staff at Gallipoli has been augmented, and is now more than sufficient to meet the requirements of the troops there, I sent instructions yesterday for Dr. Jolly to return here, and he will, therefore, I trust, as his health does not appear to be good, soon be on his way to England.

"Owing to the irregularities of the means of communication, I had not in the usual course received the report of the operations of the Society's temporary hospital and soup kitchen at Rasgrad for January. I now forward a report from Dr. Jolly of the working during January till the advance of the Russians compelled the hasty evacuation under difficult circumstances, but successfully, without losing any material, on the 24th January. This temporary hospital and soup kitchen has been in every sense a success, having been the means of alleviating really an immense amount of suffering under the most emergent and unforseen circumstances, during the regions of winter, when means of transport and communication have suddenly been stopped by heavy snow storms, and from other causes; and in it hundreds of sick and wounded have thus found shelter, rest, surgical aid, nursing, and food, from which otherwise they would have been cut off, in some cases never to require such help again in this world. To Dr. Jolly, as in charge of this depôt, the success is mainly due for the unflagging earnestness of his endeavours to bring the aid of his skill, and the means placed at his disposal by the Society, on every possible occasion, to every poor suffering sick and wounded soldier who came within his reach, and to Dr. Crookshank also much is due for his not only having taken every means to ensure Dr. Jolly's endeavours being efficiently supported, but for having at times of pressure given his own aid to supplement that of Dr. Jolly.

"Another instance of Dr. Jolly's earnestness in relieving suffering on every possible occasion was given at Varna when he succeeded Dr. Crookshank on the latter being recalled to Constantinople by me as related in my letter to you of 26th February, and when he had only just reached Varna, on being compelled to leave Rasgrad by the advance of the Russians. For the moment, owing to many of the sick and wounded at Varna having been removed to Constantinople, and owing to the Russians having advanced to within a very short distance of Varna itself, there was no need of Dr. Jolly's services amongst the troops. The suddenness of the Russians advance brought with it another source of misery and suffering in the shape of thousands of fugitives, whose advent in such immense numbers, and in a most miserable flight completely paralysed the authorities, in whose extremity Dr. Jolly at once volunteered his aid to help to relieve the urgent

distress, and started a soup kitchen, which in the space of a week fed no less than 6,270 persons. Concerning the details of this most humane work, I enclose a report which Dr. Jolly has given me, and Dr. Crookshank, who had returned to Varna on the 6th February, writes to me in a letter, dated 7th February, 'Everyone speaks highly of Dr. Jolly, who has been on foot the whole of the last two nights distributing food to nearly 4,000 starving women and children, and has brought great credit to the Society he is connected with.'

"In my last letter I enclosed one from Dr. Crookshank in which mention was made that his Highness Prince Hassen, commanding at Varna, expressed his intention of sending a letter of thanks for the aid rendered by the Society there. This letter has now reached me with an acknowledgment of the quantities of stores distributed amongst the sick and wounded, and I forward herewith a copy.

"Drs. Hope and Lightfoot arrived here from Silistria, on the 25th February, and Dr. Crookshank arrived on the 3rd instant, having wound up the operations of the Society in the Varna district.

"As I had formed the intention for some time past of sending aid to Salonica, where great need prevails, owing to a large number of wounded having found their way there from Sophia and that district, I despatched Drs. Crookshank and Hope to Salonica on the 4th instant, and to remain there should necessity for their services exist, till 31st March, proceeding thereafter to England. Dr. Lightfoot left here same time to proceed on to England at once,

"Learning that milk could not, under the present distressing circumstances, be sufficiently supplied to meet the wants of soldiers suffering from diseases which would be benefited by its use, I offered to the War Office authorities the supply of condensed milk I have remaining. My offer was thankfully accepted, and I am now distributing the supply amongst several hospitals indicated by the authorities.

"Yours sincerely,

"J. S. YOUNG."

8th March, 1878.

"In my letter of the 6th instant I informed you that as I had formed the intention for some time past of sending aid to

Salonica, where great need prevails, I despatched Drs. Crookshank and Hope to that place on the 4th instant, Dr. Lightfoot accompanying them, but with a view of proceeding on to England without remaining there. I have just received the following telegram from Dr. Crookshank, dated Salonica yesterday :—

"'Begin work to-morrow with 250 beds. Have retained Lightfoot. Pressing need of everything except provisions. Send by first steamer, pack saddles, all tents, blankets, bedding, clothing, medicines, dressings, stretchers. Well received by authorities. Every facility asked for granted.'

"I am, therefore, very glad that I have been able to carry out my intention of sending aid to Salonica, and I shall thus be enabled to dispose to the best advantage the stores I have remaining on hand, besides meeting with surgical aid, a most pressing call for aid. The stores asked for by Crookshank will be dispatched to-morrow.

"I mentioned also in my letter of the 6th instant that I had given instructions to Dr. Jolly to return here from Gallipoli, with a view of proceeding to England. I yesterday arranged with Barrington Kennett, whom I had informed of my intention to withdraw Dr. Jolly, that a medical officer of the Stafford House Committee, which is still continuing its operations, should take over the hospital of forty-six beds, equipped by our Society, from Dr. Jolly, and accordingly Dr. Barker of the Stafford House Committee proceeds to Gallipoli to-day to relieve Dr. Jolly, who will, therefore, in all probability leave for England by French mail steamer, on 13th instant, though I may send him to help at Salonica if Crookshank should report that his services are wanted.

"Yours sincerely,

"J. S. YOUNG."

"CONSTANTINOPLE,

"15*th March*, 1878.

"DEAR COLONEL LOYD-LINDSAY,

"In my letter of 8th instant I informed you of my having sent to Salonica Drs. Crookshank, Hope, and Lightfoot, also of my having received from Dr. Crookshank a telegram notifying the pressing need for aid that exists at Salonica, and that they had already commenced work by taking over charge of 250 beds, every facility being granted by the authorities.

"I now enclose a most interesting report from Dr. Crookshank, dated 11th instant, giving details of the work taken in hand.

"On the 9th instant I despatched my assistant, Mr. Greenwood, with all the tents, and clothing I had remaining in depôt; also medicines and a large supply of bandages and other materials for dressing wounds. These have already arrived at Salonica, and will enable Dr. Crookshank to carry out his desire to separate the Gangrenous cases under canvas, as I sent him two large hospital marquees, three small hospital marquees, and three bell tents.

"To-day Dr. Jolly leaves also for Salonica, taking with him sixty packages of medical comforts, so that altogether the help sent to Salonica will, I trust, be adequate to the requirements so clearly described by Dr. Crookshank in his letter enclosed.

"I have now distributed almost all our stores, and shall proceed to Salonica after I have received poor Meyrick's monument, and arranged for the Turkish inscription to be put on it, and will decide when our work at Salonica shall cease, for I have no intention of keeping the surgeons there one day longer than the present pressure or emergency shall exist. I shall probably, therefore, leave for Salonica about first or second week in April.

"Yours sincerely,

"J. S. YOUNG."

From Dr. HARRY CROOKSHANK.

"SALONICA.

"11*th March*, 1878.

"DEAR MR. YOUNG,

"You will be glad to hear that without loss of time we have set down to real earnest work, which promises fair to equal any we have hitherto been engaged in. We arrived here Wednesday afternoon, having been detained at the Dardanelles twelve hours by rough weather, and the same evening I called on Evan Bey, the head medical officer of the Military Hospital, as also on Dr. Ruttledge, an Englishman in the Turkish service, who has been attached to the Salonica division for more than a year, from these gentlemen I obtained a good deal of reliable information on the state of affairs, which enabled me to decide on our present line of action.

"Early next morning (7th) I paid a visit to Temple Bey,

principal medical officer of the district, and went over the hospitals with him. The Caserne, which is more especially under his direction, contains nearly 900 patients, and a more wretched condition than they are in cannot be conceived. I found a large number of sick and wounded lying on mats on the floor, without any bedding under them, and nothing to cover themselves with, but their overcoats, which also, in many cases were wanting.

"Surgical appliances of every description were lacking. Very coarse charpie and bandages, which had been very badly washed several times, were the only dressings that remained. Numbers of the wounded patients were not dressed for three or four days at a time, and hospital gangrene was spreading through the wards with fearful rapidity. The hospital staff was greatly overworked, three of there members being laid up with typhoid fever. Altogether scattered about the town were upwards of 1,500 sick and wounded from Sophia and the Servian frontier, and the numbers were daily increasing. In addition there are some 500 patients at Uskuss, and about the same number in the Mitisintza, and Novi Bazar hospitals, all of which are waiting to be transported to Salonica.

"After consulting with Dr. Hope we decided to retain Dr. Lightfoot's services, telegraphing to you to that effect, and asking for an immediate large supply of stores of all descriptions. I determined to lose no time in getting to work, and the same afternoon took over from Temple Bey one of the wings of the Caserne, containing 214 patients of the worst description. So that within twenty-four hours of our arrival we were actually in charge of a large hospital.

"Our portion of the Caserne consists at present of a large ward, No. 1, with 100 beds, and three small gangrene wards; Nos. 2, 3, 4, with thirty-five beds, under Drs. Hope and Lightfoot; ward 5, 120 beds; ward 6, nine beds, small-pox and gangrene, under my care, assisted by a dresser, but which I propose Dr. Jolly will share with me on his arrival. Altogether we have upwards of 260 patients, and the only expense incurred will be the making of 100 beds for my ward, No. 5. At the contracted rate of 15 *piastres-caimé* per bed, equal to about £

"Except such extras of diet as milk, eggs, wine, and tobacco, which we may wish to order for the patients, the Society will not be put to any other expense in maintaining the work.

I have telegraphed you for a large supply of stores, especially bandages, and S. H. E. cases, which we anxiously look forward to, and which I trust Mrs. Layard will kindly assist us in.

"I think I can very advantageously dispose of all the stores you have in hand, also particularly ask for tents. The weather being fine I propose putting all the bad cases of gangrene under canvas as the only chance of getting rid of it, and as we have a large number of major operations to be performed I could not consent to do them anywhere else except in an hospital marquee to ensure success.

"There is apparently plenty of work here for many weeks to come, and I hope you will be able to pay us a visit to judge of the reality of it.

"Yours very sincerely,

"HARRY CROOKSHANK."

From Mr. Robert W. JOLLY, SURGEON (*Charing Cross Hospital*).

"SALONICA,

"*19th March*, 1878.

"Arrived here yesterday morning after very fair passage of three days from Constantinople. Found Crookshank, Hope, and Lightfoot fully occupied attending to wounded, who were in a fearfully neglected condition. Most of them were wounded fighting against the Servians, and managed some way or the other to crawl down here. Now that the wounds are being looked after there is a very different state of affairs, and the numbers are lessening every day. Altogether there are about 800 wounded, besides sick, of whom 200 are under our own special care. Stafford House have also sent doctors here, and possibly more will soon arrive.

"In Constantinople there are still about 80,000 poor refugees driven from their homes, destitute and penniless, living in the mosques.

"How one realises the horrors of war in seeing so many helpless women and children dying by scores every day of typhus, small pox, &c.—all brought on by the crowded, unsanitary condition in which they are obliged to live. The Turkish

Compassionate Fund is doing wonders, but still they can only give food, and decent habitations are the great desideration to people accustomed only to breathe the pure fresh air of the country.

"About the end of April will see me home, the 14th April being the utmost length of my stay here. By that time there should be no lack of Turkish surgeons, besides which a month will produce wonders in our patients.

"R. W. JOLLY."

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PAMPHLETS

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