

Report of the Commissioners appointed to inquire into the regulations affecting the sanitary condition of the army, the organization of military hospitals, and the treatment of the sick and wounded. : [Vol. 2] Appendix LXXIX.

Contributors

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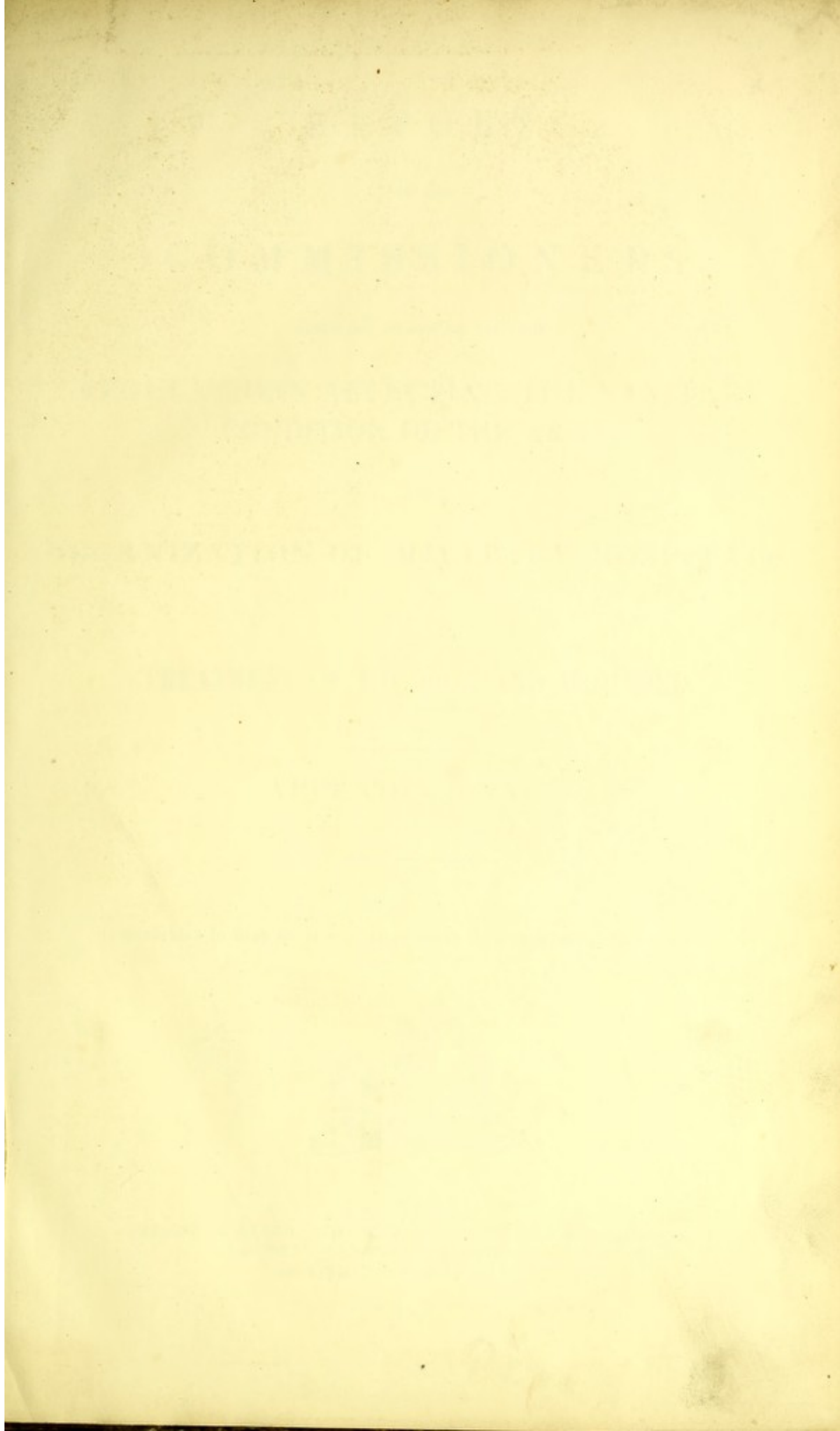


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R E P O R T

OF THE

C O M M I S S I O N E R S

APPOINTED TO INQUIRE INTO THE

**REGULATIONS AFFECTING THE SANITARY
CONDITION OF THE ARMY,**

THE

ORGANIZATION OF MILITARY HOSPITALS,

AND THE

TREATMENT OF THE SICK AND WOUNDED.

APPENDIX LXXIX.

(In continuation of Report and Appendix presented 9th February 1858.)

Presented to both Houses of Parliament by Command of Her Majesty.



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PRINTED BY GEORGE EDWARD EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.

FOR HER MAJESTY'S STATIONERY OFFICE.

1858.

REPORT

OF THE

COMMISSIONERS

APPOINTED TO ENQUIRE INTO THE

REPORT OF THE SELECT COMMITTEE OF THE HOUSE OF COMMONS ON THE
REGULATIONS AFFECTING THE SANITARY
CONDITION OF THE ARMY,

THE

ORGANIZATION OF MILITARY HOSPITALS

AND THE

TREATMENT OF THE SICK AND WOUNDED

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1901.

REPORT OF THE ROYAL COMMISSION APPOINTED TO INQUIRE INTO THE
SANITARY CONDITION OF THE ARMY.

APPENDIX LXXIX.

COPIES

OF

LETTERS written and received by the DIRECTOR GENERAL of the ARMY MEDICAL DEPARTMENT, by the PRINCIPAL MEDICAL OFFICER of the Army, and by the PRINCIPAL MEDICAL OFFICERS of Divisions and Hospitals, relating to the HEALTH of the TROOPS, and the SANITARY CONDITION of HOSPITALS in BULGARIA, the CRIMEA, and SCUTARI, during the War in the East, 1854 to 1856.

(Laid before the Royal Commission on the Sanitary State of the Army by order of the Minister for War.)

(In continuation of Report and Appendix presented 9th February 1858.)

MEMORANDUM OF THE ROYAL COMMISSIONERS

REPORT OF THE ROYAL COMMISSIONERS APPOINTED TO ENQUIRE INTO THE
 CAUSES OF THE DECREASED EXPORTS OF THE ROYAL NAVY
 IN THE YEAR 1767

By the Commissioners, Sir James Oglethorpe, Sir John Mordaunt, and Sir
 John Boscawen, Bart.

LONDON: Printed by R. DODD, in Pall-mall, 1768.

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- II.—CORRESPONDENCE of MEDICAL OFFICERS respecting the State of TROOPS and HOSPITALS in BULGARIA, &c.
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COPIES OF LETTERS, &c.

COPIES of LETTERS written and received by the DIRECTOR GENERAL relating to the HEALTH of the TROOPS and HOSPITALS.

No. 1.

Dr. Smith to the Military Secretary.

SIR,
Army and Ordnance Medical
Department, 21st February 1854.

As I have reason to suspect that disease, of a very serious and fatal nature, prevails in Turkey during a considerable part of each year, that is, between July and March, and that it proves particularly malignant in persons not natives of the country, as was evinced during the Russo-Turkish campaign of 1828-9, I am therefore of opinion measures ought to be adopted without delay to ascertain the character of the complaints which prevail, the localities in which they prove the most severe, and the best methods of treating them, if these have been ascertained.

This information ought, if possible, to be obtained without consideration of price or exertion, and, if practicable, be possessed before the expeditionary force lands in Turkey; I therefore recommend that three of the staff surgeons of the first class (Drs. Dumbreck, Linton, and Mitchell), ordered for service with the army, should at once proceed to Constantinople, and, on their arrival, two should repair to the interior, and the third remain at the capital, each in his own locality seeking the information which is desired.

The exertions of these officers, however, will be comparatively unproductive if they appear in the country simply as private individuals, therefore to ensure full success to their labours, I beg to submit that the senior, Dr. Dumbreck, be furnished with a letter to the British ambassador, who, I propose, should be requested to advance their object in every possible manner; and, above all, have each of them supplied with an intelligent interpreter, who will be able to converse with and question the medical practitioners, &c., in the country, relative to the objects of inquiry.

If this proposition be approved, I will, if I receive authority, direct them to make the best of their way to Constantinople, either by Trieste or Marseilles.

I write this letter at the suggestion of Lord Raglan, after having satisfied his Lordship that the measure I propose is calculated to contribute greatly to the advantage of the force about to proceed on service up the Mediterranean.

I have, &c.

(Signed) A. SMITH,

The Military Secretary,
&c. &c. Director General.

P.S.—The diseases to which I have referred are, from July to September, severe remittent and intermittent fevers; from September to December, malignant dysentery; and from December to February, a fatal form of typhus fever. This I have learned from oral information, and the few scanty documents I have had an opportunity of consulting, for nothing in the shape of medical works exist in Turkey, so far as I can discover, which are calculated to furnish any information relative to the diseases of Turkey.

(Signed) A. S.

No. 2.

Sir Richard Airey, Military Secretary, to the Director General of the Medical Department.

SIR,
Horse Guards, 21st February 1854.
HAVING submitted to the General Commanding-in-Chief your letter of this date, I am directed to

acquaint you that whilst his Lordship approves of your proposal that three staff surgeons of the first class should at once proceed to Constantinople for the purpose of ascertaining what are the diseases most prevalent in Turkey in the seasons to which you allude, he would wish that one of these officers should proceed to Vienna for the purpose of placing himself in communication with Dr. Sigismund, a physician of eminence there, who, from his researches and travels in Turkey and the Danubian provinces, is possessed of the most valuable information; and to this end Lord Hardinge will not hesitate to give to the officer whom you may select a letter of introduction to the Earl of Westmoreland.

I am to add that application will at once be made to the War Office for the granting the travelling expenses of the medical officer to be ordered to Vienna, &c., and for the passage allowance of those officers whom you may order to Constantinople.

I have, &c.

(Signed) RICHARD AIREY.

The Director General,
&c. &c.

No. 3.

Dr. Smith to Mr. J. Mitchell.

SIR,
Army and Ordnance Medical
Department, 27th February 1854.

It having been decided that you are to accompany Staff Surgeon First Class Linton to Constantinople for the purposes stated in the letter which has been addressed to him, and which you will be good enough to peruse. I request, after both of you have obtained through the British ambassador the facilities necessary to enable you to enter on the inquiries you are expected to make, and which are noted in the letter you are required to peruse, you will direct your attention to Constantinople itself, and to the districts south and west of Adrianople; those beyond will have the attention of Dr. Linton.

Whenever occasions offer, you will take care to make me acquainted with your proceedings.

I have, &c.

(Signed) A. SMITH,

Mr. J. Mitchell,
&c. &c. Director General.

No. 4.

Dr. Smith to Dr. Dumbreck.

SIR,
Army and Ordnance Medical
Department, 27th February 1854.

WITH reference to verbal instructions in detail which you have already received touching the inquiries you are required to make at Vienna, and on your route from thence to Constantinople, with a view to acquire full information regarding the diseases of the Danubian provinces and the districts to the south as far as Constantinople, I have now to request you will proceed without delay to Vienna, and on arrival there deliver the two letters herewith enclosed, one for the Earl of Westmoreland, and the other for Dr. Sigismund.

You will explain to the Earl the object of your inquiries, and solicit from him what assistance you may find will be necessary to the success of your enterprise. Among the items of assistance you will require will be an able interpreter, who, besides understanding English, should, if possible, speak the several languages of the countries through which you will have to pass.

A

Dr. Sigismund will no doubt furnish you with much valuable information, as he is reputed to be well acquainted with the Danubian districts and their diseases.

Knowing as I do your energy and abilities, I calculate you will, by the time you reach Constantinople, have acquired such an amount of information in regard of the climate of the Principalities and of Turkey, of the diseases which affect their inhabitants, and of the periods when these usually occur, as will prove of the utmost advantage, should the force now under orders to sail for the Mediterranean have to proceed to the interior of Turkey.

I have, &c.
 (Signed) A. SMITH,
 Director General.

Dr. Dumbreck,
 &c. &c.

P.S.—You will be pleased to write me as frequently as you can, making me acquainted with all your proceedings.

No. 5.

Dr. Smith to Dr. W. Linton.

Army and Ordnance Medical
 Department, 27th February 1854.

SIR,
 It being thought necessary that two staff surgeons of the first class should be dispatched to Constantinople, with a view to obtain, as far as may be practicable, information relative to the climate of Turkey, and its diseases, &c., I have to inform you that Dr. Mitchell and yourself have been selected for that duty, and to request you will proceed thither without delay, via Trieste.

The enclosed letter for the British ambassador informs him for what purpose you are sent, and in it he is requested to ensure you whatever facilities you may consider necessary to the success of your inquiry.

Your first duty will be, conjointly with Dr. Mitchell, to proceed to the embassy, deliver the letter, and at the same time make known your wants, so that no time may be lost in entering on the investigation you are required to make, as you cannot foresee how soon the information you are in quest of may be required.

The presence of two (Dr. Mitchell and yourself) at Constantinople is not considered desirable; you will, therefore, after having made the necessary preliminary arrangements, proceed toward the interior, taking the routes which armies having to advance towards the Balkan would most likely take, and visiting the localities which most likely would constitute halting-places or sites of encampments for such armies. The diseases which occur in these places and their neighbourhoods you will make every effort to ascertain, and you will note particularly any localities in these routes which may be either considered peculiar from their unhealthiness, or the contrary.

It is not intended you should pass the Balkan mountains; you will, therefore, on reaching them return again towards the south, and by a different route to Constantinople.

I feel it unnecessary to impress on you the expediency of your return to Constantinople as soon as possible; at the same time no inquiries, promising useful results, should be omitted for the sake of expedition.

Dr. Mitchell, on your leaving, will enter on inquiries similar to those to which your attention is to be directed; his, however, will be limited to Constantinople, and the districts south of Adrianople.

Whenever an opportunity occurs, you will take care to acquaint me of your proceedings.

I have, &c.
 (Signed) A. SMITH,
 Director General.

Dr. W. Linton,
 &c. &c.

No. 6.

Dr. Smith to the Deputy Secretary at War.

Army and Ordnance Medical
 Department, 7th March 1854.

SIR,
 HAVING reason to fear that cholera may occur among the troops proceeding up the Mediterranean should they be employed during the summer in Turkey, I have the honour to recommend for the favourable consideration of the Secretary at War that the enclosed requisition for cholera belts may be complied with. Articles of this kind were used with advantage during the last outbreak of cholera in this country.

I have, &c.
 (Signed) A. SMITH,
 Director General.

The Dep. Secretary at War,
 &c. &c.

Required for issue to the troops proceeding to Turkey in the event of cholera appearing amongst them—

Cholera belts - - - - - 40,000

(Signed) A. SMITH,
 Director General.

No. 7.

Dr. Smith to the Military Secretary.

Army and Ordnance Medical
 Department, 23d March 1854.

SIR,
 HAVING during the last three weeks been engaged in observing how far the means which have been adopted with a view to ventilation of tents are efficient, I have found them far from being so, as the painted canvas is not sufficiently strong to maintain patent the opening through which the impure air from the tent should escape. In consequence, I have had some appliances constructed of tin which, in my opinion, would effect the results desired; but Mr. Stacey, the principal storekeeper at the Tower, to whom they have been shown, conceives that the tin will, from rusting, eventually cause the destruction of the canvas, and that some other material, not liable to that objection, should, if possible, be substituted for it.

Assuming this may be accomplished, I would recommend that inquiry be immediately made in order that the substance best suited for the purpose be employed, and that 500 of the smaller sort for bell tents, and 300 of the larger for hospital marquees, should be provided with all possible speed, and sent to Turkey for trial and observation.

The appliances of tin to which I have referred were left on Monday at the Tower with Mr. Stacey.

I have, &c.
 (Signed) A. SMITH,
 Director General.

The Military Secretary,
 &c. &c.

No. 8.

Dr. Dumbreck to Dr. Smith.

Widdin, Bulgaria,
 23d March 1854.

SIR,
 I HAVE the honour to notify to you my arrival in this city, on the evening of the 21st instant, after a journey of seven days from Belgrade.

I have received from the Governor General of Bulgaria, Sami Pacha, much personal kindness. I write from under his roof, and I have his assurances that my further progress shall receive his assistance. It would be difficult to make you aware of the value of his aid and kindness in the present state of this barbarous country, where the means of travel, always bad, are more or less arrested by the state of war, and where every sort of personal privation must be endured.

Between this place and Kalafat there is now concentrated a force of 35,000 Turks, 18,000 regulars. The sick from the latter place, where the duty is most harassing and severe, are brought across the Danube to Widdin, which, always an unhealthy town, is now a hot-bed of disease, typhus and dysentery being the ailments prevailing among the soldiers, and indeed among the civil population also. Among the former the mortality is very great. As many as 34 men have died of disease in the hospitals in one day, and this great loss has been going on for some time, and this altogether from the diseases I have spoken of, as there are not more than 30 wounded now here. A few days since 1,700 sick were in hospital; about 1,400 are now ill.

These poor fellows have to endure many privations; their sufferings, both out of hospital and while there, are borne with all the resignation for which this fatalist people are remarkable. I suppose there was never any national movement so universal as this. Every Turk who can leave his home, and find fire-arms, is making for the seat of war. Albanians, some mere boys, are flocking in in crowds.

I have visited the principal hospitals, where I saw between 700 and 800 men. Barracks have been vacated for the use of the sick. I cannot say much for these hospitals. Ventilation is rendered difficult from the extreme cold prevailing (during the last four days of my journey to this place it snowed), and the tainted and infected air of the wards gives their inmates but a poor chance of recovery.

I saw about 20 of the wounded at Citate, nearly all wounds of the extremities, without fracture, from grape and musketry. I saw no case where amputation had been performed. A Turk prefers death to dismemberment or mutilation from surgery, and I fear the poor men are allowed to have their own way here. Medical officers dare not perform these operations without the consent of the military officers; and if sanction is given, they must also guarantee the success of the proposed operation, as, if the patient dies, the operation is blamed as the cause of this result altogether. I fear that military surgery is at a low ebb in the Turkish army.

This place becomes almost uninhabitable from marsh fever as the season advances, and it is in contemplation to remove the hospitals from this to Lom Palanka, a more salubrious town than Widdin, to the eastward on the Danube, some eight hours from hence.

It would be premature in me, till I confirm my present impressions by more extended observations, to say anything herein the shape of recommendations for our army, but one thing appears to me most urgent. The winter climate of these countries is most severe, and our men are not now clad well enough to enable them to resist it. We cannot have too much bedding, and the supplies of food and nutriment cannot be too great; as, without good food and clothing in these pestiferous places, our well-cared-for soldiery would be decimated in a few weeks. The air is surcharged with the elements of disease; and if we are deficient in the supplies on which the maintenance of their stamina depends, we shall have much to contend with. When I reach Constantinople I shall have occasion to speak of these matters in a more formal manner.

I trust you will excuse the rambling, desultory style of this letter; but in my present nomadic state, with many interruptions and arrangements to make, I need scarce offer any apology.

Dr. Frasy, the gentleman given to me as a companion by the consul general at Belgrade, is a most intelligent man. Without him I should have been unable to have got on in this country. I trust I shall be able to dispense with his further companionship at Shumla, as his presence with me will form a large addition to the outlay of this journey. The expenses of travelling here are enormous. In coming through Servia the journey was made on horseback to a frontier town, Nigotin. Here the

horses were not forthcoming; but we got two of the carts of the country, and, seated on some hay, were transported in that primitive manner for nearly fourteen hours, at an outlay of something above three pounds sterling. No remedy for this state of things.

To-morrow we start on horseback for Shumla, which we shall not reach in much less than ten days. From thence I think I shall go to Varna, and then returning to Shumla, cross some one of the Balkan passes.

While I write the guns at Kalafat are making themselves heard, firing every now and then on reconnoitring parties of Russians.

I scarcely hoped I should have been able to have written to you from this place, but I find the Pasha is sending despatches to Belgrade, and I consign this through him to our consul general there.

I have, &c.

(Signed) D. DUMBRECK, M.D.,
Staff Surgeon, &c.

Dr. Smith,
&c. &c.

No. 9.

Dr. Smith to the Military Secretary.

Army and Ordnance Medical
Department, 13th April 1854.

SIR,

PEAT charcoal having been found very useful at Fort Pitt, Fort Clarence, and the camp at Chobham, in destroying the disagreeable and noxious odours which arise from privies and other localities where animal and vegetable matters are undergoing decomposition, I have the honour to recommend that 20 cwt. of it should be provided and sent to Turkey, to be issued by the commissariat department whenever it may appear to the medical officers of the army to be required.

I have, &c.

(Signed) A. SMITH,
Director General.

The Military Secretary,
&c. &c.

No. 10.

Dr. Smith to the Military Secretary.

Army and Ordnance Medical
Department, 13th April 1854.

SIR,

THE information I have acquired in the course of the last six weeks in reference to Turkey and the Danubian provinces, their climate, and the effects the climate produces on the human constitution, causes me to fear the British troops, about to be in all probability actively employed in opposing the Russians in the East, will suffer seriously in health if every means of averting disease be not vigorously observed from the time they land on the Turkish shores.

The means suited to effect this will be found to be numerous, and must in a great degree be left to the wisdom and energy of the local authorities of the army, whose duty and interest it will be to maintain, as far as practicable, the efficiency of the force; but there is one of them, however, and a very important one, which should in my opinion be considered in this country, because whatever is to be effected in regard to it must, in a great measure at least, be accomplished here, and at a cost to the public which renders it more than any of the others it will be necessary to adopt, a subject for the deliberation of the home authorities. I allude to a proper adaptation of the clothing of the soldier to the peculiarities of the climate, and the kind of duty on which he is to be engaged.

If such adaptation be admitted to be necessary and be effected, there is every reason, I think, to expect highly beneficial results; on the other hand, if it be disregarded, sickness and inefficiency beyond what would otherwise occur must be expected; indeed so certain does it appear to me that the one or the other will be the consequence, according to the course

which is adopted, that I feel I should be guilty of a dereliction of my duty did I not earnestly solicit for the subject a special consideration.

The dress the soldier now ordinarily wears, and the mode in which he is required to wear it, may not conduce in any very material degree to disease during times of peace, when he is neither subjected to long and great exertions, nor exposed to a continuance of intemperate and variable weather; but very different will be the results when, as in times of war, he is otherwise circumstanced. Then its many defects are conspicuous, and it is then that it is found to be neither suitable to high nor to low temperatures; when the former prevails it proves oppressive, when the latter, it is unequal to ensure the degree of warmth necessary to the maintenance of health.

In Turkey and the provinces, the British forces will be exposed to great heat as well as to great cold. During the summer they will often have to march, and probably oppose the enemy, when the thermometer in the shade indicates 91 and 92 degrees of temperature, and in winter to an amount of cold much greater and more continued than that to which they had been accustomed in their native country.

That these will happen I have every reason to expect, and in consequence I feel constrained to recommend that an inquiry should be instituted, with a view to ascertain if it is practicable to adopt measures whereby the dress of the soldier may be made to contribute more than it now does to his comfort and his health, and should such inquiry be considered advisable, I take leave to recommend,—

1st. That the red coat, more especially the red coat tightly buttoned to the body, should be discontinued during the hot weather of summer.

2d. That a loose garment of lighter material, for instance, one somewhat resembling the blouse used in France or the smock-frock in England, should be substituted for it.

This garment ought, in my opinion, to be of a texture that will admit of its being rendered waterproof, and should be so capacious as to permit of its being worn over the red coat in winter, or over the jacket during the cold chilly nights which often occur in Turkey during the spring, the summer, and the autumn months.

This vestment ought I think to be confined tightly to the body in the region of the loins, by means of a circular belt at least four inches in breadth, the latter, if of this width, will prove most agreeable and useful to the soldier on the line of march.

3d. That the head dress at present worn by both infantry and cavalry soldiers should be laid aside during the hot season, and a substitute furnished not so calculated as black felt, bear skin, and such like materials to accumulate heat.

It is most important that the head should not be over-heated or over-loaded, for even the natives of Turkey suffer much from headache and coup de soleil; nay, apoplexy is occasionally produced by the great heat of the sun which frequently prevails during the summer season.

4th. That the leathern stock should be discontinued so long as the troops are employed in the field. In summer no substitute beyond the collar of the shirt or of the garment already described will generally be necessary; in winter, however, a handkerchief will be required to secure against colds and sore throat, which will prove frequent complaints if the men have not a proper protection for the neck.

5th. That each man should be in possession of one or two flannel shirts or waistcoats, also one or two pairs of flannel drawers, and two pairs of worsted stockings.

If these alterations and additions be thought necessary, I strongly recommend that they be effected at the cost of the public and not of the soldier.

I have, &c.

(Signed) A. SMITH.

The Military Secretary,
&c. &c.

Director General.

No. 11.

Dr. Smith to Dr. John Forrest.

Army and Ordnance Medical
Department, 13th April 1854.

SIR,

WITH reference to your promotion to the rank of deputy inspector general of hospitals for service with the force ordered to Turkey under command of Lord Raglan, I have now to request you will immediately proceed to Gallipoli, via Trieste, and report yourself to Lieutenant General Sir George Brown, commanding there, for the purpose of assuming the medical charge of whatever portion of the British force you may find at the station, and you will continue to discharge the duties of principal medical officer at Gallipoli, until you shall be superseded by some medical officer senior to yourself joining the force. You will be guided in your duties by the general regulations of the service.

Immediately on your arrival you will make a minute inspection of Gallipoli and its vicinity, and furnish me as speedily as possible with a topographical description of both, in which you will specially remark on the water required to be used for drink and culinary purposes. You will also state from what sources it is obtained, and if it is procurable in sufficient quantity.

This is only one of the many items on which I shall expect full information from you as soon as possible after your arrival.

You will also be pleased to inform me what are the diseases of Gallipoli, and what remedies are usually employed in their cure.

I have, &c.

(Signed) A. SMITH,

Director General.

Dr. John Forrest,
&c. &c.

No. 12.

Dr. Dumbreck to Dr. Smith.

SIR,

Constantinople, 17th April 1854.

I have the honour to notify to you my arrival yesterday at this place.

I last addressed you on the 23d ultimo from Widdin; on the 24th I started by the postal road to the eastward for Lom Palanka. An attack of intermittent, contracted at Widdin, which seized me that evening, detained me in Lom Palanka till the 26th, on which day I proceeded to Rahova or Orahava; here the road leading to the eastward leaves the Danube, going southward to the town of Pleono, which I visited, and following the same line of communication—that by which an army from Varna, Shumla, or Roustchouck, would advance westward,—I successively visited the inland towns of Lovtcha, Selvi, and Timova.

Lovtcha and Timova are places of considerable importance in reference to the objects of my journey, as these two towns possess, in my opinion, the requisite sanitary and other conditions to render them for an army advanced beyond them towards the west the most eligible spots where hospitals in rear might be formed. Timova for a large establishment, Lovtcha for one of less extent.

At Timova, I again turned towards the Danube by the way of Biela, proceeding to Roustchouck, remaining also to visit Turtukai and Silistria; but as I found that the Russians had crossed to the right bank of the river in force at Matchin, and had their outposts advanced some twenty hours south, as far as the Kara Sorv, I abandoned this intention, particularly as the Turkish garrison of Turtukai had been withdrawn (leaving there only a few irregulars), and was falling back by forced marches on Shumla. I therefore proceeded to that city by way of Rasgrad. From Shumla I took the postal road across the Balkans (greater and lesser) by the pass of Selemno, visiting on my way the towns of Delmna, Osman Bazar, Kazan, &c. in Bulgaria, and the towns of

Selemno, Jamboli, &c. in Roumelia, following the course of the river Timjal on to Adrianople; here I parted with my companion and proceeded to Constantinople.

The endemic diseases of the Danubian provinces are only periodic fevers, with their sequela, and dysentery. We find these diseases by the marshy banks of the Danube, and in the deep sunk ill-ventilated towns at the bottom of Alpine valleys, where there are no marshes or other very obvious sources of malaria. I shall proceed immediately to write my report of this journey, when I shall convey in detail what I may have been able to collect.

I append an account of my daily employment since I left Belgrade. By starting soon after daybreak I had always ample time to inform myself of what I desired to know in the towns visited. You will appreciate the difficulty of obtaining exact information, when I tell you that there is not from Widdin to Adrianople one resident medical practitioner, except at Roustchouk, where the Prussian consul is of that profession.

I have, &c.
(Signed) D. DUMBRECK, M.D.
Dep. Inspector General, &c.

Dr. Smith,
&c. &c.

tion of wells and purification of the water, an extract from the letter of instructions from the Duke of Newcastle to Lieutenant General Sir George Brown.

In reply, I beg to state for the information of the General Commanding-in-Chief, that the senior medical officers who proceeded to Turkey some weeks ago to make inquiries relative to the climate of the country, and to obtain information on every point likely to conduce to health or disease, will report upon the water which is obtainable, and will notify to General Brown and others in what situations good water is to be found, and also what means should be taken to purify water which may require to be subjected to that process.

Since the receipt of your communication I have been expecting the opportunity of perusing a report in reference to Gallipoli, but as what I have desired has not been afforded, I feel it now my duty to offer the foregoing observations, and to state that I will add to them, if I find I am fortunate enough to obtain any information which is likely to prove interesting or useful.

I have, &c.
(Signed) A. SMITH,
Director General.

The Military Secretary,
&c. &c.

JOURNEY from Belgrade to Constantinople.

Date.	Name of Towns, &c.	Postal Hours.
Mar. 15	Belgrade to Geotchka - -	4½
" 16	Geotchka to Poparawitch - -	10
" 17	Poparawitch to Nerisnitza - -	10
" 18	Nerisnitza to Milanawitch - -	9
" 19	Milanawitch to Breza Palanka - -	6
" 20	Breza Palanka to Nigotin - -	6
" 21	Nigotin to Widdin - -	13½
		in cart.
22, 23	Widdin.	—
" 24	Widdin to Lom Palanka - -	10
" 25	Lom Palanka.	—
" 26	Lom Palanka to Rahova - -	12
" 27	Rahova to Pleono - -	12
" 28	Pleono to Lovtcha - -	6
" 29	Lovtcha to Selvi - -	6
" 30	Selvi to Tenova - -	8
" 31	Timova to Biela - -	9
April 1	Biela to Roustchouk - -	9
" 2	Roustchouk.	—
" 3	Roustchouk to Rasgrad - -	10
" 4	Rasgrad to Shumla - -	8
" 5 & 6	Shumla.	—
" 7	Shumla to Osman Bazar - -	10
" 8	Osman Bazar to Valtcher - -	10
" 9	Valtcher to Jamboli - -	8
" 10	Jamboli to Carpeha - -	5
" 11	Carpeha to Adrianople - -	13
" 12	Adrianople.	—
" 13	Adrianople to Bingos - -	14
" 14	Bingos to Tchorla - -	10
" 15	Tchorla to Eskmedsche - -	14
" 16	Eskmedsche to Constantinople	6

(Signed) D. DUMBRECK, M.D.
Dep. Inspector General.

No. 13.

Dr. Smith to the Military Secretary.

Army and Ordnance Medical Department, 21st April 1854.
SIR, I HAVE the honour to acknowledge the receipt of your letter of the 24th ultimo, transmitting, for any observations I may have to offer respecting the forma-

No. 14.

Dr. Smith to the Military Secretary.

Army and Ordnance Medical Department, 28th April 1854.
SIR, WITH reference to my letter of the 13th instant, I have the honour to submit, for the consideration of the General Commanding-in-Chief, the enclosed extract from a communication I have received from Deputy Inspector General of Hospitals, Dr. Dumbreck, dated Widdin, Bulgaria, 23rd March 1854.

Of the severity of the climate during winter we have ample proofs; and on that account I beg most earnestly to recommend that timely measures be resorted to with a view to protect the troops against the inclement weather to which they will be exposed should they have to pass the coming winter either in Turkey or the principalities.

I have, &c.
(Signed) A. SMITH,
Director General.

The Military Secretary,
&c. &c.

EXTRACT of a Letter from Deputy Inspector General of Hospitals, Dr. Dumbreck, dated Widdin, Bulgaria, 23rd March 1854.

"It would be premature in me, till I confirm my present impressions by more extended observations, to say anything here in the shape of recommendations for our army, but one thing appears to me most urgent,—the winter climate of these countries is most severe, and our men are not now clad well enough to enable them to resist it. We cannot have too much bedding, and the supplies of food and nutriment cannot be too great, as without good food and clothing in these pestiferous places our well-cared-for soldiery would be decimated in a few weeks; the air is surcharged with the elements of disease, and if we are deficient in the supplies on which the maintenance of their stamina depends, we shall have much to contend with. When I reach Constantinople I shall have occasion to speak of these matters in a more formal manner."

No. 15.

Mr. Menzies to Dr. Smith.

Head Quarters at Scutari, Constantinople, 29th April 1854.
SIR, IN reporting to you my arrival here with the rest of the medical officers of the "Emperor" steam

ship from England on the 23rd instant, I have at the same time the honour to inform you that the whole British force now assembled here amounts to upwards of 10,000 men, and consists of the following regiments, viz., three battalions of the Guards just landed from Malta, 7th Royal Fusiliers, 23rd, 33rd, 41st, 47th, 49th, 77th, 88th, 95th, a company of the 19th Regiment, and 140 men of the Royal Sappers and Miners.

Of the above force, only three regiments are quartered in the barracks, although there is ample accommodation for 4,000 men, the rest being encamped a little to the eastward of the town in a healthy, dry, elevated position.

The hospital arrangements have nearly been completed for the accommodation of the sick of all corps now arrived, and are attended by their own medical officers, assisted by the Staff. As the space allotted to us (which consists of three sides of a square of the uppermost storey, the Turks using the two lower ranges for their hospital and bath-houses) will only give us room for 256 patients, all minor cases of disease have to be treated in barracks or under canvas. Fortunately we have only to-day 155 sick in hospital, which is a small proportion for the strength, and the cases of disease under treatment are of an ordinary character, and principally the result of exposure to the solar rays, and heavy cold dews at night; there are also some cases of ophthalmia in hospital arising from similar causes and dust. I must reserve what further remarks I may have to offer respecting the position of the barracks and hospital, with the accommodation which each is capable of affording, until another time.

There has been much inconvenience experienced here in consequence of the want of books and stationary of all kinds necessary for hospital purposes, and which can only be procured here at a very high charge, and few articles of which can be had at all.

Having been appointed by Dr. Dumbreck, Deputy Inspector General of Hospitals, to conduct the duties of principal medical officer in his absence at Scutari, (he being located at Constantinople, which is separated by the Bosphorus, making his visit of inspection each morning), and to see that all details of duty connected with the establishment are duly carried out, I have accordingly taken up my quarters in the hospital, and established my office there, having Messrs. Robb and Pink as my clerks, and Assistant Surgeon Dr. Grier, 92d Regiment, professional assistant, who also occupies a quarter near me. We have our own sentries at the hospital entrance, and every care is taken to prevent irregularities from being committed; and measures of a sanitary nature are also being taken by the authorities, at the recommendation from time to time of the Deputy Inspector-General of Hospitals, for the preservation of the health of the troops at this place.

I have, &c.

(Signed) D. MENZIES,
Staff Surgeon, &c.

Dr. Smith,
&c. &c.

P.S.—Lord Raglan arrived here this morning.

(Signed) D. M.

No. 16.

Major-General Yorke to Dr. Smith.

SIR,
Horse Guards, 2nd May 1854.
I HAVE submitted to the General Commanding-in-Chief your letter of the 28th ultimo, with its enclosure from Dr. Dumbreck, dated from Widdin, in Bulgaria, and his Lordship had previously had under his consideration your letter of the 13th ultimo, to which you again refer.

Viscount Hardinge observes that in your letter of the 13th ultimo, although adverting to the extremes

both of heat and cold to which it may be expected that the troops will be exposed in Turkey, your suggestions mainly relate to the heat, and, with a view to the comfort of the soldier, you recommend that the red coat should be discontinued during the summer, and a loose garment of lighter material substituted for it.

Lord Hardinge is fully sensible of the advantage which it would be to the soldier if he could be provided with clothing adapted to meet both the extremes of heat and cold, but he desires me to observe that this advantage could only be fully obtained particularly in a climate where the days are intensely hot and the nights cold, by giving him two dresses; and it would be impossible that he could himself carry this extra weight, with the addition of a blanket or great coat, nor could such an addition be admitted to the wheel carriages or other means of transport accompanying the army as would be required for the conveyance of this extra clothing for the troops.

The great and important desideratum is to lighten the weight which the soldier carries; and to this his Lordship's attention has been for some time directed, and, as he hopes, with some effect; but while aware that a lighter garment would conduce to the comfort of the soldier under a burning sun, he must observe that the troops perform their marches in India wearing their usual uniforms, and the heat there is at least as great as is likely to be experienced in Turkey.

Dr. Dumbreck on the other hand adverts to the necessity of our troops having better and warmer clothing on entering upon a campaign; and he lays great stress upon the importance of a large supply of bedding. No doubt a full and sufficient supply of every article of this description for the hospitals should be forwarded and made applicable for their use. This his Lordship hopes is already either arrived at or on its way to Constantinople; but he begs to be informed to what extent bedding has been sent out for general hospitals.

It is, however, impossible to carry with an army engaged in operations in the field, bedding for the soldiers in the ranks.

With reference to the observation in your letter of the 28th ultimo, as to the necessity of timely measures being resorted to with a view to protect the troops against inclement weather, Lord Hardinge desires me to state that a supply which he hopes will be found sufficient of blankets and of field equipments of every kind has been already forwarded to Turkey; but in determining a question of such importance as that of changing the dress of the troops employed in the field in that country, it is essential to proceed only on accurate information after the subject has been well considered on the spot. His Lordship therefore requests that Dr. Dumbreck may be instructed on his return to Constantinople to lay before General Lord Raglan the result of his observations, and such practical suggestions as he may desire to offer, with a view to protect, as far as possible, the troops from the effects of the climate. The opinions which Dr. Dumbreck may have been enabled to form will doubtless receive from Lord Raglan every consideration, and, aided too as he will be by officers who will then have acquired some experience of the country, the General Commanding-in-Chief will be able to act with confidence on any report which may be made to him by his Lordship in all those matters which require his interference.

In others to which reference is made in your letter, such as wearing the leather stock, Lord Hardinge quite concurs that the leather stock is objectionable and ought to be changed, just in the same manner that white covers, similar to those worn by our soldiers in India, have been adopted; but to make any general changes in the clothing of the army at 3,000 miles distance, at the very moment of entering upon a campaign, is obviously impracticable.

The commander of the forces in the country will give such orders as he may deem expedient with

respect to any particular points in which he considers a change may be desirable.

I have, &c.

(Signed) C. YORKE.

Dr. Smith,
&c. &c.

No. 17.

Dr. Smith to the Military Secretary.

Army Medical Department,

9th May 1854.

SIR,

HAVING reason to expect that it may be frequently necessary to accommodate sick in the hospital marquees, and not unfrequently on damp ground, I consider it advisable, with a view to guard against evil consequences on men being placed in such positions, that there should be supplied for the 30 hospital marquees issued to regiments, tarpaulins fitted to cover the whole of the ground inside each tent, to prevent the damp ascending or any water or other fluid that may be spilled in the tent descending into the ground, and causing humid and unhealthy exhalations.

I have, &c.

(Signed) A. SMITH,

The Military Secretary,
&c. &c. Director General.

No. 18.

Dr. Smith to the Military Secretary.

Army Medical Department,

11th May 1854.

SIR,

ASSUMING that our troops will ere long be involved in active warfare with the enemy, and that many men will soon suffer from diseases and from wounds that will either permanently disable them, or disable them for such a length of time as to render their removal from the vicinity of the conflicting forces alike necessary to the welfare of the sufferers and of the army, I therefore feel it my duty to submit that immediate arrangements should be made to afford whatever assistance in that respect may be required. These arrangements, to prove equal to the object in view, will involve a liberal supply of ships, some to convey periodically to England men never likely to become available for further service, and also such as are not likely to do so within a reasonable time; others for use in harbours or for the transport of sick, in the event of hospitals being established at a distance from the station of the army, and in a situation that will admit of the sick being conveyed to them by water.

The ships for the first-mentioned purpose should be commodious steamers (high between decks, with ample means of ventilation, and fitted with fixed berths), and one should sail whenever the accumulation of sufferers of the description specified should warrant its departure. On ships being supplied the most important item of the arrangements will have been effected. The other items, which will consist of matters of detail, will require to be provided by the local authorities at the places of embarkation.

The preceding is the course which I think should be adopted in regard of the more important cases. It now remains for me to submit what I consider will be necessary to expedite the recovery of the less serious ones.

Many cases of this kind will doubtless occur, especially if the army be engaged to the north of the Balkan mountains, between them and the Danube, which will prove difficult of cure if they be kept there, but which will yield readily to treatment in more favourable positions. The latter, from all I can learn, will not, I fear, be easily found in Turkey, therefore they must be looked for elsewhere. Experience at Walcheren, at Hongkong, and at other places has proved that disease, which would not

yield to treatment on shore, readily succumbed almost the moment the sufferer was placed on board a ship not half a mile distant from the spot where no favourable results could be obtained; and further, that convalescence, which was stationary on shore, advanced rapidly under like circumstances.

These facts indicate the preparations which ought to be made, provided it be not possible to secure what would be much more advantageous, namely, hospital accommodation on some healthy island in the Black Sea or in the Grecian Archipelago.

The French, I am informed, have made arrangements for the establishment of a large hospital in Candia. Hence, I must presume they have ascertained that that island possesses a climate favourable to health, and conducive to recovery from disease. A similar course should, I think, be adopted by this country.

Should an establishment of the kind I suggest be formed, it will require to be supplied with a medical staff, medicines, &c. from this country, as what are in Turkey are considered to be necessary for the wants of the army serving there.

I have, &c.

(Signed) A. SMITH,

The Military Secretary,
&c. &c. Director General.

No. 19.

Dr. Smith to the Principal Medical Officer.

Army Medical Department,

13th May 1854.

SIR,

MANY opportunities of sending letters to this country from the army in Turkey having occurred since the 18th ultimo, the date of the last communication which I received from Dr. Dumbreck, I cannot but express my disappointment at having been so long without any intelligence concerning the health of the troops, and the arrangements which have been made connected with the Medical Department of the army under command of Lord Raglan.

The heads of other departments in this country seem to be informed up to the latest possible date of all the concerns that relate to their office, and it may easily be conceived how unpleasant it is for one when in conversation with those authorities to be obliged to confess a total absence of information. I feel happy, however, under the assurance that this circumstance has only to be brought to notice in order to secure the co-operation of all concerned in the fulfilment of an object so essential to the administration of the concerns of the department; and I trust after this no opportunity will be lost in keeping me fully in possession of every circumstance connected with the sanitary condition of the army.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer,
&c. &c. Director General.

No. 20.

Dr. Smith to Dr. Dumbreck.

Army Medical Department,

13th May 1854.

SIR,

WITH reference to the observations in your letter, dated Widdin, 23rd March last, on the climate of Northern Turkey, and the necessity of a liberal supply of bedding to keep the troops in health, I have, after communication with the General Commanding-in-Chief, to request you will lay before Lord Raglan the results of your observations, and offer to his Lordship such suggestions as you may think likely to be useful, with a view that the troops may be protected as far as possible from the effects

of the severe cold to which it appears they will probably be exposed.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Dumbreck,
&c. &c.

No. 21.

Dr. Smith to the Principal Medical Officer.

Army Medical Department,
31st May 1854.

SIR,

As the wounded in the Peninsula often suffered very severely from thirst, and as the means of allaying it were not generally forthcoming, I have thought it now necessary, with a view to prevent such-like suffering being experienced in Turkey, to forward 100 two-quart waterproof bags, to be distributed among the persons employed in carrying the wounded from the field. These bags are intended to be suspended in the same manner as haversacks are. Each has a screw which answers the office of a cork, and each has also a pliable drinking cup attached to it by means of a cord.

The number sent is small, but should you report that they prove valuable for the purpose they are proposed, I shall immediately take steps to forward a further supply.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 22.

Extract of a Letter from Commissary-General Filder to Sir C. Trevelyan, dated Constantinople, 4th June 1854.

"I find that the difficulty about taking the extra articles of diet from our stores arises from the apprehension the regiments entertain that they might be suddenly ordered to move, when larger quantities than they would have the means of carrying might remain on their hands, as we can only issue in entire packages. To remove this difficulty I have offered to furnish them with transport for the conveyance of what they may have on hand, although I am not quite certain that I shall have transport enough to carry biscuit and forage corn. The regiments are now taking some of the articles; but I could not undertake to provide transport for the beer, that consequently goes off more slowly. The divisions have been expecting to be called upon suddenly to move during the last ten days.

"But Dr. Smith must not suppose that because the extra articles have not, for the reasons above stated, been issued from the Commissariat stores, the troops have been without the means of making a morning and evening meal. Those at Constantinople are abundantly supplied with sugar, coffee, rice, &c. from the shops at prices, I suppose, higher than we should charge, but not perhaps higher than they would pay in England. The division at Gallipoli is also well supplied by means of sutlers, although at prices higher probably than those paid at Constantinople. Some officers of experience here, indeed, seem to think that the Government would have acted wisely to have left this business in the hands of sutlers as heretofore."

No. 23.

Dr. Smith to the Principal Medical Officer.

Army Medical Department,
8th June 1854.

SIR,

I HAVE the honour to request you will immediately inform me if the "preserved potatoes" which have been forwarded to Turkey by two different firms have arrived, and if any portion of them has yet been

issued for the use of the sick or of the troops generally.

If these articles have not already been issued, I beg to request your attention to them, as they will, no doubt, prove more conducive to health than many of the vegetables which are grown in Turkey.

Should you have reason to consider them likely to be useful, and that large supplies will probably be required, I shall be glad to hear from you with the least possible delay, in order that what may be considered necessary may be provided with all possible despatch.

I am also most desirous to be informed what has occurred in reference to the ale and porter which have been sent out. You will be pleased to report in what condition these articles arrived, how they were relished, what quantities have been consumed, and whether there is any reason to consider it desirable that they should be regularly supplied, with a view to their being used by the sick and the troops generally.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 24.

Dr. Smith to the Military Secretary.

Army Medical Department,
12th June 1854.

SIR,

WITH reference to my letter of the 21st February last, recommending that three of the staff surgeons, first class, ordered for service in Turkey, should proceed overland, to enable them to ascertain and furnish me with information relative to the diseases, &c. of the country, I have the honour to state, for the information of the General Commanding-in-Chief, that I have now received Dr. Dumbreck's report on the topography, diseases, &c. of Servia and Bulgaria.

It is stated in the report that the water in certain localities is bad, and I am, therefore, of opinion a few filtering machines should be supplied to keep in hospital, to be used only under special circumstances; I say used only under special circumstances, because I know from experience that every description of apparatus of the kind soon becomes comparatively inefficient if constantly employed.

The advantages which will be experienced in special cases will, I have reason to believe, be considerable, and I therefore beg to express a hope that I may be permitted to select twenty of the machines I think most likely to answer the object in view, and have them packed and forwarded to Turkey, along with a supplementary supply of surgical materials, &c., which is about being forwarded to the Tower for embarkation.

I expect the cost of the number proposed will not exceed 18*l.* or 20*l.*, and I beg to enclose a requisition for these articles.

I have, &c.
(Signed) A. SMITH,
Director General.

The Military Secretary,
&c. &c.

Letter from the Secretary of Board of Ordnance to Dr. Smith, dated 13th June 1854 ^C/₅₄₆ and numbered ¹⁴⁷⁵/_{3 L}, conveying the Board's command that twenty filtering machines be selected and price stated.

No. 25.

Dr. Smith to the Military Secretary.

Army Medical Department,
13th June 1854.

SIR,

I HAVE the honour to transmit the enclosed extract from a "Report on the Medical Topography and Diseases of the Turco-Danubian Provinces of

"Servia, Bulgaria, &c." for the information of his Lordship the General Commanding-in-Chief, and to solicit special attention to the second paragraph.

Most of the communications I receive from medical officers serving in the East speak of the great severity of the climate at certain times of the year; it will, therefore, be essential to the safety of the soldier that an ample supply of bedding, flannel waistcoats, and flannel drawers be in Turkey for issue to the troops before the next cold season sets in.

I have, &c.
(Signed) A. SMITH,
Director General.
The Military Secretary,
&c. &c.

(Extract.)

Prophylaxis, &c.

"1st. I should recommend that every man in the army should in the early part of the autumn be provided with flannel jackets and drawers, to be worn till the month of May following.

"Our soldiers are half clad. This climate for nine months in the year, with its abrupt and trying transitions from great heat to the most severe cold, requires the adoption of the above suggestion as a measure of the first importance for the preservation of the health of our troops.

"2nd. During seasons, and in localities where endemic diseases prevail, I think that soldiers exposed to the evening and morning exhalations from malaria-produced ground should have a small ration of diluted spirit, medicated with quinine, given to them, an hour before sunset and before daybreak. A couple of grains of quinine given at such times would exercise a very salutary effect as an antidote. This plan dates from the days of Lind; it obtains in the navy, and is worthy of serious consideration, for I believe that cinchona has as much an antidotal as a remedial power.

"3rd. In notoriously unhealthy places the sentries should be changed every hour. This may involve loss of rest, but it will break the force of the pestilential emanations if we can lessen the period of continuous exposure to them.

"4th. The introduction of a good warm hood, as worn in the Turkish army, on night duties, or where the men are exposed to severe weather, would be an admirable addition to the soldier's dress, and would protect him from cold as well as disease. Let us imitate the inhabitants of all classes in these countries, who universally wear this in circumstances where protection is sought from cold and damp. The hood worn by the Turkish soldier will serve a double purpose. Pulled over the men's forage caps, it will save them from the chilling effect of the cold at night, piercing in these climates, and as it has two woollen straps, each a yard long, these brought over and round the neck and mouth, and tied, would form an excellent respirator and sifter of malarious exhalations.

"5th. Immediately on the occupation of a town or neighbourhood of evil (sanitary) reputation, large fatigue parties should be at once employed in removing or lessening all patent or suspected causes of disease. Foul ditches should be cleaned, pent-up pools of stagnant water should be given vent to; exuberant vegetation, when not a screen against malaria, should be cut down; the filthy accumulations of mud, ordure, and numberless impurities with which Mussulman towns are polluted, should be removed.

"6th. Much of the river water in Bulgaria is bad, surcharged with lime, and at some parts of the country, for example, on the large plains stretching from Widdin to the east, is far from plenty.

"For our hospitals filters would be desiderata, or some substitute for these. Felt, for instance, is used for this purpose in, I think, the Austrian army. When water is unwholesome, alum as a means of purifying turbid water I have just heard of.

"In the Turkish army there is attached to each regiment a certain number of men, about twenty-five to a battalion, whose duty it is to provide wholesome water for the soldiers. Each of these men has a horse laden with two immense bags, with a hose at the bottom of each. The duty of these men is to keep the regiment supplied with good water; they bring it to the hospitals and barracks. On a march they precede the advancing corps or army, and then meet it laden with water drawn from the purest sources, such as fountains, &c. When an army is encamped, these men still labour at their vocation, bringing good water, filling the recipients procured for it, and always keeping up an abundant and wholesome supply. Some arrangement of this sort (we cannot do better than imitate the Turk) is wanted with us.

"7th. Short marches, particularly when troops first take the field.

"8th. The formation of open fireplaces, or the introduction of stoves into the wards of hospitals, or buildings used as such. The mode of house heating is most objectionable. The 'mangal' is a large dish of live charcoal, and on the introduction of this into the room or ward they are dependent for warmth. Two or three of these things would be insufficient to keep up a proper temperature if ventilation were also cared for; but this is disregarded, and as the windows are kept closed, large mattings are hung before the doors, and not a breath of air finds admittance, the atmosphere is naturally polluted and unwholesome, the wards are all stuffy and close, and I think at Widdin that the epidemic typhus and dysentery there prevailing were invited to establish themselves by the atmosphere provided and maintained for them by this miserable contrivance. Burning wood in an open fireplace would assist and promote ventilation. This, and a good stove, would warm the largest ward or barrack room, and we should escape from the suffocating 'mangal' and its consequences.

"9th. Avoiding as quarters towns deep sunk in valleys, where ventilation is obviously wanting. Towns so placed are always unhealthy.

"10th. In these countries there are scarcely any tables. The Turk eats off a tray placed on a low stool, and he writes on his knee. Each regiment should carry with it a portable operating table."

"14th March 1854.—Belgrade, the capital of Servia, is situated on an advanced elevated angle of land, jutting out where the Save joins the Danube, one side of the promontory being washed by the Save, the Danube skirting its other aspect. The apex of the headland is crowned by the fortress of Belgrade, which beetles over the valleys of both rivers. Retiring inland from this point, the crests of the ridge is found covered by the Servian parts of the town, the slope and low ground, at both sides of this hill, are the Turkish and Jewish quarters. In all directions except inland we see fever-producing country, the desolate-looking banat of Temeswar stretching far on one side, and the low undrained tract lying between the Save and Semlin are both alike unhealthy.

"The Save often escapes from its banks, and then we have part of the lower town under water. Then follow the fevers of the summer months, which prevail especially in this quarter of the city. The soldiers in the elevated citadel would be comparatively safe, but the sentries furnished to this district are exposed to the influence of its malaria, and thus contract periodic fevers.

"The water of Belgrade is bad; that used in the military hospital is filtered through drip-stones. Belgrade is very badly supplied with food. The Servian peasant is rich, and will scarcely take the trouble to breed stock or seek a market for it; he tills a patch of land for maize, rears hogs for exportation, and the communities of large towns are left to look to exterior sources for supplies.

"15th March.—Belgrade to Grotzko, four and a half hours. Leaving Belgrade, and going east by

south, we enter an open treeless country, with low hills around; a poor light soil; roads mere tracks (hardened by traffic) over fields; scarcely any water. In about two hours a more picturesque country is entered, rising into gently swelling hills; road amidst copses of the valonia oak. We then descend towards the valley of the Danube almost to the level of the river, and arrive at the small town of Grotzko, an extremely unhealthy place, of about 300 houses. The Danube inundates the low lands around, and fevers prevail during the greater part of the year, the quotidian in August of a bad type running into nervo-typhoid forms.

"16th March.—Grotzko to Passarowitz, ten hours. Route by Danube for about an hour over frequently submerged plateaux. Turning south, we ascend hills of easy ascent, amidst oak copses and the remains of an old forest; a few patches of cleared land for maize here and there; no houses near the road; soil of the richest humus; not a pebble the size of a walnut on whole days journey; road broad and good, and aspect of country healthy; after four hours open and park-like. Then the town of Kolar is reached, a most unhealthy place. A small stream, the Raliah, is close to the village; but nearer still there is a considerable reedy swamp, quite enough to explain why the inhabitants look anæmic, sallow, and fever stricken. About five hours hence, over a level, well-wooded country, the Morava, a fine rapid river, more than half the breadth of the Thames at Westminster, is reached, and crossed in a boat. Nearly two hours hence, over level and rich plains, but partially cultivated, Passarowitz, the third town of Servia, is reached; it lies at the base of a low ridge, running from north to south; it is a paltry, dirty place, but nothing can be said against it on the score of health, as endemic diseases are not known there.

"17th March.—Passarowitz to Neresnitza, ten hours. Ascending the easy acclivity of the hill spoken of, we leave the valley of the Morava, a fine, well-wooded, rich, level tract, through which the river runs with a very winding course. Descending to the eastward, we soon reach a well-wooded campaign country, well watered, with the same rich soil as during yesterday's route. After an hour the sluggish stream of the Ulava is crossed, an open down-like country entered, with a healthy, numerous peasantry, and no endemic diseases. Two hours of this brings us to a country still rich and fertile, but of deeply cleft hills, grassy slopes, and tufts of young oaks (far off on our right a mountain range of abrupt bold summits), excellent encamping ground. After five hours from Passarowitz the village of Maetza, a healthy spot, of 100 houses, is reached. Soon afterwards the river Peck is reached, and, to shorten the journey, forded. An abrupt mountain ascent is entered on; the scenery wild and Swiss-like; the rocks of primitive and transitional varieties; the river, which we skirt, is broad, and often escapes from its banks. From this point to Neresnitza fever is frequent in the alluvial valleys of this river. Neresnitza is an insignificant village, seated close to the above river.

"18th March.—Neresnitza to Melanawitz, nine hours. Journey commenced over a mountain ascent of the most alpine character; road good; bounding rocks principally of clay slate. Ascent and descent of this mountain occupied three and a half hours; cold excessive; mountain brooks covered with ice. It snowed lightly, not in flakes, but in the beautiful stellar forms, indicative of a high altitude and a low temperature. A valley, through which runs the river Peck, is reached, and after five and a half hours of the day's journey we arrive at Maidanpeck. This valley is rich in iron ore, and it is thickly inhabited. Maidanpeck lies on a small, oblong-square-shaped spot, closely hemmed in on all sides by precipitous mountains; no marshes, and the stream running through the village lively with sand banks. Spite of no apparent excitants of disease, there is no place in Servia so unhealthy as this. There is usually a

resident medical man, but at the period of my visit he was absent in ill health.

"Periodic fevers are found here nearly the whole year. From the middle of July to the end of September, a most severe form of this prevails, of the tertian and quartan type. General dropsy, ascites, and spleen enlargements, are most common here. The unhealthiness of this place is proverbial all over Servia; they talk of its whole population lasting only from three to four years, but I could not have any authentic information on the subject. About four hundred of its inhabitants are engaged in procuring the iron ore. They suffer more than wood cutters or other labourers. From this unhealthy spot to Milanowitz occupies about four hours over alpine ranges covered with snow. We ascend far above the region of the oak, and get among forests of noble beeches, which crown the highest summits of these mountains. Milanowitz, on the Danube, a small town of 300 houses, is said to be very healthy; at least this was the assurance given by its leading inhabitants. There is no medical man here; syphilis is frequent.

"19th March.—Milanowitz to Breza-Palanka, six hours. Rode for an hour close to the Danube. Forging then a tributary of this, we ascend among mountains, the snow falling heavily and lying deep. Not a house during the six hours of this mountain ride. The range passed, we come to the village of Breza-Palanka on the Danube. It is said to be salubrious, and the aspect of its inhabitants bears this out. The country here has a desolate and sad look. The military frontier of Austria opposite thinly inhabited, with its scattered block houses, and the river, from the state of war, without a sign of traffic or animation, enhancing the sombre and depressing appearance of this place.

"20th March.—From Breza-Palanka to Negotin, six hours. During seven eighths of the way the road is by the Danube, on an alluvial snow-covered tract, little above the level of the river, some two or three hundred yards in breadth. Low hills rose from this. Some small tributaries of the Danube crossed, and some miserable villages of emigrant Wallachs lie on the route. Leaving the Danube, the road to Negotin is over level plains little cultivated. Maize the crop. Wells numerous. Negotin has marshes in its neighbourhood, and paludal fevers of a mild type are endemic. High winds prevail, neutralizing probably the otherwise pernicious effect of the malaria, diluting its power to do mischief.

"21st March.—From Negotin to Widdin, 13½ hours, per cart, post horses not being forthcoming. Over plains to the quarantine station on the Danube. There is a German medical man at this miserable spot, which does not suffer from any endemic disease. Keeping from thence the banks of the Danube, we first are ferried over a small deep stream; and a few hundred yards beyond this we leave Servia by crossing the Timok, not far from its entrance into the Danube. Keeping by the banks of the latter for about a mile, we enter within a chain of low hills, passing through the village of Viuph, where, and in the neighbourhood, a considerable Turkish force is in cantonments. Continuing among the low hills the vast half-swampy Bulgarian plain on which Widdin is placed is reached. The distant crest of the Balkan is now seen to the south.

"Widdin.—This most important Bulgarian city, the head quarters of the pashalic, lies on a dead level. A distant amphitheatre of low hills bounds this place. The Danube washes the northern walls of the city, which consists of two parts, the "grad" or fortified portion, and the varosh or suburban quarter, exterior to the filthy neglected glacis of the first-named fortified stronghold.

"The elements of disease exist everywhere and in excess (though formerly acquainted with Turkish towns), which I have never seen exceeded.

"To persons inhabiting the cities of Western Europe, even those the least famed for their cleanliness, the

incredible filth of a Turkish town cannot be imagined. Everything bears the marks of squalor and decay. A well-known author, Ranke, speaking of Widdin, says, 'its fetid bazaar, and its streets strewn with putrid carcases, round which the vultures swarm, tell plainly that the majority of its 20,000 inhabitants are Mussulmen;' and speaking of another town in Bulgaria, he says, 'but the stench of the air gives sufficient evidence of the presence of Mussulman habitations.'

"Fever, and the numerous ills depending on the want of sanitary and police measures, must always hover over these unclean abodes, and it is not to be wondered at, if the sanitary state of Widdin is, while I write, of the most unsatisfactory kind. The town is a vast barrack, the regular casernes being given up as military hospitals.

"The force between this and Kalafat amounts to 35,000 men. Of these, 18,000 are regulars. The sick of the last-mentioned are all brought, by bridge, to the intervening island, hence in boats to Widdin. The sickness is very great. On the 22nd March it was 1,400, having declined from 1,700. Fever and dysentery, the scourges of armies, are doing their work. The mortality has of late been nearly thirty daily. It has reached thirty-four deaths in twenty-four hours. This sickness is attributed to the severity of the winter, to the exposure of the men in tents, to their privations of all kinds, and to excessive fatigue and bodily toil they undergo. Duties are incessant, and throwing up earthworks at Kalafat exhausts the strength of these men. Their hospitals too are nurseries of disease, as we shall see presently, and malaria always hangs over Widdin. The civil population is also most unhealthy, suffering from the same maladies the soldiers are labouring under.

"I visited the greater military hospitals, seeing between eight and nine hundred of their sick. The remainder are scattered about in dwelling houses.

"The principal military hospital is a large block of building, an oblong square, with central court and interior colonnade from which its wards (it has only a ground floor) are entered. The exterior of the building looked bright and clean, and the approach to it was marvellously so for Widdin. The large surface of the interior court was almost covered with stagnant water.

"The wards are large, containing about 60 sick. They are boarded and matted. The men lie in double rows round three sides of the room. There are no bedsteads, but the bedding is good, the mattress of straw, thick, and comfortable. Above this a thin one of cotton; the sheets clean; the diets carefully prepared, but the atmosphere is electric with the elements of disease, from the want of ventilation, and from the stuffy fumes of the detestable 'mangal.'

"The hospital contained about 500 sick, and was not overcrowded; but the state of its courts and passages was neglected, and here and there filthy; but this establishment was by many degrees the best in the place. I visited three others. A large vacated barrack with 154 sick in very bad order. Here I saw about twenty survivors of the wounded at Citate. Wounds of the extremities principally; no amputations.

"In another barrack I saw 158 sick of one battalion said to be 1,000 strong. These men were miserably neglected, and the whole establishment in the worst order.

"Lastly, I visited a very large dwelling house with upwards of 100 sick. The air in all these places was laden with the seeds of disease."

No. 26.

Dr. Dumbreck to Brigadier General Tylden.

SIR, Varna, 16th June 1854.
I HAVE the honour to submit the following suggestions in regard to the sanitary measures which it is desirable should be carried out in the Turkish

barrack destined as the General Hospital of Varna for the English army:—

1st. Ventilation.—The miserably small windows, want of fireplaces, and vicious construction of the internal fittings of the rooms or wards, render this most defective. The windows ought to be enlarged, apertures made in the walls near the roof and the ground, and a light railing substituted for the boarded kind of parapet which goes round the central part of each ward.

I should also suggest for your consideration the expediency of making openings in the roof (plafond) of these wards.

2d. The central part of the ground floor ought to be boarded, and perhaps a careful examination of the masonry of the lower part of the building might point out means to keep out the innumerable swarms of rats which now infest the rooms. These animals are destructive to stores, and will prove a very obvious source of annoyance to patients.

3d. The drains near and leading from the privies, particularly that to the eastward, should be carefully looked to. Their covering is broken and out of order, and, unless remedied, will allow the atmosphere to be vitiated by the escape of pestilential miasmas.

4th. The privy to the westward should, as being superfluous, be no longer used. Were its openings carefully covered, a large and probably a useful room might be thus added to our hospital accommodation; as an ablution house, for example.

5th. The preparation of a pack and arm store is requisite.

6th. The fitting up and repair of the room used as an apothecaries' store is also required.

7th. Provision must be made for heating this establishment during the severe winter of this climate. The mode in which buildings in this country are usually warmed, by the use of the "mangal" (a dish of live charcoal) and the most careful exclusion of the external air, is both ineffective and unhealthy.

The introduction of the stove will, I think, be a matter of absolute necessity; and I trust that this suggestion will be considered and acted on at once, as immediate means ought to be taken to guard our troops from the trying sickness of a Bulgarian winter.

I have, &c.

(Signed) D. DUMBRECK, M.D.,
Dep. Inspector General, &c.

P.S.—The central court ought to be raised. After rain, from the inequality of its surface, it is a stratum of mud. In autumn it would be marshy enough to do mischief, and its probable ill effects ought to be neutralized as I have proposed.

Brigadier General Tylden,
&c. &c.

No. 27.

Dr. Smith to the Principal Medical Officer.

SIR, Army Medical Department,
20th June 1854.

I HAVE the honour to request you will be pleased to ascertain, and report to me at your earliest possible convenience, whether mats made of coir or straw are to be procured in Turkey for the use of the troops, and the price asked for them. If mats cannot be obtained, you will be good enough to state whether coir, straw, or other material whereof mats could be made, is to be had in sufficient quantities, and its price, to permit of each soldier having a mat to lie upon whilst in winter quarters.

I have, &c.

(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 28.

*Dr. Smith to the Principal Medical Officer.*Army Medical Department,
3rd July 1854.

SIR,

I HAVE the honour to acquaint you that I fully approve of the suggestions in regard to the sanitary measures which it is desirable should be carried on in the Turkish barrack destined as the General Hospital at Varna for the English army, contained in your letter of the 16th ultimo, copy of which you have furnished for my consideration.

It will be immediately necessary to consider in what way the hospitals will best be heated in winter, and I shall be glad to receive your views on this point.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 29.

*Mr. Menzies to Dr. Smith.*General Hospital, Scutari,
4th July 1854.

SIR,

WITH reference to my former communication, dated the 26th ultimo, I have now the honour to enclose for your information copy of my last weekly state, as furnished to the Inspector General of Hospitals, now at head-quarters at Varna, together with the number of sick belonging to the Royal Artillery, also in the General Hospital, and which will be in future included with the rest of the sick in the next Quarterly Return which shall be furnished you from this, with observations thereon.

At present I may observe that our casualties have been rather numerous during the period, owing to the many very hopeless cases that were left upon our hands on the departure of the various divisions of the army from this. The prevailing diseases of any importance now under treatment are fevers of the continued form, catarrhal affections, phthisis, pulmonalis, and bowel complaints. The very hot and sultry weather we have had here lately has greatly prostrated the strength of many patients who had been convalescing favourably; and I regret to say, in several instances of bowel complaints seizing the men in as well as out of hospital, choleraic symptoms presented themselves, attended with much collapse and prostration of the vital powers, vomiting and purging during the early stage, also rather severe cramps in the lower extremities. The pulse, however, was never altogether wanting, although very weak and compressible; tongue generally dry, and thirst urgent.

The treatment found most useful consisted in the administration of large doses of calomel and opium, say ten grains of the former with one of the latter, made into a pill. This was repeated, if necessary. Turpentine fomentations were applied to the extremities, mustard sinipisms to the epigastrium, and the patient was allowed *small portions of very cold water* at certain intervals of time, under which he gradually rallied; and, I am happy to add, all have done well (seven in number) that were attacked in this way.

Several of the medical officers connected with the hospital establishment, some residing in the buildings and others in the immediate vicinity, have also suffered from looseness in the bowels; and I have myself had the prevailing complaint, which greatly weakened me for a day or two, but now quite recovered.

It is difficult to trace these attacks to any obvious existing cause, but no doubt much may be ascribed

to atmospherical influence, and I should also think the very close, foul, and noxious air of the hospital may in some degree predispose the constitution to the disease.

I may also bring to your notice another source from whence most unwholesome exhalations arise, and which must be highly pernicious to the public health and the recovery of the patients in this hospital. I mean an establishment that at present exists about 70 yards to the westward of the General Hospital, and quite close to the water's edge, for the manufacture of musical instruments from the *putrid entrails of sheep and other animals*. This had been reported by the officer appointed to make health inspections on a former occasion, and a board of medical officers condemned the establishment in question as highly injurious to the public health in consequence of the intolerable effluvia arising from this locality at all times, but more especially when the wind is from the same quarter. Other sanitary measures were at the same time proposed for cleansing one of the drains in the neighbourhood, and from which there are emitted unhealthy exhalations.

I have put Dr. Hall, the Inspector General, in possession of these facts, and also informed him that I made my Special Report to the Commandant here with the view to measures being taken without delay for the removal of the evil complained of, and also suggested the propriety of establishing a garrison police to prevent the repetition of such nuisances being committed.

I have, &c.

(Signed) D. MENZIES,
Staff Surgeon, &c.Dr. Smith,
&c. &c.

P.S.—There will be 48 invalids (now in the General Hospital here) to be sent to England by the first favourable opportunity, 21 of these having lately come up from Gallipoli.

D. M.

No. 30.

*Mr. Menzies to Dr. Smith.*General Hospital, Scutari,
Turkey, 9th July 1854.

SIR,

SINCE I had the honour of writing to you on the 4th instant, informing you of the appearance of seven cases of choleraic diarrhoea amongst the troops at this station, and the recovery of all the men from the treatment pursued, I am now happy to say that no fresh cases of this description have appeared either among the patients in hospital or been admitted from barracks.

I can only ascribe this sudden favourable subsidence of the disease, and in general improved sanitary condition, to the sudden reduction of temperature which followed a severe thunder storm, with very heavy rain and wind, from the north-north-east, on the morning of the 5th, and by which the air has also been rendered much less oppressive to the feelings.

I may also inform you that steps are being taken by the Turkish authorities to have the nuisance I complained of removed from the vicinity of the hospital, also a slaughter-house situated between this and the barracks, from which there have also frequently been most offensive effluvia. Ossian Pasha, one of the head interpreters, personally examined the situation described on Thursday last, and seemed most anxious to forward my wishes in every respect, in carrying out any sanitary measures that would be conducive to the general health of the establishment.

I have, &c.

(Signed) D. MENZIES,
Staff Surgeon, &c.Dr. Smith,
&c. &c.

No. 31.

Extract of a Letter dated Varna, 19th July 1854, addressed to Dr. Smith by Dr. Hall, Inspector General, together with the Copy of a Letter from Dr. Hall to Lord Raglan, dated Varna, 19th July 1854.

"I think it probable the army will not remain inactive here much longer, and a change of locality would do the 1st, 3rd, and light divisions no harm. The site of the camp of the 2nd division is well chosen, and the men are comparatively healthy; but that of the cavalry and light division, at Devna, is in the vicinity of an extensive morass, at the head of a lake, which is fed by a stream that runs between the encampments of the cavalry and infantry, and which, as the season advances, will prove prejudicial to the health of the men. After my visit to the camp, the other day, Lord Raglan wished me to put down on paper my observations, which I did the same evening, and forwarded them to him through Lieut.-Colonel Steel, his military secretary. They are of too cursory and local a nature to interest you much, but perhaps it is as well I should send you a copy of them, though I fear the perusal will hardly repay you for the trouble."

SIR, Varna, 15th July 1854.

In obedience to instructions received from his Excellency the Commander of the Forces, I have the honour to state that I visited the camps of the 1st, 2nd, and light divisions of the army on the 12th and 13th instant, and inspected the hospital marquees of all the regiments in them, and I take leave to submit the following observations for his Lordship's consideration. In doing so I shall follow the course of my own journey, and commence with the light and cavalry divisions at Devna.

The camp at Devna, though on rising ground, is, in my opinion, too near to the lagoon at the head of the lake, and later in the season the health of the men will, I fear, be influenced by it; for even now the smell of the marsh is very perceptible early in the morning, and as the infantry division is out at drill from 6 to 8, five or six days in the week, those men who do not take either coffee or some other stimulant, before going on parade, will be liable to contract either fever or bowel complaints. At present the chief ailments of the men are bowel affections, some few of which have assumed the character of Asiatic cholera, but as yet no deaths have occurred under that head.

The cavalry are encamped in the valley below; the five dragoon guards nearest the marsh on ground that, I should say, would scarcely be habitable after heavy rain of any duration. The position of this regiment had attracted the attention of Lieut.-General Sir George Brown, who mentioned that it was his intention to move the camp of the heavy cavalry brigade a little higher up, on the eastern slope of the valley, when Brigadier Scarlett arrived.

The light cavalry brigade is encamped higher up the valley, near the boggy grounds where the river which feeds the lagoon springs.

The cavalry have already a larger proportion of sick than the infantry, and the chances are that this will increase if they remain where they are; but I suppose the site of the camp was selected on account of its proximity to water, and it becomes a question whether it might not be removed half a mile higher up, on either the eastern or western slope of the valley, without any very serious inconvenience.

The infantry, too, would be better away from the vicinity of the morass, which cannot be more than from half to three quarters of a mile distant from their camp, but which the military people seem to think is

quite sufficient to protect the men from its noxious influence; but as the wind blows over it towards the camp at this season of the year, I must confess I am not of the same opinion.

Those regiments which do not give their men coffee before they go out to drill in the morning, the 23rd and 88th, for instance, I noticed had a larger proportion of sick than the others, and the proportion, I think, increase as the autumn advances.

The rations of the men are indifferent, though perhaps as good as the country affords. The meat is thin, and without fat; the bread heavy, sour, and badly baked on some occasions; and there is a want of vegetables, and seasoning for the men's soup. Onions are the chief fresh vegetable the men can procure, and a capital one it is, but it is not sufficient of itself to make the soup nourishing and palatable. Rice ought to be made an integral part of the ration, as it was at the Cape of Good Hope during the wars in Kafferland, and if that cannot be sanctioned the Commissariat Department should be instructed to have a sufficient supply in store to meet the wants of each division when the men cannot procure the article through any other channel, as is often the case now. Salt and pepper should also be Commissariat supplies, to ensure the men having these essential articles always within their reach. The present system of trusting mainly to the resources of the country is an uncertain and expensive one, for when the demand is great the articles become dear and scarce, where there is little or no mercantile enterprise amongst the inhabitants, so that it would be economical for the men had they even to pay a moderate fixed price to the Commissariat for their rice, salt, and pepper, and certainly it would be beneficial for them always to have these articles within their reach. About one halfpenny a day from the man's pay, added to the allowance of coffee and sugar which he draws now from the Commissariat, would ensure him not only coffee before his morning drill, but a comfortable meal in the evening, which is very desirable.

The site of the camp of the 2nd division is unobjectionable, the only drawback is the limited supply of water near at hand, but there is abundance within an easy distance. Some of the tents of the 2nd brigade are closer together than there is any occasion for, and they are interspersed among dwarf oak bushes, which are not high enough to shade, but quite sufficient to impede the circulation of air. There is, however, an abundance of unexceptionable ground to the northward and westward of that which the brigade now occupies, so that the defect admits of easy remedy.

The tents of the 1st division are too much crowded, and many of them, as in the 2nd division, are interspersed among low oak bushes. There is a good deal of sickness in the camp, particularly in the guards and artillery. But the artillery are encamped on a very objectionable piece of ground, and it would be well to remove them to some other locality, as well as to give the whole division more space; but I would not recommend, what Dr. Linton mentioned, that they should occupy any portion of the ground where the light division was formerly encamped. It would be better to extend it to the north, or put it on the ridge in front of their present site to the westward, if the ground admitted.

The supplies brought into camp by the country people is more abundant at Devna than at either of the other camps, and consist of eggs, milk, poultry, onions, pumpkins, and cucumbers; latterly they have commenced bringing apricots in an unripe state, which are less desirable than the other articles enumerated above, and it would be desirable to restrict their sale as much as possible, as they have obtained the unenviable designation in the Mediterranean of "Kill Johns."

The following is a statement of the number of sick in each regiment I visited :—

In the Devna Camp.

Regiments.	Number of Sick.	Fevers.	Bowel Complaints.
72nd - - - - -	20	2	6
19th - - - - -	7	0	1
23rd - - - - -	14	3	1
Ditto - - - - -	24 convalescents for the day.		
77th - - - - -	22	9	2
33rd - - - - -	11	2	4
88th - - - - -	30	6	8
Rifles - - - - -	14	0	6
Horse Artillery - - - - -	10	6	2
Sappers - - - - -	4	0	2
	156	28	32

Camp of the 2nd Division.

Regiments.	Number of Sick.	Fevers.	Bowel Complaints.
30th - - - - -	12	2	1
47th - - - - -	15	—	6
47th - - - - -	11	2	1
49th - - - - -	24	3	9
55th - - - - -	16	1	4
95th - - - - -	13	6	1
Artillery - - - - -	14	1	6
	105	15	28

Cavalry Division, Devna.

Regiments.	Number of Sick.	Fevers.	Bowel Complaints.
5th Dragoon Guards -	8	5	0
8th Hussars - - - - -	18	1	7
11th Hussars - - - - -	13	2	3
13th Light Dragoons -	18	0	9
17th Lancers - - - - -	11	1	4
	68	9	23

Camp of 1st Division, Aladyne.

Regiments.	Number of Sick.	Fevers.	Bowel Complaints.
Grenadier Guards -	62	10	44
Coldstream " - - - - -	22	14	4
S. Fusiliers " - - - - -	38	11	9
42nd - - - - -	17	1	0
79th - - - - -	20	0	2
93rd - - - - -	26	1	8
Artillery - - - - -	14	2	7
	199	39	74

I have, &c.

(Signed) JOHN HALL,

Lieut.-Colonel Steele,
&c. &c. Inspector General of Hospitals.

No. 32.

*Dr. Smith to Mr. Menzies.*Army and Ordnance Medical
Department, 22nd July 1854.

SIR,

In acknowledging the receipt of your letter of the 4th instant, I have to request you will inform me what steps have been taken to improve the sanitary condition of the immediate neighbourhood of the hospital at Scutari.

I have, &c.

(Signed) A. SMITH,

D. Menzies, Esq.
&c. &c.

Director General.

No. 33.

*Dr. Smith to the Secretary of the Ordnance
Department.*Army and Ordnance Medical
Department, 27th July 1854.

SIR,

I HAVE the honour to acknowledge a reference made to me by order of the Honourable Board, dated 24th instant, on a letter from the storekeeper at the Tower, relative to a supply of waterproof covers for the floors of tents; and in returning the documents submitted, I beg to forward the report of a board of medical officers which was assembled at this office yesterday, to examine seven different kinds of prepared cloth proposed to be used for the purpose above stated.

With reference to the report, I beg to state that I concur in opinion with the Board, viz., that Article No. 3 is the one best suited for the purpose in view; further, I beg to observe, that I think the proposed covering should be in one rather than in two or more pieces, as I expect if it be divided at all, it will get so deranged during the night while the men are asleep, that none of the advantages which might otherwise result will be secured.

I have, &c.

(Signed) A. SMITH,

The Sec. Board of Ordnance,
&c. &c.

Director General.

No. 34.

*Dr. Smith to the Principal Medical Officer in
Turkey.*Army and Ordnance Medical
Department, 29th July 1854.

SIR,

As it appears to me that there is reason to fear the troops will, when encamped in the field, suffer in health from sleeping on damp and wet ground, I think that you will agree with me that some effort should be made to lessen, if possible, the chance of sickness arising from that cause.

With this view, I would suggest that you direct inquiries to be instituted, in order to ascertain if any article is used by the natives for such purpose; and if so, what is its nature; and whether, if efficient, it could be obtained in sufficient quantities to supply what might be necessary for the army?

There are various articles manufactured in this country which I am told completely intercept the passage of any humidity from the earth, provided they are spread over the ground enclosed by the tents, and though not disinclined to believe it, I am still unprepared to expect all the advantages which I am told will result from the adoption of one or the other of them.

If you see reason to expect benefit will accrue from having a covering for the floor of each tent, and that the material is not to be obtained in Turkey, I shall, on hearing from you, endeavour to have whatever may appear necessary supplied and forwarded with the least possible delay.

I have, &c.,
(Signed) A. SMITH
The Principal Medical Officer, Director General.
&c. &c.

No. 35.

Dr. Hall to Dr. Smith.

SIR, Varna, 29th July 1854.
I HAVE the honour to enclose a copy of my report to Lord Raglan of this date for your information.

I have, &c.
(Signed) J. HALL,
Inspector General of Hospitals.

Dr. Smith,
&c. &c.

MY LORD, Varna, 29th July 1854.

SINCE my letter to you of the 24th inst., I am sorry to say cholera has prevailed to a greater or less extent in all the divisions of this army; but unfortunately I cannot give you such precise information as I could wish, or as I should be able to do after the receipt of the weekly states of sick due to-morrow. I receive almost daily communication from all the camps, but still the chain of events is not kept up in this way with that accuracy by all officers that it is in their official returns.

I mentioned to you in my last letter that cholera in a severe form had manifested itself in the camp of the light division at Devna on the 22nd instant, and that 16 casualties had been reported to me up to the period of my addressing you on the 24th. In the course of that evening and the following day, I heard of the death of five more men, and since then 17 other deaths have been reported, making a total of 91 admissions and 38 deaths since the disease broke out at Devna. The attacks were so numerous and the disease so fatal at its onset that on the 24th it was deemed prudent to remove the camp to a place called Monasterm, about five miles from its former site, and for two or three days there appeared to be considerable improvement in the health of the men; but this morning I regret to say I have received reports of the death of 11 men, ten in the light division, and one in the 5th Dragoon Guards.

Dr. Alexander's report of yesterday morning states that there are several severe cases of diarrhoea under treatment in the 1st brigade, but no cholera, and in the 2nd brigade that the bowel complaints are mild.

The light division of cavalry has escaped cholera as yet, but as their sick list was becoming heavy with other complaints, they have been moved about 20 miles in advance on the Shumla road.

The only case of cholera which has occurred in the cavalry took place in the 5th Dragoon Guards, and proved fatal.

It is a remarkable circumstance that the regiments encamped at Devna were struck with the pestilence, and suffered nearly in the ratio of their proximity to the morass at the head of the lake, and it is no less curious that the disease is said to have made its appearance after a shift of wind to the north-east, which blew directly across it to the encampment.

The 1st division at Aladyne, so far as I know, have only had one death and two other admissions from cholera amongst the soldiers, but some cases have appeared amongst the native arabah drivers attached to the camp.

In the 2nd division three admissions and two deaths have been reported. The case of recovery

was in a drunken tailor, and the disease may have been the penalty of his dissipated habits. The two fatal cases occurred in recruits just landed from England, who had been marched from Varna to the camp of the 2nd division in one day. The distance is not beyond that of an ordinary march, but the recruits who had been sent out this year are many of them young lads not equal to much fatigue; they were just from on board ship, and the hour of march was not judiciously chosen, as Dr. Cruikshank says they did not reach the camp until two P.M.

At Gallipoli, three admissions and one death from cholera were reported to have taken place in the camp of the 4th Foot, up to the 22nd instant, and two deaths in the General Hospital in town up to the same date.

At Scutari dysentery has been prevalent, but no case of cholera has appeared since the beginning of the month.

On the 24th it was found necessary to remove 110 invalids from the General Hospital here and put them on board the "Monarchy" transport in the Bay, to make room for the sick sent in from the light division at Devna. On the 26th six men were attacked with cholera on board the "Monarchy," and two died, but since then there has been no recurrence of the disease.

In the 3d division encamped on the plain outside the walls of Varna, two cases of cholera occurred in the 28th Regiment on the 25th instant, one of which recovered, and the other proved fatal. In the 38th Regiment two men were attacked with cholera on the 24th, and one on the 25th, all of whom died. A case of cholera occurred in the 44th on the 25th, and recovered. The regiment was then sent to the opposite side of the lake, and encamped at the top of a ravine leading from the camp of the heavy cavalry below. After their removal two cases of cholera occurred, one of which proved fatal. The camp was then removed to the high open ground facing the Black Sea, and since that period the disease has not reappeared.

As cholera had manifested itself in every regiment of the 3d division but the 50th, the camp was removed on the 26th from the neighbourhood of Varna to the dry open slope of the promontary on the other side of the bay facing the Black Sea, and the 50th was left on the old camp to take the duties in Varna. The day after the removal of the division two cases of cholera appeared in the 38th, and 40 men reported themselves sick with diarrhoea. Since then there has been a wonderful improvement taken place in the health of the men.

Yesterday a case of cholera occurred in the 50th Regiment, and proved fatal; to-day three other admissions are reported.

A company of Sappers and Miners which was encamped outside the Shumla Gate, and suffering severely from cholera and diarrhoea, was also removed to the high ground on the opposite side of the bay, with the happiest result.

On the 25th two men were attacked with cholera in the camp of the depôt companies, and recovered. The site of their camp has since been changed. On the 27th the heavy cavalry which were encamped between the head of the bay and the lake on the opposite side, and had begun to suffer from bowel complaints, were removed to the high ground near the 3rd division.

Yesterday two men who had been suffering from diarrhoea for some days were attacked with cholera, and this morning one is reported dead, and the other in great danger.

The Ambulance Corps, which arrived only a few days ago from England, and is encamped at the head of the bay about half a mile nearer the lake than the camp of the heavy cavalry was, were attacked with cholera on the 26th, since which date five cases have been admitted and one death has taken place.

This morning they had 21 sick, four with cholera and 13 with diarrhoea, many of them of a slight character.

In the General Hospital at Varna the admissions chiefly from amongst the patients under treatment or other diseases have been,—

	Admitted.	Died.
On the 25th July - - -	12	6
" 26th " - - -	13	7
" 27th " - - -	8	8
" 28th " - - -	15	10
" 29th " - - -	9	9*
Total - - -	57	46
At other Stations - -	100	36
Total - - -	157	76

* One of whom was a native.

The loss in the French General Hospital, so far as we have been able to ascertain, has been,—

	Admissions.	Deaths.
On the 25th July - - -	not ascert.	25
" 26th " - - -	do.	15
" 27th " - - -	do.	7
" 28th " - - -	51	42
" 29th " - - -	22	27
Total - - -	73	116

I have, &c.
(Signed) J. HALL,
Gen. Lord Raglan, G.C.B., Inspector General of
&c. &c. Hospitals.

No. 36.

Dr. Smith to the Principal Medical Officer.

Sir,
Army and Ordnance Medical
Department, 3rd August 1854.

As I am very anxious to ascertain the nature of the winter dress, the outer as well as the inner clothing of the Russian soldier, and also of the Austrian, I have the honour to request you will be pleased to make inquiries into this subject, and favour me with the required information as soon as you have been able to obtain it.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General,
&c. &c.

No. 37.

Dr. Hall to Dr. Smith.

Sir,
Varna, 3rd August 1854.

I HAVE the honour to enclose a copy of the Minutes of a Medical Committee assembled by order of Lord Raglan, Commanding the Forces in Turkey, and to inform you that his Lordship has been pleased to sanction the committee's recommendation regarding the issue of a spirit ration, and has increased the soldiers' ration by the addition of two ounces of rice, and half a pound of meat, on account of the uncertain supply of fresh vegetables, and the poor quality of the meat issued by the contractor. I am no great advocate for the use of spirits, as you know, nor have I ever seen them of much use, and the present occa-

sion is no exception; but as public opinion was much in favour of the measure, I yielded my opinion to the majority, taking care to make the quantity small, and coupling it with a recommendation for coffee in the evening, which I must own I have more faith in.

I have, &c.
(Signed) J. HALL,
Dr. Smith, Inspector General of
&c. &c. Hospitals.

" We the undersigned, being a Committee appointed by order of General Lord Raglan, Commander of the Forces serving in Turkey, to report on the necessity or advisability of issuing a spirit ration to the soldiers of this army during the present prevalence of cholera and diarrhoea, are of opinion that a small ration of spirit would be beneficial to the health of the men under existing circumstances, and beg to recommend that one in the proportion of sixty-four to a gallon be issued, mixed with water, and given after dinner, and a basin of hot coffee and biscuit in the evening.

" We further take leave to recommend that cholera belts be issued and worn by the men; that no drills or fatigues take place in the morning until the men have either had breakfast, or at all events some coffee and biscuit; and that commanding officers of corps be enjoined to keep a vigilant watch over their canteens, by causing frequent inspections to be made, at uncertain periods, both by the medical officers and officers of the day, to prevent any sour and unwholesome wine or liquors from being sold there, as diarrhoea is very prevalent at present; that the men be encouraged and advised to report their sickness at once to the medical officers, because the disease has hitherto been found manageable when seen in the early stages, but if neglected liable to terminate in cholera.

" We are of opinion the bread issued to the soldiers is of an inferior quality, being dark, heavy, badly baked, and very liable to disorder the bowels, and we suggest that better should be provided, composed of wheaten flour alone, which we are inclined to believe is not the case with the present contract bread. A portion of wheat might be ground at the mills at Devna, under the supervision of military authority, and made into bread, which we think, by contrast, would soon show the inferior quality of the contractor's meal; and if this cannot be carried into effect, we are of opinion that it would be desirable to issue biscuit in place of bread during the prevalence of cholera.

(Signed)
" J. HALL, M.D.,
" Inspector General of Hospitals.
" D. DUMBRECK, M.D.,
" Dep. Inspector Gen. of Hospitals.
" W. LINTON, M.D.,
" Dep. Inspector Gen. of Hospitals.
" J. FORREST, M.D.,
" Dep. Inspector Gen. of Hospitals.
" W. CRICKSHANK,
" 1st Class Staff Surgeon."

No. 38.

18th August 1854.

LIST of additional articles of bedding required to be sent to Turkey for the use of the army whilst in winter quarters, given to the Duke of Newcastle by Dr. Smith:—

60,000 blankets.
40,000 rugs.
40,000 palliasses.
40,000 bolsters.

No. 39.

Dr. Hall to Dr. Smith.

SIR,
Varna, 21st August 1854.
WITH reference to your communication of the 3d instant, and my reply of the 17th, on the subject of the winter clothing of the Austrian and Russian soldiers, I have now the honour to enclose a statement Mr. Jenner, Purveyor, has procured for me from two of the interpreters who are employed in this camp, and who seem conversant with the subject from long residence amongst the Austrians and Russians, and as they have no object in telling an untruth, perhaps their statements may be depended on.

I have, &c.
(Signed) J. HALL,
Inspector General of
Hospitals.

Dr. Smith,
&c. &c.

MEMORANDUM of Clothing worn by Austrian and Russian Soldiers in the Winter.

AUSTRIAN.

- Cap.—Oilskin, lined with woollen cloth, with a fall to fasten under the chin; this fall protects the ears and neck.
- Cravat.—A long woollen scarf.
- Shirts.—A flannel shirt with a linen one over it.
- Socks.—Worsted socks, with cotton socks drawn over them.
- Trowsers.—Thick cloth.
- Waistcoat.—Double-breasted thick cloth.
- Coat.—Ditto ditto.
- Over-coat.—Thick cloth, with cape.
- Gloves.—Sheepskin with worsted palms.
- Boots.—Long boots drawn over the trowsers, and the boots reach nearly to the knee.

RUSSIAN.

- Cap.—Thick cloth, in shape somewhat like a forage cap, but no peak to it; it has a fall to it, which covers the ears and neck.
 - Cravat.—Handkerchief.
 - Shirts.—A sheepskin, with a coarse linen shirt over.
 - Socks.—None. Rags and canvas tied round the legs.
 - Trowsers.—Thick cloth.
 - Waistcoat.—Linen padded with cotton.
 - Jacket.—Thick cloth.
 - Over-coat.—Thick cloth, with cape.
 - Gloves.—Sheepskin, or very thick cloth, with worsted palms.
 - Boots.—Long boots drawn over the trowsers; the boots reach within about 6 inches of the knee.
- On guard the sentry has a large over-coat of sheepskin which reaches to the ankles, and has a high collar that protects the ears and neck; he is also provided with over-boots lined with sheepskin.

(Signed) K. JENNER.

Varna, 21st Augst 1854.

No. 40.

Mr. Menzies to Dr. Smith.

Lord Raglan's Army,
General Hospital, Scutari,
24th August 1854.

SIR,
I HAVE the honour to acknowledge receipt of your communication of the 22d ultimo, and to inform you in reply thereto, that immediate steps had been taken by the Turkish authorities to have the nuisances I complained of removed from the vicinity of the hospital, and more particularly the manufactory that had been established for musical instruments; the drainage has also been much improved, and the privies

looked to and thoroughly cleansed out, so that the air both within and without the establishment has been much improved by the sanitary measures that have been adopted, and which it will be my duty to see are in future strictly carried out.

I have, &c.
(Signed) D. MENZIES,
Staff Surgeon, &c.

Dr. Smith,
&c. &c.

No. 41.

Dr. Smith to the Military Under Secretary, War Department.

SIR,
Army and Ordnance Medical
Department, 11th Sept. 1854.

I HAVE the honour to acknowledge the receipt of your letter of the 6th instant, transmitting a copy of a letter from Captain Austen, suggesting that a vessel should be chartered for the purpose of conveying to Turkey a supply of potatoes for the use of the army, and requesting my opinion as to the propriety, in a sanitary point of view, of sending out a consignment of this nature.

In reply, I beg to state for the information of his Grace the Duke of Newcastle, that if good wholesome potatoes, in the proportion of one pound per man, could be issued daily for the troops in Turkey, even for a month, I am of opinion it would doubtless prove conducive both to their comfort and their health.

I fear, however, that should potatoes be sent from this country, they would not be found to possess the requisite qualities by the time they were served out to the troops, as I suspect, from what has hitherto come under my own observation, that a very great part of them would be seriously damaged during the voyage.

I therefore beg to recommend, that the opinion of persons who have had experience of what these vegetables can be subjected to without injury, should be taken before the experiment suggested by Captain Austen be tried.

I have, &c.
(Signed) A. SMITH,
Director General.

The Military Under Secretary,
&c. &c.

No. 42.

Extract from a Letter dated "Camp in front of Sebastopol, 27th October 1854," addressed to Dr. Smith by Dr. Hall, Inspector General of Hospitals.

"THE want of vegetables, too, is beginning to be felt, and representations have been made to endeavour to get potatoes and onions brought for the men's use. Hitherto the weather has been singularly favourable to us, but each day brings us nearer to the change, which every one who knows the country says we may expect before the winter sets in; and that during the winter it will be quite impossible for the army to keep the field, or to exist under canvas."

No. 43.

Dr. Smith to the Principal Medical Officer.

SIR,
Army and Ordnance Medical
Department, 28th October 1854.

A QUESTION having been put to me for any information that I can furnish from the experience of medical officers in respect to the efficacy and utility of the supplies of Moore's Concentrated Milk and Cocoa and Milk, sent out to the army in the East, I have to request that you will forward to me a report thereon with as little delay as possible.

I feel unwilling to call your attention to such a subject at the present time, but the information is desired in order to determine upon the expediency of despatching a further supply of these articles for the use of the troops during the forthcoming winter.

I have, &c.

(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 44.

Extract of a Letter from Dr. Hall, Inspector General of Hospitals, to Dr. Smith, Director General of the Army Medical Department, dated

Camp before Sebastopol,
2d November 1854.

"I AM sorry to say, you will observe the health of the army is by no means in a satisfactory condition, although cholera has now nearly left us. The duty of the men is very severe, and they have had to encounter exposure and privations which have lowered the standard of health amongst them, and rendered them more susceptible of disease than perhaps they would otherwise have been. At present the men have tents, and an effort is being made to get them regularly supplied with vegetables, which was becoming very necessary, as in some instances the men were beginning to show symptoms of scurvy. The cases, however, are few, and all those I have seen are of a mild character, but still it would not be judicious to let such a disease gain ground, as we should soon have its formidable concomitant dysentery. Of the first importation which arrived two days ago, I got a fair proportion of potatoes, onions, and cabbages distributed to the sick in hospital gratis; the remainder was sent to the divisions of the army. To-day I hear another vessel has arrived with 150 tons of different kinds of vegetables on board, which I am quite sure will be eagerly purchased by the men, who seem fully sensible of their value and importance to health."

45.

Dr. Smith to the Principal Medical Officer.

SIR, Army and Ordnance Medical
Department, 3d November 1854.

CHLORIDE of lime, chloride of zinc, and chloride of soda having been supplied for the use of the troops of Lord Raglan's army, as deodorizing agents, I have the honor to request you will inform me, after full trial has been made of each of these articles, which of them appears to be the most efficient for the purposes required, and which, in your opinion, ought to be hereafter supplied.

I have, &c.

(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 46.

Dr. Smith to the Principal Medical Officer.

SIR, Army Medical Department,
9th November 1854.

As a large amount of sick is likely to require accommodation during the winter months in the hospital at Scutari, I have the honor to request you will inform me whether proper means exist for warming that establishment.

If they do not, you will be pleased to state what number and description of stoves will be required for the purpose above mentioned, and also what size and length of iron funnelling will be necessary for each stove.

I have, &c.

(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 47.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical
Department, 15th November 1854.

SIR, I HAVE the honour to request you will inform me whether you consider the ale and porter which the Government has sent out to Turkey from time to time, to be advantageous to the health of the troops, and if the practice hitherto adopted should be continued.

You will also be pleased to state whether either of the above articles, or both, prove useful to the sick, and if they can be had at the hospitals in sufficient quantities.

I have, &c.

(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 48.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical
Department, 16th November 1854.

SIR, WITH reference to your letter of 27th ultimo, stating that the want of vegetables is beginning to be felt, I have the honour to inform you, that there is a large supply of two kinds of preserved potatoes in the commissariat stores in Turkey ready for issue.

I have, &c.

(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 49.

Dr. Smith to the Military Secretary.

Army and Ordnance Medical
Department, 17th November 1854.

SIR, SCURVY having unfortunately made its appearance among the forces serving at the seat of war, I have the honour to submit to the General Commanding in Chief the urgent necessity of immediately transmitting a large supply of lime and lemon juice for the use of the forces in the Crimea.

In reference to this matter, I beg to submit that inquiry be made of the Admiralty whether these articles can be furnished from the naval stores at Malta, or from the Black Sea Fleet; and if not, that they would be pleased to advise the best course to be pursued to obtain the articles referred to, particularly the lemon juice, which is said to be extensively used in Her Majesty's ships, and to be procured in large quantity in the Mediterranean.

I have, &c.

(Signed) A. SMITH,
Director General.

The Military Secretary,
&c. &c.

No. 50.

D. Menzies, Esq. to M. Wreford, Esq.

General Hospital, Scutari,
17th November 1854.

SIR,

I HAVE to bring to your notice complaints made to me, as you will observe by the accompanying papers, by the Superintending Divisional Medical Officers in the Barrack Hospital of various kinds, requiring to be immediately remedied by your department, but more particularly with respect to the requisitions sent in for numerous and indispensable articles not being attended to or furnished, and without which it is impossible that medical officers can perform their duty in a way satisfactory to themselves or benefit to their patients.

I need scarcely say, that at a time like this, no want of any kind should be for a moment allowed to remain unanswered; and if you have not the articles so urgently required in your store, or any other supplies that are likely to be required, I beg you will at once inform me and lose no time in having them purchased, as the ambassador requests that this should be done.

I have also to impress upon you the great necessity of having the privies at the barracks put in proper order, and all other sources of impurity removed; and if you find the pioneers do not exert themselves, it might be necessary to apply to have a non-commissioned officer appointed to see that the strictest attention is paid to the orders given in keeping the barrack hospital privies in a proper state of cleanliness, and which is so indispensably necessary for the general health and comfort of the whole establishment. I will thank you to return the letters enclosed for your perusal.

I have, &c.

(Signed) D. MENZIES,
Deputy Inspector General, &c.

M. Wreford, Esq.,
&c. &c.

D. Menzies, Esq. to M. Wreford, Esq.

General Hospital, Scutari,
17th November 1854.

SIR,

IN consequence of the delay and inconvenience which has from time to time arisen to the public service from there being no purveyor quartered here, I have to request you will direct immediately an officer of this rank to be permanently resident at the General Hospital in future, and with whom I may be able to communicate at any moment I find the necessity of the service may require me to do so.

I have, &c.

(Signed) D. MENZIES,
Deputy Inspector General, &c.

M. Wreford, Esq.,
&c. &c.

D. Menzies, Esq. to M. Wreford, Esq.

General Hospital, Scutari,
20th November 1854.

SIR,

IN acknowledging the receipt of your letter of the 18th instant, in which you state that Mr. Ward may shortly be relieved from his charge, and taking other things into consideration it is not my wish that he should be ordered to come to reside at the hospital; but I have to direct you will send Mr. Rogers in his place immediately to replace the young man recently come out from England, and therefore quite inexperienced in the duties of his department to be of service to me.

I have, &c.

(Signed) D. MENZIES,
Deputy Inspector General, &c.

M. Wreford, Esq.,
&c. &c.

M. Wreford, Esq. to D. Menzies, Esq.

General Hospital, Scutari,
20th November 1854.

SIR,

I HAVE to acknowledge the receipt of your letter of this day's date, in reply to mine of the 18th instant, in which you state "that as Mr. Ward may be shortly relieved from his charge, and taking other circumstances into consideration, it is not your wish that he should be ordered to come to reside at the hospital," but you are pleased to direct, that I will send Mr. Rogers in his place to replace the young man recently come out from England.

In answer to which I beg to inform you that I claim the right of superintendence, control, and distribution of the officers and clerks of my department, not only by a previous understanding with the War Office authorities before I accepted my appointment, but also by the Secretary at War's instructions for my guidance.

I beg, however, to inform you now as I have done before, that I shall at all times be ready and willing to co-operate with you and all other medical officers in doing what may appear best for carrying out our duties in the most cordial and efficient manner.

I have, &c.

(Signed) M. WREFORD,
Purveyor in Chief.

D. Menzies, Esq.,
Deputy Inspector General,
&c. &c.

D. Menzies, Esq. to M. Wreford, Esq.

General Hospital, Scutari,
18th November 1854.

SIR,

WITH reference to the communication from his Excellency Lord Stratford de Redcliffe, which I referred to you, dated the 2nd instant, requesting to have a list of such articles as we required for the hospital, including the number or quantities of each as may be desirable for the more complete information of those who are to provide them; your immediate attention to this is required, having received a communication from the Military Secretary to supply the list called for by his Excellency without delay.

I have, &c.

(Signed) D. MENZIES,
Deputy Inspector General, &c.

M. Wreford, Esq.,
&c. &c. &c.

No. 51.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical
Department, 18th November, 1854.

SIR,

I HAVE the honour to acquaint you that large supplies of warm winter clothing, consisting of drawers, socks, &c., have been sent out to Turkey for distribution amongst the troops of the British army; it will therefore be necessary for steps to be immediately taken on their arrival to ensure a proper proportion being allotted to all men at that time in the various military hospitals, including the attendants, as well as the sick and wounded under treatment.

I have, &c.

(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 52.

Major General Yorke to the Director General.

Horse Guards,
20th November, 1854.

SIR, WITH reference to your letter of the 17th instant, I am directed by the General Commanding in Chief to transmit to you the enclosed copy of a letter from the Admiralty, stating that as the lemon juice on board the ships in the Black Sea, and in store at Malta, is not more than sufficient for the requirements of the fleet, directions have been given for 40,000 lbs. of that article being shipped immediately in steam vessels about to leave this country, consigned to the Commissary General in the Crimea, and adding that lemon juice squeezed last year may be obtained to some extent at Messina, although it is doubtful if the quality is equal to that issued to the navy.

I have, &c.,
(Signed) C. YORKE.

The Director General,
&c. &c.

SIR, Admiralty, 18th November, 1854.
WITH reference to your letter of the 17th instant, I beg to acquaint you that the lemon-juice in store at Malta, and on board the ships in the Black Sea, is not more than sufficient for the requirements of the fleet, and that directions have therefore been given for 40,000 lbs. of that article being shipped immediately in steam vessels about to leave this country, consigned to the Commissary General in the Crimea, the delivery to be made according to the order of the senior Officer of the Commissariat at Constantinople, and you will be duly advised of the shipment thereof.

I beg to add, that it is understood that supplies of lemon juice squeezed last year may be obtained to some extent at Messina, although it is not known that the quality thereof is equal to that of the juice issued in the navy; and I request you will be pleased to cause a timely requisition to be made if a further quantity should be required to be supplied from this country.

I have, &c.
(Signed) T. T. GRANT.

The Military Secretary,
&c. &c.

No. 53.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical
Department, 21st November, 1854.

SIR, I HAVE the honour to inform you that in consequence of your having expressed in one of your late letters a fear that scurvy was about appearing in the army in the East, I have succeeded in getting the Admiralty to give the necessary instructions for the shipment of 40,000 lbs. of lime juice, which will be immediately forwarded by steam vessels from this country, consigned to the Commissary General in the Crimea.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 54.

Major General Yorke to the Director General.

Horse Guards, 25th November, 1854.

SIR, WITH reference to my letter of the 20th instant, I am directed by the General Commanding in Chief

to transmit to you the accompanying copy of a communication which has been received from the Admiralty, stating that 20,016 lbs. of lemon juice, being a further portion of the 40,000 lbs. of that article to be sent to the East, for the use of the sick of the army in the Crimea, were shipped at Gosport on the "Esk" steam transport, which is expected to leave Portsmouth to-day.

I have, &c.
(Signed) C. YORKE.

The Director General,
&c. &c.

SIR, Admiralty, 24th November, 1854.

WITH reference to your letter of the 17th instant, I beg to acquaint you, for the information of the General Commanding in Chief, that 20,016 lbs. of lemon juice, being a further portion of the 40,000 lbs. of that article referred to in my letter of the 18th, were shipped at Gosport on the 23rd instant in the "Esk" steam transport, which is expected to leave Portsmouth to-day for the Black Sea.

I have, &c.
(Signed) T. GRANT.

Major General Yorke.

No. 55.

Dr. Smith to the Principal Medical Officer.

Army and Ordnance Medical
Department, 27th November, 1854.

SIR, ADVERTING to my letter of the 21st instant, I have now the honour to acquaint you that information has been received from the Admiralty that 10,080 lbs. lemon juice, being a portion of the supply therein referred to, was shipped at Deptford on the 21st instant in the "Holyrood" steamer, which vessel is expected to leave England on or about the 24th instant.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

P.S. Since writing the above, I have received intelligence that a further supply of 20,016 lbs. of lemon juice has been shipped on board the "Esk" steam transport, which was expected to leave Portsmouth on the 25th instant.

No. 56.

Dr. Smith to the Principal Medical Officer.

Army and Ordnance Medical
Department, 29th November 1854.

SIR, WITH reference to my letter of the 27th instant, informing you that a supply of lemon juice has been forwarded for the use of Lord Raglan's army, I have the honour to acquaint you that I have had much conversation on the subject of scurvy with Dr. Budd, who has devoted considerable attention to this disease, and written respecting it in Dr. Tweedie's Library of Medicine. He states that in order effectually to arrest the disease it is necessary for the patient to take one ounce and upwards of lemon juice daily.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 57.

Dr. Smith to the Military Secretary.

Army and Ordnance Medical
Department, 1st December 1854.

SIR,
As there is reason to believe that the army in the Crimea will suffer during the winter from scarcity of vegetables, and that in consequence scurvy is likely to prevail, I have to recommend, for the approval of the General Commanding-in-Chief, that a further supply of 40,000 gallons of lime juice, agreeably to the requisition herewith enclosed, may be forwarded to Balaklava with the least possible delay, in addition to the quantity proposed to be supplied by the Admiralty, and referred to in your letter of the 20th ultimo, enclosing a communication from that department, and dated the 8th November.

I have, &c.

(Signed) A. SMITH,
Director General.

The Military Secretary,
&c. &c.

REQUISITION for a supply of lime juice for the use of the army in the East.

Lime juice, 40,000 gallons. 30th November 1854.
(Signed) A. SMITH.

To be consigned and addressed to the Senior Commissary of the Forces.

No. 58.

D. Menzies, Esq. to Dr. Smith.

General Hospital, Scutari,
5th December 1854.

SIR,
I HAVE the honour to acknowledge receipt of your letter of the 15th ultimo, in which you refer to a communication that passed between Lord Stratford de Redcliffe and myself on the subject of what might be required in the British Hospitals at Scutari, and in which you express some concern relative to the articles that I particularly specified, of hospital bedding and stoves for warming the buildings. I distinctly stated in that letter to Lord Stratford de Redcliffe, that "the sick and wounded in this hospital have received every care and attention which their situation so imperatively demanded;" and I beg to report to you, that whether as regards supplies of medicines, medical comforts, bedding, stoves, or any other articles which could prove conducive to their comforts and necessities, there had been no want, and moreover, that throughout the whole of the trying period during which I have been at the head of the Medical Staff at Scutari, these subjects have had my earnest and watchful solicitude.

I feel sorry that you should have entertained the slightest misgiving as regarded the subject, but I trust that the explanation which I shall proceed to give will satisfy you that the confidence which you have been pleased to put in me has not been misplaced.

Some time before the cold weather set in I applied to the Engineer department at this station for some additional stoves to be erected in the wards of this building and in the barracks, not that they were then necessary, but because the foresight which my position here calls upon me to exercise led to the presumption that before long they might be required. My inquiries resulted in the information that the Turkish Government themselves preferred erecting the stoves in question, as they were apprehensive that our workmen, being unacquainted with the nature of their buildings, might fail to do the work with safety, this will explain to you my reason for alluding to the subject in my communication with his Excellency the Ambassador, through whom all communications with the Turkish authorities must necessarily pass.

With regard to the bedding, I may state that when our hospitals were visited by the Turkish authorities they expressed a wish to supply us with any articles that we might require. At this time our wounded were placed chiefly on our own boards and trestles; but as our Varna stores had not arrived, and as it was impossible to say at what moment we might have a thousand additional wounded men on our hands, I thought it prudent at least to accept of their offer, and which led consequently to my again applying for a supply to the ambassador. Having made application to Mr. Wreford, the Chief Purveyor, for a return of the bedding then in store here and elsewhere in Turkey, I beg to enclose his reply.

Having made the foregoing explanation, I hope you will clearly understand that it was not an absolute want of those articles that made me ask for them, but perhaps an excessive degree of anxiety regarding the charge which I had, and which led me to determine, whatever might occur, that did I err, it should at least be on the safe side.

I have, &c.

(Signed) DUNCAN MENZIES,
Deputy Inspector General, &c.

I beg leave to send you the correspondence which has taken place between myself and Mr. Wreford on the subject of stoves.
Dr. Andrew Smith,
&c. &c.

D. Menzies, Esq. to M. Wreford, Esq.

Principal Medical Officer's Office,
Scutari, 3rd December 1854.

SIR,
As it is now a month since a Board assembled for the purpose of suggesting means for warming the hospitals at Scutari, I have to request that you will have the goodness to acquaint me what progress is made in the placing of stoves in the wards; and also, as far as you know, when the number required will be put up, and any reasons for the delay which has already taken place; as the weather is becoming cold it is necessary for me to have some definite information on the subject. As you were President of the Board I look to you for as much assistance in the matter as possible.

I have, &c.

(Signed) D. MENZIES,
Deputy Inspector General.

M. Wreford, Esq.
Chief Purveyor.

M. Wreford, Esq. to D. Menzies, Esq.

Barrack Hospital,
4th December 1854.

SIR,
HAVING referred your letter of yesterday relative to the progress making in the erection of the stoves for warming the hospitals to the Commanding Royal Engineer, I beg to enclose herewith Lieutenant Gordon's reply for your information.

I have, &c.

(Signed) M. WREFORD,
Purveyor in Chief.

D. Menzies, Esq.
Deputy Inspector General, &c.

Royal Engineers' Office,
Scutari Barracks, 4th December 1854.

SIR,
I BEG to inform you, relative to the Inspector General of Hospitals' letter respecting the progress made in placing stoves in the wards of the hospitals, that the greater part of the wards in the Barrack Hospital are at the present moment provided with stoves, and that the number demanded for the General Hospital on the 16th ultimo have this day been taken over to that building, to be erected in the quarters

mentioned in the requisition. I am in hopes that the whole number of stoves required for the hospital will be erected in about a fortnight from this date; but to speak with any certainty about even the probable time of completion of a work for the execution of which I am dependent on Turks, is out of the question.

I have, &c.
(Signed) E. C. GORDON,
Lieutenant, Royal Engineers.

M. Wreford, Esq.
Purveyor in Chief.

M. Wreford, Esq. to D. Menzies, Esq.

Scutari,
5th December 1854.
SIR, I HAVE the honour to acknowledge the receipt of your letter of the 3rd instant, stating that the Director General desires to be made acquainted with the circumstances under which it was found necessary to apply to the Turkish Government, through the British ambassador, for the loan of 200 sets of bedding.

In reply to which, I beg to call to your attention that at the time the request was made sick and wounded men were arriving from the Crimea daily in considerable numbers, and although the stores then in our possession here were sufficient to meet the immediate demands, yet as Dr. Hall had written to you requesting accommodation to be prepared forthwith for the reception of at least one thousand more than those then dispatching from Balaklava, who might shortly be expected to follow, and as our expected stores from Varna had not arrived, it was deemed important to avail ourselves of the offer of the Turkish Government to assist us in emergency, and hence the application which was in due course complied with.

The supply was of great assistance in preparing us for the expected event notified by the Inspector General of Hospitals.

The return of the distribution of the Purveyor's Stores which have been sent out from England for the use of this army I am not yet in possession of sufficient data to furnish. Application, however, has been made to the Purveying Officers in charge at distant stations, as well as this, to furnish me, with as little delay as possible, with returns of all stores that have come into their charge, showing the sources from whence received, and the disposal.

When I get these returns, which I hope shortly to receive, I shall endeavour to give the Director General all the information he seeks upon this important subject, which I beg to add has already received much of my attention.

I have, &c.
(Signed) M. WREFORD,
Purveyor in Chief.

D. Menzies, Esq.
Deputy Inspector General, &c.

No. 59.

Dr. Smith to the Principal Medical Officer.

Army and Ordnance Medical
Department, 6th December, 1854.
SIR, WITH reference to my letter of the 27th ultimo, I have the honour to inform you that an additional supply of lime juice amounting to 40,000 gallons will shortly be sent out to the Crimea, and which will, I trust, be a sufficient quantity to enable you effectually to guard against the outbreak of scurvy among the troops.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 60.

Dr. Hall to Dr. A. Smith.

Camp before Sebastopol,
6th December, 1854.

SIR, I HAVE the honour to enclose a weekly state in duplicate to the 2d inst., by which you will notice there is a considerable increase of sickness confined chiefly to the recruits and new regiments. The duty is very severe, twelve hours in and twelve hours out of the trenches. The weather for the last three weeks has been wet, cold, and tempestuous; the men are indifferently clad, not well fed, and they have had but scant means of cooking. Within the last three days an order has been given to issue compressed fuel and lights to the troops; and a supply of blankets, and warm under clothing has arrived and is in course of distribution; but the road to Balaklava is almost impassable at present, and everything has to be brought up on packhorses, and there is only a limited number of them, so that getting up supplies is a work of time and labour. I think cholera has decreased within the last few days, but the deaths, I regret to say, continue numerous.

I have, &c.
(Signed) JOHN HALL,
Inspector General.

Dr. A. Smith, Director General,
&c. &c.

No. 61.

Major General C. Yorke to the Director General of the Medical Department.

Horse Guards,
11th December, 1854.

SIR, WITH reference to your letter of the 1st instant, enclosing a requisition for an additional supply of 40,000 lbs. of lemon juice for the use of the army in the East, I am directed by the General Commanding in Chief to transmit to you the enclosed copy of a letter from the Admiralty, stating that no lemon juice can be spared by the Naval Department at present, and to inform you that a supply might be obtained from Messina by the commissariat; a communication has accordingly been made to the Treasury on the subject.

I have, &c.
(Signed) C. YORKE.

The Director General,
&c. &c.

W. Leyborne to the Military Secretary.

Admiralty,
8th December 1854.

SIR, WITH reference to your letter of the 2d instant enclosing a copy of a letter from the Director General in which it is stated that a further quantity of 40,000 lbs. of lemon juice is required for the use of the army in the East, I beg to acquaint you, for the information of the General Commanding in Chief, that no lemon juice can be spared from this country at present by the Naval Department, the stores being nearly exhausted by the supply of 40,000 lbs. called for by your letter of the 19th ultimo; but I would suggest that a supply to some extent could probably be obtained from Messina by the commissariat, should his Lordship think it desirable to apply to the Treasury for that purpose.

I have, &c.
(Signed) W. LEYBORNE.

The Military Secretary,
&c. &c.

No. 62.

Extract from a Letter from Inspector General of Hospitals, Dr. Hall, dated "Camp before Sebastopol, 15th December 1854."

"ON a representation of mine, two steamers have been told off, to run between Scutari and Balaklava, to convey sick and wounded men. The two steamers named are both small, and will not carry more than 150 each, which will scarcely be sufficient to keep the fearfully increasing sick list of the army within bounds; and I must candidly admit I view the progress of winter, in the men's present overworked and unprotected condition, with great alarm. The men are squalid, dirty, half clad, and covered with vermin; they are irregularly fed, and frequently have no fuel to cook the scanty ration they obtain, which is very often served out to them just as they are on the point of marching off to the trenches, where they have no means whatever of cooking. The thin bell tents they have are a poor protection against the wet tempestuous weather we have already had; and what will they be when the winter sets in in earnest, which we may expect next month? The duty, too, is both severe and constant; and now that the commissariat transport has failed, though a preference was given to their mules over the sick soldiers that I wanted to obtain shelter for, in a village called Karani, about a mile and a quarter to the rear of where the cavalry lines formerly were, they have to fetch their own rations from Balaklava, a distance of at least six miles, I should say, from the right of our position.

"Nearly a third of the army is sick, either present or absent; and, though this naturally exceeds all ordinary calculations for supplies, yet, with all or even greater disadvantages in the way of transport than any other, the medical is the only department that is held up to public odium.

"I am quite aware the poor sick or wounded soldier suffers more than any one could wish, and more than he ought to suffer, if we had a regularly-organized ambulance corps, like that of the French; but we seem all to be waiters on Providence, and what the result will be, no one yet can tell; but if something be not speedily done to improve the condition of the men, there will be a very small army indeed left in the spring, to contend with the mighty host that is gathering in our rear.

"Cholera is raging in all the newly-arrived regiments, and many of the puny youthful recruits are so broken down by duty and the hardships of their position that they have not sufficient energy left to cook their rations, and they die, when attacked with any disease, from sheer exhaustion."

No. 63.

Major General C. Yorke to the Director General, Medical Department.

Horse Guards,

SIR, 16th December 1854.

REFERRING to your letters of the 1st and 5th inst., I am directed by the General Commanding in Chief to transmit to you the inclosed copy of a communication from the Treasury, stating the measures which have been taken for procuring a supply of lime or lemon juice, to the extent, if possible, of 40,000 gallons, at Messina, for the use of the troops in the Crimea, and for shipping the same to the consignment of Commissary General Filder, with instructions to the master of the vessel conveying it to call for the orders of the senior commissariat officer at Constantinople.

I have, &c.,
(Signed) C. YORKE.

The Director General,
&c. &c.

Sir E. C. Trevelyan to Major-General Yorke.

Treasury Chambers,
14th December 1854.

SIR, I AM commanded by the Lords Commissioners of Her Majesty's Treasury to acquaint you, for the information of the General Commanding in Chief, with reference to your letter dated 11th inst., that the commissariat officer in charge at Malta has been desired to take the best means for purchasing at Messina a quantity of lime or lemon juice, to the extent, if possible, of 40,000 gallons, for the use of the army in the Crimea, and for shipping it to the consignment of Commissary General Filder, with instructions to the master of the vessel carrying it to call for the orders of the senior commissariat officer at Constantinople.

I am, &c.,
(Signed) E. C. TREVELYAN.

Major-General Yorke,
&c. &c.

No. 64.

Dr. Hall to Dr. Smith.

Camp before Sebastopol,
17th December 1854.

SIR, IN reply to your communication of the 15th November, wishing to know whether I consider the ale and porter sent out from time to time has been advantageous or not to the health of the troops, and if the practice should be continued;

I have the honour to state that in my opinion no good whatever was gained by its being sent out to Bulgaria in the summer; on the contrary, I think it had a tendency to derange the bowels. On service in the field it is quite impossible to transport so bulky a supply, and here, where the men are compelled to fetch their own rations from Balaklava, a distance of between five and six miles, it would be quite unobtainable, if there were ever so large a quantity of it in store there, nor would the men, during this cold, wet, tempestuous weather, purchase it or drink it if they could obtain spirits.

I think malt liquor might be used with advantage in many cases in the General Hospital at Scutari, and I think it would be advisable to ship a quantity of bitter ale and porter to that station for the use of the sick.

I have, &c.
(Signed) JOHN HALL,
Inspector General of Hospitals.

Dr. A. Smith,
&c. &c.

No. 65.

Dr. A. Smith to Colonel Mundy.

Army and Ordnance Medical
Department, 19th December 1854.

SIR, ADVERTING to your letters of the 4th and 6th inst., respecting a supply of meat biscuits for consumption in the army in the East, I have now the honour to forward, for the information of the Duke of Newcastle, the enclosed report thereon. The articles forwarded to me, viz., a portion of the biscuit in use in the Russian army, and some powder employed by Mr. Borden to form biscuits, were as soon as received placed in the hands of Mr. Rogers, an able analytical chemist, and his statement with reference to them will, I trust, prove satisfactory to His Grace. The time which has been required to obtain these results was unavoidable, owing to certain obstacles having arisen in the course of the investigation which could not be quickly overcome.

A third article, it will be seen, has been subjected to experiment by Mr. Rogers, namely, a kind of biscuit which I received from a gentleman residing in Edinburgh, with the information that it had been advantageously used on various occasions in India.

The report of Mr. Rogers speaks for itself; and as I have reason to place the utmost reliance upon his accuracy, I beg to state that a considerable quantity of biscuit manufactured of the composition prepared by Mr. Borden should be obtained and forwarded to the army, to be tried on occasions when a full supply of animal food of a proper quality is not to be had. The commissariat and medical authorities should be required to report on the qualities of the biscuit, and decide if it would be advisable to forward periodical supplies. I feel convinced that Mr. Rogers is right in believing that one pound of the biscuit will be required to afford the nourishment necessary to maintain a man in the possession of his full bodily strength.

On one point, however, I must confess that I have some doubts, or, in other words, I question whether the biscuit can be preserved for any great length of time without deterioration, particularly if it be exposed to humidity. Nothing short of actual experiment should be made.

As it is necessary that the nourishing properties of the biscuits should be fairly tested, I beg to add that the experimental supply should be prepared under the direct supervision of Mr. Rogers, who will willingly undertake to see that the articles to be employed in their manufacture are of good quality, and that the biscuits are properly baked.

I have, &c.,
(Signed) A. SMITH,

Colonel Mundy,
&c. &c.

Director General.

No. 66.

Dr. Smith to Colonel Mundy.

Army and Ordnance Medical
Department, 19th December 1854.

SIR,
As I have great reason to fear that scurvy will continue to appear in the army during the winter months, unless a full supply of vegetables be issued to the troops, I have the honour to recommend that every possible effort should be made to ensure their being put in possession of such a supply as will enable a full ration of vegetables to be served out to each man at least four times a week.

Some time ago specimens of five different kinds of preserved vegetables were submitted for my inspection, and I was so satisfied with their qualities that I had them examined and reported on by a board of medical officers; their report is herewith forwarded. The articles in question are enumerated in the enclosed document, and I consider that all of them, with the exception of the potatoes, are superior to any of the kind I have seen prepared by other persons.

It will be observed that the vegetables can be furnished in very large quantities; indeed, sufficient supplies can be prepared to permit of every soldier being provided with a daily ration should it be found necessary. Such a measure, however, I do not think it requisite to recommend in the first instance, although I believe it is not improbable that I shall have to do so before the termination of the winter; for the information, however, which will enable us to judge on this point, we must look to the authorities on the spot.

Onions, it will be observed, are not included amongst the articles enumerated, but as they are vegetables most essential and most beneficial, I beg to advise that a large supply should be provided in order that the means may exist for distributing them in liberal quantities.

With a supply of vegetables such as I have suggested, and with a free use of lemon juice, which will be practicable if the quantity I have demanded be furnished, I entertain great hopes that one of the most fatal diseases to which armies are subject will be prevented, or if not entirely prevented, only ap-

pear in a form that will admit of its being readily overcome.

I have, &c.
(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

PROCEEDINGS of a Board of Medical Officers assembled by order of the Director General, to examine and report on the quality, and adaptability for use in the army, of vegetables dried by the process of Messrs. Morel Fatio et cie. de Paris, who have submitted samples.

The Board having had the specimens marked cabbage, turnips, potato, carrot, and julliene, cooked agreeably to directions, found that in this process the samples regained the form and appearance of the fresh vegetable, as well as the taste and flavour, to perfection.

The Board are therefore of opinion that the dried vegetables of Fatio et cie. are well adapted for use in the army, and as an article of diet (full or half) in hospitals, when and where fresh vegetables of good quality cannot be obtained.

(Signed) J. MUNRO, M.D.
Surgeon Major
Coldstream Guards.

H. PILLEAU,
Staff Surgeon.

F. REID, M.D.
Second Class
Staff Surgeon.

Army and Ordnance
Medical Department,
December 6, 1854.

No. 67.

Dr. Smith to the Military Under Secretary.

Army and Ordnance Medical
Department, 21st December 1854.

SIR,
HAVING heard from many quarters that there is a great lack of the means of securing personal cleanliness in the army serving in the Crimea, and that the difficulty of maintaining a better state of things mainly arises from the impossibility of obtaining soap;

I beg to submit, therefore, that measures should be immediately adopted whereby a facility of obtaining that important article will be afforded to the army; and should the Commissariat department not have already taken steps to send it out in large quantities, I am of opinion that such should be resorted to with the utmost dispatch.

I have, &c.
(Signed) A. SMITH,
Director General.

The Military Under Secretary,
&c. &c.

No. 68.

Major General C. Yorke to the Director General of the Medical Department.

Horse Guards,
22d December 1854.

SIR,
WITH reference to your letter of the 17th ult., and mine in reply, I am directed by the General Commanding in Chief to acquaint you that a letter has been received from the Admiralty, stating that 9,900 lbs. of lemon juice have been shipped at Deptford in the "Sydney Hall" steam transport, and will be dispatched forthwith to the Crimea. This shipment is in completion of the 40,000 lbs. referred to

in the letter from the Admiralty, a copy of which I transmitted to you on the 20th ult.

I have, &c.
(Signed) C. YORKE.

The Director General,
&c. &c.

No. 69.

Dr. Smith to the Principal Medical Officer.

Army and Ordnance Medical
Department, 23d December 1854.

SIR, I HAVE the honour to request you will inform me what steps have been taken to provide Regimental Hospitals for use in the Crimea during the winter.

I have no doubt if wooden huts be constructed of thick deal it will be possible to so line them inside as to ensure, with the aid of a proper stove and a sufficient supply of bedding, the heat necessary to the comfort and benefit of the sick.

The amount of bed clothes for each man in hospital will be considerable, as he will have, first, the two blankets which are to be issued to each soldier, then the blankets, &c. which accompany the hospital canteens A. and B., and, lastly, each man will be enabled to have a proportion of the hospital bedding out of the supply (sufficient for 10,000 men) which has been forwarded as hospital stores.

I am very anxious to have immediate information on these points, and I strongly recommend you, if you have not already done so, and more especially if you have not been consulted on the subject of hospitals, to volunteer an opinion to Lord Raglan, and state to him what you consider necessary.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

P.S.—I hope you will take steps to have trestles provided for the use of the men sleeping in regimental hospitals during the winter.

No. 70.

Dr. Smith to the Principal Medical Officer.

Army and Ordnance Medical
Department, 26th December 1854.

SIR, I HAVE read with deep concern the lamentable account of the condition of the sick in the fourth division, furnished by Deputy Inspector General Humfrey; and I sincerely hope it will be possible to effect some improvement in respect thereof. I am of opinion you should at once secure a supply of boards and trestles,—even should you take them from the General Hospital at Scutari,—for it would be easy for the authorities of that establishment to replace any number of these articles, as they possess facilities for having them made which are not available in the Crimea; and further, they are empowered to incur any expense which may be found necessary.

I expect that in a few days, nearly 4,000 iron bedsteads will leave this country for Scutari; these, in addition to the numbers already despatched of that and various other kinds, will place at your disposal 10,000 beds in all.

Should you not have previously taken such steps, I trust you will immediately on the arrival of this communication submit the necessity for carrying out the measure herein proposed, and you will be good enough to inform me what has been accomplished in the matter; whatever may be the cost and exertion

required, we must not permit the sick soldiers to remain on the wet ground.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 71.

Dr. Smith to the Principal Medical Officer.

Army and Ordnance Medical
Department, 27th December 1854.

SIR, ADVERTING to my letters of the 21st and 27th ult., relative to the supply of lemon juice for the use of the army in the East, I have now the honour to inform you that 9,900 lbs. have been shipped at Deptford in the "Sydney Hall" steam transport, and will be despatched forthwith to the Crimea.

This shipment is in completion of the 40,000 lbs. referred to in my letter of the 21st November.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 72.

Dr. Smith to the Secretary, Board of Ordnance.

Army and Ordnance Medical
Department, 27th December 1854.

SIR, WITH reference to my letter of 2d inst., enclosing a requisition for 40,000 cholera belts, I am desirous that all regiments and detachments now about to proceed to the East shall be supplied with them prior to their embarkation.

With this view, and as there are regiments and drafts about to embark in a few days at Cork, I beg that 2,000 of the 40,000 required shall be sent there immediately, to be issued as opportunity offers.

I have written to the Principal Medical Officer at Cork, informing him that number will be forwarded either to the Ordnance Storekeeper or the Barrack Master, to whom he must apply whenever they are required to be supplied to troops.

I shall be glad to know when they leave; they ought to be in Cork by Saturday next, on which day several detachments embark.

I have, &c.
(Signed) A. SMITH,
Director General.

Secretary, Board of Ordnance,
&c. &c.

No. 73.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical
Department, 2d January 1855.

SIR, I HAVE the honour to acquaint you that I have received a communication from the War Department in reply to a recommendation recently submitted by me on the subject, to the effect that thirty tons of soap have been shipped for the use of the troops in the Crimea, of which supply about ten tons were forwarded towards the close of November last.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 74.

Dr. Smith to the Principal Medical Officer.

SIR,
Army and Ordnance Medical
Department, 2d January 1855.

I HAVE the honour to forward the enclosed copy of a communication received from Mr. J. Gregory, recommending a particular prescription for the prevention and cure of chilblains, and shall feel obliged by your reporting to me, after a sufficient trial of it has been instituted, whether it is found to be an efficacious remedy.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 75.

Dr. Smith to the Military Secretary.

SIR,
Army and Ordnance Medical
Department, 6th January 1855.

THE Principal Medical Officer at Chatham having reported that the invalids who arrived at that station yesterday from Turkey were most of them in a very filthy state—many without shirts, and the shirts of the rest not in a fit condition to be used; I am of opinion that the articles demanded in the enclosed list should be immediately furnished and sent to the purveyor at Fort Pitt, in order that they may be used by patients under the circumstances referred to until their own can be washed.

I have, &c.
(Signed) A. SMITH,
Director General.

The Military Secretary,
&c. &c.

List of articles required for the use of the sick now at Chatham, or who may arrive there from Turkey:—
2,000 cotton shirts.
2,000 cotton socks.

To be sent to the Purveyor at Chatham without a moment's delay.

I have, &c.
(Signed) A. SMITH,
Director General.
January 6.

No. 76.

Dr. Smith to the Military Secretary.

SIR,
Army and Ordnance Medical
Department, 6th January 1855.

I HAVE the honour to state, for the information of the General Commanding in Chief, that I consider it my duty to submit a copy of a letter I have received from Staff Surgeon 2d Class Baxter, who has recently arrived from Turkey, in medical charge of invalids, per transport "Libertas," in order that it may be transmitted to the proper authorities, with a view to the vessel being put into a proper state before she be again employed to convey soldiers, more particularly sick soldiers.

I have, &c.
(Signed) A. SMITH,
Director General.

The Military Secretary,
&c. &c.

SIR,
General Hospital, Fort Pitt,
Chatham, 2d January 1855.

REFERRING to the transport "Libertas," No. 95, which was employed conveying invalid officers, soldiers, and seamen, from Constantinople to England, and arrived at Chatham on the 30th ultimo;

I have the honour to acquaint you of the state of that ship, and her unfitness for the comfort and accommodation of troops, more particularly "invalids."

We sailed from the Bosphorus on the 17th October, at which period, and until early in November the weather continued fine and dry. Shortly after we left Malta we experienced adverse winds and severe gales, generally lasting some days; on those occasions the ship laboured very much, causing the seams in the upper deck and sides to open, admitting water, to the great discomfort of the men, their clothes and bedding being continually wet. That portion of the ship allotted for the treatment of sick was frequently so uncomfortable in this way as to oblige the removal of some patients to hammocks swung midships—between the fore and main hatchways; latterly, the ship was so wet and uncomfortable throughout, that they were seldom if ever either warm or dry.

I have, &c.
(Signed) F. HASTINGS BAXTER,
Staff Surgeon 2nd Class, in
Medical Charge.

The Director General,
&c. &c. &c.

No. 77.

Dr. Smith to the Principal Medical Officer.

SIR,
Army and Ordnance Medical
Department, 6th January 1855.

IN the event of any preserved vegetables being sent for the use of the hospitals at Scutari, I have the honour to forward five copies of instructions for their cooking, in order that you may be acquainted with the proper manner of preparing them as an article of diet.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 78.

Dr. Smith to Second Class Staff Surgeon M. F. Manifold.

SIR,
Army and Ordnance Medical
Department, 8th January 1855.

IN your report dated the 2d instant, of the arrival of invalids from Turkey per "Himalaya," occurs the following passage:—"The arrangements made on board for the reception of the sick and wounded were not so good as might have been desired, in consequence of the ship being sent to sea in great haste."

Further, the principal medical officer at Portsmouth reports that of the number landed from the "Himalaya," twenty wounded men were not in a state to enable them to undertake the journey to Chatham, on account of their wounds being open, and in an ill-conditioned and sloughing state.

With reference to these points I have to request you will inform me to what you are inclined to attribute this condition of the wounds in question; whether the imperfect arrangements on board the transport had any share in their production; whether there were any signs of a scorbutic tendency amongst the sick and wounded during the passage; and whether the defects of arrangement to which you refer, and which I beg you will specify, were remedied during the voyage or during the detention at Malta.

I am desirous to receive from you a report on the progress of the wounded and sick during the voyage, and an unreserved statement in regard to any deficiency of supplies or defects of arrangements which tended directly or indirectly to retard their recovery.

I have, &c.
(Signed) A. SMITH,
Second Class Staff Surgeon
M. F. Manifold, &c. &c.
Director General.

No. 79.

Dr. Smith to Colonel Mundy.

Army and Ordnance Medical
Department, 10th January 1855.

SIR, THE reports that reach me daily testify to the great necessity that exists for ensuring better accommodation during the voyage for the sick and wounded, whom it is found necessary to transfer from Balaklava to Scutari.

Although I am prepared to believe that great efforts are made by the medical department to secure every possible comfort and convenience to the sufferers while on board ship, I still equally believe that not even a very moderate amount of either has been attained, nor will be attainable, until vessels be fitted up in every respects as hospital ships, and appropriated for the especial purpose of conveying sick and wounded.

The necessity of such a measure as that now submitted I had the honour to bring to the notice of the General Commanding in Chief on the 11th of May last, and I now feel it my imperative duty to state, for the information of His Grace the Duke of Newcastle, that what appeared to me necessary then I believe to be even more necessary now.

The naval authorities, from the knowledge they must have acquired of the best method of fitting ships with everything that is needed for the proper accommodation of sick, would in my opinion be the best qualified to fit the vessels with all that would be absolutely required for the interests of the army in the East; and if His Grace thinks it desirable to apply to them, I hope it will be considered advisable to urge that whatever is needed may be provided with all possible despatch.

I have, &c.
(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

No. 80.

Dr. Smith to the Deputy Secretary-at-War.

Army and Ordnance Medical
Department, 11th January 1855.

SIR, As cholera, and diseases occasioned by exposure to cold when the body is not sufficiently clothed, are now very prevalent in the Crimea, I beg to recommend to the consideration of the Secretary-at-War, that every soldier who leaves this country during the cold season in the prospect of joining the army in the above command should, either before he embarks, or within twenty-four hours after embarkation, be furnished with the proportion of warm clothing intended to be issued generally to the troops on that service; and that he should use it during the voyage and on landing, in order that he may have the best possible chance of preserving his health when he enters upon his arduous duties in front of Sebastopol.

I have, &c.
(Signed) A. SMITH,
Director General.

The Deputy Secretary-at-War,
&c. &c.

No. 81.

Dr. Hall to Dr. Smith.

Before Sebastopol,
12th January 1855.

SIR, I HAVE the honour to enclose the weekly state of sick to the 6th inst., and regret to say that the sanitary condition of the army continues very unsatisfactory. Fevers and bowel complaints are more frequent than ever; and since the intense cold weather set in, a number of men have had their feet frost-bitten, and this, from the duty, exposure, and reduced

stamina of the men, will, I fear, be a thing of frequent occurrence. Blankets and warm under clothing have been distributed, but these do not appear sufficient to protect the men from the weather; besides, the shoes that have been sent out are of too small a size, and of indifferent quality, which adds to their misery.

Symptoms of scurvy have made their appearance in some cases, but as yet the disease has not made much progress amongst the men; and I hope, by the arrival of the expected supply of lime juice, its further spread will be arrested. An effort is being made to get the wooden huts which have arrived from England conveyed to camp, but from the state of the roads, and defective condition of the transport of the army, is a work of slow progress and great labour. Some regiments are undertaking it by sending fatigue parties of men down to Balaklava for them. Other commanding officers of regiments say it is the duty of Governments to provide transport for such things, and do nothing. In the meantime their men are deprived of the shelter they are intended and ought to have, the sick in particular. We are getting some huts erected at the General Hospital at Balaklava to increase our accommodation there, and the Highland Brigade have all their sick under the shelter of houses in a village called Kadekoi, about a mile and a half in advance of Balaklava. We have had the chapel converted into an hospital, and in it part of the sick of the 79th and 93rd are accommodated, the remainder in some small houses in the neighbourhood, and the 42nd have got possession of a house of somewhat better pretensions for their sick.

Want of transport and the almost impassable state of the roads, have thwarted all our endeavours to do what we wished for the sick in camp.

Had the huts and stores been here at the beginning of October in place of January, I am convinced things would have been better, but there is no use reverting to that; our duty is to do the best we can for the sick with the means at our disposal.

I have, &c.
(Signed) J. HALL,
Inspector General of Hospitals.

Dr. Smith,
&c. &c.

No. 82.

Extract of a Letter from the Army Medical Department to Dr. Hall, Principal Medical Officer, dated "Crimea, 12th January 1855."

"I TRUST you will henceforward, if you have not already done so, make known in writing to the Commander-in-Chief whatever you consider is likely to deteriorate the health of the troops, or retard the recovery of those who may unfortunately have lost it, and that you will suggest whatever steps you consider calculated to prevent the one or the other, as by the adoption of such a course, and by that only, you will discharge your responsible and onerous duty."

(Signed) A. SMITH,
Director General.

No. 83.

Dr. Smith to the Deputy Secretary-at-War.

Army and Ordnance Medical
Department, 13th January, 1855.

SIR, As I have reason to believe that it will eventually be necessary to provide, for the accommodation of the sick of the regiments stationed in the Crimea, a better description of hospitals than mere wooden huts, I beg to submit that I may be authorized to have prepared and despatched a regimental hospital of corrugated iron, sufficient to accommodate twenty-six sick, and furnish a surgery in which to preserve the medicines, &c. required for use in the buildings. This hospital, a plan and description of which I have the honour to enclose, if forwarded immediately, will

enable us to judge what further steps, if any, should be taken.

In the event of the measure which I now propose, and which I regard as an experimental one, being adopted, it will be necessary that a sapper should be sent to Mr. Walker, the manufacturer of the corrugated iron buildings, to receive instruction in the method of erecting the hospital, and also that he should accompany it to the Crimea, where he may be otherwise employed as soon as he has discharged the special duty required of him.

The cost of the hospital, including twenty-six beds, lining, flooring, &c., will be 260*l*.

It is most important that no delay should occur if the hospital is to be provided, and I therefore entreat an immediate reply to this communication.

As the enclosed plan and letter from the manufacturer are original documents, I beg they may be returned to me.

I have, &c.
(Signed) A. SMITH,
Director General.

The Deputy Secretary-at-War,
&c. &c.

No. 84.

Dr. Smith to H. Roberts, Esq.

SIR,
Army and Ordnance Medical
Department, 16th January 1855.

I HAVE the honour to acknowledge the receipt of your letter of the 13th instant, and its enclosures, upon the subject of the purchase of further quantities of lemon juice for the use of the army in the Crimea.

In reply, I beg to state, for the information of His Grace the Duke of Newcastle, that it is highly necessary that no delay should take place, but that at least 20,000 gallons should be shipped within the next two months, and the remainder as soon afterwards as possible. The quantities should be sent on to the Crimea as soon as they are delivered, say 20,000 lbs. at a time.

I am not prepared to advise that oranges be sent out, as I fear the satisfactory distribution of such an article would under existing circumstances prove almost impracticable, I am more inclined to trust to the lime juice; and I think if it be understood that the latter is absolutely necessary to the safety of the troops, such efforts will be made as will obtain it in the quantities required.

I have, &c.
(Signed) A. SMITH,
Director General.

H. Roberts, Esq.
&c. &c.

No. 85.

Dr. Smith to Dr. Forrest.

SIR,
Army and Ordnance Medical
Department, 18th January 1855.

SOME of the medical officers who have returned to this country have mentioned to me that the sewerage in and about the hospitals at Scutari was very defective when the army first arrived at Constantinople, I shall therefore be glad to be informed if it has since been improved to the extent necessary to insure, so far as it is concerned, every chance of health to the inmates of the establishment.

If nothing appears to have been done, I request you will immediately represent the necessity of measures being at once adopted.

I have also to request you will inform me the distance of the burial ground from the hospital, and the usual depth of the graves, and whether each

corpse is buried separately, or a number buried together.

I shall also be glad to be informed what means exist of conveying the dead to the burial ground; and if what is necessary is not in possession, you must at once recommend that some light conveyances be constructed at Constantinople for the purpose, unless you are of opinion, should such be wanted, that they may be more speedily furnished from this country.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Forrest,
&c. &c.

No. 86.

Dr. Smith to the Principal Medical Officer.

SIR,
Army and Ordnance Medical
Department, 18th January 1855.

I HAVE the honour to request you will inform me how far the locality is from the camp where the bodies of the soldiers and animals who have died are interred, and whether they are buried to a sufficient depth, so as to prevent the escape above ground of the gases resulting from decomposition.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 87.

Dr. Hall to Dr. Smith.

SIR,
Before Sebastopol,
20th January 1855.

ADVERTING to your letter of the 28th of September last, with its enclosure, I have now the honour to transmit the opinion of a Medical Board assembled to report on the specimens of dried meat alluded to in your communication, and labelled "Côte-de-bœuf," which arrived here some little time after your letter, and its preservative qualities were well tested by having been allowed to remain in the box in which it came out on the damp ground of a tent during a very wet and tempestuous season.

I have, &c.
(Signed) JOHN HALL,
Inspector General
of Hospitals.

Dr. A. Smith,
&c. &c.

"WE, being a Medical Committee assembled by Dr. Hall, Inspector General of Hospitals, pursuant to instructions received from Dr. Smith, Director General of the Army and Ordnance Medical Department, to report on a specimen of dried meat sent out in November last, and proposed to be supplied for the use of the army in the field, certify, after having had the portion of patent dried meat labelled, "Côte de Bœuf, 14 Juillet 1854," prepared in the manner set forth in the instructions which accompanied it, that we have partaken of the same, and find it very palatable, but the muscular fibre rather dry. It is very portable, keeps well in all weathers, at least judging from the specimen under consideration, which has been lying in a damp tent for the last six weeks to test its powers of preservation, and would, in our opinion, be a great acquisition, under certain circumstances, to an army in the field, and we therefore recommend that a supply of it be sent out and kept in reserve in the commissariat stores.

"One great objection that strikes us to its general adoption in the army is the length of time it requires to be steeped in water before cooking, which is not

compatible with either the habits of British soldiers, or the economy of military life in the field."

(Signed) JOHN HALL,
Inspector General of Hospitals.
WILLIAM LINTON, M.D.,
Deputy Inspector General of Hospitals.
W. C. HUMFREY,
Deputy Inspector General of Hospitals.
T. ALEXANDER,
Staff Surgeon, 1st Class.

Camp before Sebastopol,
20th January 1853.

No. 88.

20th January 1855.

Memorandum in reference to the Invalids of the "Cambria," furnished by order of the Secretary-at-War.

1st. On Tuesday forenoon (I think) Colonel Clarke called on me, and stated that the "Cambria" had arrived at Liverpool with invalids, and that it was necessary to decide what was to be done with them; knowing as I did from reports that many of them were bad cases, I proposed that they should be sent to Chatham by sea, or at least that they should not be disembarked until the Staff Surgeon at Liverpool had boarded the vessel, and reported the condition of the men. On this understanding, as far as I recollect, Colonel Clarke left me.

In the course of the afternoon, General Freth called, and stated that an order had been sent before my recommendation was received, and that all the men were to be disembarked, the Major having engaged to provide hospital accommodation for the sick, and lodgings for those not requiring medical treatment.

2dly. On Tuesday I received a letter from the Staff Surgeon reporting that all the men had been disembarked before he knew anything of the matter; he further stated that "nine would be admitted into the 'Royal Infirmary,' when the remainder 187 now enjoying the hospitality of the Major will be sent by rail to Chatham for final disposal."

3dly. On the 18th, General Freth called and informed me of the arrangements which had been made for the transfer of the men not in hospital to Chatham. On receiving this information, I immediately wrote to the Principal Medical Officer at Fort Pitt, informing him that the first division would reach Chatham in the course of the afternoon of the 19th, and the last division on the 20th, and that he must be provided with all the means of conveyance likely to be necessary.

This is all I know of the case.

My reasons for holding the opinions I did, and for offering the advice which I tendered to Colonel Clarke, are—

1st. I believed that the greater part of the invalids would be men either suffering from wounds or their consequences, or from active or subdued diseases, or from debility, the consequence of one or other of these affections.

2dly. That men so circumstanced would not be in a fit state to be carried hundreds of miles in railroad carriages, especially during the present highly inclement season, when pulmonary and catarrhal affections are even rife amongst the inhabitants of this island.

3dly. I feared that the frequent transfer from vehicle to vehicle would expose those having open wounds, or old wounds or stumps, to injury, which might cause them lengthened suffering, if not cost some their lives.

4thly. That the cold to which they would be unavoidably exposed would likely originate disease in many who might previously to disembarkation be free from it, and aggravate it in others who were still suffering to a certain extent.

5thly. I calculated that the treatment they would receive would in all probability be productive of injury to infirm and delicate men, and might occasion diseases of the bowels, to which I had reason to expect many of them would be prone, considering that in all probability not a few had been suffering from such affections before they embarked for England.

6thly. I felt that should disease of the bowels become developed in a railway carriage, the most unpleasant and even serious consequence would result before the conclusion of the journey.

7thly. I felt that the inconvenience, and some dissatisfaction, which would be experienced if they were sent round by sea, though considerable, could not justify the other course, which appeared to my mind to be threatened with so many disadvantages.

I felt if they were sent by sea, the journey would only be of four days' or four and a half days' duration; that during that time the men would be lodged in comparative comfort, in a splendid roomy vessel to which they were accustomed; that they would be sheltered from the inclemency of the weather, and would never require to be moved until they reached the Dock Yard at Chatham. On the other hand, if by rail, the time they would have to travel would be a considerable number of hours of two successive days, a period much too long for men in delicate health to sit in an erect posture; that they would have the first day two removals, at least, if not four, into and out of vehicles, and on the second at least eight, each removal greatly holding out danger to many of them, if not to all. I could further not contemplate without dread the likelihood of many suffering from the cold to be expected at this season while they were in the carriages, as well as while they were being removed from carriage to carriage, more especially in their transfer from Euston Station to Chatham, I felt that if men were among the number who had been wounded in the lungs, or who had suffered from dysentery, the latter were almost certain to have an attack of pulmonary inflammation, which would likely carry them off, and the others would become the subject of relapses which might prove fatal owing to the untoward circumstances.

Whilst I was Principal Medical Officer at Fort Pitt, I had ample proofs of the (I may say) deadly consequences which on one or two occasions occurred merely from weakly men having been removed from Gravesend to Chatham in the middle of winter; hence with such knowledge I could not conscientiously act otherwise than I did on the present occasion, and I feel most confident that any medical man of experience will hold the opinion I did.

(Signed) A. SMITH,
Director General.

No. 89.

Adjutant General Wetherall to the Director General.

Horse Guards,
22d January 1855.

SIR, A DIFFERENCE of opinion having existed among medical men as to the beneficial effect to the wearers of a general and constant use of flannel, the General Commanding in Chief has desired me to request you to favour him with your opinion as to the expediency of issuing to soldiers flannel in lieu of cotton shirts. This question more especially relates to the troops serving in the Crimea, the climate of which country is very changeable to the extremes of wet, heat, and cold.

I have, &c.
(Signed) G. WETHERALL,
Adjutant-General.

To the Director General,
&c. &c.

No. 90.

Dr. A. Smith to Adjutant General Wetherall.

Army and Ordnance Medical
Department, 23d January 1855.

SIR,
In doing myself the honour to acknowledge the receipt of your communication of the 22d inst., I beg to submit, for the information of the General Commanding in Chief, that in my opinion every soldier serving in the Crimea should have cotton shirts, and also should possess in addition to these two flannel shirts.

During the cold season, and the months in which the temperature is subject to great and sudden vicissitudes, the use of both kinds will, I think, be necessary, and prove conducive to the maintenance of health, while during the hotter months, in which the variations are generally less considerable, the cotton shirts alone will answer better than the flannel alone.

I have, &c.
(Signed) A. SMITH,
Director General.

To Adjutant General Wetherall,
&c. &c.

Dr. A. Smith to Adjutant General Wetherall.

Army and Ordnance Medical
Department, 27th January 1855.

SIR,
In acknowledging the receipt of your second communication, dated 24th instant, and with reference to my letter of the 23d, on the subject of flannel and cotton shirts for the use of the army, I have now the honour to submit for the consideration of the General Commanding in Chief, that if both kinds of the articles in question cannot be allowed to the soldier cotton shirts are to be preferred.

I have, &c.
(Signed) A. SMITH,
Director General.

Adjutant General Wetherall,
&c. &c.

No. 91.

Dr. A. Smith to the Deputy Secretary-at-War.

Army and Ordnance Medical
Department, 24th January 1855.

SIR,
As it is again being stated by persons on whose veracity I think I may depend that coffee is still issued to the troops in an unground state, and on that account it is not so beneficial as it should be, I feel it my duty to suggest that some arrangement should be made to forward the article in a state which will admit of its being cooked without the delay necessary to grind, or what I am told is more usually done, mash it.

If coffee is really prepared as stated, its full flavour and its stimulating powers will not be ensured, and consequently the drink which will be swallowed will prove unpalatable and comparatively useless, if not injurious, whereas if properly prepared it will be most acceptable and beneficial to men circumstanced as those of the army in front of Sebastopol now are.

It is just possible my information is incorrect, in that case this communication will only have to be regarded as unnecessary; but if on the contrary it be correct, I hope it will lead to the transmission in future of coffee properly ground and secured in tin canisters, each containing a known quantity.

The constant use of coffee, however, even if properly prepared, will in time prove distasteful to many men; I would therefore suggest, with a view to the health and comfort of the troops, that a supply of tea should also be provided, and issued twice or oftener in each week, according as it may be desired.

I have, &c.
(Signed) A. SMITH,
Director General.

The Deputy Secretary-at-War,
&c. &c.

No. 92.

Dr. A. Smith to the Deputy Secretary-at-War.

Army and Ordnance Medical
Department, 27th January 1855.

SIR,
As a great portion of the sick and wounded which arrive from the Crimea at Scutari are comparatively without a supply of under clothing, and therefore have to be furnished with it from the hospital stores, a question arises—are they to be allowed, on their being discharged from hospital, to keep in their possession any articles which may have been issued to them, or are they to return them into store when they are found fit to be sent to the Convalescent Depot.

If an arrangement be made to the effect that the invalids in question are to be permitted to retain the clothes issued to them under the circumstances above stated, it will be such a drain upon the hospital stores, and will create such uncertainty as to what amount may be required, that I fear it will be productive of serious difficulties and inconveniences in the working of the hospital establishment.

Although I consider it my duty to give this opinion, I feel it also incumbent on me to submit that some means should be adopted to supply the men with under clothing before they are discharged from hospital.

I beg therefore to recommend that a special store should be formed at Scutari under the charge of the Quartermaster of the garrison, who should, upon the order of the proper local authorities, have at hand flannel drawers, woollen socks, neckcloths or comforters, and such other minor articles as may be considered necessary under the circumstances in which the men may be placed.

I have, &c.
(Signed) A. SMITH,
Director General.

The Deputy Secretary-at-War,
&c. &c.

No. 93.

Army and Ordnance Medical
Department, 31st January 1855.

SIR,
HAVING heard it remarked in this country that a building to be used as an hospital is being erected in the square of the General Hospital at Scutari for the accommodation of 1,000 sick and wounded men, I am anxious to be informed if I would be justified should I hear it again stated to give it a negative.

I hope I shall receive authority to do so, as I cannot see how a sufficient supply of pure air will reach the patients in it if it be surrounded on all sides by buildings filled with sick.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 94.

Dr. A. Smith to the Military Secretary.

Army and Ordnance Medical
Department, 2d February 1855.

SIR,
As I feel myself justified in inferring from an observation in a letter just received from the Crimea, dated 12th ultimo, that no lime juice for the use of the troops had yet reached Balaklava, and as the possibility of that being the case is giving me great uneasiness, inasmuch as the Principal Medical Officer states that some cases of scurvy have appeared in the army, I have the honour to request that I may be informed if any account has yet been received by the Admiralty of the arrival of the "Holyrood" steamer, which left this country on the 24th November last with 10,080 lbs. of lime juice, and the "Esk" steamer, which also left the following day with 20,016 lbs. of

it on board, and if these ships had arrived, whether the lime juice had been disembarked.

Even suppose that these quantities have arrived, they will supply nothing like what will be required in the army provided scurvy should generally prevail; I am therefore most desirous to know what steps have been taken with reference to the 40,000 gallons required in my requisition of 30th November last.

The necessity for the immediate delivery of that quantity in the Crimea is now very urgent, and I fear greatly that if it be not effected with the utmost despatch, we may soon have a disease raging which may carry off half of the whole force.

I have, &c.
(Signed) A. SMITH,
Director General.

The Military Secretary,
&c. &c.

No. 95.

Dr. A. Smith to the Secretary, Board of Ordnance.

SIR, Army and Ordnance Medical Department, 3d February 1855.

I HAVE the honour to acknowledge your letter dated the 31st ultimo, accompanied by a flannel cholera belt proposed to be supplied for the use of the army in the East, and communicating the request of the Board of Ordnance to be informed whether this pattern possesses any advantages over the one now furnished for the above service.

In reply I beg to state, for the information of the Honourable Board, that I am of opinion that neither the belt proposed by Messrs. Bell and Moody, nor the elastic woollen one which it appears is at present in course of supply by the Ordnance Department, are adapted to afford the advantages expected from cholera belts.

I have, &c.
(Signed) A. SMITH,
Director General.

The Secretary, Board of Ordnance,
&c. &c.

Mem.—The two pattern belts mentioned herein are returned.

No. 96.

Dr. A. Smith to the Under-Secretary of State.

SIR, Army and Ordnance Medical Department, 3d February 1855.

WITH reference to your letter of 30th ultimo, forwarded to me by order of His Grace the Duke of Newcastle upon the subject of cleansing the hospital at Scutari by means of prepared charcoal, I have to inform you that an abundant supply of it has already been forwarded for that purpose.

I have, &c.
(Signed) A. SMITH,
Director General.

The Under Secretary of State,
&c. &c.

No. 97.

Dr. A. Smith to the Principal Medical Officer.

SIR, Army and Ordnance Medical Department, 5th February 1855.

SEVERAL persons deserving of every credit have lately informed me that the remains of the dead are buried at Scutari in trenches not more than thirty yards distant from the hospital, and within view from the windows of the establishment.

Further, it has been said that corpses, when removed from the wards to the dead house, are carried in so

careless and exposed a manner as to produce a very depressing effect on the survivors in the ward, as well as on those who are able to move about.

If these allegations are unfounded or exaggerated, this letter will be in whole, or part, superfluous.

If, however, the statements in question are correct, I hope you will be able at once to effect arrangements which will put an end to such practices.

I trust it will not be difficult to find a burying-place at a much greater distance, and to which the dead may be conveyed in covered carts.

It is desirable further that plain coffins or shells should be in readiness, and at all times employed in removing corpses decently covered from the place of death to the dead house. A few stretchers, like those which were sent out in the "Army and Navy" will answer well for this purpose. These I think you will be able to have manufactured by Turkish workmen, as it would be objectionable to employ for the purpose referred to those which have been forwarded from this country for conveyance of the sick and wounded from the landing place to the hospitals.

Should it be but too true that the remains of the dead have been buried in numbers in trenches within thirty yards of the hospital, I fear that the exhalations which will arise during the ensuing warmer weather from such masses of decomposing animal matter will operate very prejudicially to the health of the sick in hospital. The fear of such evil consequences should lead you to reflect on the subject, and to devise and carry out speedily measures calculated to diminish the chance of such a misfortune. Adding to the depth of covering alternate strata of quick lime and earth will tend materially to obviate the evil consequences referred to.

I shall be glad to be informed what depth of soil now covers the bodies which have already been buried in the trenches, and to what extent the covering has been increased by quicklime and earth well beaten down.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 98.

Major General Yorke to the Director General of the Medical Department.

SIR, Horse Guards, 5th February 1855.

WITH reference to your letter of the 2nd instant, requesting to be informed if any report had been received of the arrival in the Crimea of the steamers having on board the lime juice sent out for the use of the army in the field, I am directed by the General Commanding in Chief to transmit to you the enclosed copy of a letter from the Admiralty, stating that by a report of the 19th ultimo, received from Capt. Christie, R.N., at Balaklava, it appears that the "Holyrood" steamer, in which 10,080 lbs. of lime juice were shipped, was then landing her cargo, and that it is presumed the 20,016 lbs. shipped in the "Esk" must have been landed before that date, but that no information has been received of the arrival of the "Sydney Hall," conveying the remainder of the lemon juice provided by the Admiralty.

In regard to your requisition for an additional 40,000 gallons on the 1st December last, I am directed by his Lordship to refer you to my letter of the 16th ultimo, communicating to you the arrangements made by the Treasury for procuring, if possible, the quantity required, at Messina, and for shipping the same to the consignment of Commissary-General Filder.

I have, &c.
(Signed) C. YORKE.
&c. &c.

T. F. Grant, Esq. to Major General Yorke.

Admiralty,
3d February 1855.
SIR,
In reply to your letter of this date, enclosing one of the 2nd instant from the Director General of the Army and Ordnance Medical Department, respecting the supplies of lemon juice sent to the East for army service, I have the honour to acquaint you, for the information of the General Commanding in Chief, that by a report of the 19th ultimo, received from Captain Christie, R.N., at Balaklava, it appears that the "Holyrood," in which vessel 10,080 lbs. of lemon juice were shipped 21st November, was then landing her cargo, having arrived on the 5th ultimo, and that the "Esk," which had taken 20,016 lbs. of juice from England, was to convey provisions for Turks at Eupatoria, so that it is presumed her cargo must have been landed at the date of Capt. Christie's report.

Of the arrival of the "Sydney Hall," in which was sent the remainder of the lemon juice ordered in your letter of the 17th November last, viz. 9,900 lbs., no information has been received; and I beg to observe, with reference to Dr. Smith's inquiry respecting the 40,000 gallons required by his requisition of 30th November last, that my letter of the 8th December informed you that this additional quantity could not be furnished by the Naval Department, and suggested that a supply to some extent could probably be obtained from Messina through the Commissariat, should his Lordship consider it desirable to apply to the Treasury for that purpose.

I have, &c.
(Signed) THOS. F. GRANT,
Major General Yorke,
&c. &c.

No. 99.

Dr. Smith to the Under Secretary for War.

Army and Ordnance Medical
Department, 5th February 1855.
SIR,
I HAVE the honour to forward, for the information of the Duke of Newcastle, the enclosed extract of a letter I have received from the Inspector-General of Hospitals with the army under date 12th January 1855.

On receipt of this communication I immediately addressed a letter to the Commander-in-Chief in reference to the supply of lime juice, a copy of which is herewith enclosed.

I have, &c.
(Signed) A. SMITH,
Director General.
The Under Secretary for War,
&c. &c.

Before Sebastopol,
12th January 1855.

"I HAVE the honour to enclose the weekly state of sick to the 6th instant, and regret to say that the sanitary condition of the army continues very unsatisfactory. Fevers and bowel complaints are more frequent than ever, and since the intense cold weather set in a number of men have had their feet frost-bitten, and this from the duty, exposure, and reduced stamina of the men will, I fear, be a thing of frequent occurrence. Blankets and warm under clothing have been distributed, but these do not appear sufficient to protect the men from the weather; besides the shoes that have been sent out are of too small a size and of indifferent quality, which adds to their misery.

"Symptoms of scurvy have made their appearance in some cases, but as yet the disease has not made much progress amongst the men, and I hope, by the arrival of the expected supply of lime juice the further spread will be averted."

No. 100.

Dr. Smith to the Under Secretary for War.

Army and Ordnance Medical
Department, 7th February 1855.
SIR,
WITH reference to your letter of the 13th January, and its enclosed copy of a communication from Commissary General Wild, dated Malta, the 3d ultimo, I take leave to inquire if any further information relative to the desired supply of lime juice for the use of the army in the Crimea has been received from Mr. Wild.

I am specially anxious on the subject, as I received a few days ago from the Inspector General of Hospitals in front of Sebastopol, a letter reporting that several cases of scurvy had appeared in camp, and the same letter gave me to believe that no lime juice had then reached Balaklava. By a letter, however, which has subsequently been received by the Admiralty from Captain Christie, it appears that the "Holyrood" steamer, in which 10,080 lbs. of lemon juice were shipped, was then landing her cargo, and that it is presumed that 20,016 lbs. shipped in the "Esk" must have been landed before that date (the 19th January).

In conclusion, I beg earnestly to advise that Mr. Wild, who it appears has been entrusted with providing the lime juice, should be required to make every possible effort to forward it to the army in the Crimea, as its presence will prove advantageous in removing the scorbutic taint which no doubt exists very generally at the present moment.

I have, &c.
(Signed) A. SMITH,
Director General.
The Under Secretary for War,
&c. &c.

No. 101.

Dr. Smith to the Military Secretary.

Army and Ordnance Medical
Department, 8th February 1855.
SIR,
I HASTEN to submit, for the information of the General Commanding in Chief, the enclosed extract, and as it is of the greatest importance that the articles recommended by Dr. Hall should be supplied with the utmost despatch for the use of the whole force in the Crimea, I beg earnestly to recommend that the Board of Ordnance should at once be requested to take the steps necessary to have them furnished and forwarded to Balaklava.

It may not be possible immediately to obtain from a small number of dealers in waterproof articles the quantities sufficient, I therefore advise that every person who trades in such waterproof goods should be resorted to, and if they cannot collectively produce the amount required in a very short space of time they should deliver into store what they can within a fortnight, so that they be despatched and followed as speedily as possible by the remainder.

Although the more severe part of the season will have passed before the articles referred to arrive, yet the rains of the spring and the dews of the summer will still be sources of mischief, and if their bad effects can be obviated by the late arrival of the material recommended a great advantage will be secured.

I have, &c.
(Signed) A. SMITH,
Director General.
The Military Secretary,
&c. &c.

EXTRACT of a Letter from Dr. Hall, Principal Medical Officer, Crimea, to the Director General, Army Medical Department, dated before Sebastopol, 18th January 1855.

"A PIECE of waterproof cloth for the men to sleep on would be invaluable. Tarpauling and waterproof

bottoms for tents do not answer in practice, as the water which beats through a bell tent in stormy weather lodges and forms pools in place of being absorbed into the earth.

"We have tried both these in the tents of the sick, and I have almost always heard them condemned by the medical officers, whereas a strip of macintosh cloth spread on the ground under the blanket answers admirably well. It was what I and many others used when compelled to sleep on the ground, so that I can speak of it from personal experience, and I think it might be adopted with great advantage to the health of the troops. It is a light article, and conveyance could easily be provided for an article of that kind, and they could easily be made so that the cloths of a given number of men would form both a small patrol tent and a flooring to it, and thus protect the men from rain and the damp ground beneath.

No. 102.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical Department, 8th February 1855.

SIR, As I am positively without anything like detailed information touching the state of the sick and wounded in the camp, and the means available for their nourishment and medical treatment, I request you will be so good as to require the senior officer of each division to supply you weekly with a statement that will involve the above and all other information which you or they may think likely to prove useful to me, and enable me to meet the inquiries and remarks which are daily, nay hourly, being addressed to me.

These statements you should, I think, require the officers specified to deliver to you when you make your weekly tour of inspection, and by doing so you will be further able to enlighten me by such personal observation as you no doubt have the opportunity of making on these occasions.

I am getting almost nervous from anxiety for information, and therefore beg of you to take every opportunity of supplying me. As I have already informed you no means calculated to facilitate your operations will be refused, you have simply to state what are necessary to your purpose to have them; one or more additional clerks will be supplied you, if you require them, and you may rest assured I will engage the best I can obtain, so that you may have the ablest possible helpers to copy your communications and returns.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 103.

H. Roberts, Esq. to Dr. Smith.

War Department, 8th February 1855.

SIR, I AM directed, by the Secretary of State for this department to acquaint you, in reply to your letter of the 7th instant, that no information has been received from the Commissariat Officer in charge at Malta, regarding the supply of lime juice for the use of the army in the Crimea, since that communicated to you in the letter from this department dated 13th ultimo; but directions were given to that officer under date 25th ultimo, to forward to its destination with as little delay as possible, in periodical shipments, 20,000 gallons of lime juice when received from the contractor, and also to obtain and forward a further similar quantity as soon as possible after the shipment of the first 20,000 gallons, as requested in your letter of the 16th ultimo.

I am, &c.
(Signed) HENRY ROBERTS.

Dr. Andrew Smith,
&c. &c.

No. 104.

B. Hawes, Esq. to the Director General.

War Office,

10th February 1855.

SIR, I AM directed to acknowledge the receipt of your letter of the 11th ultimo, recommending that every soldier who leaves this country during the cold season for the Crimea should, either before he embarks or within twenty-four hours after embarkation, be furnished with the warm clothing intended to be issued generally to the troops, and to acquaint you that the General Commanding in Chief does not think it necessary that soldiers embarking for the Crimea should be served with warm clothing on embarkation, or shortly afterwards, his Lordship considering that if it be issued to them in the Bosphorus it will be sufficient to protect them against the weather they will probably encounter in the Crimea.

I have, &c.
(Signed) B. HAWES.

The Director General,
&c. &c.

No. 105.

Extract of a Letter from Dr. Hall, Inspector General of Hospitals, to Dr. A. Smith, Director General, Army Medical Department, dated "Before Sebastopol, 10th February 1855."

"I ENCLOSE a note from Dr. Pine, recommending a supply of amorphous quinine dissolved in spirit to be sent out and used in wine as a prophylactic in the manner pointed out by Dr. Bryson, R.N., at page 80 in the pamphlet on diseases in Turkey, and memoir on the remittent fever of the Levant.

"The remedy in question appears, by the report, to have been used with satisfactory results, and if you would be good enough to order out such proportion of the solution as you think fit, we could institute trials of it in different regiments, and note the result for your information."

No. 106.

Dr. Smith to J. Wood, Esq.

Army and Ordnance Medical Department, 10th February 1855.

SIR, IN reply to your letter, having reference to my requisition of 7th instant, for 2,000 cholera belts, to be sent to Cork for the use of detachments thence embarking for the seat of war, referring also to a recent objection of mine against a specimen belt sent from your department for inspection, and further inquiring what description of cholera belt I intended should be supplied on the demand referred to, I have the honour to request you will be pleased to call attention to the description* specified in my requisition of 9th December last for 40,000 belts for the use of the troops serving in the Crimea, which requisition was submitted to the Military Secretary with a view to its being forwarded to your department in due course.

I have, &c.
(Signed) A. SMITH,
Director General.

J. Wood, Esq.
&c. &c.

No. 107.

Dr. Hall to Dr. A. Smith.

Before Sebastopol, 11th February 1855.

SIR, IN reply to your letter of the 18th January 1855, requesting to be informed how far the locality is from the camp where the bodies of the soldiers and animals that die are interred, and whether they

* "Each 12 inches wide, to be made of stout flannel, and furnished with 3 straps and buckles."

are buried to a sufficient depth to prevent the escape above ground of the gases resulting from decomposition. I have the honour to inform you that the lines of this army are very extensive, and no one place is selected for the burial of the dead; each division has its own place of sepulture, generally sufficiently distant from the men's tents to prevent mischief; and the graves are directed to be dug sufficiently deep to prevent the escape of noxious effluvia; but I regret to say both these points are occasionally violated, not, however, to an extent to create uneasiness; and as the military authorities are now getting more alive to the laws of health, these violations of orders are not so likely to be permitted in future. As for dead animals, their carcasses were lying about in every direction by dozens, until I pointed out the fatal results that might be expected to ensue from allowing so much animal matter to decay and taint the air in every direction, and since then an effort has been made to get some of them buried, but this has only been imperfectly done in most cases where it has been attempted, and numerous dead bodies of horses lie about still in every direction, and it is my intention again to call the Commander-in-Chief's attention to the subject.

At Balaklava, where the Turks died in great numbers, and were buried so superficially, alarm was created for the public safety, and the subject was investigated by a mixed Commission which recommended that the over-crowded cemetery should be closed, and a new one opened more remote from the village; that, too, has been closed, and the Turkish sick have been moved out of the town and placed in huts overlooking the sea to the eastward of the town.

Huts are in course of erection for the reception of newly-arrived troops at Balaklava, and the Quarter Master General's department have in my opinion selected a most objectionable site for them, viz., between the Turkish burying ground above alluded to, and a perpendicular hill of considerable elevation. I pointed out the objections to the site, but the answer I got was that there was no other place available; but if we remain here during the summer we shall, I am quite sure, pay the penalty of so glaring a violation of the laws of health.

I have, &c.

(Signed) JOHN HALL,
Inspector General
of Hospitals.

Dr. Andrew Smith,
&c. &c.

No. 108.

Quartermaster-General Freeth to Dr. A. Smith.

Horse Guards,

SIR, 12th February 1855.

I HAVE the honour to forward a letter from the Board of Ordnance, accompanied by a mattress* proposed for military uses.

And in requesting your opinion upon the same for the information of the General Commanding in Chief, I am to observe that the troops encamped in the Crimea are supplied with waterproof cloths.

It may, however, be possible that the mattress may be useful in the hospital tents, of which you will be the best judge.

I have, &c.

(Signed) J. FREETH,
Quarter Master General.

Dr. Smith,
&c. &c.

P.S.—You will be pleased to return the enclosure.

No. 109.

Dr. A. Smith to the Deputy Secretary-at-War.

Army and Ordnance Medical

SIR, Department, 12th February 1855.

I BEG to acquaint you that immediately on the receipt of your letter of the 9th instant, orders were

given to have the quantity of chloride of zinc, then being got ready for shipment to the General Hospital at Smyrna, made up to a ton, and to be packed and forwarded as directed.

I have delayed the execution of the order respecting "sand bags" till such time as I might be able to ascertain the purpose for which they were intended.

Fearing there has been some mistake in regard to these articles, an opinion confirmed by Sir J. Forbes, I have now the honour to request you will inform me whether another article was not intended to be supplied.

I have, &c.

(Signed) A. SMITH,
Director General.

The Deputy Secretary-at-War,
&c. &c.

No. 110.

Dr. Hall to Dr. Smith.

Before Sebastopol,

12th February 1855.

SIR,

WITH reference to your letter of the 12th January, in answer to mine of the 15th December, pointing out the hurried and unsatisfactory way in which ships were obliged to be fitted out by the Medical Department for the accommodation of sick and wounded men proceeding to Scutari, and wishing to be informed what steps I had taken to remedy the evil, I beg to annex a copy of a letter I wrote on the 4th December on the subject of proper ships being told off and fitted for the service.

That recommendation met with the sanction of the Commander-in-Chief, and the agent of transports named two steamers "Sydney" and "Australia," capable of conveying about 150 each; but as these were found insufficient I made a second representation on the 17th December, and another on the 19th December, and two more ships were added, the "Melbourne" and the "Brandon," but delay took place in fitting them up at Constantinople, and the "Sydney" and "Brandon" were absolutely filled with stores, and despatched by Admiral Boxer, without allowing time for the medical equipment to be put on board, though remonstrated with by Second Class Staff Surgeon Wishart, as you will see by the annexed letter from that gentleman. These vessels were not only told off by the naval authorities, but a permanent staff for them was named by me, which was published in General Orders, and I gave instructions to the Principal Medical Officer at Scutari for their equipment, which I was surprised to see published in the "Times" newspaper.

The regular steamers only now coming into use, the "Melbourne" and "Brandon" have each made one trip with sick fitted up properly, and we expect the "Sydney" and "Australia" daily fitted in like manner, so that I hope much of the discomfort the sick have hitherto experienced will be obviated in future. You must not imagine the subject had escaped my notice, or that I had not spoken of the defective system before, but I can find no written communication anterior to the 4th December. Much of my business with the Commander-in-Chief was necessarily transacted verbally, but I must say I have always found him ready to listen to any suggestions, and willing to afford assistance.

Early in the season I urged on him the necessity of better shelter being provided, and more care being taken of the men; for if they were harassed and exposed in the manner they were then,—if we were to remain the winter—a very small army would be left in the spring; that letter was in writing, and I got an answer through the Adjutant General, saying that the Commander-in-Chief thought I had travelled out of the question, and he was not pleased. The copies of those notes I have unfortunately either mislaid or lost, in the confusion of my tent being blown down, for my portfolio was unfortunately open, and I lost

* Cork mattress, waterproof surface.

many of my papers and letters, and the portfolio itself was trampled in the mud, by the men that came to assist me in getting my tent put to rights.

With regard to the "Avon," I have no explanation to give beyond what was contained in my letters of the 7th and 13th December; that of the 7th, being in anticipation of what might arise out of the Court of Inquiry, contained all the documents in original connected with the case, which were sent that you might be able to judge whether she had been properly supplied with comforts or not; I think she was. The paucity of bed pans was matter of necessity when she was fitted out, and the subject does not appear to have been brought under Dr. Lawson's notice afterwards.

In conclusion, I may add that I hope it will be found that due representations have from time to time been made by me, either verbally or in writing, on most matters connected with the health of this army. It is true I have not put on record in writing, merely for the sake of putting on record, things I knew could not be complied with, and had I written them, the Commander-in-Chief must have felt I knew they could not be complied with.

I have, &c.
(Signed) J. HALL,
Inspector General
of Hospitals.

Dr. A. Smith,
&c. &c.

Dr. Hall to Brigadier General Airey.

Before Sebastopol,
4th December 1854.

SIR,
From the daily increasing number of sick, I consider it absolutely necessary, and I beg you will have the goodness to submit the question for the favourable consideration of the Commander of the Forces, that two large and commodious steamers, fitted with all necessary appliances for the comfort and convenience of sick officers and soldiers, should run regularly between Balaklava and Scutari; by which arrangement much of the discomfort and confusion of the present system of embarking the sick hurriedly on board any vessel that may casually be in port at the time would be obviated, and if a large vessel like "Pride of the Ocean," were moored in the harbour, in aid of the General Hospital, I am of opinion there would be sufficient accommodation for the reception of the sick from camp during the period between the trips of the steamers.

I have, &c.
(Signed) J. HALL,
Inspector General
of Hospitals.

Brigadier General Airey,
&c. &c.

No. 111.

Dr. Smith to Colonel Mundy.

Army and Ordnance Medical
Department, 14th February 1857.

SIR,
REFERRING to your letters of the 15th September and 16th November, and my replies thereto of the 27th September and 20th November last, relative to the proposed issue to the troops in the Crimea of fresh uncooked meat, preserved in a certain way by Mr. Rennie, I have now the honour to forward, for the information of Lord Panmure, a copy of the proceedings of a Board of Medical Officers, assembled at the camp before Sebastopol for the purpose of examining and reporting upon a sample of the article in question.

I beg to add that I agree with the Board as to the advantage likely to be derived from a supply of meat preserved according to Mr. Rennie's process being in reserve in the commissariat stores, and I am of opinion that a supply should be forwarded to the

Crimea agreeably with the recommendation contained in the enclosure.

I have, &c.
(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

No. 112.

Dr. Smith to the Under Secretary for War.

Army and Ordnance Medical
Department 15th February 1855.

SIR,
I HAVE the honour to forward for the information of the Minister for War, copies of various letters referring to the defective sanitary condition of the steamer "Telegraph," employed to convey commissariat drivers to the Crimea, as well as to the total want of any provision for the probable contingency of sickness occurring on board. I beg, therefore, to submit the necessity, on future like occasions, of causing such steps to be taken, as may prevent a recurrence of the state of things described, as, had the vessel proceeded on her voyage unprovided as she was found to be, it is likely that a large number of her passengers might have died, or at least have landed in the Crimea unequal, from sickness, to assume the duties expected of them on their arrival with the army.

I beg to add, that I have ordered a medical officer for the vessel, and he will embark this day.

I have, &c.
(Signed) A. SMITH,
Director General.

The Under Secretary for War,
&c. &c.

No. 113.

Wm. Odell, Esq. to Dr. A. Smith.

Portsmouth,
18th February 1855.

SIR,
REFERRING to your letter of the 14th instant, and the transport "Telegraph," I beg leave to inform you that I have since inspected that vessel. On my representation and the report of the medical officers, two ventilating tubes have been supplied; twelve engineers have since joined the vessel, making sixty-one passengers in all.

The ship has a medicine chest, but I intend, nevertheless, to supply a chest and portable case of instruments from the store here, unless you offer any objection.

Assistant Surgeon Peacock has not arrived here as yet.

I have, &c.
(Signed) WM. ODELL,
Staff Surgeon, 1st Class.

Dr. A. Smith,
&c. &c.

P.S.—It is said also that Major General Simpson proceeds in this vessel.

W. O.

No. 114.

Major General C. Yorke to the Director General.

Horse Guards,
21st February 1855.

SIR,
REFERRING to your letter of the 16th instant, expressing your apprehension that, from the tenor of a communication which you had received from the Principal Medical Officer in the Crimea, the lemon juice shipped from this country in November last had not yet reached Balaklava; I am directed by the General Commanding in Chief to transmit to you the enclosed copy of a letter which has been addressed to this department by the Admiralty in reply to the reference made to them on the subject, stating that it appears, by a return received at the Admiralty dated Balaklava, the 2nd instant, that the

"Holyrood" was nearly cleared, and that this presumed the "Esk," about to convey Turkish troops to Eupatoria, must have delivered all her stores between the 26th ultimo, and the date of Dr. Hall's letter.

I have, &c.

(Signed) C. YORKE.

The Director General,
&c. &c.

T. T. Grant, Esq. to the Military Secretary.

Admiralty,

19th February 1855.

Sir,

WITH reference to your letter of the 17th instant, enclosing a copy of a letter from the Director General of the Army Medical Department, in which he states that he is apprehensive, in consequence of a communication received from Dr. Hall, that the lemon juice shipped in the "Holyrood," "Esk," and "Sydney Hall," had not yet reached Balaklava; I beg to acquaint you, for the information of the General Commanding in Chief, that it appears, by a return received in this department, dated Balaklava, the 2nd instant, that the "Holyrood" was nearly cleared, the "Sydney Hall" half cleared, and the "Esk" about to convey Turkish troops to Eupatoria; and it is presumed that the latter steamer must have delivered all her stores between the 26th ultimo, the date of Dr. Hall's letter, and the 2nd instant, when she was being prepared for troops.

I have, &c.

(Signed) T. T. GRANT.

The Military Secretary,
&c. &c.

No. 115.

A. Cumming, Esq. to Dr. Smith.

Scutari,

22d February 1855.

Sir,

IN acknowledging your letter of 5th February, adverting to the mode in which corpses are removed to the dead house in this hospital; I have to observe, that your proposal appears to me more objectionable than the mode now in use, viz., the corpses being decently wrapped up in a blanket and carried on a bearer by two orderlies to the place appropriated for their reception. A coffin or shell would, I conceive, be doubly suggestive.

The sketch which Deputy Inspector General Lawson sent recently of the burial ground will show its distance from the General Hospital, and which is, he tells me, 100 yards; of course the hospital wall is nearer.

A new burial ground has within a day or two been conceded to us by the Turkish Government at a greater distance, and is now, I believe, being used; its site is pointed out in Mr. Lawson's sketch.

Every attention will be given to the proper conveyance of the bodies to the grave yard, and that no deleterious effects may arise from the graves being of insufficient depth or not duly covered over.

I have, &c.

(Signed) A. CUMMING,

Dr. A. Smith,
&c. &c. Inspector General of Hospitals.

No. 116.

A. Cumming, Esq. to Dr. Smith.

Sir,

Scutari, 22d February 1855.

IN reply to your letter of 31st January respecting the huts erected in this barrack square, I have to acquaint you that these were commenced and nearly completed during my absence in the Crimea, and previous to my departure I heard no intention expressed of constructing such buildings.

Staff Surgeon Cruickshank, in a letter to you dated 11th ultimo, mentions the site and character of them,

but he informs me that no reference was made to him until they were in an advanced state.

I do not altogether approve of the way in which these huts have been constructed, nor of the site which they occupy; and I rather think they were intended when first projected for the accommodation of the depot, to enable the remaining barrack accommodation to be given up to the hospital purposes. I hope they will not materially interfere with the sanitary condition of this hospital, and my intention is to occupy them by convalescents, and probably, also, in part, as dining and breakfast rooms, by which means we shall be able to thin the wards and corridors.

I am at present too pressed by time to enter more fully on this subject.

I have, &c.

(Signed) A. CUMMING,

Dr. A. Smith,
&c. &c. Inspector General of Hospitals.

No. 117.

Dr. A. Smith to Under Secretary of State.

Army and Ordnance Medical

Department, 22d February 1855.

Sir,

IN acknowledging the receipt of your communication of the 16th instant, on the subject of the parasitic vermin infesting the hair and clothing of the soldiers of the army serving in the East, I have the honour, in reply, to state, for the information of his Lordship, that the substances equally efficacious as nicotine for destruction of these insects are the red precipitate of mercury, white precipitate of mercury with chalk, the mercurial or blue ointment, and stavisaire (lousewort). The latter I have reason to believe is used in Turkey for the object referred to. In addition to the above a decoction or infusion of tobacco is also a prompt agent in the destruction of such vermin; but even these preparations of tobacco, though much less powerful than nicotine, the active principle of that herb, cannot generally be used with safety, as we have instances of fatal results from the external application of tobacco recorded by Doctors Percival and Taylor in their respective works, and dogs have been frequently killed by applications of this kind.

The articles I have mentioned all readily destroy the vermin in the hair, but to eradicate them when they have spread over the body and taken up their abodes in the clothing is not so easily effected; indeed, it is not generally practicable unless by getting rid of the clothes in which they have been harboured, and by the subsequent observance of great personal cleanliness. But where it has been found an object not to abandon the articles of clothing so infested, various processes to meet the evil have, though with but very imperfect success, been resorted to; amongst them I may mention fumigation of the clothes, either with sulphur, turpentine, camphor, or tobacco, or sponging those portions of them which the insects usually most resort to with a solution of veratrea (the active principle of white hellebore) or of corrosive sublimate; none of these measures, however, can be regarded as so perfectly effectual as that of placing the clothes in boiling water, or keeping them for some time immersed in water kept at the boiling point. This, the most satisfactory process, is of course effected with difficulty where the quantities of infested articles are great.

Having submitted these observations, I may merely remark further, that there is reason to believe that no remedy will fully accomplish the object desired unless aided by good diet, cleanliness, and the opportunity of frequently changing more especially the under clothing.

Every medical officer is aware of the means which are used to effect the destruction of the kind of vermin in question; and though I have not issued any particular instructions on the subject, I have, however, endeavoured to provide the best means to ensure their

removal from the sick by requiring for them an abundance of under clothing and a supply of combs and brushes, as well as of small-toothed combs (of the former 10,000 sets, of the latter 1,000), have been furnished for use in the hospital, also a large supply of soap, which, with plenty of water, will no doubt soon remove from the persons and clothes of the sick the nuisance which accompanied them from the field.

Nothing, I fear, short of the removal and change of every article of clothing now in use from every man of the army, in addition to daily ablution and marked attention to personal cleanliness, will effectually eradicate the vermin.

The inmates of our poor-houses are cleansed of them by the use of white precipitate, and the removal of the infected clothes from their persons.

I have, &c.
(Signed) A. SMITH,
Director General.

The Under Secretary of State,
&c. &c.

No. 118.

Extract of a Letter from Dr. Hall, Inspector General of Hospitals, to the Director General, dated "Before Sebastopol, 23rd February 1855."

"I HOPE the 40,000 gallons of lime juice you mentioned is not far off at present, so that the ration may be continued to the whole army.

"I am quite sure that lime juice, fresh vegetables, warm clothing, and better shelter would eradicate scurvy and cure the diarrhoeas the men labour under much sooner than any system of medical treatment that could be adopted; and if they could only have so much relaxation from their duty in the trenches as would admit of their having two consecutive nights in bed, I am quite satisfied they would soon regain their strength and health.

"Now the regularly fitted out transports that were recommended at the beginning of December are coming into use, and will be a relief to us; but what I am calculating on, and am most anxious about, is the new hospital near the castle at Balaklava. I was up there to-day to see how they were getting on, and found eight huts are nearly completed, and we are getting them equipped as rapidly as we can, and in a few days we shall be able to send a couple of hundred more up there. I am quite pleased with the place, and anticipate much more benefit by sending men there than down to Scutari. At Scutari the buildings are large, crowded, and difficult to keep well ventilated. Fever consequently has made its appearance and proved fatal to many, both officers and men."

No. 119.

From Dr. A. Smith to Colonel Mundy.

Army and Ordnance Medical
Department, 27th February, 1855.
SIR,

As the season of the year is now approaching when sick and wounded may be transferred to England without risk of serious suffering from inclement or severe weather on approaching the channel or landing at its ports, I am of opinion that the time has arrived for considering whether it would not be desirable to remove to this country, direct from the Crimea, cases of that nature which might safely be subjected to a long voyage. Of the advantages of such a measure we have ample experience in the good effects attending removals of this kind from the East and West Indies, where cases of dysentery and diarrhoea, stationary in their progress or disposed to deteriorate as long as the sufferers remain in the country where they have been contracted, derive so much benefit from the sea voyage that the soldier who has embarked

in these climates a broken-down invalid frequently lands here in comparatively re-established health.

But as it will not be possible to foresee what will be the effect of a prolonged sea-voyage in cases of other diseases or wounds, I submit, should the suggestions I now propose be entertained and acted on, that arrangements be made that each vessel conveying sick soldiers should touch at certain intermediate ports, viz., Malta and Gibraltar, in order, should any of the cases on board have become aggravated so as to render their landing desirable, that an opportunity may be thus afforded for effecting this.

Ordinary vessels, it is needless to say, will not be applicable for the removal of the sick to whom I refer, but the conveyances for this purpose must be of the description recommended in my letter of the 11th May 1854, namely, steamers with appropriate fittings.

If it be found expedient to adopt the proceeding of the kind above proposed, I have no doubt but that great benefit will result from it to the sufferers, and another very obvious advantage will be the facilities which this arrangement will afford for relieving the overcrowded state of the hospitals at Scutari and in the Crimea.

I have, &c.
(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

No. 120.

Dr. A. Smith to the Under Secretary for War.

Army and Ordnance Medical
Department, 27th February 1855.
SIR,

WITH reference to my letter of the 7th instant, pressing that a further supply of lime juice should be sent out to the army in the Crimea beyond what has been forwarded by the Admiralty, I have the honour to state, for the information of the General Commanding in Chief, that it is most essential to the interests of the troops, that 40,000 gallons proposed to be purchased by the Commissariat Officer at Malta should be despatched to Balaklava as speedily as possible, there being every reason to fear that the supplies sent from England will soon be exhausted, considering that a scorbutic taint has shown itself very generally among the troops.

I have, &c.
(Signed) A. SMITH,
Director-General.

The Under Secretary for War,
&c. &c.

No. 121-2.

Dr. A. Smith to the Under Secretary for War.

Army and Ordnance Medical
Department, 28th February 1855.
SIR,

I HAVE the honour to acquaint you, for the information of the Secretary of State for War, that I have been concerned for some time past to observe that by the returns received great sickness has prevailed in the force serving at Gallipoli and Boulahir.

This has been on the average 26 per cent., an amount quite disproportionate to the strength and to the duties performed at these stations.

Having been led by these facts to believe, either that there existed some local causes very prejudicial to health, or something in the constitution or conduct of the detachments which rendered them more prone to sickness and less able to bear and recover from it than other men similarly circumstanced, I requested on the 9th November and the 16th January last, from the senior medical officer at Gallipoli, a report on the subject of the unusual sickness in the detachments under his charge.

In his explanation in regard thereto which I have received, it is not attributed to local influences, but to the fact that the service companies of the 4th Foot, on quitting Gallipoli for Varna in August last, having weeded out and left behind all their sickly and weakly men; to the debilitated condition of those so left behind, their repeated admissions, frequent relapses, and tardy convalescence, are to be ascribed.

As a large portion of the detachments appear to consist of men debilitated by previous disease and other causes, as sickness has not of late materially decreased, and is likely in such a force to be augmented in the approaching hot season, I submit that it would be to the interests of the service to withdraw the detachments in question, or at least all the weakly men, and have them replaced by an equal force, giving them a reasonable hope of remaining effective.

I have, &c.

(Signed) A. SMITH,
Director General.

The Under Secretary for War,
&c. &c.

No. 123.

Dr. Smith to Colonel Mundy.

SIR,
Army and Ordnance Medical
Department, 1st March 1855.

IN reference to the necessity existing for accommodation for sick and wounded, additional to that which the hospital and barracks at Scutari afford, I have the honour to observe, for the information of the Minister at War, that I should consider the erection of temporary hospitals in the neighbourhood of these establishments as to be deprecated strongly, the ground in their immediate vicinity having been for centuries, and at present, used as a place of burial.

I should recommend as a preferable site for any proposed structures for hospital purposes the Princes Islands in the Sea of Marmora, as being conveniently accessible to the army as well as salubrious.

I have, &c.

(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

No. 124.

Dr. Forrest to Director General.

SIR,
London,
2d March 1855.

WITH reference to your inquiry relative to the wooden buildings that have been erected in the barrack square at Scutari for the accommodation of sick and wounded, I have the honour to state to you that I objected to the site of those buildings to Lord William Paulet, from their close proximity to the barracks, and from their being surrounded, on all sides, by high stone walls, which would completely exclude a free circulation of air, and that consequently they would be insufferably hot and perfectly uninhabitable in the summer months; besides that under any circumstances they were much too near to the barrack hospital, where upwards of 2,000 sick were already congregated, and that, should fever unfortunately break out, it would in all probability, from the overcrowded state of the hospital, assume a typhoid character, which would render the separation and dispersion of the sick absolutely necessary. He replied that Staff surgeon Dr. Cruickshanks had stated objections similar to mine, but that he, Dr. C., had afterwards approved or agreed (I forget which term he used) to the huts being erected.

I was unwell and confined to bed at the time the buildings were commenced, and had not therefore an

opportunity of stating my objections until several of them were built; they were not, however, occupied when I left Scutari on the 8th ultimo.

I have, &c.

(Signed) J. FORREST, M.D.

Deputy Inspector General
of Hospitals.

The Director General,
&c. &c.

No. 125-6.

Dr. Smith to Colonel Mundy.

SIR,
Army and Ordnance Medical
Department, 3d March 1855.

I HAVE the honour to forward, for the information of Lord Panmure, the copy of a letter from Deputy Inspector General of Hospitals, Dr. Forrest, on wooden buildings erected in the square of the barrack hospital at Scutari, for the accommodation of the sick and wounded, and I beg you will be pleased to move his Lordship to cause the buildings to be at once removed, as I consider their presence on this site to be objectionable in the highest degree; and I regret that any medical officer should have given the slightest countenance to a measure so fraught with imminent danger.

I have, &c.

(Signed) A. SMITH,

Colonel Mundy,
&c. &c.

Director General.

No. 127.

H. Roberts, Esq. to the Director General.

SIR,
War Department,
3d March 1855.

I AM directed by Lord Panmure to transmit to you the enclosed extract of a letter from Commissary General Filder, with its enclosures, showing the results of experiments made in Turkey in brewing beer from Patent Concentrated Wort, according to directions given by the Lords of the Treasury, on the accompanying papers from the Secretary-at-War, and Mr. Edward Moore, and I am to request you will favour his Lordship with your opinion as to the advantage, or otherwise, of furnishing a fresh supply of this wort, and state whether you have received any reports from the medical officers regarding it.

It is requested that the original papers may be returned.

I have, &c.

(Signed) H. ROBERTS.

The Director General,
&c. &c.

No. 128.

Dr. Hall to Dr. A. Smith.

SIR,
Before Sebastopol,
3d March 1855.

COLONEL Mc Murdo, Inspector General of Transport, having requested me yesterday to furnish him with an estimate of the probable number of mules that would be required for the use of the Medical Department in the event of the army taking the field for active service, I have the honour to enclose a copy of my estimate for your information.

I have, &c.

(Signed) JOHN HALL,

Dr. A. Smith,
&c. &c.

Inspector General of Hospitals.

ESTIMATE of the probable Number of Animals that will be required for the Ambulance and Conveyance of Medical Stores for the Medical Department of the Army in the Field.

For one brigade of three regiments of say 850 men each	2550
There will be required for the conveyance of the surgeon's panniers (bât animals)	3
For chairs 8, and litters 4, mules each regiment	36
For long car for each regiment 4 mules	12
For the conveyance of surgical panniers of the Staff surgeon of brigade	1
For one brigade	52
2d brigade	52
Total for Division	104
For Divisional Reserve Stores, one waggon for Purveyors' stores and Medical comforts	6
One do. for Apothecary's stores and equipment	6
Two light spring waggons to carry 4 men in a recumbent position, with 2 mules to each	4
Total for a Division of 5,100 men	120
There are five Divisions of Infantry which on this calculation would require	600
There would be required for the Division of cavalry	136
For the artillery	136
	872
For the conveyance of reserve stores 10 waggons with 6 mules in each	60
Two reserve spring waggons	8
Total	940

There should be a certain number of spare mules to replace any that get sick or in other ways become non-effective, and I think the estimate for the Medical Department cannot be made under 1,000 animals.

(Signed) J. HALL,

Before Sebastopol, 3d March 1855. Inspector General of Hospitals.

No. 129.

Dr. Smith to Dr. Hall.

SIR, Army and Ordnance Medical Department, 6th March 1855.

HEREWITH you will receive a portion of a weekly journal ("Spectator,") dated 24th February, in which is a letter from Dr. J. Davy, contrasting the dietary during December, and nearly the whole of January last, of a British Regiment of the Line serving before Sebastopol, with the scale and quality of rations issued at the same time to the Naval Brigade employed on the same service, and strongly animadverting on the opposite results arising from the very different mode of administration in these respects of the two services.

If the dates submitted by Dr. Davy are correct, it must be admitted there are grounds for strictures unfavourable as regards the army, unless it can be shown that the difficulties which it is presumed stood in the way of providing a fuller and more suitable dietary for the troops, as well as the means of cooking it, were totally unsurmountable.

Now supposing the statements on which that contrast has been founded are strictly accurate, and equally true as regards all the corps of the army so situated, I confess, for my part, I can scarcely con-

ceive why the troops should not have been at least somewhat better supplied, both as to quantity and quality of provisions, than it would appear they have been; and even admitting that difficulties, nay great difficulties, existed as regards the supplies for the army, still I apprehend they could not have been so insuperable as not to have permitted of the men being provided with at least a larger amount of fresh provisions.

I am anxiously expecting replies from yourself, and the medical officers under your superintendence, to the queries which I sent to you respecting the sanitary condition of the British force serving before Sebastopol, the state of the camps, lines, field, and general hospitals, and, in short, an account of all causes and circumstances affecting the health of the troops under your medical charge.

In the list of queries referred to, due prominence is given to the subject of duty and dietary in relation to the health of the soldier.

But I must now further urge on you the necessity of transmitting to me, with the least possible delay, full information on these points; and especially I am desirous, in order to be relieved from much anxiety, and to be able to answer inquiries, to have copies of all communications and of all representations made by you to the Commander of the Forces in regard to the duty, dietary, &c., as affecting the health of the troops.

You will, before you receive this, be aware that the conduct of the Medical Department of the army is, among other subjects, to engage the attention of a Committee of the House of Commons; therefore, I beg of you to supply me, and that immediately, with every kind of information which you may deem likely to enable me to establish a character for it, which the public appears desirous to prove it does not possess.

I have, &c.

(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 130.

H. Roberts, Esq. to the Director General.

SIR, War Department, 6th March 1855.

AN offer having been received from Messrs. Crockford and Co., of St. James's Street, for the supply, by contract, of port and sherry wines for the use of the troops in the Crimea, I am directed by Lord Panmure to request that you will inform his Lordship whether you would recommend as a general rule the substitution of a wine ration for a spirit ration.

I am to transmit for your information a copy of a letter on this subject which has been addressed to the Commissary General.

I have, &c.

The Director General, (Signed) H. ROBERTS.
&c. &c.

H. Roberts, Esq. to Commissary General Filder.

SIR, War Department, 5th March 1855.

I AM directed by Lord Panmure to transmit herewith for your information a copy of a letter from Messrs. Crockford and Co., offering to supply port and sherry wines for the troops in the Crimea.

According to the prices of wines stated in this letter, the ration of sherry would cost 4s., if con-

tracted for, and 1s. 8d. if purchased in excess of the ordinary allowance, and the ration of port would be exactly double that cost in each case; and it appears clear, therefore, that whatever the officers might do, the men could not purchase these wines.

There seems to be no doubt, therefore, that the ration of rum is very much cheaper, and being served out, as it is understood, mixed with lime juice and water, and thus forming an agreeable and anti-scorbutic beverage, it is conceived that the wine would not be deemed an acceptable substitute for the present ration.

As the Messrs. Crockford have already sent out to the Crimea a large quantity of wine, and are prepared to send out more, I am to desire that you will afford their agents the facilities for the disposal of them as expressed in the enclosed copy of a letter addressed to these gentlemen.

I have, &c.
(Signed) H. ROBERTS.

Commissary General Filder,
&c. &c.

No. 131.

Dr. Smith to Colonel Mundy.

SIR,
Army and Ordnance Medical
Department, 7th March 1855.

HAVING reason to believe that the troops in the Crimea are still without the periodical supply of vegetables suggested, as so necessary for them, in my letter of the 19th of December 1854, I again earnestly submit, for the consideration of the Minister for War, the necessity of renewed efforts being made to secure to the army, now suffering from scurvy to no trifling extent, the food so well calculated to arrest the advance of that serious malady.

Lime juice, which is now so freely used, will doubtless effect much, but without a full ration of vegetables, at least four times a week, we can scarcely hope that the complaint will be mastered before great loss of life is sustained.

I have, &c.
(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

No. 132.

Dr. Smith to Colonel Mundy.

SIR,
Army and Ordnance Medical
Department, 5th March 1855.

I HAVE the honour to transmit herewith, for the information of Lord Panmure, a copy of a letter addressed to Lord William Paulet, recently received from the Principal Medical Officer at Scutari, in which he animadverts strongly on a practice obtaining in the hospitals there, of issuing pay to patients while under medical treatment.

In the same communication, Dr. Cumming submits, that a ration of tobacco should be issued to such patients. The latter indulgence he no doubt recommends in anticipation that the inculcated issue of pay to soldiers in hospitals will be discontinued.

It is impossible for any medical man to view the practice of furnishing soldiers with money, while under medical treatment, without being impressed with fear of the worst consequences, more especially in establishments like those in Scutari, where intercourse with the sick can scarcely be prevented; if the soldiers so circumstanced get money, they will soon render useless every attempt of their medical attendants in their behalf. I most readily admit that the patients should be provided with whatever may tend to their advantage, but they should be

strictly debarred from what will have the opposite effect.

I therefore submit that the Government ought to provide whatever may be deemed necessary for the sick, but I am of opinion that the command of money should be withdrawn till such time as they are restored to health, or at least brought to such a condition that their retention under strictly medical treatment is no longer necessary.

A ration of tobacco might safely be granted, with the understanding, however, that its use will be confined to localities where it will have no bad effects on patients suffering from diseases which would be injuriously influenced by the proximity of smoking, and the indulgence must necessarily be withheld from men whose ailments, in the opinion of the medical officers, would be aggravated thereby.

I have, &c.
(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

No. 133.

Dr. Smith to Mr. Cumming.

SIR,
Army and Ordnance Medical
Department, 2d March 1855.

THE at all times important subject of the ventilation of hospitals deserves additional prominence and importance from the now not distant approach of the warm season in Turkey, and I accordingly beg to suggest that your best and most earnest efforts may be directed to the application of the most effective means for carrying out this in the hospitals at Scutari and elsewhere under your superintendence, as, if every available means for this end are not promptly and vigorously resorted to, I dread the consequences which will follow. Be good enough to let me know what measures are being adapted in reference to this.

I hope you are able to keep down the factor of the privies, which must, I fear, discharge their gases into the buildings, and even into the surrounding atmosphere; the abundant use of water and charcoal I look on as the best corrective of this.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Cumming,
&c. &c.

No. 134.

Dr. Smith to Mr. Cumming.

SIR,
Army and Ordnance Medical
Department, 9th March 1855.

HAVING heard much of the salubrity of the "Princes" Islands, I think your attention should be directed to them, with a view, if possible, of transferring to one or the other of these from 800 to 1,000 sick, and as the advent of warm weather will render marquees for hospital accommodation appropriate and desirable, I am now trying to get from 80 to 100 sent out to you for service when the season shall be suitable for their use in the locality referred to, should an unobjectionable site be then obtainable. You are doubtless aware that 70 marquees were last year sent from this country to the seat of war, and I presume that most of them will be available.

I am of opinion if you can get good offices built in a suitable locality, and have the marquees pitched, that you will thus secure comfortable accommodation for cases of a class which our experience tell us are always most beneficially influenced by removal for treatment from crowded and polluted hospitals to a breezy and salubrious camping ground. Besides in

these marquees you will have means of securing more comfort and coolness to the sick than other temporary hospitals such as wooden houses would afford, and you can always, should a site prove objectionable, change your ground, a difficult matter when wooden houses are the means of accommodation resorted to.

Now that the season is advanced, and that the sick may be brought to this country without risk of injury from its climate, I am trying to procure three large three-deckers to run from the Crimea to England, touching during their transit at Scutari, Malta, and Gibraltar, to deposit at one or other of these ports, men whose state might render the further prosecution of their voyage unsafe.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Cumming,
&c. &c.

No. 135.

H. Roberts, Esq. to the Director General.

SIR,

War Department,
9th March 1855.

I AM directed by Lord Panmure to acquaint you, in answer to your letter of the 7th instant, that every exertion has been and will continue to be made, for supplying the army in the Crimea with vegetables, both fresh and preserved.

I have, &c.
(Signed) H. ROBERTS.

The Director General,
&c. &c.

No. 136.

Dr. Smith to Colonel Mundy.

SIR,

Army and Ordnance Medical
Department, 10th March 1855.

THE facility which has existed, ever since the formation of the barrack hospital at Scutari, for intercourse between the sick therein and persons dwelling exterior to its walls, universally acknowledged to be most objectionable, the constant presence of strangers in the wards of a hospital where quietude ought to prevail, is most disadvantageous, and is necessarily productive of an amount of over excitement calculated, in certain cases, to convert a manageable disease into one of a different character.

The Principal Medical Officer at the above station, in a letter which I have just received, animadverts strongly on these points, and is exceedingly anxious that means should be immediately adopted to put an end to the unchecked access to the hospital which now obtains. Dr. Cumming cannot be more impressed with the impropriety of such a state of things than I am, and I therefore earnestly beg to recommend that proper regulations may be adopted, so that the gates of the barrack hospital be shut against indiscriminate visitors, and the practice, now tolerated, of persons coming from the suburbs of Scutari, and entering the northern gate and making a thoroughfare of the central area on their way to the landing place, ought to be at once put an end to.

It is a custom, and a proper one, in all hospitals, that the relatives, the friends, and persons especially interested in the welfare of the sick, should have access to them; and I therefore proposed that this indulgence should be afforded twice, or even three times a week, but that it should be restricted within certain hours, when the presence of strangers is not likely to operate detrimentally on the sick, or interfere with the necessary duties of the medical officers, nurses, and servants. The regulations under which the proposed admissions should be tolerated should, I think, be established by the local authorities on the spot, and they ought not to be such as would exclude any person having a fair claim to enter the building. The hours of visiting should be so regulated that the

prolonged presence of strangers should be prevented as it must be remembered that the primary object of all hospital establishments is, the well-being and the restoration to health of their inmates; and, though the excitement which the gratification of curiosity may afford to certain classes of visitors may not be injurious to them, it is well known that the sick man, with his weakened frame, and his nervous system, sensitive and excitable, ought to be carefully kept apart from influences which will bear unfavourably on his susceptible condition; and as the amelioration of his state is our first object, hence the earnestness with which I seek to avert from him aught of a nature likely to interfere with his progress towards health.

Another point is, that the ill-regulated resort of visitors to an hospital entails with it the certainty that articles of the kind most improper for the use of the sick are clandestinely introduced. I need not dwell on this; the use of improper articles of food is calculated to vitiate everything that the highest medical skill might direct for the sick.

At Scutari, such necessary and judicious measures and precautions have hitherto, I fear, been almost entirely disregarded, and I have no doubt but that much ill has followed the violation of rules admitted in every country to be directly beneficial to the sick.

I have been told that the wards of the hospitals at Scutari present, at times, more the appearance of a fair than of apartments devoted to sick and wounded men, many of whom are drawing near the termination of their lives.

It is far from my wish, in the above observations, to offer anything which would appear to indicate a wish on my part to debar the sick from periodically enjoying the presence of their friends, their relatives, and even of persons who, actuated by good and philanthropic motives, desire to communicate with them; but, as I have already sufficiently expressed in the foregoing, I am of opinion that the presence of even these unexceptionable visitors should only be permitted two or three times a week, and at hours when the working of the hospital establishment would suffer no derangement from such cause, and for periods not so prolonged as to operate injuriously on the infirm health of the inmates of our hospitals.

I have, &c.
(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

No. 137.

Dr. Smith to Dr. Hall.

SIR,

Army and Ordnance Medical
Department, 10th March 1855.

REFERRING to paragraphs 15, 17, 19, and 27, of my letter of the 5th ultimo, relative to the sanitary condition of the troops under your medical charge, of the camps and hospitals, as also of the town of Balaklava, I have the honour to acquaint you that I consider it prudent, in case of any unforeseen difficulty or delay occurring as to the procuring from the ports of the Black Sea quick lime and charcoal, to order to be immediately shipped for Balaklava eighty tons of peat charcoal and ten tons of chloride of lime.

These articles coming in aid of local supplies, and of other deodorants and disinfectants which have from time to time been sent to Scutari, and which, as you are aware, are at your command, will, I trust, when judiciously and extensively employed in and upon the places where the remains of the dead have been buried, as well as in the latrines, and the pits where offal and carcases of animals have been interred, obviate the evil consequences to be apprehended from the putrefaction of animal matter near the camps.

While I have no doubt you have earnestly turned your attention to the matters so essential to the health of the troops, and have been recommending

the requisite precautions to be employed against the approach of warm weather, still, as I am much in want of exact information as to what has been done in regard thereto, I am most anxiously expecting from you the replies to the queries contained in the letter referred to.

I have, &c.,
(Signed) A. SMITH,
Director General.

No. 138.

Dr. Hall to Dr. Smith.

Sir,
Before Sebastopol,
12th March 1855.

ON my return from Balaklava this evening I found the period of departure of the mail had been changed from nine o'clock to-morrow morning to seven o'clock this evening, and all that Mr. Robb will be able to accomplish will be to get the weekly state completed, but I fear it will be out of his power to get the general weekly state ready to go by this opportunity. I am happy, however, to be able to inform you that the improved state of health of the army continues, and although the difference between this and last week is not so great as was taken off from the morning states the other day, owing to allowance not having been made for states that had not arrived, still the decrease in the course of the week amounts to 406, with a prospect of the decrease continuing. This error I discovered and corrected in the weekly state that was transmitted to the Minister at War through Lord Raglan.

I recommended that a Board of health, composed of myself and the superintending officers of divisions, should assemble for the purpose of examining the hospitals, camps, and corps of the whole army, and making such suggestions as might appear to us to be necessary for the health and comfort of the men; and we commenced our labours with the 3d Division on the 10th, which is one of the most sickly in the whole army, and certain regiments in this division are more unhealthy than others. It will be our endeavour to trace out the cause of this, for amongst men living on the same circumscribed piece of ground, clothed and fed in the same manner, and subjected to the same duties and fatigues, it is curious that one corps should be more unhealthy than another, and where that does exist to any extent there must be some defect in either the *materiel* of the regiment or the manner of managing it by those in command over it. Some commanding officers exert themselves more than others for their men, and when they do their efforts are generally crowned with the satisfactory result of the improved comfort and appearance of their men, and others again argue that it is the duty of government to bring everything to the soldier, and so perhaps it is, abstractedly speaking; but where the public transport of the army is annihilated, this kind of passive resistance only adds to the misery of the men.

The camps generally speaking are much cleaner than they were, and as the Commander-in-Chief's attention has been specially drawn to the subject, this improved condition of things is likely to continue.

Since the Guards went down to Balaklava, about a fortnight ago, they have improved in health and appearance, and the Cavalry and Artillery continue to enjoy comparatively good health.

Scurvy is disappearing fast, and the bowel complaints which present themselves are neither so numerous nor so intractable as they were.

Our supplies of every kind are ample, and notwithstanding all that has been written about the French hospitals, truth compels me to say that our own regimental system far exceeds their field ambulance, and so they admit themselves, and so must every one who compares them now; and from all I hear, with the exception of the University in Pera, I doubt the

superiority of their general hospitals over ours; but a system of detraction has been commenced against our establishments, and has been kept up by interested parties under the garb of philanthropy—some to regain lost moral reputation, and others to make their mission of importance; and they wish the world to believe that all the ameliorations in our institutions are entirely owing either to their own exertions or those of a few nurses, and I am sorry to say some of our own department have pandered to this, and have been rewarded for it. On the 9th instant I had the honour to enclose of issues of medical comforts from the purveyor's store at Balaklava, for the use of the sick, in refutation of the Scutari correspondent of the "Times," and I now send you another for February, the month the reporter was in the Crimea, which ought to be sufficient, I should think, to convince the most incredulous that the sick of the British army have not been left to the eleemosynary contributions of the Time's Fund; and mind you, these figures are taken from official data duly authenticated, and not from an ad libitum newspaper statement that may be true, but there is no means of proving it beyond mere assertion. I defy the Times' Commissioner to prove that he has issued all the things he says he has for the use of the sick. It is well for him to despise the system of vouchers, but what institutions could exist without them? He himself may be as pure as the unsunned snow and as guileless as a child, but my experience of the world teaches me that all men are not so.

I have, &c.
(Signed) J. HALL,
Inspector General of Hospitals.

No. 139.

Major General C. Yorke to the Director General.

Sir,
Horse Guards,
12th March, 1855.

REFERRING to my letter of the 16th December last, I am now directed by the General Commanding in Chief to acquaint you that a communication has been received this day from the Admiralty to the effect that as a portion of the lemon juice which was obtained last year by the Admiral Superintendent at Malta, for the service of the navy, can now be spared in consequence of supplies having recently been contracted for in this country; the before-mentioned officer has been accordingly directed to cause 5,000 gallons of that article to be forwarded by the earliest opportunities, consigned for the service of the troops to the Commissary General in the Crimea, and to hire freight for the conveyance of the same.

I have, &c.
(Signed) C. YORKE.

No. 140.

Dr. Smith to the Under Secretary for War.

Sir,
Army and Ordnance Medical
Department, 13th March 1855.

As it is to be feared that on the setting in of warm weather, serious consequences to health may result in the absence of proper precautions both at Scutari, in the vicinity of the camps, and at Balaklava, from the decomposition of animal matter, offal, &c.; and as I am doubtful in regard to local supplies of charcoal and lime being available in sufficient quantity and in due time, I have the honour to submit, for the consideration of the Secretary of State for War, that in addition to the considerable quantities of peat, charcoal, and other deodorants which I have already caused to be forwarded to these stations in aid of local resources two hundred tons of peat charcoal should be immediately shipped, 130 for use in the Crimea, and 70 for Scutari.

In anticipation of Lord Panmure being induced to order the carrying out of this proposal, I beg to add in reference thereto that, as the article in question is produced chiefly in Ireland, its price would be considerably enhanced and its despatch delayed by its being sent to London for shipment; hence it is desirable that it should be sent from the Irish port nearest to the place of its production.

Further it may be right to mention that ten tons by weight of peat charcoal measure nearly thirty tons; it would therefore be necessary to engage 600 tons measurement for the conveyance of the quantity specified. Finding that the importers of this article had been in the habit of sending it in hogsheads, which are unwieldy and difficult of stowage, I have requested in respect of recent shipments that it should be packed in old flour barrels as being more manageable and easier of distribution.

Lastly, I venture to add that it is very desirable that the supply referred to should be sent by a steam ship, as we cannot calculate on the continuance of cool weather at the stations named much beyond the middle or end of April.

I have, &c.
(Signed) A. SMITH,
The Under Secretary for War, Director General.
&c. &c.

No. 141-2.

E. C. Mundy, Esq., to Dr. Smith.

Sir, War Department,
13th March 1855.

In transmitting for your information the copy of a letter from Dr. Milroy, containing certain remarks on the summer clothing for the troops in the Crimea, I am directed by Lord Panmure to request that you will impress on the Principal Medical Officers abroad the necessity of the men keeping their woollen shirts and cholera belts on.

I have, &c.
(Signed) E. C. MUNDY.

Dr. Smith,
&c. &c.

Dr. G. Milroy to Lord Panmure.

Whitehall,
28th February 1855.

MY LORD,
I BEG very respectfully to submit a few remarks upon a subject which is at present under your Lordship's consideration, viz., the summer clothing of the troops in the Crimea. My attention has been a good deal drawn to the study of the various circumstances influencing the health of the army for several years past, and especially since 1851, when I acted as Medical Commissioner in Jamaica, during the prevalence of cholera there, and when General Banbury, then Commander of the Forces, requested me to look narrowly into the subject.

In Appendix E of my official report to the Colonial Office, ordered to be printed by the House of Commons last year, I have recorded the general results of my observations.

These may perhaps be not undeserving of your Lordship's notice at the present time, when the organization, &c., of the medical department, among others of the army, is so much canvassed. I would especially solicit your Lordship's attention to the remarks on canteens, and also to the two suggestions at the end of the appendix respecting the inspection of barracks, &c., by medical and engineer officers together, and the annual or biennial publication of reports.

But to come to the special object of this letter, the proper clothing of the soldier in hot weather.

There is no point on which my opinion is more decided than as to the great utility, I would almost say the necessity, of woollen clothing being worn next the skin in hot climates and in malarious regions. It is of the utmost consequence for the maintenance of health that the surface of the body be guarded against the changes of temperature, often very great, during the twenty-four hours, and from one day to another. Sudden chills of the surface when the skin is perspiring freely are among the most frequent causes of attacks of fever, dysentery (that bane of armies in the field), and diarrhoea, not to mention of the increased liability to cholera, chest complaints, &c., &c.

Fresh arrived troops are of course more susceptible than others.

Each man should in my opinion be provided with two or three woollen shirts or jackets, so that he is never without one on him, night as well as day, when engaged in out-door duty. They may be of a thinner texture for summer than for winter wear, only they ought to be woollen, not linen or cotton.

It is a common prejudice that woollen clothing next the skin must be disagreeable and oppressive in hot climates. Quite the reverse, as I can testify from my own experience in the West Indies, and up the Mediterranean, &c., provided always the outer clothing be loose and easy, especially round the arms, shoulders, and chest, and the throat be not confined with any hard stock.

I would here mention an occurrence which struck me forcibly in Cuba, in 1851, among the Spanish troops, as well deserving imitation in our own service. I happened to be in Havannah when the soldiers marched out to attack Lopez and his buccaneering expedition just landed from New Orleans. The weather was very hot, and as the service was expected to be very fatiguing, all the troops, officers as well as men, wore loose dark green blouses, secured with a belt round the waist, and low-crowned straw hats. I could not but think at the time how much more suitable such a dress was in a tropical country than the tight encasements of the British troops I had just left in Jamaica.

Allow me in conclusion to offer one or two other very brief hints connected with the health of the troops.

1. The chocolate sent out should if possible be prepared with sugar, as it is France, and thus be ready for use at once, whether eaten in the solid form, or used as a beverage; otherwise it will not be liked by the men, as mentioned (I think) by Mr. Filder, in one of his letters.

Chocolate is infinitely preferable to coffee; where there is any tendency to diarrhoea, *coffee is apt to increase any disorder of the bowels.*

2. The water drunk by the troops in the field should, when suspected to be impure, be previously boiled if possible. Cold tea makes an excellent beverage. The addition of a little elixir of vitriol to impure water would be both grateful and useful, especially in the summer months.

3. The daily use of quinine as a prophylactic, before the fever season begins, might be of great service by fortifying the system, &c. This practice has been followed with decided benefit among the crews of our ships of war on the coast of Africa, and other sickly climates.

I have, &c.
(Signed) G. MILROY,
Medical Director.

Lord Panmure, K.T.,
&c. &c.

No. 143.

Dr. Smith to Colonel Mundy.

SIR,
Army and Ordnance Medical
Department, 16th March 1855.

I HAD the honour of addressing you on the 27th February, on the subject of the removal of sick and wounded from the Crimea, and from the hospitals of the East, to this country by direct conveyance, without their treatment and detention at intermediate posts, except in individual cases where, owing to special circumstances, the continuous prosecution of the voyage might be deemed undesirable.

A Medical Board composed of the officers named in the margin,* all of whom have served at the seat of war, having been lately assembled by my directions to consider certain points in connection with the hospital establishments of the East, and to offer what suggestions or recommendations their local knowledge and experience might enable them to supply; I beg to annex, for the information of Lord Panmure, an extract from the proceedings of this body strongly confirmatory of the views I felt it my duty to put forth in the communication to which reference has been made.

I have, &c.
(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

EXTRACT from the Recommendations of a Board of Medical Officers assembled at 13, St. James's Place.

8th March 1855.

"3. EVACUATIONS of all the hospital establishments to the largest practicable extent."

"4. To carry out the last recommendation, the removal of the sick and wounded to England would seem most desirable, for reasons too obvious to dwell on; but the beneficial effects of the voyage, the escape from the crowded and polluted hospital, and, in that, the best remedy for nostalgia, a deeply-rooted and widely-spread disease among our enfeebled sick in the hospitals in Turkey, are strong arguments in favour of this measure."

No. 144.

Dr. Smith to the Secretary, Board of Ordnance.

SIR,
Army Medical Department,
17th March 1855.

WITH reference to my letter of yesterday's date, urging that the litters and chairs should be sent to the Crimea immediately should they not have already gone;

I was greatly disappointed last evening to find that the articles were not yet being manufactured; if this be the case, I beg and entreat that the number that may be already completed may be forwarded by the very first opportunity instead of waiting for the completion of the whole number, and that like portions as soon as ready may be despatched in the same way.

The necessity for this course is so great that I trust my proposition will not be open to any objections.

I have, &c.
(Signed) A. SMITH,
Director General.

The Secretary, Board of Ordnance,
&c. &c.

* Deputy Inspectors General, Dr. Dumbreck, Dr. Forrest, Mr. Menzies.—Staff Surgeon, 2d class, H. Mapleton.

No. 145.

Dr. Smith to the Deputy Secretary-at-War.

SIR,
Army Medical Department,
17th March 1855.

A BROCHURE on Scorbutic Camp Dysentery, by Dr. John B. Wilmot, having been brought to my notice, I am of opinion that this treatise is worthy of being circulated among the medical officers of the army of the East; it contains an account of a remedy which it would seem to me desirable to try in the above disease, which has hitherto proved so intractable and fatal. I therefore request the sanction of Lord Panmure to send out one hundred copies of the above work for distribution among the medical officers serving in Turkey. The sum required for this service is 5*l.*

I have, &c.
(Signed) A. SMITH,
The Deputy Secretary-at-War, Director General.
&c. &c.

No. 146.

Dr. Smith to Dr. Hall.

SIR,
Army and Ordnance Medical
Department, 19th March 1855.

IX enclosing an extract of a letter from Dr. Milroy to the Minister at War, advocating the continued use of woollen clothing next to the skin, even during the hot seasons of warm climates, and in malarious regions, I have to observe that I am disposed to subscribe to the opinion that such practice is salutary, and to recommend for consideration the propriety of its adoption for the soldiers of our army now serving in the Crimea.

I do not know whether summer as well as winter clothing has been furnished for the troops under your superintendence, but I am very desirous of having an early opinion from you on the above subject, after consulting with the medical officers serving with you; and should woollen articles for summer wear be deemed desirable, I can, if they be not available on the spot, soon have an adequate supply forwarded for this service.

You will do well to impress on the medical officers of the army the propriety of their seeing in changeable and bad weather that the men wear their cholera belts, excellent protection against vicissitudes of temperature, as well as grateful and comfortable supports to men necessarily undergoing much toil and fatiguing bodily exertion.

I have, &c.
(Signed) A. SMITH,
Dr. Hall, Director General.
&c. &c.

(Extract.)

"THERE is no point on which my opinion is more decided than as to the great utility, I would almost say the necessity, of woollen clothing being worn near the skin in hot climates and in malarious regions; it is of the utmost consequence for the maintenance of health that the surface of the body be guarded against the changes of temperature, often very great, during the twenty-four hours, and from one day to another. Sudden chills of the surface when the skin is perspiring freely are among the most common causes of attacks of fever, dysentery (that bane of armies in the field), and diarrhoea, not to mention of the increased liability to cholera, chest complaints, &c. &c.

"Fresh arrived troops are of course more susceptible than others.

"Each man should in my opinion be provided with two or three woollen shirts, or jackets, so that he is never without one on him, night as well as day, when engaged on out-door duty. They may be of a thinner texture for summer than winter wear, only

they ought to be woollen, not linen or cotton. It is a common prejudice that woollen clothing next the skin must be disagreeable and oppressive in hot climates; quite the reverse, as I can testify from my own experience in the West Indies, and up the Mediterranean, &c., provided always the outer clothing be loose and easy, especially around the arms, shoulders, and chest, and the throat be not confined with any hard stock."

No. 147.

Dr. Smith to Dr. Cumming.

SIR,
Army and Ordnance Medical Department, 23d March 1855.
A BOARD of Medical Officers having offered certain sanitary suggestions in reference to hospitals, &c., I have the honour to forward for your consideration an extract from the proceedings of this body, conveying a recommendation in regard to interments, to which I have to direct your attention and request your efforts to carry it out.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Cumming,
&c. &c.

Extract No. 6.

"THE formation of places of sepulture as distant as practicable from hospitals; deep graves, and, when the dead accumulate, the use of peat charcoal to correct effluvia; a layer of quicklime below and above the interred body would be also a desirable feature in the process."

(Signed) A. SMITH.

No. 148.

Dr. Smith to Dr. Cumming.

SIR,
Army and Ordnance Medical Department, 23d March 1855.
A BOARD of medical officers having, by my directions, reported on certain points connected with the locality and sanitary condition of the hospitals at Scutari and its neighbourhood, I have the honour to draw your attention to the following points, with a view to your adoption of such measures thereon as shall tend to neutralize and remove aught of an objectionable nature, remediable by the means which your resources will supply.

1st. The wards in the general hospital, diverted from their legitimate use, and occupied as apothecaries' stores and purveyors' office, should, if possible, be restored to the direct service and reception of the sick.

2d. The defective state and unscientific formation of the drains of the hospital should be seen to and corrected without delay.

3d. The proximity of the place of sepulture is most objectionable; efforts to render its vicinity as little noxious as possible should be assiduously persevered in. A special letter on this subject, dated the 22d instant, has been addressed to you, to which I request your pointed attention.

4th. Means ought to be taken to close the gaping seams of the flooring of the rooms of the barrack hospital, which now harbour vermin.

5th. The eastern wing of the barrack hospital was at one time more unhealthy than the other portions of the building; if this is found still to obtain, the cause ought to be sought for, and if it admits of a remedy this should be applied.

6th. No means should be left untried to rid the area of the barrack hospital of the huts most improperly erected on such a site.

7th. The approach of the warm season renders the prolonged occupation of the Palace Hospital most objectionable; its notoriously unhealthy position calls

for some action anticipating the necessity for its evacuation and for the disposal of its inmates.

8th. It is said that the rooms for sick in Kulalie Barrack are over stables, now no longer probably serving for such purpose, but still their former use suggests the necessity of carefully seeing that they retain no elements of disease derived from the time when the impurities of the stable must have tainted the very walls and the soil.

9th. The offensive and pestilential state of all the privies have been commented on. What means have been taken to remedy this?

The Board recommends the abandonment of the use of the Turkish privy, and the formation of other latrines, technically, it is believed, called the sluice privy, in which, on the removal of a shot chained to an orifice of the pipe for the removal of the impurities, a large stream of water effectually cleanses the recipient, rendering impossible all lodgement in it, or in the tube which carries off its contents.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Cumming,
&c. &c.

No. 149.

Dr. Smith to Dr. Cumming.

SIR,
Army and Ordnance Medical Department, 23d March 1855.

THE notorious insalubrity of the site of the group of buildings constituting the Palace Hospital at Scutari during the summer and autumn months calls forth measures in anticipation of the advent of this period, which will enable you altogether to dispense with the occupation of the above hospital, the prolonged tenancy of which would be unjustifiable.

I request therefore that you will direct your attention to this subject, and communicate to me when you propose to effect the evacuation of this unhealthy locality.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Cumming,
&c. &c.

No. 150.

Dr. Smith to Colonel Mundy.

SIR,
Army and Ordnance Medical Department, 23d March 1855.

ALTHOUGH I feel that I have no connection with the hospital recently established at Smyrna, I still think it to be my duty to send a copy of an important letter* I have received from Deputy Inspector General Humfrey now there, for the information of Lord Pannure.

I have, &c.
(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

No. 151.

Dr. Smith to the Quartermaster General.

SIR,
Army and Ordnance Medical Department, 23d March 1855.

IN reply to your letter of the 17th instant, with its enclosure from Lord William Paulet, I have the honour to state, for the information of the General Commanding in Chief, that I presume his Lordship's application extends to a provision of marquees and tents for men not under hospital treatment.

In reference to tent accommodation for the use of the sick, I have to acquaint you that I have lately ordered 100 hospital marquees for this service.

I have, &c.
(Signed) A. SMITH,
Director General.

The Quartermaster General,
&c. &c.

* 10th March 1855.

No. 152.

Dr. Cumming to Dr. Smith.

SIR, Scutari, 25th March 1855.
I HAVE to acknowledge the receipt of your letter of the 10th instant, respecting the graveyard, and have to acquaint you that it has been inspected by a Sanitary Commission, of which Drs. Sutherland and Gavin are members, and who have made such suggestions as they deemed necessary. There never appeared to me any injurious consequences to be apprehended from it.

The sense of smell of persons visiting it may have been offended by a sewer which discharges itself into the sea of Marnora close by, and which, to my knowledge, has deceived some.

The peat charcoal will be found of much use for many purposes.

I have, &c.
(Signed) A. CUMMING,

Dr. Smith,
&c. &c.
Inspector General of Hospitals.

No. 153.

Dr. Hall to Dr. Smith.

SIR, Before Sebastopol,
25th March 1855.
I HAVE the honour to transmit, for your information, the report of a Sanitary Board ordered to assemble on the 10th instant, by Field Marshal Lord Raglan, Commanding in Chief, together with the copy of a report on the advantage of giving tea, coffee, and cocoa on alternate days to the troops serving in the field.

I have, &c.
(Signed) J. HALL,
Inspector General of Hospitals.

Dr. Smith,
&c. &c.

No. 154.

Dr. Smith to Colonel Mundy.

SIR, Army and Ordnance Medical
Department, 26th March 1855.
As I continue to hear from time to time of the inefficiency of the orderlies provided for attendance on the hospitals in the East, and that great inconvenience and even more than inconvenience is often experienced from many of these men being unable to read, I beg respectfully to represent, for the consideration of Lord Pannure, the necessity of some measure being immediately adopted to remedy the evil referred to, and to provide what is so essential to the comfort of the sick, and the success of the medical treatment to which they require to be subjected.

In a letter I have received from Smyrna, dated 2d March, the inefficiency of the hospital orderlies, and the incapacity of some of those employed is forcibly stated.

I have, &c.
(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

No. 155.

Dr. Smith to the Principal Medical Officer.

SIR, Army and Ordnance Medical
Department, 5th April 1855.
I HAVE the honour to inform you that 800 pounds of spermaceti candles will shortly be sent out to the Crimea for the use of 100 coloured lamps intended to be used as a mark to distinguish field hospitals at night.

Each of these candles is calculated to burn for six hours, and it is very advisable that instructions should be given for them not to be used for any other purpose than for the above service.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 156.

Dr. Smith to the Principal Medical Officer.

SIR, Army and Ordnance Medical
Department, 5th April 1855.
HEREWITH I have the honour to enclose a copy of a second invoice for hospital stores shipped on board the "Stella" for use in the General Hospital at Scutari, which vessel sailed for her destination on the 8th ultimo.

The reason why it was not forwarded in my letter of the 12th ultimo is, that the authorities at the Tower omitted to send it me.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 157.

Dr. Smith to the Principal Medical Officer.

SIR, Army and Ordnance Medical
Department, 5th April 1855.
I HAVE the honour to enclose herewith copies of invoices and of medical comforts and hospital stores, shipped on board the "Raphael" for use in the General Hospital at Scutari, which vessel sailed for her destination on the 1st instant, and you will please advise me of her arrival in due course, and also forward me a receipt for the stores, &c. which are received.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 158.

Dr. Smith to A. Cumming, Esq.

SIR, Army and Ordnance Medical
Department, 7th April 1855.
I HAVE the honour to forward herewith thirty copies of a brochure on the treatment of scorbutic camp dysentery, by Dr. Wilmot, which I request you will cause to be distributed among the medical officers under your orders; and that you will inform me of the steps taken to ensure their circulation.

I have, &c.
(Signed) A. SMITH,
Principal Medical Officer, Director General.
&c. &c.

No. 159.

Dr. Smith to the Deputy Secretary-at-War.

Army Medical Department,
12th April 1855.

SIR,

In reply to your letter of the 5th inst., No. 154319, requesting me to instruct Mr. Bridgett to procure a wringing machine for the use of the hospital at Kululee, and also for that at Balaklava, I have the honour to inform you that Mr. Bridgett has ordered them, but although every dispatch will be used in preparing them, they will not be ready for shipment before the middle of next week.

By that time the vessels now loading with hospital stores, specially for this department, will have sailed, but immediately the machines are ready Messrs. Hayter and Howell will be instructed to apply for tonnage and see to their shipment.

(Signed) A. SMITH,
Director General.

The Deputy Secretary-at-War,
&c. &c.

No. 160.

Dr. Smith to Dr. Hall.

Army Medical Department,
13th April 1855.

SIR,

THE Minister at War having transmitted to me your returns of medicines issued from the stores at Balaklava to the troops in the Crimea between the 1st January and the 5th March 1855, and requested me to state to him whether I considered what remained in store is a sufficient provision for so large an army as that now in the Crimea, I have the honour to inform you that, judging from the returns in question, I feel great difficulty on this point, although modified to some extent by your statement that a large supply was required from Scutari, a part of which was being landed at the time your letter was written.

I earnestly request you will take care to prevent your stock of medicines getting so low as it appears to have been on the 5th ultimo, as under the present circumstances of the troops a much larger supply ought always to be available for issue, and I cannot believe it possible that any difficulty can exist in maintaining such a supply, as the quantities of every article at Scutari must be very large.

The total want of quinine and the small amount of chloroform which you return in store especially attracted my attention, and care must be taken to avoid the necessity of having to make such confessions in future. You may rest assured the public will not lose this opportunity of holding up the department to further obloquy; but even were there no reason to fear that, it must be kept in mind that nothing but the absolute inability of securing the article could warrant such a want of them.

In a former letter you informed me that you had made several requisitions on Scutari which had not been attended to; should such gross neglect again occur you must not fail to make the subject one of serious consideration, and have the offender, whoever he may be, punished in the manner such neglect fairly merits.

If at any time when you require medicines you find your applications are not responded to, your best course will be to obtain at once the sanction of Lord Raglan to send a dispenser immediately to Scutari, with stringent instructions to the effect that he must immediately return to Balaklava with the supplies you require, as nothing can persuade me that there is not in the stores of the chief medical store keeper an ample stock to meet any demand that you may find it necessary to make upon him, and at the same time leave the establishment in full possession of everything requisite.

I have, &c.

(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 161.

Dr. Smith to Dr. Hall.

Army Medical Department,
13th April 1855.

SIR,

I HAVE the honour to transmit herewith a bill of lading and shipping invoice of seven cases of quinine for the use of the troops under Lord Raglan, and forwarded per steamer "Iron Age," which proceeded to Balaklava on the 10th instant.

I have, &c.

(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 162.

Dr. Smith to the Principal Medical Officer at Balaklava.

Army and Ordnance Medical
Department, 13th April 1855.

SIR,

I HAVE the honor to forward, by desire of the Secretary of State for the War Department, twenty printed copies of instructions on sanitary arrangements extracted from the Sanitary Journal, which I request you will put in circulation among the medical officers acting under your orders, and that you will acknowledge their receipt, and notify the steps you have taken for giving effect to Lord Panmure's wishes.

I have, &c.

(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 163.

Dr. Smith to the Under Secretary for War.

Army and Ordnance Medical
Department, 13th April 1855.

SIR,

As the "Great Tasmania" and "Saldana" are to be continuously engaged for the conveyance to the Crimea of effective troop, and for bringing home sick, wounded, and invalids, I am of opinion it will be to the interest of the service to appoint a surgeon and two assistant surgeons for service on board each of the vessels; and I beg to be informed whether I have Lord Panmure's authority to nominate medical officers for the same.

I have further to acquaint you for the information of his Lordship, that as the medical officer at Liverpool, engaged in superintending the fitting up of the vessels herein referred to, has reported that they are nearly ready for the purposes to which they are to be devoted, I have ordered a proper supply of medicines, instruments, and surgical materials, with a view to their being forwarded immediately to Liverpool, to be placed in the pharmacus of the ships.

I have, &c.

(Signed) A. SMITH,
Director General.

The Under Secretary for War,
&c. &c.

No. 164.

Dr. Smith to the Principal Medical Officer at Kululee.

Army and Ordnance Medical
Department, 13th April 1855.

SIR,

I BEG to forward, at the request of the Minister for War, five printed copies of instructions for sanitary arrangements, extracted from the Sanitary Journal, for the information of the medical officers acting un-

der your orders, the receipt of which you are requested to acknowledge.

I have, &c.
(Signed) A. SMITH,
Principal Medical Officer, Director General,
&c. &c.

Similar letter to Principal Medical Officer, Abydos, on same date.

No. 165.

Dr. Smith to the Principal Medical Officer in Scutari.

Army and Ordnance Medical
Department, 13th April 1855.

SIR,
I HAVE the honour to forward, by desire of the Minister for War, ten printed copies of instructions on sanitary arrangements, extracted from the Sanitary Journal, for circulation among the medical officers under your orders, the receipt of which you will acknowledge, and notifying the steps taken for giving effect to Lord Panmure's wishes.

I have, &c.
(Signed) A. SMITH,
Principal Medical Officer, Director General,
&c. &c.

No. 166.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army and Ordnance Medical
Department, 13th April 1855.

SIR,
I HAVE the honour to request you will inform me whether the number of medical officers you now possess is sufficient for the performance of the medical duties of the army before Sebastopol, and if there is fair reason to believe that it is likely to prove efficient during the summer, when active operations may be anticipated.

In the event of your being of opinion that the medical staff is not sufficiently numerous, you will be pleased to lose no time in communicating with me, and state the number and ranks of the additional officers you are likely to require. I am anxious that each division of the army should have a deputy inspector general of hospitals, as the superintending medical officer, and at least one, if not two, staff surgeons of the 1st class.

I may add that I have addressed a similar letter to this to the Principal Medical Officer at Scutari.

I have, &c.
(Signed) A. SMITH,
Principal Medical Officer, Director General,
&c. &c.

No. 167.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
14th April 1855.

SIR,
I HAVE the honour to state, for the information of the Minister for the War Department, that a letter I am in receipt of from the Inspector General of Hospitals in the camp before Sebastopol, dated 26th March, speaks of the sultriness of the weather, the thermometer of Fahrenheit having been as high as 70°. The winter clothing still in wear must in such circumstances be oppressing to the soldier, and it is most essential to his health and comfort that he should be put as speedily as possible in possession of lighter articles of dress. I beg, therefore, earnestly to recommend that no measure be left untried calculated to expedite and hasten the arrival at their destination of the articles of clothing for warm weather, which has no doubt already been provided and deposited.

The supply above referred to, which it is proposed should be worn during the warm parts of the day, will prove most beneficial to the health and well-being of the troops, though at the same time it will

not be possible to withdraw from them the warmer clothing with which they have been supplied; as it is well known that though the spring days in the Crimea are warm, the evenings and nights are excessively cold; indeed this peculiarity is a characteristic of the climate, even during the summer months.

I have, &c.
(Signed) A. SMITH,
The Under Secretary for War, Director General,
&c. &c.

No. 168.

Dr. Smith to Colonel Mundy.

Army Medical Department,
14th April 1855.

SIR,
WITH reference to your letter of the 7th instant, I have the honour to state, for the information of Lord Panmure, that I have forwarded by the mail of this day to the Principal Medical Officers at Scutari, Kulalie, Abydos, and Balaclava, a supply of printed copies of instructions on sanitary arrangements, extracted from the Sanitary Journal, agreeably to his Lordship's desire.

In regard, however, to those intended for the hospital at Smyrna, I take leave to enclose ten to be forwarded by the War Department, as I have no medical authority at that station with whom I can communicate.

I am, &c.
(Signed) A. SMITH,
Colonel Mundy, Director General,
&c. &c.

No. 169.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
14th April 1855.

SIR,
REFERRING to your letter of the 7th instant, conveying the decision of Lord Panmure, that each soldier should carry on his person a "linen bandage," I have the honour to remark, previous to complying with the final clause of the letter which instructs me to furnish a "pattern bandage" to the Board of Ordnance, that the "linen bandage" is comparatively little used, and that calico is by nearly all practical and experienced men considered the material most applicable for the formation of bandages for surgical purposes.

Further I would beg to observe, as it is deemed expedient that a provision of this kind should form part of the equipment of the soldier, that some completeness should be given to this appliance by the addition of a portion of lint, as the value of the first named surgical adjuvant would be greatly enhanced if conjoined with the latter, its almost inseparable companion in the treatment of wounds.

The subject has already been considered, and to a certain extent acted on, by me, as the enclosed copy of a letter to Dr. Hall, dated the 15th November last, will evince.

I have, &c.
(Signed) A. SMITH,
The Under Secretary for War, Director General,
&c. &c.

No. 170.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical
Department, 14th April 1855.

SIR,
REFERRING to your private letter of 26th March, and that portion of the contents commenting on the furs, &c., which the troops were then wearing, I hope you will not fail to urge that every practicable exertion may be made to have the soldiers of the army supplied with the description of dress which

will prove more conducive to their comfort and welfare than the warmer articles of which you speak, which are unsuited to a temperature of 75° Fahrenheit.

Although a lighter description of dress will, I have no doubt, be acceptable during the day, the chilly evenings and nights will require a provision of warmer articles; but I feel persuaded that you will be able to advise Lord Raglan in regard to this subject without any suggestions from me.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 171.

Dr. Smith to Dr. Hall.

Army Medical Department,
16th April 1855.

SIR,

REFERRING to your letter of the 30th ultimo, acknowledging the receipt of my communication of the 10th March relative to the shipment of peat charcoal and chloride of lime for sanitary purposes in the Crimea, and stating that these articles are not so much required as they were some time ago, before the establishment of lime kilns in the vicinity of Balaklava, nor so desirable for use in hospitals and ships as the chloride of lime, I have the honour to acquaint you that the peat charcoal which I have caused to be sent on requisition direct from this department, as well as 200 tons which I have moved the Secretary of State for War to transmit to the East through the commissariat, has been forwarded in aid of local resources of common charcoal and quicklime, which might not be available in the quantity and at the time and place required.

I have also to remind you that I have made due provision for the despatch of other deodorants and disinfectants to the East, and especially of large supplies, as noted on the margin,* of chloride of zinc.

With the exception of 1,000 pints addressed to Balaklava, per "Arethusa," the supplies of the article in question have been forwarded to Scutari, whence you can obtain it on requisition.

Notwithstanding the large quantities, however, already shipped, I gave instructions immediately on the arrival of your letter of the 30th for the despatch of the articles therein demanded, which, according to the note on the margin,† will leave England in a few days per steamer "Retriever."

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 172.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical
Department, 16th April 1855.

SIR,

THE ships "Great Tasmania" and "Saldanha," now preparing at Liverpool to carry out effective troops to the Crimea, are fitted out with the special object of returning to this country with sick, wounded, and invalids from the seat of war; and as I am of opinion that each vessel should have at least one surgeon and two assistant surgeons on board, and even more, should the nature of the cases embarked

* Chloride of Zinc,—	Pints.
Eagle - - - - -	1,450
Whitley Park - - - - -	1,450
Hella - - - - -	3,000
Black Sea - - - - -	3,000
Arethusa - - - - -	3,000
	<hr/>
	11,900

† Liq. Trine chloride, 500 pints; crude sulphate of iron, 5 cwt.; consigned to the Senior Commissary, British Forces, Constantinople, on account of the Principal Apothecary, Scutari.—Cases and keys marked



appear to require additional medical aid, I have to request that you will take care that the medical officers to be placed in charge shall be in every way effective when they assume this duty, and likely to continue so during the voyage, and that they have at their command everything which it can be supposed will be necessary for the use of the invalids.

As regards this arrangement I must hold you responsible, and I have no fear of your failing in the discharge of so important a duty.

It is most requisite that a nominal roll of the men embarked, in which the disease of each individual shall be specified, should be despatched, by post direct to this office, on the day the sick are placed on board, or as soon after it as possible.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 173.

Dr. Smith to Dr. Hall.

Army Medical Department,
16th April 1855.

SIR,

WITH reference to my letter of the 9th instant, notifying the shipment per steamer "Iron Age" of quinine for Balaklava and for Scutari, I have now the honour to acquaint you that the remainder of that supply (100 pounds), which was not ready for despatch by that vessel, is about to be sent to Scutari by the steamer "Retriever."

You will be pleased to take the necessary steps to have the article referred to forwarded to Balaklava on its arrival at that station.

The cases are consigned as on former occasions to the "Commissary General, Lord Raglan's Army, on account of the Principal Medical Officer, Balaklava."

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 174.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical
Department, 18th April 1855.

SIR,

REFERRING to your letter of the 27th March, addressed to Field Marshal Lord Raglan, I think it highly desirable, looking to the unsatisfactory state of health of the 79th Highlanders, that your proposition for a removal from their encamping ground to the higher point and dryer soil occupied by the reserve companies and the men of the 68th regiment should, if strategic reasons do not altogether forbid its adoption, be urged with all your influence.

It seems too evident that the prolonged occupation of the site the corps now holds will sap its health and seriously impair its efficiency—considerations which, if prominently brought forward, may be successful in bringing about the change of position you desire.

The situation of the 93d in Kadikoi, and of the troops in the huts exposed to the miasm of the half swampy sodden valley, and the small polluted stream which empties itself into Balaklava harbour, is productive of much anxiety, and I trust that the formation of the trench for the drainage of this tract will be pressed forward, and that every other corrective of this endemic evil, which your local knowledge will suggest the adoption of, will be put in practice.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 175.

Dr. Smith to Col. Mundy.

Army Medical Department,
19th April 1855.

SIR,

As I have strong reasons for believing that vegetables are not cultivated in Turkey to an extent which

will admit of the army in the Crimea being liberally supplied with such during the coming summer, I beg to submit to the Minister for the War department that this subject should receive earnest consideration without further delay, as there is nothing more essential to the maintenance of the health of the troops than a due and adequate supply of fresh vegetables to their ordinary rations.

Assuming that the reports which reach me of the probable deficiency of this most necessary constituent of healthy diet are in accordance with truth, I feel it to be my duty to recommend that measures be at once adopted to ensure a continuous supply of fresh vegetables for the service above referred to; and if on inquiry it be found that the doubts as to the capability of the markets of Turkey to afford the required supply be well founded, I consider that the best course would be to rent in a suitable locality a portion of arable land suited to the growth of vegetables, to be cultivated by persons engaged for this purpose by the British Government, and placed under proper superintendence.

A supply of labour for the object contemplated in the above proposition will not be difficult to secure, as it is well known that the Maltese are skilful and industrious market gardeners employed in such capacity all over the Levant, acquainted moreover with the climate and soil, on a knowledge of the peculiarities of which successful tillage and raising of crops depend.

I have, &c.
(Signed) A. SMITH,
Director General.

Col. Mundy,
&c. &c.

No. 176.

Dr. Smith to the Deputy Secretary at War.

Army Medical Department,
23d April 1855.

SIR,
In acknowledging the receipt of your communication of the 21st instant, enclosing a copy of a letter from Lord Wm. Paulet, commanding troops at Scutari, requesting a supply of 500 bags of peat charcoal to be sent to that station, I have the honour to state in reply, that although a considerable quantity of that article has been forwarded on requisition from this department to Scutari, Balaklava, Eupatoria, &c., and 200 tons are now being forwarded from Ireland to the East, still as peat charcoal is likely to be in demand at those stations for some time to come, I advise that the 500 additional bags of it be immediately ordered.

I have, &c.
(Signed) A. SMITH,
Director General.

The Deputy Sec. at War,
&c. &c.

No. 177.

Dr. Smith to Colonel Mundy.

Army Medical Department,
23d April 1855.

SIR,
I HAVE the honour to submit, for the consideration of the Secretary of State for the War Department, copies of two letters which Mr. Cumming, Inspector General of Hospitals at Scutari, found it necessary to address to Lord W. Paulet, and I feel it my imperative duty to earnestly recommend that all the men of the department quartered in the sheds be immediately removed, and accommodated at a distance from the hospital buildings.

2nd. That great exertions should be made to relieve the hospitals and depôts of all men not likely soon to be able for further service in Turkey, whom Mr. Cumming states are numerous; the removal of these men to this country would be productive of incalculable benefit to the hospital establishments, as also to the men themselves.

3d. If the removal of the men referred to cannot possibly be accomplished, I trust Lord W. Paulet will be urgently required to obtain further accommodation, as an influx of wounded from the army may now fairly be contemplated, and the consequence of such an influx, limited as the existing accommodation is, will be most disastrous now that the temperature is daily increasing.

That measures should be immediately adopted to ensure the medical officers at Kululie a suitable amount of accommodation, as, should they become disabled by fever and other diseases which are liable to originate from overcrowding, the consequence may be most disastrous. If buildings do not exist sufficient for the wants of the medical officers and nurses, they ought, in my opinion, to be erected with the utmost dispatch.

I have, &c.
(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

No. 178.

Dr. Smith to the Deputy Secretary at War.

Army Medical Department,
26th April 1855.

SIR,
I HAVE the honour to acknowledge the receipt of your letter of the 21st instant, respecting the washing for the troops at Scutari, and in reply beg to say, for the information of the Secretary at War, that I am not aware of the arrangements made with reference to this subject, as the purveyor does not communicate with this department on such points.

A large supply of washing machinery is now at Scutari, which was forwarded by my order, and I presume it is in active operation.

I have called on Mr. Wreford for the information you require.

I have, &c.
(Signed) A. SMITH,
Director General.

Deputy Secretary at War,
&c. &c.

No. 179.

Dr. Smith to the Military Secretary.

Army and Ordnance Medical
Department, 26th April 1855.

SIR,
It having been determined to fit out ships for the removal from time to time of sick and wounded from the Crimea to this country for further treatment, and the vessels the "Great Tasmania" and "Saldanha" being completed in fittings, &c., necessary for such service, with the exception that attendants requisite for the care of the sick and wounded are not yet provided, I have the honour to forward a copy of a letter from the War Department, dated 25th April, 1855, ¹⁴⁸⁸⁶⁶₂₂ instructing me to apply to the General Commanding in Chief in regard to these attendants, of whom the enclosed Return specifies the class, number, and distribution I consider indispensable for the proper performance of the duties which the above service involves; and as both vessels are ready to leave this country it is necessary that all possible despatch should be used in expediting the provision of stewards, serjeants, and orderlies, as detailed; and it will be essential to the success of the undertaking, and the comfort of the sick, that the men employed in the above capacities should be intelligent, steady in their habits, and in possession of their full bodily vigour.

I have, &c.
(Signed) A. SMITH,
Director General.

Military Secretary,
&c. &c.

No. 180.

Dr. Smith to the Principal Medical Officer at Scutari.

Army and Ordnance Medical Department, 27th April 1855.

SIR, I WAS much pleased to hear from your last letter that the vacant space in the hospital at Scutari was now very considerable; but I fear, unless you can get another establishment in addition to what you now possess, that space will again soon be occupied; we are all naturally expecting something very serious in the Crimea, therefore it is unnecessary for me to urge upon you the absolute necessity of being well prepared with accommodation for what the casualties of a battle or an assault may produce.

Dr. Hall has a considerable amount of accommodation at his disposal; still you ought to be also prepared to take a large share of the wounded. I must, therefore, impress on you the necessity of getting all your beds fully put in order, so that, should you have a sudden influx, no delays in disposing of the sick will arise from deficiency of your department.

I shall be glad to be immediately informed what hospital accommodation you can afford, in the event of a sudden demand for it.

I have, &c.

(Signed) A. SMITH.

The Principal Medical Officer, Director General.
&c. &c.

No. 181.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical Department, 27th April 1855.

SIR, I HAD much pleasure in perusing your letter detailing the hospital accommodation you have available in the Crimea; and I feel it will be most satisfactory, should an assault on the tower take place, or a great battle be fought. I hope, however, you will not regard it as sufficient, since you can never anticipate what may be the number of wounded. You will, therefore, I beg of you, press strongly on Lord Raglan the necessity for still further extending it; and I shall be glad to hear from you as soon as possible what further huts you have been able to obtain.

Only a few months ago I had a hundred hospital marquees sent to Scutari; and I hope you will keep them in view if they can be made useful.

When you require immediately any supplies from Scutari, I think you ought to apply for a vessel specially to fetch them, and in that vessel you ought to dispatch some one of your staff to see your orders carried out, and return with the supplies.

I think this course is necessary, as it seems difficult otherwise to get your orders obeyed.

I have, &c.

(Signed) A. SMITH,

Dr. Hall, Director General.
&c. &c.

No. 182.

Dr. Smith to J. Wood, Esq.

Army and Ordnance Medical Department, 27th April 1855.

SIR, AFTER having carefully examined Mr. Barnett's bedstead, in conjunction with several other medical officers, I considered a proportion of them to be much required for service in the hospital of the army in the East, and I consequently ordered fifty-one in January last, and subsequently five of an improved pattern, to be sent to Scutari. The copy of the report of a medical board on the bedsteads in question is herewith enclosed.

I have, &c.

(Signed) A. SMITH,

J. Wood, Esq., Director General.
&c. &c.

No. 183.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army and Ordnance Medical Department, 27th April 1855.

SIR, ON perusing the sanitary reports from the senior medical officers of divisions for the week ended 7th instant, which you have lately transmitted to me, I am gratified to observe a steady general improvement in the health of the army, and in the means and precautions requisite to this end.

Especially it gives me great satisfaction to learn that the medical supplies are abundant, and I trust that there will never again be any deficiency, either in regimental hospitals, or in the divisional, or in the central store attached to the army, but that arrangements shall be made, and strictly carried out, whereby medical stores far in advance of any possible demand shall be forwarded on your requisition from the medical depôt at Scutari, at which station a superabundance will always be found.

I observe that fever of rather a severe form still prevails in the 4th Division, and that the senior medical officer thereof attributed the continuance of it, in a great degree, to the overcrowding of men in the tents, to defective ventilation, and want of cleanliness. He also complains that his recommendations on these subjects to the divisional authorities have not been attended to or have been misunderstood.

I feel persuaded that you have taken the matter in hand, and properly represented it to Lord Raglan; and that you do not fail repeatedly and strongly to urge upon his Lordship the necessity of his supporting you, and the medical officers in charge of divisions, in all matters of a sanitary nature.

You will be good enough to transmit to me copies of the representations to which Mr. Roberts refers, and of any others which he or you have made subsequently on the matter in question.

I have, &c.

(Signed) A. SMITH,

The Prin. Medical Officer, Director General.
&c. &c.

No. 184.

Dr. Smith to the Deputy Secretary-at-War.

Army Medical Department, 28th April 1855.

SIR, I HAVE the honour to forward, for the information of the Secretary-at-War, the copy of a letter, dated Balaklava, 12th instant, from Mr. Fitzgerald, Purveyor to the Forces, and approved by Dr. Hall, with its accompanying requisitions for medical comforts, as they contain quantities so enormous that I think it my duty to bring them to the notice of Lord Panmure.

The enclosed return of medical comforts forwarded to Scutari since the 20th January last, will show the large supplies sent out; but as so much has been said, and with a certain degree of truth, respecting the deficiencies of medical comforts which have occurred at the seat of war, I feel it both politic and right to furnish what the local authorities require, as they must be better judges as to what the wants of the sick are than I can possibly.

I still continue of opinion that the medical arrangements, generally, at the seat of war, will not be satisfactorily carried out until a small steamer is appointed to run between Scutari and Balaklava specially appointed for the medical department, as was recommended by me to the Duke of Newcastle in my letter of the 18th November last; and if a vessel of that description were to be under the sole control of Dr. Hall, he would then have no difficulty in obtaining supplies from Scutari, the best place for a general store.

At one time it would have been utterly impossible to provide stowage room at Balaklava for such quan-

ties of medical comforts as Dr. Hall now requires; but as I have reason to believe that that difficulty is now partially removed, it may be possible to find a place for their safe housing. Such being the case, should it not be thought desirable to appropriate a vessel, as proposed, and thus enable the chief store to continue at Scutari, as it has been for many months past, and where I think it ought to be, I will immediately apply for freight, in order to forward the articles herein required direct to the latter place.

It will be observed that supplies, to the enormous extent required, are demanded to be forwarded monthly, which will be found impracticable at least for several months, as the present state of the market will not furnish now, or for some considerable time to come, some of the articles enumerated in the requisition.

I have, &c.

(Signed) A. SMITH,

The Dep. Secretary-at-War, Director General.
&c. &c.

No. 185.

Dr. Smith to Dr. Hall.

Sir, Army and Ordnance Medical Department, 1st May 1855.

In reference to the communication from Assistant Surgeon Menzies, 93d Highlanders, dated the 13th ultimo, with a comment thereon by Deputy Inspector General Dr. Linton, in regard to an additional hut for the sick of the above corps, I have to request, in reference to this and all such matters, that you will press your applications strongly on the Quartermaster General, and repeat them earnestly till such wants are supplied.

I have, &c.

(Signed) A. SMITH,

Dr. Hall, Director General.
&c. &c.

No. 186.

Dr. Smith to the Under Secretary at War.

Sir, Army and Ordnance Medical Department, 3d May 1855.

I BEG to acknowledge the receipt of your letter of the 30th ultimo, relative to the reappearance of cholera,—I hope only in a sporadic form,—in the army in the Crimea, and requesting information as to the quantity of camphor available for use in the hospitals of the East.

In reply I have the honour to acquaint you, for the information of Lord Panmure, that large quantities of medicines appropriated for the treatment of cholera, diarrhoea, dysentery, fevers, and other diseases which have been prevailing or are likely to prevail, have been sent, during the last four months, to the general medical depôt at Scutari for distribution.

In addition to these large supplies, sufficient to form an ample reserve at Scutari, which is at the command of the Principal Medical Officer in the Crimea, I caused a smaller but considerable issue of medical stores to be made last month to Balaklava direct.

Further, on the 11th ultimo, I caused another requisition to be made out for the medicines, &c. most likely to be in demand to be forwarded to Scutari on completion.

In case, however, of any delay or difficulty in the forwarding of medical supplies from that station to the Crimea, on the request of the Principal Medical Officer, I have given instructions to have the destination of the supply in question changed to Balaklava direct, and, being quite ready, it will be despatched in a few days if the requisite tonnage is available.

With reference to the article specified in your letter I beg to inform you, that 100 pounds of camphor are included in this shipment.

Of that medicine not less than 461½ pounds have been sent to the East, of which 436½ had arrived up to 10th of April.

I have good reason to believe that not more than 300 pounds can have been issued from store, and that there must remain at least 160 pounds in addition to the quantity proceeding by the present occasion.

I have, &c.

(Signed) A. SMITH,

The Under Secretary at War, Director General.
&c. &c.

No. 187.

Dr. Smith to Dr. Cumming.

Sir, Army and Ordnance Medical Department, 3d May 1855.

As it may possibly occur from time to time that some medicines not in store at Scutari may be required, I have to request that you will never hesitate a moment in causing the Chief Medical Storekeeper to purchase them in the quantities necessary, should they be obtainable in any of the shops at Constantinople.

I have, &c.

(Signed) A. SMITH,

Dr. Cumming, Director General.
&c. &c.

No. 188.

Dr. Smith to the Principal Medical Officer at Balaklava.

Sir, Army and Ordnance Medical Department, 4th May 1855.

WITH reference to a letter from Mr. Fitzgerald, P.F., dated Balaklava, the 12th ultimo, and approved of by you, enclosing two requisitions of medical comforts, dated respectively 29th January and 27th March 1855, I have the honour to inform you that, to prevent any possible want of any of the articles, I have given instructions for the whole of the quantities contained in both requisitions to be forwarded to Balaklava direct by the earliest opportunity, notwithstanding the large supply of nearly all these articles that has been transmitted to Scutari during the last few months, and which the accompanying return will show.

This statement will put you in possession of the large quantities of medical comforts that have left this country for Scutari since the 19th January last; but as it is mentioned in Mr. Fitzgerald's letter that you required one of his requisitions to be supplied monthly, and as the aggregate quantity of essence of beef, preserved meats, and soups demanded in one requisition amounts to 80,000 tins, I have to request you will inform me whether you still consider this to be requisite, taking into consideration the supplies sent to Scutari, and the probable wants of the sick of the army.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

P.S.—The 80,000 tins of soups, preserved meats, and essence of beef would give about ½ lb. daily for thirty-two days for 500 sick, supposing each patient was to be supplied.

(Signed) A. S.

No. 189.

Dr. Smith to B. Harris, Esq.

Sir, Army and Ordnance Medical Department, 5th May 1855.

By yesterday's mail I received from Dr. Hall a letter he had addressed to you, under date 14th ultimo, in reference to the transport of sick and

wounded from the Crimea to Smyrna, and also a copy of a communication on the same subject he had received from you, dated 30th March 1855; and as I find by that communication that Dr. Hall is directed to charter ships for the conveyance of sick and wounded direct to Smyrna, without any delay or stoppage being allowed in the Bosphorus, I feel it my duty to state, that I consider such a practice as most objectionable. If that course is to be regularly observed, I am of opinion that it will often happen that many individuals will have to encounter an amount of suffering which would not fall to their lot were the vessels to touch at Scutari, and thereby afford the opportunity of removing them into the hospitals at that station, such cases as it might be found were not, unless absolutely necessary, fitted for longer detention on board ship.

I do not, on various accounts, think it desirable that Smyrna should be made available for slight or chronic cases only; at the same time, I think Scutari ought to be the port where all vessels should touch, in order to admit of any arrangements being made there, which it may have been discovered during the voyage to have become necessary.

This measure, which I strongly recommend should be observed, is alike required for the cause of humanity and for the good of the public.

I have, &c.
(Signed) A. SMITH,
Director General.

B. Harris, Esq.,
&c. &c.

No. 190.

Dr. Smith to the Under Secretary for War.

Army and Ordnance Medical Department, 8th May 1855.

SIR, IN reply to your letter dated the 1st instant, 17, regarding a code of regulations to be hung up in the hospital ships "Saldanha" and "Great Tasmania." I have the honour to enclose, for the information of the Minister for the War Department, a series of regulations which I consider it warrantable for me to suggest; but some of the regulations proposed to be introduced by Staff Surgeon Mapleton, such as those guarding against the misappropriation of utensils, articles of bedding, &c., I am of opinion should be drawn out by military authority, which alone has the power to enforce them.

I have, &c.
(Signed) A. SMITH,
Under Secretary for War, Director General.
&c. &c.

No. 191.

Dr. Smith to the Principal Medical Officer at Scutari.

Army and Ordnance Medical Department, 10th May 1855.

SIR HAVING observed, by the returns, that vacant accommodation exists in the hospital at Abydos to the extent of 143 beds, it appears to me desirable to transfer to that establishment some of the sick now at Scutari, so as still further to diminish the numbers at the latter station.

The comparative rarity of febrile affections at Abydos, and the other advantages which it offers, renders such a transfer, when it can be conveniently effected, a judicious arrangement.

You will be pleased to take care that the hospital establishment at Abydos is kept fully supplied with medical comforts, medicines, &c.

I have, &c.
(Signed) A. SMITH,
Principal Medical Officer, Director General.
&c. &c.

P.S.—You must understand that in reference to the above recommendation you are to use your own

discretion, as you must know better than I can whether it would be prudent to send greater numbers to Abydos or not.

(Signed) A. S.

No. 192.

Dr. Smith to the Secretary, Board of Ordnance.

Army and Ordnance Medical Department, 10th May 1855.

SIR, WITH reference to my requisitions of the 16th January last for 200 litters and chairs, of the 20th February for 20 ambulance waggons and 60 ambulance carts (Woolwich kind), and of the 27th March for 500 bearers for wounded men, I have the honour to request that I may be informed if these articles have left this country, and if so, by what vessels and at what date.

If they have not yet been dispatched, I beg to submit to the Right Honourable the Board of Ordnance that they may be immediately forwarded, as they are most urgently required in the Crimea.

I have, &c.
(Signed) A. SMITH,
Secretary, Board of Ordnance. Director General.

No. 193.

Dr. Smith to the Principal Medical Officer at Scutari.

Army and Ordnance Medical Department, 11th May 1855.

SIR, I HAVE the honour to forward the enclosed copy of a letter from Dr. Jameson, Staff Surgeon 1st Class*, respecting the supply of medical comforts for the use of the hospital at Abydos, and request you will ascertain why the articles were not sent, or some reply to his communications on the subject, stating why they were not forwarded.

You will perceive, from Dr. Jameson's letter, the course he adopted to obtain supplies, and the consequence has been that the wants at Abydos have been made known to the public through the House of Commons.

I have, &c.
(Signed) A. SMITH,
Principal Medical Officer, Director General.
&c. &c.

No. 194.

Dr. Smith to Dr. Jameson.

Army and Ordnance Medical Department, 11th May 1855.

SIR, WITH reference to your letter of the 23rd ultimo, respecting a supply of stores for the use of the general hospital, Abydos;

I have to request you will never permit the same to get below two months' supply in advance.

I have, &c.
(Signed) A. SMITH,
T. R. Jameson, Esq., M.D., Director General.
&c. &c.

No. 195.

Dr. Dumbreck to the Principal Medical Officer at Scutari.†

Army Medical Department, 11th May 1855.

SIR, I AM desired by the Director General to state, in reference to his letter of 20th April regarding a prescription of Dr. Jennings for the cure of cholera,

* Dated General Hospital, Abydos, 23d April 1855.

† Similar letter to this sent to Principal Medical Officer, Crimea.

that, by an omission, the instructions for the preparation of one of the leading ingredients of the formula in question were not at the same time transmitted.

The accompanying extract* of a letter from Dr. Jennings will afford the information thus inadvertently withheld, and I may mention that an additional supply of the ammoniated tincture of guaiacum has been forwarded to complete the ingredients insisted on by this gentleman as necessary to give efficiency to the prescription.

As Dr. Jennings is most confident of the infallibility of the remedial agent as prepared by his direction, I am further desired to request that you will test it, should a necessity for the use of anticholeraic medicines arise, and report on the subject for the information of the Director General.

I have, &c.

(Signed) D. DUMBRECK,

Prin. Medical Officer, Dep. Ins. Gen. of Hospitals.
&c. &c.

No. 196.

Dr. Smith to Dr. Hall.

Army Medical Department,
12th May 1855.

SIR,

In consequence of Sir John McNeill having recently reported to Lord Panmure "the total lack of quinine in the camp hospitals in the Crimea," the Secretary for War has requested me to call on you to furnish a full explanation, in reference to the report in question, to be transmitted by me for his Lordship's information.

Your letters of the 19th and 26th ultimo I have received, and they are so far satisfactory. I shall be glad, however, to be informed of the steps that were taken to discover the want or supposed deficiency of the medicine referred to.

I observe you mention that Mr. Apothecary Fernandez has occasionally permitted the quantity of certain articles in the medical store under his charge to get low, without making you acquainted with the circumstance. You must administer to him a severe admonition against such a practice, and order him to report to you, in writing, at least twice a week, the condition of the medical depôt as to the quantity and quality of the stores in his charge.

You will also decide on the propriety of calling in the assistance of the senior medical officer at Bala-klava, in carrying out these instructions, with a view to the general depôt being at all times fully supplied with every requisite, far in advance of any possible demand.

Should Mr. Fernandez again prove inattentive, you will not hesitate at once to prefer charges against him for neglect of duty, and will take care to press the utmost rigour of martial law against him, or any other officer, or subordinate employé, by whose indifference, neglect of duty, or misconduct, the sick are led, or even likely to be led, to suffer from the want of any available requisite for their medical treatment or personal comfort.

I have, &c.

(Signed) A. SMITH,

Dr. Hall, Director General.
&c. &c.

No. 197.

Dr. Dumbreck to the Quartermaster General.

Army and Ordnance Medical
Department, 12th May 1855.

SIR,

In reference to your letter of the 12th instant, I am desired by the Director General to acquaint you, for the information of the General Commanding in Chief, that a communication was sent off last

evening to the Senior Medical Officer at Plymouth, desiring him to instruct Staff Surgeon Crerar (who is in medical charge of the troops embarked on board the "Great Tasmania") to have daily inspections made of the men, and, should any further cases of smallpox occur at sea, to make every effort to separate them, so as to limit as far as possible the spread of the complaint.

I have, &c.

(Signed) D. DUMBRECK,

The Quartermaster General, for Director General.
&c. &c.

No. 198.

Dr. Smith to Dr. Hall.

Army Medical Department,
12th May 1855.

SIR,

WITH reference to the remark quoted on the margin,* reporting the inconvenience resulting from the want of leeches in the camp hospitals in the Crimea, and to your note on the subject to the effect that "leeches have been written for to Sinope long ago, and are daily expected; they are not an economical remedy, as they will cost from 2½d. to 3d. each;" I regret to find that a deficiency of this nature exists, and has existed for a long time. The endeavours to remedy this defect should have been urged, and repeated again and again, until a supply of leeches was obtained, and arrangements made to keep up the supply. The expensiveness of a remedial measure must not be considered for an instant. The price you quote is only half of that paid for leeches supplied to military hospitals in England; but were the charge fourfold, this and any other requisite for the treatment of the sick and wounded must be provided at whatever cost; and I am only surprised, after what has been repeatedly written and urged on this subject, that any omission or defect which it is possible to remedy should still exist as a source of regret or cause of complaint from any quarter.

With regard to the matter in question, I trust you will be able to assure me, that while leeches were not forthcoming, the means to supply, in some instances, their place for the local abstraction of blood were at all times available; that you took care, with the assistance of the divisional medical officers, that the cupping instruments, and particularly the temple scarificators and scalp glasses, which I caused to be supplied for use in the army, have been at all times ready for use in the hospitals since the force took the field.

I have, &c.

(Signed) A. SMITH,

Dr. Hall, Director General.
&c. &c.

No. 199.

Dr. Dumbreck to the Under Secretary of State for War.

Army and Ordnance Medical
Department, 12th May 1855.

SIR,

In reply to your letter of the 3d instant, with its enclosure, I have the honour to observe, for the information of the Minister for War, that I have had a personal communication with Dr. Beaman on the subject of salt as a preventive of cholera, and after having fully heard from him his reasons for holding

* Report of Senior Medical Officer, 3d Division:—

"In the Hospitals of the 38th and 50th a few leeches would have been very desirable; in the first-mentioned hospital for the treatment of a case of gun-shot wound of the elbow-joint, in the last, for the treatment of a severe contusion of the left side of the head, paralyzing the organs of sight and hearing on that side."

* See Dr. Jennings' Letter, dated 29th March 1855.

the views he entertains, I have come to the conclusion to make known his views to the medical officers serving with the army of the East, and to request that a trial of the salt should be made in some of the regiments in the Crimea should cholera unfortunately re-appear in the army; and should results warrant its adoption, I have instructed that every effort should be made to enforce its general use.

I have, &c.

(Signed) D. DUMBRECK,

Dep. Insp. Gen. of Hospitals,

The Under Secretary for the Director General.
of State for War.

No. 200.

Dr. Smith to the Under Secretary of State for War.

Army and Ordnance Medical
Department, 12th May 1855.

SIR,

I BEG to acknowledge the receipt of your letter of the 7th instant, and with reference to that portion of it which relates to a report having been received by the Secretary of State for War from Sir J. McNeill, that there was recently a total lack of quinine in the camp hospitals in the Crimea, I have the honour to acquaint you, for the information of Lord Panmure, that I find from documents which I have received from Dr. Hall that, on the same occasion, Sir J. McNeill had reported the circumstance to Lord Raglan. By the enclosed copy of Dr. Hall's report on the subject to Lord Raglan, Lord Panmure will learn that the Field Marshal Commanding the Forces was satisfied that Sir J. McNeill had been misinformed on the matter in question, that there really existed no want of quinine in the camp hospitals; and by the note on the margin it will be seen that Dr. Hall was requested by Lord Raglan to communicate to Sir J. McNeill the result of his inquiry into the alleged deficiency, to show to him that it had never existed.

At the very time, then, at which Sir J. McNeill reported a lack of quinine, there were 28 lbs. in the various camp hospitals. The day after 50 lbs. arrived from Scutari, and a few days later 100 lbs. of the same medicine; making a total of 178 lbs.

Further, before the second week would have expired, 200 lbs. of quinine, and 50 lbs. of amorphous quinine, would have arrived direct from England, and in another fortnight 100 lbs. of the former, and 50 lbs. of the latter.

Those supplies, in addition to at least 500 lbs. in store at Scutari, 300 lbs. on the passage thither, 200 lbs. now ready for shipment to that station, and 100 lbs. also about to be dispatched to Balaklava direct, will, I trust, satisfy Lord Panmure that the army will not suffer from want of this important medicine. I intend, however, to send more, besides amorphous quinine, as I am of opinion extensive use ought to be made of these preparations as prophylactic remedies.

I will, as I have already done, caution Dr. Hall on the very important matter in question; and if the explanations I receive from him do not prove satisfactory, I shall extend to him what Lord Panmure desires.

I shall do myself the honour to forward a copy of Dr. Hall's further explanations on the subject when it arrives, and also a copy of what it may be necessary for me to write to him in reply thereto.

I have, &c.

(Signed) A. SMITH,

Under Secretary for War. Director General.

No. 201.

Dr. Dumbreck to the Deputy Secretary at War.

Army and Ordnance Medical
Department, 15th May 1855.

SIR,

I HAVE the honour to acknowledge the receipt of your letter of the 11th instant, enclosing a prospectus of Messrs. Fyfe respecting their portable waterclosets; and in reply beg to state, for the information of Lord Panmure, that 71, of two kinds manufactured by that firm, have been sent to the hospitals in the East, and that an additional number will be forwarded as soon as the Principal Medical Officers report that they are required.

I have, &c.

(Signed) D. DUMBRECK,

Dep. Insp. Gen. of Hospitals,
in the absence of the

The Deputy Secretary
at War. Director General.

No. 202.

Dr. Smith to Dr. Hall.

Army Medical Department,
15th May 1855.

SIR,

DR. BEAMAN, a highly respectable London physician, in extensive practice, has found salt to be very useful in preventing cholera; and as I have, after a lengthened conversation with him, seen grounds to credit much of what he has stated to me, I am very anxious that it should be tried when fitting occasions arise.

It will probably be difficult to get it generally used, therefore I think you had better trust the treatment in the first instance to some careful and pains-taking officers, who will faithfully observe its effects, and accurately note them.

Your best course, probably, will be to fix upon two or three regiments, and induce the surgeons to have it used as regular as practicable, should cholera appear as an epidemic; and if it be observed that the men of these corps suffer less than those of regiments who do not regularly employ it, then there will be fair grounds to justify more stringent efforts being made to employ it generally.

I shall be anxious to learn the result of the experiment, as I cannot avoid saying I contemplate advantage from it, being satisfied, from what I have seen of Dr. Beaman, that he is a prudent, cautious, and observing practitioner. I send nine copies, which you will distribute among the senior medical officers, for the use of the medical officers of their respective divisions.

I have, &c.

(Signed) A. SMITH,

Director General.

Dr. Hall,
&c. &c.

No. 203-4.

Dr. Smith to Principal Medical Officers at Scutari, Kalulie, and Abydos.

Army Medical Department,
15th May 1855.

SIR,

DR. BEAMAN, a highly respectable London physician, in extensive practice, has found table-salt to be very useful in preventing cholera; and as I have, after a lengthened conversation with him, seen grounds to credit much of what he has stated to me, I am very anxious that it should be tried when fitting occasions arise.

I therefore transmit, for your information, five printed copies of Dr. Beaman's views in regard to this remedy, which I will thank you to circulate among the medical officers serving under your orders.

I am desirous that you should embrace any opportunity which may present itself for testing its effects;

and should your observations of these lead you to believe that it exercises a prophylactic or remedial power, this will form fair grounds for some stringent efforts being made for its general employment among the sick in the hospital under your care, whose state would not contra-indicate its use, and among the convalescents or invalids attached to your station.

I shall be anxious to learn the result of the experiment, as I cannot avoid saying I anticipate advantage from it, being satisfied, from what I have seen of Dr. Beaman, that he is a prudent, cautious, and observing practitioner.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 204.

Dr. Dumbreck to the Deputy Secretary at War.

Army Medical Department,
15th May 1855.

SIR, I HAVE the honour to acknowledge the receipt of your letter of the 11th instant, ^{15.4.55}_{2.5.55}, enclosing a prospectus of Messrs. Fyffe, respecting their portable waterclosets, and in reply beg to state, for the information of Lord Panmure, that seventy-one, of two different kinds manufactured by that firm, have been sent to the hospitals in the East, and that an additional number will be forwarded as soon as the Principal Medical Officers report that they are required.

I have, &c.
(Signed) D. DUMBRECK,
Dep. Insp. Gen. of Hospitals
in absence of the
Director General.

Dep. Secretary at War,
&c. &c.

No. 205.

Dr. Dumbreck to A. Cumming, Esq.

Army and Ordnance Medical
Department, 18th May 1855.

SIR, REFERRING to the evidence of Miss Elizabeth Wheeler, page 329 of "The Report on the State of the Hospitals of the British Army," I am desired by the Director General to request your attention to the system at one time apparently obtaining in the hospital under the immediate surveillance of Deputy Inspector General of Hospitals Dr. McGrigor, which permitted nurses to exercise their judgment and discretion in the selection of cases for the treatment of which stimulants might be applicable. This is a state of things calling for severe reprehension, and for your direct and stringent interference, should a recurrence of it be attempted in the hospitals under your superintendence.

I have, &c.
(Signed) D. DUMBRECK,
for Director General.

A. Cumming, Esq.
&c. &c.

No. 206.

Dr. Smith to the Under Secretary of State for War.

Army Medical Department,
18th May 1855.

SIR, REFERRING to your communication of the 27th ultimo, in reply to my letter of the 17th, I have the honour to acquaint you, for the information of Lord Panmure, that my inquiries respecting the shipment of peat-charcoal for the East had reference not to supplies of that article on requisitions proceeding direct from this department, in respect of which the quantities, dates of dispatch, and modes of conveyance, are known in this office, but to the 200 tons referred to in my letter of the 17th April and 13th March.

As the information solicited in my last communication on the subject is necessary, in order to estimate the probable quantity of peat charcoal available for use at Scutari, Kululie, and in the Crimea, as well as with reference to future supplies, I beg to know whether the "Zebra" conveyed the full quantity (200 tons) intended to be sent by that vessel, and the date of sailing.

The same particulars are also desirable in respect to the 500 tons mentioned in your letter of the 27th ultimo as having been on that day ordered to be supplied by the Board of Ordnance, in addition to 500 bags ordered on the same day to be furnished on requisition from this Department, at the request of the Deputy Secretary at War, for the same destination as the former.

I have, &c.
(Signed) A. SMITH,
Director General.

Under Secretary for War,
&c. &c.

No. 207.

Dr. Smith to Colonel Mundy.

Army and Ordnance Medical
Department, 21st May 1855.

SIR, IN reply to your letter of the 15th instant, I have the honour to state, for the information of the Minister for War, that, from the statements I have received from the Crimea, I am in hopes that a fair supply of water will be always attainable from the wells and tanks which have been constructed; still I think it prudent that the army should be in possession of the forcing pumps. It often happens, in limestone formations, that the supply of water is abundant, where little indication of its existence is observable till opportunities for its exit are provided. In the extensive limestone tracts which occur in Southern Africa, water is often found in abundance during the whole year, when nothing around gives any reasons to expect its presence, indeed when everything would rather indicate the likelihood of its being wanted. I mention this fact as a reason for not venturing any opinion in the absence of better information. I think the local authorities ought to seek information from such natives as they may have an opportunity of communicating with.

I have, &c.
(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

No. 208.

Dr. Smith to Dr. Beaman.

Army and Ordnance Medical
Department, 21st May 1855.

SIR, I HAVE had your printed instructions forwarded to Turkey and the Crimea, — nine copies to the Crimea, five to Scutari, four to Kululie, and two to Abydos. I have earnestly impressed on Dr. Hall that the agent shall be sedulously used in certain regiments, and, if it appears advantageous, that vigorous steps shall be taken to secure its being generally employed. I have also ordered some of the best description of salt to be forwarded from this country, in order that the trial may be a fair one. I fear we shall not find the volunteers you expect; soldiers are curiously constituted, and I expect, from what I know of them, that they will endeavour to avoid using the salt if they can, under an idea (from its simplicity, and its being an article familiar to them) that it will be of no use. This will not, however, be allowed to interfere; exertions will effect much.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Beaman,
&c. &c.

No. 209.

Dr. Smith to the Deputy Secretary at War.

Army and Ordnance Medical
Department, 22d May 1855.

SIR,

In reply to your letter of the 4th instant, I have the honour to transmit, for the information of the Minister for the War Department, the Report of the Proceedings of a Board of Medical Officers, assembled to consider the propositions of a Committee of the Civil Surgeons at Smyrna Hospital, for changing the diets, &c., in military hospitals.

I beg to add that I fully concur in the opinion expressed by the Board, and strongly recommend that any articles, which may not be provided in the already established scale of diet, may be, when they appear desirable, issued to the sick under the head of Extras, which can be easily effected if the alteration as proposed by the Board, not limiting the issue of those to particular diets, be sanctioned.

I have, &c.

(Signed) A. SMITH,

Deputy Secretary at War, Director General.
&c. &c.

No. 210.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,

23d May 1855.

SIR,

I HAVE the honour to inform you that 100 tons of ice, intended solely for the use of the sick in the hospitals in the East, will shortly be dispatched from this country for Scutari, on board the ship "City of Montreal;" and I have to request that you will make the necessary arrangements to secure the best means in your power to have it kept in a state fit for all hospital purposes.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 211.

Dr. Smith to Assist. Surgeon Raymond.

Army and Ordnance Medical
Department, 23d May 1855.

SIR,

THE report of the Principal Medical Officer at Portsmouth, who inspected the ship "Lady Eglinton," recently arrived with invalids under your medical care, having stated that there was a want of general cleanliness on board, I have to direct that you will explain how this occurred, and what measures you took to remedy a state of matters so injurious to the well-being of the sick under your charge.

I have, &c.

(Signed) A. SMITH,

Assist. Surgeon Raymond, Director General.
&c. &c.

No. 212.

Dr. Smith to Dr. Hall.

Army Medical Department,
24th May 1855.

SIR,

WITH reference to the article noted in the margin,* a small supply of which has been sent for trial, I have the honour to acquaint you that from experiments made in this office it appears to be highly charged with chlorine, and either by the agency of the moisture present in an apartment the gas is slowly, or by adding a little water it is quickly and abundantly, extricated.

I need scarcely add that, when the smell of chlorine is sensibly diffused through the ward or room, the vessel containing the article in question should be wholly or partially closed for the time.

I have, &c.,

(Signed) A. SMITH,

Dr. Hall, Director General.
&c. &c.

No. 213.

Dr. Smith to the Principal Medical Officer at Scutari.

Army and Ordnance Medical
Department, 24th May 1855.

SIR,

I HAVE to request you will desire the medical officers in charge of sections of the hospitals which are under your superintendence to append to each weekly return furnished to this department remarks on the nature, progress, and treatment of the prevailing disease, as well as of cases of wounds.

The almost total want of professional information of the kind referred to has frequently placed me in a most perplexing position; for on inquiries being made and reports being demanded by Parliament, there are not any records in this office to illustrate the causes of unhealthiness and mortality, or the means of answering queries respecting modes of treatment, or the condition of convalescents and of men leaving Scutari.

Hitherto I have refrained from pressing for such reports, being afraid of overtaxing the medical officers, or of trenching upon their more direct professional duties; but now that the number of sick and serious cases have greatly diminished, while the proportion of medical officers has increased, I no longer see an obstacle to obtaining records of the sickness, wounds, and fatal cases among the officers and men of the army of the East beyond mere nominal and numerical returns.

I feel persuaded that the medical officers will cheerfully and zealously seize every opportunity to second your endeavours in carrying out the object referred to, to supply a most important deficiency in the records of the department, the existence of which has become a reproach to it.

I have, &c.

(Signed) A. SMITH,

The Prin. Medical Officer, Director General.
&c. &c.

P.S.—Enclosed in a copy of a letter from the Minister for War is a specimen of the demand for professional information. It may be added, too, that weekly reports from every officer in general charge in the Crimea are received at this office.

No. 214.

Dr. Smith to the Principal Medical Officer at Scutari.

Army and Ordnance Medical
Department, 24th May, 1855.

SIR,

In reply to your letter of the 8th instant, enclosing copies of communications from you to Lord William Paulet, relative to the provision of hospital accommodation for the sick of the Sardinian army, and to the existence of cholera in Constantinople, &c., I beg that you will make every effort to relieve the hospitals, so that the number necessarily accommodated may have the full amount of space which, according to established sanitary doctrines, should be allotted to them.

I hope ere this you have received the 100 marquees sent out, and also the two iron storehouses which may, should you see fit, be appropriated to hospital barrack rooms in lieu of them being assigned for the reception of scores.

* Medical Supplies per "Eagle":—
Collin's deodorizing and disinfecting powder, 200 lbs.

I trust you will, with the aid of Lord Paulet, get a portion of the sick yet remaining removed to some better locality than Scutari, as the circumstance of the proximity of the vast cemeteries to the hospital must be regarded as an unsatisfactory feature in that site.

Some wooden huts on a more favourable spot might be quickly got up, and I trust that the arrangements which have been made to transfer as many of the sick as possible to this country are being zealously carried out by the medical officers, as far as they are concerned, as I have reason to believe that a full provision of ships will be available for this purpose.

I have, &c.

(Signed) A. SMITH,

The Prin. Medical Officer, Director General.
&c. &c.

No. 215.

Dr. Smith to the Principal Medical Officer at Balaklava.

Army Medical Department,
24th May 1855.

SIR,

REFERRING to your report to Lord Raglan of 7th instant, I have to inform you that I have brought permanently to the notice of the Minister for War that portion of it which presents so painful a feature of the sufferings of men of certain corps from the most inadequate amount of rest and sleep they are permitted to enjoy. Although I have adopted this step, I have the fullest confidence that every measure calculated to meet such a state of things will be taken on the spot; yet I need scarcely say how anxious I am on this subject, or how deeply I feel the importance of your continued vigilance being directed to prevent, by reiterated representations to the Field Marshal, if necessary, a continuance or recurrence of what must, if unchecked, sap fatally the efficiency of the army by exhausting its physical power, and rendering the men worn out by loss of rest and sleep, an easy prey to any epidemic influence which may exist.

I have, &c.

(Signed) A. SMITH,

The Prin. Medical Officer, Director General.
&c. &c.

No. 216.

Dr. Smith to Colonel Mundy.

Army and Ordnance Medical
Department, 24th May 1855.

SIR,

I FEEL it my imperative duty to transmit, for the information of the Minister for War, the accompanying "Extract" from a report dated the 7th instant, of Dr. Hall, Principal Medical Officer in the Crimea, to Field Marshal Lord Raglan; and although I feel perfect confidence that the Field Marshal to whom the report is addressed will have taken measures to remedy the evil pointed out, I cannot permit this occasion to pass without stating as my decided opinion, if such occurrences are permitted to take place, that the Commander of the Forces will soon have no army to fight the enemy, nor men to do duty in the trenches or elsewhere.

Cholera, I regret to find, is making insidious advances in the army, and should it become epidemic, as is not unlikely, such means of exhausting the physical powers of the troops as want of a proper amount of rest and sleep will render men amenable to that deadly disease, who under more favourable circumstances would be fully equal to resist its assaults. No men, unless under temporary and unavoidable circumstances, should have less than two of every three nights in bed,—indeed three out of every four would be nearer to that amount of rest which is absolutely necessary for the maintenance of health and vigour.

Nothing affecting the condition and well being of the troops in the East, under the existing circumstances, deserves more serious consideration than the subject now brought under Lord Panmure's notice; and I again earnestly recommend attention to it, feeling as I have already stated, should it be disregarded, that the General in command will soon be hampered more seriously by the ravages of disease than by the casualties of war.

I have, &c.

(Signed) A. SMITH,

Colonel Mundy, Director General.
&c. &c.

(Extract.)

"In the Second Division there has been a slight decrease in the number of admissions, and a decided diminution of the number of deaths, which has fallen from 25 to 9; but Dr. Wood, the superintending surgeon, mentions that some few cases of diarrhoea have shown suspicious symptoms of cholera purging, but as yet no actual cases of that disease have occurred in the 2d Division. He also states that the duty bears hard on the men, as they have only three nights out of five in bed.

"In the 3d Division this is still more remarkable, as the surgeon of the 39th states that the men of his regiment have been on duty every other night; and the surgeon of the 14th mentions an instance of some men who were named for duty in the trenches on the 3d instant, and who stated that if sent on duty that night, it would make their fourth night out of bed. In the 18th and 50th Regiments men are reported to be on duty two nights out of five. There appears to be great difference between regiments and great want of arrangement in thus placing men three or four consecutive nights on duty, which is apt to impair their health more than any subsequent temporary rest can repair."

(Signed) JOHN HALL,

Inspector Gen. of Hospitals.

No. 217.

Dr. Smith to the Principal Medical Officer.

Army Medical Department,
25th May 1855.

SIR,

OBSERVING by your return of sick, dated 10th instant, that each man in hospital at Abydos has an allowance of "about 600 cubic feet of space," and that there were 54 unoccupied beds in the establishment, I have to point out to you the desirableness, now that warmer weather has set in, of distributing the sick in such manner that each person shall have, if possible, 1000 cubic feet of space.

I have, &c.,

(Signed) A. SMITH,

The Prin. Medical Officer, Director General.
&c. &c.

No. 218.

Dr. Smith to the Under Secretary for War.

Army and Ordnance Medical
Department, 25th May 1855.

SIR,

IN reply to your communication of the 12th instant, I have the honour to transmit, for the information of the Minister for the War Department, the report of a Board of medical officers, assembled to consider the propriety of supplying claret to the hospitals of the army in the East, and I beg to add that I concur in the opinion therein expressed, that it does not seem desirable to add claret to the wines for use in the hospitals in the East.

I have, &c.

(Signed) A. SMITH,

Under Secretary for War,
&c. &c.

23d May 1855.

PROCEEDINGS of a Board of Medical Officers assembled by order of the Director General, Army and Ordnance Medical Department, to examine and report on an offer of Messrs. Devaux and Co., to supply claret for use in Military Hospitals.

President:

Dr. Dumbreck, CB., Deputy Inspector General of Hospitals.

Members:

H. Pilleau, Staff Surgeon, 1st Class.
Dr. Reid, Staff Surgeon, 2nd do.

The Board, having carefully considered the above proposition, is of opinion that the wines, such as port and sherry, in use in the hospitals of the East possess the qualities of body and stimulating powers which render them the vinous remedial agents to be preferred; and as the lighter wines of the Archipelago and of Asia Minor are of excellent quality and attainable on the spot, and as they are as well suited as additions to the meals of the convalescents as the lighter wines of France, the Board does not see any good reason for recommending that the claret offered for hospital use should be supplied.

(Signed) D. DUMBRECK.
H. PILLEAU.
F. REID.

No 219.

Dr. Smith to the Deputy Secretary at War.

Army and Ordnance Medical Department, 26th May 1855.

SIR,

In reference to the gluten granuli of Veron, proposed to be supplied as an addition to alimentary substances in use in the army, by the firm of Roy, Berger and Co., of Paris, I have, in forwarding the proceedings of a Board of Medical Officers on the subject, to add, for the information of the Minister for War, as my opinion, to that they have expressed, that, prior to deciding on the qualities of the substance adverted to, it will be necessary that a sample should be forwarded for trial.

I have, &c.

(Signed) A. SMITH.

The Deputy Secretary at War,
&c. &c.

23d May 1855.

PROCEEDINGS of a Board of Medical Officers assembled by order of the Director General, Army and Ordnance Medical Department, to examine certain documents in regard to the gluten granuli de Veron, Frères, proposed to be added to the alimentary substances in use in the army of the East by the firm of Roy, Berger, and Veron, à Paris, Rue de Matie, No. 58.

President:

Dr. Dumbreck, Deputy Inspector General of Hospitals.

Members:

H. Pilleau, Staff Surgeon, 1st Class.
F. Reid, Staff Surgeon, 2d Class.

The Board have attentively considered the documents above referred to in regard to the form of gluten proposed for use, but it can form no idea of the value of the article, or of its superiority over similar substances, without having the means of testing the substance itself; it accordingly recommends that a small quantity of the gluten granuli may be forwarded for trial to this office.

(Signed) D. DUMBRECK.
H. PILLEAU.
F. REID.

No. 220.

Dr. Smith to Colonel Mundy.

Army and Ordnance Medical Department, 26th May 1855.

SIR,

I HAVE the honour to notify, for the information of the Minister for War, that I yesterday received from Dr. Hall, the Principal Medical Officer in the Crimea, a copy of a letter dated the 11th instant, addressed by him to Field Marshal Lord Raglan, in which he states that cholera had during the previous seven days proved fatal to sixteen soldiers, and further, that nineteen cases of the disease were, at the above date, under treatment in the army. The occurrence in so short a period of so large a number of cases gives too strong grounds for fearing that this direful malady will probably prove the scourge of the camp, especially during the coming hot season; hence it becomes a matter for grave consideration what steps should be taken should further experience prove my anticipations to be well founded.

A force like that which is now in front of Sebastopol, concentrated as it is within a limited area, even with every advantage which the utmost sanitary care can effect, could scarcely be expected to escape without much sickness and mortality, therefore still less can such an escape be looked for when many features, the result of prolonged occupation of the site, are but too favourable to the generation and growth of the influences known to promote most readily the extension of epidemic disease.

The putrid exhalations from the decomposition of dead and but superficially buried animal matter, as well as from human and animal excrement, and from other sources which it is to be feared the camps will supply, will tend very materially to lower the scale of health, and will so contaminate the atmosphere as to render it a vehicle especially favourable to the diffusion and operation of epidemic influences. Superadded to those, the over bodily exertion which the men are called on to make in the trenches, exposed to night dews, and also after rain liable to have their feet and part of their legs immersed in mud, will no doubt prove most fertile sources of cholera; and if under such circumstances the disease now threatening to become epidemic should assume such form, it is impossible to regard without dread the too probable results which would follow such a pestilential visitant.

The necessities of war, that is, the necessity for continuing to occupy so unfavourable a position, I cannot of course judge of, nor is it perhaps within my province to remark on, but it certainly is within my province, in consequence of what has been reported, to make known my fears in regard to the foregoing subject; and I should be wanting in my duty did I not do so, and further urge the necessity of having the progress of this threatening disease very carefully watched, as I feel how requisite it is that some plan should be pre-arranged to meet the possible contingency, should the malady become so prevalent as to endanger, as it would, the efficiency, nay, more, the very existence of the army.

A copy of Dr. Hall's letter to Lord Raglan, which has appeared to me to warrant the preceding remarks, is herewith forwarded.

I have called Dr. Hall's special attention to the great danger to which I believe the army is at this moment exposed, and to the necessity which exists for every precautionary measure being adopted.

I have, &c.

(Signed) A. SMITH.

Colonel Mundy,
&c. &c.

Director General.

P.S.—Since the above letter was written I have received the copy of another communication addressed by Dr. Hall to Lord Raglan, dated the 14th instant, of which the following is an extract:—

“I regret to have to add, that since this return was closed spasmodic cholera, which forms an item

in it, has considerably increased, and as many as 18 deaths, and 52 cases under treatment, have been reported during the last 24 hours. The 4th, including the Buffs, and 71st, the 2nd, and the light division, and B, C, and P batteries of artillery, have suffered most, but as yet the disease can hardly be said to exist in the cavalry 1st and 3d divisions, nor in the siege train; this exemption, however, there is reason to apprehend will not be of any very long duration."

No. 221.

Dr. Smith to the Surgeon, — Regiment.

(Circular.)

Army and Ordnance Medical Department, 27th May 1855.

SIR, I HAVE the honour to acquaint you that a pattern of a "field dressing," as specified on the margin,* has been prepared and sealed in this office, and that it has been decided by the Secretary of State for War that the article referred to shall form part of the kit, and be carried on the person of every non-commissioned officer and soldier serving in the field, as a means of first dressing for wounds, available for use at all times and in all places.

I have also to inform you that there is to be at all times in your charge, as part of your hospital equipment, such a supply of the field dressings as will enable you to replace any deficiency caused by these articles having been taken for use, and that the supply is to be kept up, by requisitions made by you, on the Quartermaster General's department.

I have, &c.

(Signed) A. SMITH,
Director General.

The Surgeon,
— Regiment.

Mem.—This circular is to be preserved in the guard book for the information of the regimental medical officers.

No. 222.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
28th May 1855.

SIR, I regret to observe that cholera is spreading in the army in the Crimea. I hope you will find it possible, without any injustice to the sick in the hospitals under your charge, to furnish Dr. Hall with additional medical officers should he require them.

The last return received in this office shows that 1561 patients were under treatment in the hospitals at Kululie, Scutari, &c., a number which can scarcely require for its attendance all the medical officers now doing duty at those stations.

I am anxious to hear from you on this subject by the first mail after you receive this communication.

I have, &c.

(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 223.

Dr. Smith to the Principal Medical Officer at Scutari.

Army and Ordnance Medical Department, 28th May 1855.

SIR, I HAVE the honour to report to you, for the information of the Purveyor-in-Chief, that I have

received a communication from Lord Panmure, stating that 15 cases of preserved vegetables have been shipped on board the "Westbrook" at Deptford for Scutari, and consigned to "The Purveyor-in-Chief at the British Hospital, Scutari."

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 224.

Dr. Smith to Dr. Hall.

Army Medical Department,
28th May 1855.

SIR, It is with deep regret that I observe, in your letters to Lord Raglan of the 11th and 14th instant, the alarming extension of cholera in the army; and I must say I fear, from what has already occurred, that should the force be kept in its present position, and under existing circumstances, that there is too much reason to apprehend that such a loss of life may be the result as to leave his Lordship no men to fight the enemy, or do duty in the camp and trenches.

In such a state of things all your vigilance will be required, and you must impress on the medical officers the necessity for an active and incessant supervision on their part, so that you may be, by their watchful exertions, kept fully informed on every point connected with this subject calculated to further the performance of your duties.

The intelligence which every mail will bring to this country will be looked for with the utmost anxiety, and I am fully convinced that you will not fail to furnish that much desired information to the fullest extent that circumstances will admit of.

I have forwarded a very strong letter on this subject to the Minister for War, in which I have expressed my fears in the strongest terms, and suggested that there should exist some preconcerted arrangement which will permit of some important local steps being taken should the disease assume the virulent form which I fear it is likely to do.

I have, &c.

(Signed) A. SMITH,

Dr. Hall, Director General.
&c. &c.

No. 225.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical Department, 30th May 1855.

SIR, I HAVE the honour to notify to you the shipment on board the "Eagle" for conveyance to Balaklava direct of a case specially addressed to you, and as to be opened in your presence.

This box contains a quantity of a mixture, put up in small bottles, said to possess extraordinary virtues in the cure of diarrhoea and cholera.

As I am desirous that a trial of the medicine in question should be made, and its efficacy tested, I have to request you will intrust its administration to medical officers more than usually interested in putting new remedies to the test, and accustomed carefully to distinguish the real nature of the diseases alluded to, and of the powers of remedial agents in their treatment.

As soon as sufficient experience has been brought to bear on the question, I have to request you will favour me with a report of the results thereof, stating in what degree the remedy now sent out is superior or inferior to other curative means employed in those diseases.

Should the report of the trials be in favour of the remedy now forwarded, I shall lose no time in for-

* Specification of soldiers' field dressing :—
Bandage of fine calico, 4 yards long, 3 inches wide.
Fine lint, 3 inches wide, 12 inches long.
Folded flat, and fastened by four pins.

warding a note of its composition, which I am not at present permitted to do by the prescriber.

I have, &c.

(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 226.

Dr. Smith to the Deputy Secretary-at-War.

Army Medical Department,
30th May 1855.

SIR,

I HAVE the honour to submit, for the consideration of the Minister for War, the enclosed copies of letters from the Crimea* on the want of hospital attendants, and I beg to recommend that no time should be lost in enlisting men who would be suitable for the performance of the duties required of such persons.

With regard to the scheme for the formation of a corps for hospital service, communicated in your letter of the 11th instant, ¹⁸⁵⁵ which has had my careful consideration, I am of opinion that, with some extension, and a few alterations, it will supply all the wants I contemplated when I originally suggested the formation of such a corps in November or December last. Judging from the scheme now under consideration, it appears to me that no provision has been made for the discharge of a most important duty which ought to attach to the corps in question, namely, the removal of sick and wounded from the field of battle. In my plan that was a most prominent item, though perhaps never fully developed, in consequence of the contemplated measure having, soon after it was incompletely organized, been abandoned, at least as far as my share in it was concerned.

Had that plan been proceeded with, I was prepared to show what in my opinion should have been the strength and constitution of the corps, and if the opportunity had been afforded me I should have proposed the following:—

- 1st. That the corps consist of 1,000 men, embracing, in due proportion, stewards, assistant stewards, issuers, cooks, assistant cooks, wardmasters, assistant wardmasters, barbers, orderlies, and a certain number of artificers.
- 2nd. To have 600 of the number apportioned for hospital duties, and 400 assigned for the field.
- 3rd. That the corps to be officered by 1 major, 1 captain, and 10 subalterns, 6 lieutenants, and 4 ensigns, all of whom had risen from the ranks, as less likely to be too sensitive, or apt to take umbrage at the light in which their position and duties might be viewed, and perhaps remarked on, by the officers of the more strictly combatant class, or the other branches of the service.
- 4th. The major to have the general command of the corps, but more especially that division of it allotted to hospital duties, and his station should be at the establishment where the greatest number of his men might be employed; the captain to have the immediate command of the men in the field, and the subalterns to be detailed, as the interests of the service might from time to time appear to require. Subalterns, however, always to be present in the field in the proportion of one to each 100 men, to have the command of these, and be responsible that they discharge their important duties with zeal and efficiency.

This division of the corps I have all along considered, aided by the bandmen and drummers, would effect the removal of the sick and wounded to the ambulance waggons, or elsewhere, and the officers would have the military charge of the several means

of transport, and of what hospital stores, medical comforts, &c. &c. should be with the army.

These are a few of the remarks I am at present prepared to make, and if they are entertained I earnestly recommend that no time should be lost, and that the individuals to compose the future corps should be immediately enlisted, and no one should be permitted to enter it who cannot read and write, and further produce testimonials showing him generally to enjoy robust health, to be of mild temper, kind disposition, and of steady and regular habits.

The purveying department will require to be consulted as to what ought to be the duties of the stewards, assistant stewards, issuers, cooks, and assistant cooks.

The medical department will supply regulations for the guidance of the wardmasters, assistant wardmasters, barbers, and orderlies, and I will furnish those long before the corps can be ready to assume its operations. The opinions of the medical board will assist materially in supplying a comprehensive and satisfactory code of regulations, and I have already taken steps to obtain such, so far as I have the means of doing.

I have, &c.

(Signed) A. SMITH,

The Dep. Secretary at War,
&c. &c. Director General.

No. 227.

Dr. Smith to the Deputy Secretary at War.

Army and Ordnance Medical
Department, 2d June 1855.

SIR,

IN reply to your letter of the 24th April 1855, No. ¹⁸⁵⁵, I have now the honour to inform you, that the wringing machine referred to therein as under preparation for the hospital at Balaklava, has been shipped on board the "Eagle" steamer which sailed for Balaklava this day.

I have, &c.

(Signed) A. SMITH,

The Dep. Secretary at War,
&c. &c.

No. 228.

Dr. Smith to the Chairman of the Transport Board.

Army and Ordnance Medical
Department, 2d June 1855.

SIR,

I HAVE the honour to request that a sailing vessel to carry about 350 tons (measurement) of peat charcoal and medical comforts, &c., may be allotted me for Balaklava as early as possible, and that she may be ordered into the Wapping Basin, London Docks, to take in her cargo.

I have, &c.

(Signed) A. SMITH,

The Chairman, Transport Board,
&c. &c. Director General.

No. 229. (Duplicate).

No. 230.

Dr. Smith to the Under Secretary for War.

Army and Ordnance Medical
Department, 2d June 1855.

SIR,

I HAVE the honour to transmit, for the information of the Secretary of State for War, a return showing the number of cases of cholera occurring in the British force before Sebastopol, admitted into hospital on the 14th, 15th, 16th, and 18th May, and the deaths from that disease during the same period.

* Letter from Dr. Hall to Director General, dated 7th May 1855.—Letter from Dr. Hall to Major-General Esteourt, dated 6th May 1855.—Letter from Staff Surgeon Matthew to Principal Medical Officer, Balaklava, 6th May 1855.—Letter from Staff Surgeon Anderson to Dr. Hall, dated Balaklava, 5th May 1855.

Dr. Hall states, that some cases of cholera have occurred in the Sardinian contingent, and the disease is also prevailing the French army.

I have, &c.
(Signed) A. SMITH,
Under Secretary for War, Director General.
&c. &c.

No. 231.

Dr. Smith to Dr. Hall.

Sir,
Army and Ordnance Medical
Department, 4th June 1855.

HAVING observed, in the report of the senior medical officer of the 4th Division for the week ended 12th May, a remark, as quoted in the margin*, relative to the want of tartaric acid and sesquicarbonate of soda in his division, I have the honour to request you will forward an explanation on the subject, embracing the following points:—

Whether the want referred to existed in all the field hospitals, as well as in the medical store of the division.

Whether any and what requisitions for the articles named had been sent by medical officers in charge of hospitals, and by the senior medical officers of the divisions. The date of such requisitions, and to whom and when forwarded.

What quantities of the articles in question were remaining in store at Balaklava during the week in question, and what quantity at the termination of the previous week.

If the supply of them had been exhausted, date of last issue from store, and date of requisition on Scutari to replenish.

I have, &c.
(Signed) A. SMITH,
Dr. Hall, Director General.
&c. &c.

No. 232.

Dr. Smith to Dr. Wood, 2d Division.

Sir,
Army Medical Department,
5th June 1855.

HAVING observed in the documents forwarded to me from the War Department, relative to an inquiry into the alleged total lack of quinine during a portion of April last in the regimental and divisional medical stores of the army before Sebastopol, that you have stated that on the occasion in question you were informed by your dispenser that there was no quinine in the medical store of your division, and none in store at Balaklava, and that thereupon you made no representation on the subject to any superior medical authority.

At this very time, moreover, it appears that want of quinine in the 95th Regiment had existed for about ten days, that this want had been reported to you by Staff Surgeon Langley, and that it was within your knowledge, that during the period alluded to there were "probably in the hospital of that corps 50 fever cases, all urgently requiring quinine, or some substitute for that medicine."

Nevertheless, although it was your bounden duty to exhaust every means and try every effort to obtain a supply of that or other similar medicine for your divisional store, and for use in the regiments under your medical superintendence, and although, as appears from other evidence, there was, at the very time in which that article was so urgently required in certain corps of your division, a large surplus available for use in the other divisions of the army, yet you

admit that you made no representation on the subject to any superior medical authority.

Had you done so, there would doubtless have been made a re-distribution of the medicine in question, and that available for use would have been issued to you for administration to the 95th, and the battery of artillery attached to your division.

It certainly appears to me very surprising, that under such circumstances you satisfied yourself with the reply of the dispenser. Was it not your duty to have verified, or, at least, sought some confirmation of his statement? And in regard to a want of an important medicine in your division, was it not your bounden duty, as senior medical officer of the division, to represent the matter, and communicate the information you had received from the dispenser to the inspector general of hospitals, in order to the remedying the want with the least possible delay?

I regret much to be under the necessity of observing that, as the case now stands, by your own admission, you appear to me to have shown in the matter in question a great want of forethought and energy, as well as a deficiency of regard for the interests of the sick of your division and the credit of your department.

I have, &c.
(Signed) A. SMITH,
Dr. Wood, Director General.
&c. &c.

No. 233.

Dr. Smith to the Quartermaster General.

Sir,
Army and Ordnance Medical
Department, 5th June 1855.

I HAVE the honour to enclose, for the information of the General Commanding in Chief, the copy of a letter from the Principal Medical Officer at Portsmouth, to third paragraph of which communication I beg to direct particular attention, as it appears that the troops have been badly supplied with provisions during the voyage from Scutari to this country.

I have, &c.
(Signed) A. SMITH,
The Quartermaster General, Director General.
&c. &c.

No. 234.

Dr. Smith to the Surgeon in charge of the 21st Foot.

Sir,
Army Medical Department,
5th June 1855.

HAVING observed, in the documents forwarded to me from the War Department relating to an inquiry on the alleged total lack of quinine in the regimental and divisional medical stores of the army before Sebastopol during a portion of March last, that it has been stated by the Principal Medical Officer of the 4th Division that there was at the time in question a want of quinine in your regimental hospital; that, there being none of that medicine at the time in the divisional medical store, he had offered to you disulphate of cinchonine as a substitute for it, and that you had declined to accept of the substitute;

In reference to this matter, I have to request you will furnish me with the least possible delay with copies of any requisitions or representations you made at the time, and also with an explanation for your having refused to give to your sick affected with fever the benefit of using the best substitute for quinine, the cinchonine, which, from repeated and careful trials, has been found, in antiperiodic virtues, to be second only, and but little inferior, to quinine.

I have, &c.
(Signed) A. SMITH,
The Surgeon in charge of Director General,
the 21st Foot.

* "Tartaric acid and carbonate of soda have been wanting this week."

No. 235.

Dr. Smith to Surgeon Davies, 49th Foot.

SIR, Army and Ordnance Medical Department, 6th June 1855.

HAVING observed, in certain documents sent to me from the War Department relating to an inquiry on the alleged total lack of quinine in the regimental and divisional medical stores of the army before Sebastopol during a part of April last, that you have stated that your hospital was two days without quinine (about the 18th or 19th); that there was not any of that medicine at the time in the divisional store; and that you got a small quantity of disulphate of cinchonine instead, and quinine from a private hand,—in reference to this point, I have to request you will inform me whether you took any other steps than those mentioned to obtain quinine for the sick of your corps at the time when you were unsupplied from the divisional store; for, as it appears there was a considerable surplus (exceeding 20 pounds) at that very time in the other regimental and divisional medical stores, it seems to me strange that the surgeon of a regiment should not have obtained a portion of that surplus of the public stores in preference to drawing on a private source.

Further, you have stated that you never had a sufficient quantity of quinine to administer as a prophylactic of fever, a mode of using it which you considered very necessary under the circumstances in which many of the men of your corps were placed.

With regard to this matter, I have to request you will favour me with copies of any requisitions and representations you made with a view to obtain quinine in sufficient quantity for the purpose specified; for I cannot understand why that medicine should not have been placed at your disposal, had you applied for it and urged its necessity, with equal readiness and in equal quantity as in the case of most of the regiments of the 1st Division.

I find, on referring to the reports of the principal medical officer of that division, that for several weeks before, as well as during, the very period to which you refer, quinine was freely used as a prophylactic in several corps of that division.

I have, &c.
(Signed) A. SMITH,
Director General.

Surgeon Davies,
&c. &c.

No. 236.

Dr. Smith to the Under Secretary for War.

SIR, Army and Ordnance Medical Department, 7th June 1855.

IN reply to your letter of the 1st instant, I have the honour to transmit, for the information of the Minister for War, the report of the proceedings of a medical Board assembled to consider the probable efficiency of the cordial mixture which Miss Fernandez considers a remedy for cholera; and I beg to add, that I concur in the opinion expressed by the Board on this subject, as there can be no sounder principle than that which excludes from military practice remedies, whether for external application or internal use, the composition of which is undivulged.

I have, &c.
(Signed) A. SMITH,
Under Secretary for War. Director General.

No. 237.

Dr. Smith to the Principal Medical Officer at Scutari.

SIR, Army and Ordnance Medical Department, 7th June 1855.

I BEG to acquaint you that five pounds of ergotine, for trial in the hospitals at Scutari, will be shortly forwarded with other supplies now waiting shipment.

I have the honour to enclose a memorandum of the chief modes of employing the remedy in question.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 238.

Dr. Smith to Colonel Mundy.

SIR, Army and Ordnance Medical Department, 7th June 1855.

IN reference to the proposition of Mr. Joseph Maine, of 7, Union Court, addressed to the Minister for War, and herewith returned, in regard to supplying gelatine for use in the hospitals of the East, I have the honour to transmit the proceedings of a medical board assembled to consider this subject; and I beg to add, that I concur in the recommendation therein conveyed, and I have ordered 1 cwt. of this substance to be forwarded to the hospitals of the East for trial and report thereon.

I have, &c.
(Signed) A. SMITH,
Colonel Mundy, Director General.
&c. &c.

No. 239.

Dr. Smith to the Principal Medical Officer at Scutari.

SIR, Army Medical Department, 8th June 1855.

IT having been reported that five cases of cholera occurred among the invalids on board the ship "Black Prince" on her voyage from Scutari to Malta, four of which proved fatal, and as these seizures are ascribed to the use of unripe fruits, in which the men were permitted to indulge after embarkation and while lying off Scutari, I have to request that you will represent to Lord W. Paulet how desirable it is that stringent measures should be adopted in future to keep from within the reach of men so situated aught of a kind calculated to prove detrimental to them.

Boats engaged in hawking unripe fruit and other articles should be interdicted approaching vessels conveying sick.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 240.

Dr. Smith to the Under Secretary for War.

SIR, Army and Ordnance Medical Department, 8th June 1855.

I HAVE the honour to forward, for the information of the Minister for War, the copy of a letter addressed by 2nd-Class Staff Surgeon Trench* to the Inspector General of Hospitals at Malta. In reference to this communication, I am inclined to suspect that the cholera, in the instances alluded to, was the

* 2d Class Staff Surgeon French, M.D., Malta, 24th May 1855.

result of the irregularities in question, and I have written to Inspector General Cumming to recommend to Lord William Paulet the adoption of measures which will prevent men embarked in similar circumstances having access to unripe fruit.

I have, &c.

(Signed) A. SMITH,

The Under Secretary for War, Director General.
&c. &c.

No. 241.

Dr. Smith to Dr. Cumming.

SIR, Army and Ordnance Medical Department, 11th June 1855.

WITH reference to a supply of leeches, which were much wanted in the camp, I regret to have observed a note by Dr. Hall, Inspector General of Hospitals, to the effect that the whole number (1,600) lately before sent from Scutari, were found dead on arrival at Balaklava, in consequence of the store-keeper at Scutari having had them put up in closely-stoppered bottles.

You will be pleased to call on Mr. Joseph for an explanation on the subject, and to direct that greater care and judgment must be exercised in regard to future issues of leeches than to send animals, to which air is a necessary of life, in vessels from which the access of air has been carefully excluded.

I have, &c.

(Signed) A. SMITH,

Dr. Cumming, Director-General.
&c. &c.

No. 242.

Dr. Smith to the Secretary of Ordnance Office.

SIR, Army Medical Department, 14th June 1855.

HEREWITH I have the honour to enclose a requisition for hospital stores for the use of the military hospitals at Scutari, and I have to request they may be got ready for shipment as early as possible.

I have, &c.

(Signed) A. SMITH,

The Sec. of Ordnance Office, Director General.
&c. &c.

No. 243.

Dr. Taylor to Assistant Commissary General Hawkins.

SIR, Camp, 3d Division, 14th June 1855.

WITH reference to the remarks of the Commissary General in the accompanying correspondence, I have the honour to request you will be good enough to use your best endeavours to secure the means of giving fresh milk to the sick and wounded of the division as soon as possible.

I have, &c.

(Signed) J. R. TAYLOR,

Assist. Com. Gen. Hawkins, Deputy Inspector General,
&c. &c. 3d Division.

No. 244.

Dr. Smith to the Under Secretary for War.

SIR, Army and Ordnance Medical Department, 14th June 1855.

IN reply to your letter of the 29th ultimo, transmitting a communication from Mr. Chester Walker, of St. Louis Mo.,* I beg, in returning the enclosure,

to state, for the information of the Minister for War, that I am causing to be printed what appears of value in Mr. Walker's letter, with the view to its circulation among the medical officers serving in the East.

I have, &c.

(Signed) A. SMITH,

The Under Secretary for War, Director General.
&c. &c.

No. 245.

Dr. Smith to the Principal Medical Officer in the Crimea.

SIR, Army Medical Department, 15th June 1855.

IN reply to your letter of the 31st ultimo, I have the honour to inform you, that under present circumstances I am of opinion you must not have rigid reference to the ordinary military hospital economy. Whatever is likely to be of any use to the sick must be granted without the necessity of precedents, therefore I should say, if champagne wine is considered more beneficial than other articles, it ought to be given.

I certainly cannot take upon myself to authorize you to purchase eau-de-cologne and lavender water, unless the reasoning of those who require them makes it clear to you that they are likely to prove more advantageous than other deodorants in use from some superiority they possess beyond being possibly a little more agreeable to the organs of smell.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 246.

Dr. Smith to Colonel Mundy.

SIR, Army and Ordnance Medical Department, 16th June 1855.

I HAVE the honour to acknowledge the receipt of your letter of the 9th instant enclosing a communication to Lord Panmure of the 21st ultimo from Lord William Paulet, the Commandant at Scutari.

I beg, in reference to the matter contained in these documents, earnestly to renew, for the consideration of the Minister for War, my recommendation that every practicable effort should be made to remove to this country, from Scutari, all sick not likely to recover soon in the hospitals in which they are being treated.

Cases of cholera are from time to time occurring in these establishments, and should this disease assume an epidemic form, the loss of life will doubtless be very great from the opportunities it will have of working its ravages on men reduced by previous disease.

A few large transports, if they could at once be made available, would nearly empty the hospitals in the neighbourhood of Constantinople; and the benefit which would accrue to the sick, by their removal from the localities at this time, would be very great indeed. I believe that many of them, if embarked for England, even before they reached a port in this country, would attain a state of improved health far superior to that which many months hospital treatment in Turkey would bring about.

Further, it is to be hoped that the hospital ships, the "Tasmania" and the "Soldanha," will be appropriated to convey sick and wounded from Balaklava direct to England, and that neither of these vessels will have occasion to deposit any of the men embarked in the Crimea, either at Scutari, Kulalie, or Abydos.

I have, &c.

(Signed) A. SMITH,

Colonel Mundy, Director General.
&c. &c.

* Chester Walker, St. Louis, Mo., 8th March 1854.

No. 247.

Dr. Smith to Messrs. Savory and Sons, New Bond Street.

Sir,
Army and Ordnance Medical Department, 20th June 1855.

I HAVE to request you will procure, for despatch to the army serving in the field, three thousand (3,000 lbs.) pounds of best English disulphate of quinine.

The whole of this supply of quinine you will be required to furnish in fortnightly instalments of 375 pounds each.

Each instalment of the supply must be ready for shipment on 10th and 24th of every month, commencing with the 10th July, and for each a requisition shall be issued from this office in due course.

The quinine to be packed in cases, the gross weight of each of which must not exceed 100 lbs., and to be contained in bottles or in square tins lined with gutta percha, 1 lb., 2 lb., and 4 lb. in each in equal proportions.

You will be pleased to inform me whether you will undertake to furnish the supply of quinine, as specified in this letter, for the special service named.

I have, &c.

(Signed) A. SMITH,

Messrs. Savory and Sons, Director General.
&c. &c.

No. 248.

Dr. Smith to the Under Secretary for War.

Sir,
Army and Ordnance Medical Department, 20th June 1855.

I HAVE the honour to forward, for the information of the Minister for War, the proceedings of a medical board assembled to consider the alimentary properties of a sample of the gluten granulé of Véron, proposed to be sent to the seat of war for the use of the sick in hospital; and as I concur in the opinion of the board, I have the honour to recommend that 2 cwt. of the above substance may be ordered to be sent to Balaklava for the service of the sick and wounded in the Crimea.

I have, &c.

(Signed) A. SMITH,

The Under Secretary for War, Director General.
&c. &c.

PROCEEDINGS of a Board of Medical Officers assembled by order of the Director General Army and Ordnance Medical Department to examine samples of the gluten granulé of Véron, proposed by that firm in communications addressed to the Minister for War as an addition to the aliments in use in the hospitals in the East.

PRESIDENT:

Dr. Dumbreck, Deputy Inspector General of Hospitals.

MEMBERS:

H. Pilleau, Esq., Staff Surgeon, 1st Class.
Dr. F. Reid, Staff Surgeon, 2nd Class.

"THE board, having had a portion of the above gluten granulé cooked, finds it palatable, and likely to prove a welcome addition to the farinaceous forms of nutriment in use in the hospitals in the East.

"The board therefore recommends that a supply of gluten granulé may be provided for the use of the sick of the army of the East.

(Signed) "D. DUMBRECK,

Dep. Inspector Gen. of Hospitals.

"H. PILLEAU,
Staff Surgeon, 1st Class.

"F. REID,
Staff Surgeon, 2nd Class."

No. 249.

Dr. Smith to the Principal Medical Officer in the Crimea.

Sir,
Army Medical Department, 21st June 1855.

OBSERVING by the report for the week ended 26th ultimo, that much sickness, chiefly fevers, prevailed in the 17th Foot, and that great inconvenience had been experienced, and no little mischief was likely to result from the want of sufficient accommodation for the sick of that corps, I trust you have followed up the repeated applications which appear to have been made by the regimental surgeon and by the divisional superintending medical officer for one or two additional huts to supply the wants which had been so long felt.

And I persuade myself that on your urgent representation to the Field Marshal commanding the forces the evil complained of has been long ago remedied in that and all other like cases, and that the requirements of the sick and wounded have in every respect been promptly met, to the very utmost of the means and resources at command.

I have, &c.

(Signed) A. SMITH,

The Prin. Medical Officer, Director General.
&c. &c.

No. 250.

Dr. Smith to Dr. Cumming.

Sir,
Army Medical Department 22nd June, 1855.

I HAVE the honour to acquaint you that among the medical stores forwarded to Scutari, per "Janet Croll" steamer, are 40 pounds of liquor ammonia acet. fort., made exactly according to the formula of Mr. Jennings, a note of whose supposed remedy for cholera was lately forwarded to you.

You will be good enough to forward to Balaklava, on its arrival at Scutari, 20 or 30 pounds of the medicine referred to.

I have, &c.

(Signed) A. SMITH,

Dr. Cumming, Director General.
&c. &c.

No. 251.

Dr. Smith to the Principal Medical Officer in the Crimea.

Sir,
Army Medical Department 23rd June 1855.

I REQUEST you will inform me if, according to your views, a ration of butter, say two ounces daily per man, might be issued with advantage to the soldiers of the army in front of Sebastopol.

Persons who have had experience under circumstances like those in which that army is now placed, are of opinion it would prove beneficial, besides being agreeable to the palate.

I have, &c.

(Signed) A. SMITH,

The Prin. Medical Officer, Director General.
&c. &c.

No. 252.

Dr. Smith to Dr. Hall.

Sir,
Army and Ordnance Medical Department, 25th June 1855.

On the 29th ultimo I received a communication from Colonel Mundy, written by order of the Minister for War, and forwarding for my perusal a lengthened correspondence, &c., relative to an alleged deficiency of quinine in the camp before Sebastopol,

and also to a total want of that medicine in the medical store at Balaklava, from the 5th March to the 19th April last, and in the same letter an order to communicate to you Lord Panmure's opinion in reference thereto.

I regret that the occasion for such remarks should have occurred, and I sincerely hope you will take care to have always in store more than is necessary for the use of the sick and for prophylactic administration rather than less, or only barely sufficient for these purposes.

I have preferred giving you an extract from the communication referred to rather than my own version of the remarks alluded to.

I have, &c.

(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

(EXTRACT of a Letter from Lord Panmure, dated, War Department, 29th May, 1855.)

"WITH regard to quinine, I am to state that Lord Panmure's attention has been further drawn to the deficiency in the supply of it by a report which his lordship has received on the subject from Sir J. McNeill, of which and of its enclosure I am to transmit to you herewith copies, and in doing so I am to request that you will inform Dr. Hall that his lordship is much displeased at his remissness in allowing the supply of this important medicine to fall short."

(A true extract.)

(Signed) A. SMITH,
Director General.

No. 253.

*Dr. Smith to the Principal Medical Officer at Scutari.**

SIR,
Army and Ordnance Medical Department, 27th June, 1855.

AMONG the numerous formulæ and specifics for the cure of cholera and kindred diseases brought to my notice from professional and non-professional sources, there is one emanating from the latter channel, the virtues of which have been insisted on with much pertinacity, namely, charcoal derived from the leather on the animal origin, of which body its supposed efficacy may depend; the dose of this reduced to powder is about half a small teaspoonful, and it is directed to be taken in malt liquor.

Should you be disposed to attach any value to this remedy, and recommend its use in affections of the bowels, I shall be glad to learn the result of any trial of this substance in the treatment of diseases of the character referred to.

I have, &c.

(Signed) A. SMITH,
The Prin. Medical Officer, Director General.
&c. &c.

No. 254.

Dr. Smith to the Under Secretary for War.

SIR,
Army and Ordnance Medical Department, 28th June 1855.

I HAVE the honour to acknowledge the receipt of your letter of the 29th ultimo, with enclosures relative to an alleged total "lack of quinine" in the hospitals of the British force before Sebastopol, during part of the month of April last, as reported to Lord Raglan and Lord Panmure by Sir John McNeill.

With reference to the concluding paragraph of your letter, communicating Lord Panmure's desire that I will take measures forthwith for forwarding an adequate supply of quinine for the use of the army of

the East, I beg to acquaint you, for his lordship's information, that since the date of my last communication on this subject (12th ultimo), and in addition to the large quantities therein specified as having been sent to the Crimea, as being in store at Scutari, and on the passage thither, I have caused to be forwarded by various steamers 900 pounds of quinine and 400 pounds of amorphous quinine to Balaklava direct, besides 200 pounds of quinine to the store at Scutari.

And further, I have the honour to state that, exclusive of 300 pounds to be shipped for Balaklava on the 2d proximo, I have succeeded in engaging one of the firms which supply medical stores for Her Majesty's army to furnish, during the months of July, August, September, October, and November, 1855, 3,000 pounds of pure quinine, to be delivered for shipment on the 10th and 24th of each of the four first-named months, in fortnightly instalments of 5,000 ounces each, and the remaining 8,000 ounces in equal portions on the 10th and 24th of November, for despatch to the Crimea.

The supply of quinine above noted is calculated to furnish to every officer and soldier of a force of 35,000 strong, four grains of quinine per diem, for the months quoted; and I beg to add that while I am of opinion that the supply far exceeds any possible demand for the expensive and perishable medicine in question, still I have felt myself impelled to take measures to provide it, in compliance with Lord Panmure's repeated and urgent injunctions on the subject.

I have, &c.

(Signed) A. SMITH,
The Under Secretary for War, Director General.
&c. &c.

No. 255.

Dr. Smith to Brigadier General Paulet.

SIR,
Army Medical Department, 29th June 1855.

I HAVE the honour to transmit herewith, for your lordship's information, a supplementary invoice of 100 pounds of opium powder, supplied for the use of the British army at the East, and despatched per steamer "Pioneer," which left Woolwich for Balaklava on the 26th instant.

I have, &c.

(Signed) A. SMITH,
Brigadier General Paulet, Director General.
&c. &c.

No. 256.

Dr. Smith to Colonel Mundy.

SIR,
Army Medical Department, 30th June 1855.

IN reply to your letter of the 27th instant, I have the honour to state, for Lord Panmure's information, that the quantity of the gluten granulé of Véron proposed to be ordered was small, because it has not yet been ascertained that it is an article that will prove useful to, or even be relished by, the sick soldier.

Under the existence of such justifiable doubt, a small quantity only of an article is furnished in the first instance; and if it is afterwards found to be desirable to continue the supply in consequence of its being suitable to the object contemplated on its introduction, a larger quantity is then provided. Should the gluten granulé be approved of, much beyond ten cwt. will be required.

I have, &c.

(Signed) A. SMITH,
Colonel Mundy, Director General.
&c. &c.

* Similar letter sent to Principal Medical Officer, Crimea.

No. 257.

Dr. Smith to the Deputy Secretary at War.

Army and Ordnance Medical Department, 30th June 1855.

SIR, In reply to your letter of the 21st instant, I beg to state, for the information of the Minister for War, that I am of opinion, after a careful consideration of the subject, that M. Soyer's proposition in regard to a certain modification in the distribution of the broth forming part of the diet in military hospitals is worthy of adoption, as this plan will secure that the broth shall always be of an uniform strength, and that the quantity served to individual patients shall bear a just proportion to the amount of meat belonging to each class of diet.

If, therefore, the Minister for War will be pleased to sanction the proposed change, I beg to submit that I may be authorized to make the same known by a circular thereon to the medical officers of the army.

I have, &c.

(Signed) A. SMITH,

Dep. Secretary at War, Director General.
&c. &c.

No. 258.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army and Ordnance Medical Department, 30th June 1855.

SIR, I HEREBY append a formula, to the efficacy of which in the treatment of diarrhoea, the almost invariable precursor of cholera, when present in an epidemic form, a medical practitioner of London has directed my attention. This gentleman writes,—“ During the choleraic epidemic of last year I had ample proofs of the efficacy of the composition in the variety of cases that came under my care, when I thought it advisable, and did arm each of my patients with a few doses to carry in their pockets in case of an attack, which was the means in many instances of at once restraining the diarrhoea.” He further states,—“ I consider the medicine a desideratum for an army on active service in the instance of a prevailing choleraic epidemic, as well as from its uniform efficacy as its simple form.

R. Extracti Arnice, grs. v.
Cupri sulphatis, grs. i.
Morphiæ hydrochlor., grs. ss.
Pulv. capsici, grs. iij.

Fiant pilulæ duæ sumendæ pro re natâ.

“ The above on any threatening of cholera, or to check its premonitory diarrhoea.”

I have directed a supply of the extract of arnica to be forwarded for the use of the army of the East, and I shall be glad to be informed, in the event of a trial being given to the above combination, to learn if it possesses any well-marked power of controlling the premonitory symptoms of the disease.

I have, &c.

(Signed) A. SMITH,

Director General.

The Principal Medical Officer,
&c. &c.

No. 259.

Dr. Smith to the Deputy Secretary-at-War.

Army Medical Department, 2d July 1855.

SIR, WITH REFERENCE to your letter of the 22d ultimo, enclosing a memorandum as to the mode in which supplies are to be obtained for the hospital of the army in the East, I have the honour to state that in consequence of Dr. Hall having repeatedly complained of the difficulties he has experienced in obtaining supplies from Scutari, I have of late, since commodious storehouses have been established at Balaklava, had supplies of medical comforts sent direct to the Crimea.

As this appears in contradiction to the printed memorandum above referred to, I have the honour to request that I may be informed what course I am now to adopt.

I have, &c.

(Signed) A. SMITH,

Director General.

The Deputy Secretary for War,
&c. &c.

No. 260.

Dr. Smith to the Deputy Secretary for War.

Army Medical Department, 3d July 1855.

SIR, I HAVE the honour to acknowledge the receipt of your letter of the 23d ultimo, with a requisition for summer clothing for the use of the sick of the army in Turkey from Purveyor Robertson, dated Scutari, 4th May 1855, and in reply, beg to state that I consider it my duty, before causing such enormous supplies to be provided, to have the authority of Lord Panmure for so doing.

There have already been sent to the East the following quantities of clothing :—

10,000 suits of winter.
10,000 do. summer.
61,000 cotton shirts.
66,000 pairs of woollen socks.
18,000 flannel waistcoats.

In addition to the above there will soon arrive at Scutari 5,000 suits of summer clothing ordered from Marseilles.

8,000 winter do. ordered from this country.
7,700 cotton shirts, do.
9,500 pairs of woollen socks, do.
5,000 flannel waistcoats.

I am of opinion, therefore, that this is a case in which the Principal Medical Officer at Scutari should have been consulted before the demand now made was forwarded.

I have, &c.

(Signed) A. SMITH,

Director General.

The Deputy Secretary for War,
&c. &c.

No. 261.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army and Ordnance Medical Department, 7th July 1855.

SIR, REFERRING to the supply of peat charcoal sent for disinfecting purposes for the use of the army of the East, I request you will inform me if ordinary charcoal could be supplied in the Crimea or in the neighbourhood of the Bosphorus for sanitary uses in hospitals or camps.

Should this form of charcoal, which is of equal, if not greater efficiency than that from peat, not be procurable in sufficient quantity in the vicinity of the seat of war, it will be necessary that you report from time to time what supplies of the above should be forwarded from this country.

I have, &c.

(Signed) A. SMITH,

Director General.

The Principal Medical Officer,
&c. &c.

No. 262.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army and Ordnance Medical Department, 9th July, 1855.

SIR, THE enclosed letter, extracted from the “Times” of the 5th instant, having created a most painful feeling in this country, and again raises a doubt as to

the efficiency of the surgical and other means available in front of Sebastopol to meet the contingencies arising from the operations of war carried on before that fortress, I am under the necessity of applying to you for full information in regard to so startling a narrative as that, the foregoing letter, presents.

Even had not strong opinions on the subject been expressed in the House of Commons, a statement such as that referred to would demand the strictest investigation to exonerate not only those directly responsible and implicated by charges of so grave a nature, but to remove from this department, and indeed from the Government of the country, the stigma which accusations of so sweeping and serious a nature would leave if they remained unanswered or unrefuted. For though I must feel assured, from the information I receive from you, that there is an exaggeration in the letter addressed to the "Times," nevertheless the subject for the foregoing reasons is of that nature that the fullest investigation of it becomes an imperative duty, and, indeed, a communication of the Minister for War to me leaves me no option in the matter but to request that this should be immediately made.

I request, therefore, that you will lose no time in assembling a committee of senior medical officers present with the army, who were not employed on the occasion in question on actual duty, and you will be pleased to instruct these officers to examine and minutely inquire into everything connected with the subject referred to in the letter calculated to throw the fullest light on it, and for this purpose I have to suggest that the evidence of the individual medical officers of all ranks engaged in attendance on the wounded on the 18th June should be taken by the committee, and, together with the opinion of that body thereon, transmitted to me.

I shall be glad also to receive from you what observations you may be enabled to offer in regard to the most vexatious, but, I hope, over-stated and inaccurate account of the deficiencies of the department under your superintendence.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 263.

Dr. Smith to F. Peel, Esq.

Army Medical Department,
10th July, 1855.

SIR,
I HAVE the honour to acknowledge the receipt of your letter of the 4th instant respecting the cargo of ice which was sent to Scutari, and am of opinion that if it could be preserved at Balaklava it would no doubt prove useful and very acceptable there; but in the absence of certain information as to the facilities which Balaklava would afford, I am much disposed to believe it would, were it sent there, be in a great measure wasted.

Under these circumstances I am of opinion that it should be sold at once.

I have, &c.
(Signed) A. SMITH,
Director General.

F. Peel, Esq.,
&c. &c.

No. 264.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
14th July, 1855.

SIR,
I HAVE the honour to enclose herewith copies of invoices, &c. of medical comforts, &c. shipped on board the "Black Prince" steamer for use in the military hospitals at Scutari, which vessel sailed for her destination on the 12th instant, and you will be

pleased to inform me of her arrival, and also to forward me a receipt for the goods which are received.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 265.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
14th July 1855.

SIR,
HEREWITH I have the honour to enclose a copy of the proceedings of a board of medical officers on the subject of pine wool, as applied to the stuffing of mattresses, and to request that you will cause a trial to be made of the mattresses stuffed with this material, shipped on board the "Black Prince," as per invoice,* forwarded to you this day, and report to me as to their suitability for hospital use.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 266.

Dr. Smith to Dr. Odell.

Army and Ordnance Medical
Department, 14th July 1855.

SIR,
WITH reference to previous correspondence on the subject of shipping two cases of quinine for Balaklava, I have the honour to request you will inform me whether the cases in question, which were returned to your care on the 9th instant by Messrs. Savory after having been repacked, have yet been put on board the ship "Arabian," by which vessel the transport board have a second time allotted conveyance for them.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Odell,
&c. &c.

No. 267.

Dr. Smith to the Principal Medical Officer at Balaklava.

Army Medical Department,
16th July 1855.

SIR,
I HAVE the honour to inform you that the "Black Prince," which sailed on the 12th instant, had 56 pounds gelatine on board, as per margin,† intended for trial in the hospitals, and to request that you will be pleased to direct the purveyor to report to me through you whether the quality is good, and it is suitable as an article of diet.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 268.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
16th July 1855.

SIR,
I HAVE the honour to inform you that the "Black Prince," which sailed on the 12th instant, had 56 pounds gelatine on board, as per margin,‡ intended

* 18 mattresses, stuffed with pine wool, in 6 bales, addressed, Purveyor-in-Chief, Scutari Hospital.

† 1 case containing 56lbs., fine sheet gelatine, addressed, Senior Purveyor, Balaklava.

‡ 1 case containing 56lbs., fine sheet gelatine, addressed, Purveyor-in-Chief, General Hospital, Scutari.

for trial in the hospitals, and to request that you will be pleased to direct the purveyor to report to me through you whether the quality is good, and it is suitable as an article of diet.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 269.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
17th July 1855.

SIR,

I HAVE the honour to acknowledge the receipt of your letter of the 13th instant, and in reply I beg to submit, as my opinion, for the information of the Minister for War, that the stores at Scutari will be adequate to the immediate supply of medicines for the sick of so small a force as the 5,000 men raised by Major General Beatson, but it will be necessary to make provision for the periodical demands which this addition to the recipients of medical stores from Scutari will create, by forwarding larger supplies to that station than would have been called for if this extra demand had not been made.

It would certainly be the most natural and appropriate way to supply all the British troops and foreign levies from the great store at Scutari, but I fear many difficulties would be experienced were such a system to be established, as, owing to the constitution of their medical department, and the inexperience of at least a great number of the medical men of these levies, I suspect the demands would be so great as to create a risk of the stores not being always sufficient to afford what might be required for the sick of the British troops. But although I make these observations, I do not seek altogether to dissuade the Secretary of State from the adoption of a trial of the measure proposed in your letter; but if Scutari is made the depôt of supply for the various forces you enumerate, it will be necessary that I should be informed of the total of the force for whom provision must be made, and also authorized to keep up an amount of supply far exceeding what has hitherto been necessary, for the due custody of which it would also be requisite that the adequate additional storage required should be thought of and provided.

I have, &c.,
(Signed) A. SMITH,
Director General.

The Under Secretary for War,
&c. &c.

No. 270.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
20th July 1855.

SIR,

WITH reference to your letter of the 12th May 55, and to previous correspondence on the subject of a "metallic chloride," proposed by Mr. Tennant, of Brighton, to be sent to the East as a disinfectant, and ultimately permitted by him to be analyzed and experimented with at my suggestion prior to an opinion being offered relative to his proposition, I have now the honour to acquaint you, for the information of Lord Panmure, that these preliminary steps have been gone through after considerable but unavoidable delay.

Enclosed is a copy of the report of the analysis of the compound in question. It appears to be merely a mixture of sulphate of iron and common salt, certain changes having resulted, from the mixture, to which it is perhaps unnecessary for me to refer.

I beg to state that a considerable quantity of sulphate of iron, besides other deodorants and disinfectants, has already been sent to the East on requisition from this department.

As this preparation is very nearly the same in composition and properties to that proposed by Mr. Tennant, which he states in the enclosure of your letter of 22d March to be an improvement on that used in Paris for similar purposes, or, in other words, as shown by analysis an addition of common salt to sulphate of iron, I do not see any sufficient reason for sending this preparation to the East.

On the other hand, as it does not contain any objectionable ingredient, a quantity of it might be forwarded, should Lord Panmure think fit to order it to be sent.

But at the same time I beg to submit that from the great number of articles already sent thither for trial and report, I am satisfied that the medical officers are much embarrassed with such experimental inquiries, for which the multiplicity of their duties permits but little time or fitting opportunity, and which could only be efficiently carried out and reported upon by a staff of medical officers specially appointed for the purpose. This plan, however, would be almost as difficult to put in operation from the paucity of medical men for service abroad.

I have, &c.
(Signed) A. SMITH,
The Under Secretary for War, Director General,
&c. &c.

No. 271.

Dr. Smith to the Secretary, Office of Ordnance.

Army Medical Department,
26th July 1855.

SIR,

BEING very desirous to possess correct information as to the provision which exists for the conveyance of sick and wounded in the Crimea, and as your last statement of the 18th June showed only the number of litters and chairs which had been forwarded up to the 16th ultimo, I beg to be informed the number which has since been despatched, also how many out of the 20 light spring waggons, and 60 Brancom's carts, required by my requisition of the 20th January last, have been shipped. I am also anxious to know in what vessels they were embarked, and the date they left this country.

I have, &c.,
(Signed) A. SMITH,
Director General.
The Secretary, Office of Ordnance.
&c. &c.

No. 272.

Dr. Smith to Dr. Wood.

Army Medical Department,
26th July 1855.

SIR,

I HAVE to acknowledge the receipt of your letter of the 9th instant in reply to my communication of the 21st ultimo, requesting an explanation of certain circumstances arising out of an inquiry by Sir John McNeill on the alleged want of quinine with the army in the Crimea during April last, and especially in regard to the statements made on that occasion concerning the supply of that article available for use in the division which was at that time under your medical superintendence.

I have to inform you that your explanation is satisfactory; but it appears to me that Assistant Surgeon Ferguson, 95th Regiment, is open to blame in the matter referred to.

I have, &c.,
(Signed) A. SMITH,
Director General.
Dr. Wood,
&c. &c.

No. 273.

*Dr. Smith to Dr. Hall.*Army Medical Department,
27th July 1855.

SIR,

WITH reference to previous letters on the subject of administering quinine, and other preparations of bark, as prophylactic remedies, I have the honour again to draw your attention to the matter.

From all I have learnt, I am persuaded that the number of cases of fever would be greatly diminished by such a course. So convinced am I, especially by the results of the experience of naval medical officers, of the benefits arising from the prevention plan, when followed in localities in which remittent and inter-mittent fevers are likely to prevail, that I have taken care to provide ample supplies of quinine in anticipation of every possible demand for that article.

Having now at command sufficient of this drug, specially provided for that service, to furnish 5 grains per diem to every member of a force of 35,000 men, I beg you will take such measures as you think proper with a view to induce the medical officers to employ that remedy, in the hope it may prove useful in warding off attacks of fever, &c.

I have, &c.

(Signed) A. SMITH,
Director General.Dr. Hall,
&c. &c.

No. 274.

*Dr. Smith to the Under Secretary for War.*Army Medical Department,
28th July 1855.

SIR,

I HAVE the honour to state, for the information of the Minister for War, that considering the circumstances of the troops with the army in the field, I some time since came to the conclusion, after conversation with some medical officers of long service in the field, that a small quantity of butter might be added to the ration of the soldier with advantage, and I accordingly communicated my views to Dr. Hall, who concurs in the opinion that such issue would be advantageous, I therefore submit that two ounces of butter should be added to the daily ration of each man.

I have, &c.

(Signed) A. SMITH,

The Under Secretary for War,
&c. &c. Director General.

No. 275.

*Dr. Smith to the Principal Medical Officer
in the Crimea.*Army Medical Department,
28th July 1855.

SIR,

A MR. FREDERICKX, of Antwerp, having invented a machine denominated an "Insecticide," which has been used with success in the hospitals of the Belgian army for the purposes to which I shall presently advert, the Minister for War has, on my recommendation, caused one of these to be purchased and brought to this country with a view to its transmission for the use of the army of the East.

This machine is for the destruction of vermin infesting the person and clothes, for the purification of clothes infected by itch, the acarus of which it destroys, and also for the disinfecting of articles of dress belonging to sufferers from contagious diseases.

I have the honour to enclose directions for using the apparatus, and I have to inform you that a workman conversant with the management of the machine will accompany it to the seat of war, so that no difficulty may arise from unskilful manipulation. The enclosed copy of a letter from Lord Panmure will explain to you the footing on which this person joins the army. This machine, accompanied by the above workman, will be despatched for Balaklava per "John Bowes."

A Mr. Dispenser Harrison, who has proceeded to the seat of war, is also acquainted with the mode of using the apparatus.

If this is found on trial to effect the most important objects for which it is introduced, I request that you will lose no time in communicating with me thereon, as, should it prove successful, I shall immediately take care that these machines, in numbers adequate to the possible demand for them, may be supplied to the army under your care.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer,
&c. &c. Director General.

No. 276.

*Dr. Smith to the Principal Medical Officer in the
Crimea.*Army and Ordnance Medical
Department, 30th July 1855.

SIR,

WITH reference to my letter of the 28th instant, relative to the "Insecticide" of Mr. Frederickx, which has this day been shipped on board the "John Bowes" for conveyance to the Crimea, I have the honour to request that you will cause the apparatus in question to be tried and reported on with the least possible delay, in order that I may be in a position to decide on the propriety of immediately ordering a further supply of these machines.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer,
&c. &c. Director General.

No. 277.

*Dr. Smith to the Principal Medical Officer in the
Crimea.*Army and Ordnance Medical
Department, 30th July 1855.

SIR,

IN reply to your letter of 18th June, covering a return of certain medical comforts drawn for the use of the sick of the 63rd Regiment, embarked on board the "Alma," for service at Kertch, between the 31st May and 12th June, I have to observe that as so many articles appear to have been required, I think you will agree with me that it would be wise to increase the amount of supplies in future; at the same time it is quite possible if the supplies are large the expenditure will also be so.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer,
&c. &c. Director General.

No. 278.

*Dr. Smith to Colonel Mundy.*Army Medical Department,
31st July 1855.

SIR,

I HAVE the honour to enclose, for the information of the Minister for War, the copy of a letter from Surgeon Innes, 60th Rifles, the medical officer in charge of the hospital ship "Tasmania," and I beg to submit as my opinion that that vessel on her disembarking the invalids she is now conveying to this country should be inspected with a view to having remedied the defects in her fittings, specified in the communication of Mr. Innes.

I beg also to recommend that, in the seas where calms prevail during the summer months, that a steam vessel should be attached to the "Great Tasmania," so that the wounded should not suffer owing to the undue prolongation of the voyage.

I have, &c.

(Signed) A. SMITH,

Colonel Mundy,
&c. &c. Director General.

No. 279.

Dr. Smith to Colonel Mundy.

Sir, Army and Ordnance Medical Department, 4th August 1855.

As many of the diseases which occurred in the army in front of Sebastopol during the past winter were doubtless excited by the hardship and privation to which the men were exposed in the trenches, and as a recurrence of the same may be expected during the coming winter should the soldiers be exposed under similar circumstances to like causes, I consider it my duty at this early period to earnestly invite the attention of the Minister for War to the subject, in the belief that many precautions may be resorted to which will prevent much of the mischief which will accrue if they be not observed. Excessive or rather over exertion, want of sufficient rest, inefficient clothing, and want of proper food, were doubtless the sources of much of the disease which proved so destructive to the troops; therefore care ought, in my opinion, to be observed that such sources of disease shall not operate during the next winter, should it be found necessary to continue operations in the trenches or in the field.

The necessities of the present war, if these do not assume a different character before the cold season sets in, will probably require of the troops much bodily exertion, still that may be rendered comparatively harmless by arrangements which will ensure every man a fair amount of rest and sleep. No man should be required to labour more than one night without having after that one or two in bed; a succession of nights of labour will certainly cause disease even in the most robust.

The clothing of men exposed in winter operations against an enemy should be fully adequate to protect them against the bad effects of cold and wet; this unfortunately was not the case during the last winter. The amount of warm clothing now in the Crimea is probably very considerable, still I think that a larger provision should be made to guard against the possibility of a deficiency. However the men may be occupied, the protection which such a precaution will afford will prove a source of comfort to individuals, and greatly contribute to the maintenance of health. Should it be found necessary to continue operations in the trenches, special care in respect of clothing should be observed in reference to the men who may have to work in them. During the past winter few, if any, performed their tour in the trenches without suffering during the whole time from wet feet and excessive cold, and, what was still worse, the majority after being relieved returned to their cold and cheerless habitations, and were necessitated, if the exhausted frame longed for rest, to lay themselves down on the wet and miry ground without previously having had any opportunity of warming themselves or substituting dry clothes for those which had been saturated with wet whilst they had been employed in the discharge of their arduous duties. No necessity for such occurrences should be again permitted; every man should be provided with two suits of warm clothing, one to be used in the trenches, the other in the tents or huts, and regulations should be enforced to ensure the regular substitution of the one for the other. Nothing contributes more to excite disease than the feet being permitted for any length of time to be exposed to wet and cold, therefore great efforts should be made to provide water-proof boots in sufficient number that every man who may have to work in the trenches be in possession of at least one pair. The chest also, and the head, should be amply protected, the former by means of a warm worsted shirt, the latter by a padded hood or mask; the trousers, waistcoat, and jacket, should likewise be of a material calculated to maintain the warmth of the body.

The food of the troops should be, as far as practicable, of the most nutritive description; and care should be taken that ample means of proper cooking it should exist and be available. Food improperly or

only partially cooked does not ensure the end desired, but on the contrary tends to the injury or destruction of health. An extra provision of food should be furnished for the men to be engaged on night duties, more particularly for those to be employed in the trenches. Exposure to the night air is more likely to prove injurious to health in cases in which the stomach is empty than in those in which it is moderately filled, I therefore strongly recommend that no man should enter on night duty without having previously been allowed a solid supper; and with a view to afford that, I consider half pound of meat as an extra to the ordinary ration should be issued to all who are to be employed during the night, and in the event of its not being practicable to provide fresh meat, each person should receive in lieu thereof a quarter of a pound of preserved meat. This meal should take place about an hour before the men are required to enter on their duties, so that a moderate period of rest after it may be allowed them before they leave their huts. Each man to be employed as above should also be allowed an extra ration of spirits and porter.

In the event of these measures which I have suggested, together with many others which will occur to the Inspector General to recommend being authorized, I have every reason to hope that the army will never again experience the sufferings it encountered last winter, nor will the nation again sustain such a loss as it still laments.

I have no doubt whatever but that Dr. Hall will have considered all these points, still I think it my duty to bring them directly to the notice of the Minister for War, as much of what will be necessary, if my suggestions be entertained, must be provided for by the home authorities.

I have, &c.

(Signed) A. SMITH,
Director General

Colonel Mundy,
&c. &c.

No. 280.

Dr. Smith to Colonel Mundy.

Sir, Army and Ordnance Medical Department, 4th August 1855.

If there is reason to expect that the troops now in the Crimea will have to pass the coming winter in that country in situations where neither regular houses nor wooden huts will be available for their lodging, I beg to submit, as my opinion, for the information of the Minister for War, that I consider it essential that the army should be provided with tents of a more efficient description than those now in use. The ordinary bell tent, which is issued for the British army, is in many respects most objectionable, and if something superior to it be not provided before the winter sets in, there are strong grounds for expecting that an amount of sickness and inefficiency will occur, which would not happen under more favourable circumstances. The bell tent neither protects against the rain nor the cold, and is moreover uncomfortable from its shape and the very limited space it affords to the men who have to sleep in it.

The tents which are in use in India are of a very superior description, being double, the outer wall of three, the inner of two layers of cotton stitched together. Nothing more than these facts are necessary to prove that they are much superior to our bell tent. The advantages, therefore, which the tents in use in India would confer renders it desirable that a supply of that description should be furnished if possible; and I think there is still time to obtain a supply from India, where I am told ample numbers are always ready for field service.

The importance of this subject is so manifest that I feel it my duty to submit it without further delay to the serious consideration of Lord Parnara.

I have, &c.

(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

No. 281.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
6th August 1855.

SIR,

I HAVE the honour to inform you that 4,000 of Mr. Ritchie's cork mattresses will be immediately despatched amongst the Regimental and General hospitals, and for the purpose of accompanying any expeditionary force that may be detached from the main body of the army.

You will be pleased, after these beds have been sufficiently tried, to forward a special report on them with a view to future supplies should they be found to answer.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 282.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
10th August 1855.

SIR,

THE use of charcoal respirators, as prophylactic of diseases engendered from exposure to malaria, and as a safeguard if worn by persons breathing the atmosphere of hospitals believed to be laden with the germs of infectious maladies, has been pressed on me by men of admitted eminence in the scientific world.

I have accordingly directed that one hundred charcoal respirators shall be sent to the Crimea.

Though I am far from being prepared to subscribe to all the views of these gentlemen, and though I am fully impressed with the difficulties which will attend even an experimental trial of an instrument somewhat inconvenient in use, and the advantages of which will probably be considered hypothetical, I do not feel myself justified to reject, on such grounds, what may be highly advantageous and valuable.

I shall best explain the views of the advocates for the introduction of the respirator by quoting the following from a treatise of Professor Stenhouse, of St. Bartholomew's Hospital, his sentiments in regard to their applicability as prophylactics:—

"I would confidently hope that the time is now nearly come when the propagation of disease by infection shall become the exception, and not the rule; when the most nervous and delicate persons will be enabled to attend unharmed on their friends, labouring under even the most malignant infectious disorders; and when we will be enabled to traverse some of the most pestiferous districts of the world with no greater apprehension than we now would pass through the mews, lanes, and alleys of our densely-peopled and ill-ventilated cities."

Should you, therefore, be in a position in which it may be desirable to afford protection against endemic sources of disease, or against infectious miasms generated in the chambers of the sick, I request you will take an opportunity of subjecting these respirators to such trial as shall enable you to form an opinion as to their value, and you will be good enough to report to me the result of the observations made on the powers of these instruments as protectors against disease.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 283.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army and Ordnance Medical
Department, 11th August 1855.

SIR,

As it appears from the report of occurrences on board the hospital ship "Saldanha" during her voyage from Balaklava to England, that a number of the men embarked in her showed evidences of scurvy, I will thank you to furnish me with a return of the quantity of lime juice that has been landed in the Crimea since November last for the use of the army.

The scanty supply of vegetables is no doubt giving rise to the scorbutic disease; I therefore have to suggest that you, in consultation with the senior officers of the department, should consider whether lime juice should not be regularly issued to the troops, and measures should be taken, if your supply of this article is not sufficient, to obtain such additional quantity as you consider requisite.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 284.

Dr. Smith to the Chairman of the Transport Board.

Army Medical Department,
13th August 1855.

SIR,

I HAVE the honour to request that a steamer to carry about 500 tons (measurement) of medical comforts and hospital stores solely for this department for Scutari and Balaklava (may be appropriated) and that she may be ordered into the Wapping Basin, London Docks, to commence loading on the 23d instant.

I have, &c.

(Signed) A. SMITH,

The Chairman, Transport Board,
&c. &c.

No. 285.

Dr. Smith to A. Cumming, Esq., Principal Medical Officer at Scutari and Constantinople.

Army Medical Department,
13th August 1855.

SIR,

WITH reference to my communication of the 21st ultimo, on the subject of a prescription containing extract of arnica, I have now the honour to acquaint you, that a supply of 20lbs. of that article will shortly be sent to Scutari, and I have to request that on its arrival you will be good enough to cause 15 pounds of that medicine to be forwarded to the Crimea.

I have, &c.

(Signed) A. SMITH,

A. Cumming, Esq. Director General.
&c. &c.

No. 286.

Dr. Smith to Colonel Mundy.

Army Medical Department,
16th August 1855.

SIR,

As scurvy is still prevailing to a certain extent in the army in the Crimea, and as vegetables, more especially fresh ones, are not furnished for the use of the troops in the proportion necessary, I have the honour to request that I may be informed what has been the daily quantity issued for the last three months, and what allowance is likely to be made during the autumn and winter.

Without a more liberal supply of vegetable diet, I fear there is no chance of eradicating scurvy, a dis-

ease most destructive to the efficiency of an army, so destructive indeed that every means should be resorted to in order, if possible, to banish it; it is not only destructive in itself, but the operation is such that it renders disease, otherwise but of little consequence, highly serious when it attacks individuals in whom a scorbutic taint is present.

I have, &c.
(Signed) A. SMITH,
Director General.

Colonel Mundy,
&c. &c.

No. 287.

Dr. Smith to the Under Secretary of State for War.

Army Medical Department,
17th August 1855.

SIR,
I FEEL it my duty to bring under the notice of the Minister for War the enclosed extract of a letter from Dr. Hall, addressed to Lieut.-General Simpson, under date the 30th ultimo.

I feel assured that General Simpson will, ere this, have done all that is in his power to remedy the defects which have been represented to him as operating injuriously to the health of the army; but as the assistance and the co-operation of the home authorities will be required fully to effect what ought to be accomplished, I consider it proper to suggest such co-operation, and that means should be adopted to ensure a larger provision of vegetables than appears to have hitherto been afforded. That a larger supply of tea and sugar should be forwarded, and that such flour as is provided in this country should be of a superior quality. It is no doubt very desirable that the food of the men should be varied as much as possible, and that even articles calculated to stimulate the appetite should, if practicable, be added.

I had this object in view when I suggested that advantage would result if a small ration of butter could be issued; I still think the latter would prove acceptable and highly useful, and I imagine, if it were only to be allowed three times or even twice a week, great advantage would result to the soldier, and a sufficiency of the article fit for use and equal to the consumption this would create might without difficulty be provided; it is true, rancid butter, or butter otherwise impure, would certainly prove injurious, but under other circumstances it would be grateful to the men, beneficial to digestion, and induce many to consume bread or biscuit which, without such addition, would not only be unpalatable, but often rejected.

I have, &c.
(Signed) A. SMITH,
Director General.

The Under Sec. of State for War,
&c. &c.

No. 288.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
18th August 1855.

SIR,
As it is impossible to provide with any degree of certainty for the wants of the hospitals in the East, in respect to medical comforts, without periodical information of the quantities which remain in store at the central depôt, Scutari, I have the honour to request that you will call upon the Purveyor in Chief to furnish me, through you, with the least possible delay, with an account of the supplies of the various articles not yet issued, stating at the same time the last ship's cargo which has been taken into store; and to send this regularly at the close of every month.

If this cannot be done in the course of a week, I beg that at least I may have a proximate idea of the stock of the articles named in the margin.*

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 289.

Dr. Smith to the Principal Medical Officer at Scutari.

Army and Ordnance Medical
Department, 18th August 1855.

SIR,
WITH reference to my letter of the 5th February last informing you that a supply of four barrels containing 973 lbs. meat biscuit powder had been forwarded to Scutari, per "Whitley Park," I have the honour to request that you will furnish me with a report in regard to this article, stating whether it has proved useful, and if a further quantity is required.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 290.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical
Department, 24th August 1855.

SIR,
Now that the winter season is approaching, I trust every measure is being taken to ensure that you shall have always available for the camp an ample supply of medicines, surgical materials, medical comforts and stores. I think you will do well, in anticipation of the bad weather setting in, to have a large store room got ready in some central part of the camp, so as to admit of a supply of all the articles wanted for the sick of the army being at hand, to render you in a manner independent of the stores at Balaklava, which may become unapproachable should any accident happen to damage the railway, or bad weather make the roads impassable.

Further, would it not be wise to have the regimental medicine chest of each corps fully fitted up in the camp before the winter sets in, the supply which they contain, however, only to be resorted to in case of pressure or emergency?

I still feel anxious about the adequacy of the supply of wholesome water for the troops in the field, and the important subject of ensuring the necessity of ensuring a weather-proof state of the men's huts, seems to me as deserving your best care.

In conclusion, I beg, if it occurs to you that any addition, of whatever kind, to the means at your disposal, will enhance the efficiency of the department, and promote the well-being of the army, that you will acquaint me with your views and wishes, in order that they may be immediately carried out.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 291.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
31st August 1855.

SIR,
WITH reference to your letter addressed to Lieut. General Simpson, dated the 30th ultimo, relative to the insufficiency of the ration of tea and sugar supplied to the troops in front of Sebastopol, I have the honour to enclose an extract from a letter of

* Port wine, sherry, brandy, tea, barley, sugar, soap, arrow-root, sago.

Lord Panmure, to whom I addressed myself on the receipt of your communication; and I have to add, if you are of an opinion that greater quantities of the articles than those hitherto issued will be necessary or beneficial to the troops, that you have only to represent your wishes to the General Commanding the army.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

(Extract referred to in the foregoing letter.)

"I am to add that if the complaint of the insufficiency of the allowance of tea and sugar be well founded, and the General Commanding should see good reason to increase the quantities, there will be no difficulty in doing so from the stock in hand, which would in that case be replenished by additional consignments from England."

No. 292.

Dr. Smith to Dr. Hall.

Army Medical Department,
3d September 1855.

SIR,

As reports are circulated in certain medical periodicals that the motion of the ambulance waggons fitted with gutta percha buffers, lately supplied to the army in the field, is such that proves very uncomfortable to the wounded, I shall be glad to be informed if it is correct that a Board has examined these carriages and decided to that effect.

It is also stated that the litters and chairs furnished from this country are not found to be so easy in use as those the French army is possessed of.

Will you be good enough to transmit to me any information on this matter you may be able to afford.

I am also anxious to know what number of wounded the vehicles, litters, chairs, &c., now available for such service, could transport from the field at one and the same time, and whether you are of opinion that the number of these vehicles, &c., should be increased.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr Hall,
&c. &c.

No. 293.

Dr. A. Smith to F. Peel, Esq., M.P.

Army Medical Department,
8th September 1855.

SIR,

I HAVE the honour to acknowledge the receipt of your letter of the 6th instant, in reply to mine of the 30th ultimo, respecting a supply of warm clothing for the troops in the Piræus, and requesting to be informed whether in my opinion it is expedient that the same description of warm clothing should be issued to the troops stationed in Greece, as is supplied to the army in the Crimea.

In reply I have to report for the information of the Minister for War, that it will not be necessary to furnish the troops in the Piræus with the description of winter clothing which is supplied to the army in the Crimea; all that is necessary for the former is two flannel shirts, two pairs of flannel drawers, and two pairs of worsted stockings. These should be possessed by every soldier before the winter sets in, and the regiment should have in addition about fifty thick overcoats, and the same number of hoods, either attached to or separate from the coats, so as to be available for the use of the men on guard, when the

state of the weather renders such protection necessary.

I have, &c.
(Signed) A. SMITH,
Director General.

F. Peel, Esq., M.P.,
&c. &c.

No. 294.

Dr. A. Smith to F. Peel, Esq., M.P.

Army Medical Department,
10th September 1855.

SIR,

I HAVE the honour to acknowledge the receipt of your letter of the 31st ultimo, on the subject of disinfectants, and transmitting to me, for any observations I may have to offer thereon, a letter with its enclosures from Drs. Sutherland and Milroy, Sanitary Commissioners; also requiring to be informed if any further supply of disinfectants has been made since the date of my letter of the 22d June last, and whether I consider that the deodorizing powder of the Cyanic Manure Company possesses any superiority over peat charcoal, peat powder, or powdered charcoal.

In returning the enclosures I beg to state, for the information of Lord Panmure, that 2,000 pints of solution of chloride of zinc, 100 pints of chloride of soda, 2,000 lbs. of chloride of lime, and 560 lbs. of sulphate of iron have been forwarded to the East, since my letter of the 22d June last.

With reference to the deodorizing powder of the Cyanic Manure Company, I am disposed to believe from the reports I have received of its qualities from the camp at Aldershot, that it possesses a superiority over peat charcoal, peat powder, and powdered charcoal, and in consequence of the belief I have directed 6 cwt. to be forwarded to Balaklava for trial in the camp.

I have, &c.
(Signed) A. SMITH,
Director General.

F. Peel, Esq., M.P.,
&c. &c.

No. 295.

Dr. Smith to F. Peel, Esq.

Army Medical Department,
10th September 1855.

SIR,

ADVERTING to my letter of the 31st July last, relative to the necessity for sailing vessels conveying sick and wounded from the East being aided by steamers in the parts of the voyage where calms are liable to prevail, and to your reply of the 10th ultimo, in which it is stated that the Admiral at Constantinople has been desired to provide a steamer to tug the "Tasmania" through the Dardanelles, I find that provision will not be sufficient for the object in view. It will be necessary to provide against the calms which occur throughout the whole Mediterranean, and which were found to be very disadvantageous to the sick and wounded who lately arrived in this country in the "Great Tasmania" and "Saldanha."

Such having been the case, I trust it will be possible for the naval authorities at Malta and Gibraltar likewise to afford assistance.

I have, &c.
(Signed) A. SMITH,
Director General.

F. Peel, Esq.,
&c. &c.

No. 296.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army and Ordnance Medical
Department, 30th September 1855.

SIR,

Now that the south side of Sebastopol is in possession of the Allies, I am very anxious to be informed whether the sick and wounded will, as heretofore, be accommodated in huts and tents outside of the town, or whether it will be practicable to

furnish accommodation for them in some of the least injured buildings within it; also whether the advantages which will no doubt result from the altered condition of matters will in other respects materially facilitate medical arrangements, and enable the sick and wounded to be supplied with all that is necessary to their welfare, without the intervention of difficulties such as were experienced during the past winter.

Information on these points, and on all others which you think likely to be useful to me, will be very acceptable.

I am most anxious, as you will observe from a letter I lately addressed to you, that the medical department should not look during the winter to the stores at Balaklava for what may be required; and I am not without hopes that you will now especially be able to have the necessary supplies available, either in store-rooms in the camp or in Sebastopol, to meet all demands.

No effort on my part shall be wanting to supply you with whatever you may consider to be necessary; you have only to state your wants, and supplies shall be forwarded immediately.

I am endeavouring to procure a specially-qualified person to assist Mr. Fernandez in the medical store, and I hope ere long to obtain a gentleman who will prove capable of keeping all the necessary books, and aiding in the compilation of the periodical returns which I have asked for, and which are so essential to enable me to meet questions which are constantly being put to me by the public authorities in this country.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 297.

*Dr. Dumbreck to the Principal Medical Officer
in the Crimea.*

Army Medical Department,
14th September 1855.

SIR, In reply to your letter of the 26th ultimo, I am desired by the Director General to state that he will be glad to be informed of the means that have been taken to keep up an adequate supply of lime juice for the use of the army in the Crimea, and he is also anxious to know if vegetables in increased quantities are being issued to the troops.

In October or November last the Director General made efforts to have an ample supply of compressed vegetables forwarded periodically, so as to admit of a ration of these to each man being issued three or times a week, and he had reason to believe that arrangements have been made to furnish this desirable addition to the food of the soldier. I am desired to ask if these vegetables have been received and made available.

The Director General is further anxious to learn if the fresh meat for the hospital at the Monastery has lately been more regularly supplied than when you wrote to Sir George Mac Lean on the subject; if this, however, cannot at all times be provided with regularity, might not preserved meat be advantageously substituted to make good any deficiency of the fresh?

I have, &c.
(Signed) D. DUMBRECK,
The Principal Medical Officer,
&c. &c.

No. 298.

Dr. Smith to F. Peel, Esq., M.P.

Army Medical Department,
15th September 1855.

SIR, As much of the disease which proved so fatal to the troops in the Crimea during the last winter was

doubtless aggravated, if not occasioned, by the severe cold to which the soldiers were exposed during the night, without anything like a sufficiency of bedding, it is therefore most important, with a view to the maintenance of health during the coming cold season, that no such deficiency should again occur.

The supply at present in the Crimea may possibly be sufficient to meet every want; but it should not in my opinion be considered to be such, unless it is capable of affording to every individual of the force at least one paillasse, one bolster, two blankets, and one rug, and in addition a reserve number calculated to meet any losses which may from accident or otherwise be sustained. The means of stuffing the the paillasses and bolsters should, if practicable, be provided, and should consist of hay or chopped straw, one or other of which it may be possible to obtain from Constantinople, or some of the ports of the Black Sea.

I offer these recommendations in the expectation that the army will be stationary during the winter; but should it be otherwise, and the paillasses and bolsters not be suitable to the circumstances of the case, the number of blankets and rugs, or even a greater number, will be required.

If the other means necessary to protect against the baneful effects of cold and wet, which I recommended in two letters addressed to Col. Mundy on the 4th August last, the one in reference to tents and huts, the other in relation to personal clothing, &c., &c., as well as those now proposed, be liberally supplied, there is every reason to expect that the sickness of the coming winter will, as compared with what it was during the last, be comparatively trifling.

In considering these points, it will be necessary to keep in view that cold in the evenings, nights, and mornings, begins to be sensibly experienced towards the end of the present month, and that it is frequently severe before the middle of October, though the heat during the day is often considerable.

I have, &c.
(Signed) A. SMITH,
Director General.
F. Peel, Esq., M.P.,
&c. &c.

No. 299.

*Extract from Letter to F. Peel, Esq. M.P., War
Department, dated 17th Sept. 1855.*

"THE supply of cholera belts is now engaging my particular attention, and until I feel myself in a position to supply all the information I consider necessary in regard to it, I may state the returns from Scutari, under date 1st August last, show there were actually in store at that station 53,250, and available for issue whenever required.

"As articles of the kind in question are doubtless being constantly demanded for the use of the troops in the Crimea, I consider I may reasonably assume that a further supply of them is in the stores at Balaklava, as I cannot believe Dr. Hall will permit these to be unprovided in that respect, the more especially as he must be fully aware of what can be obtained from Scutari."

(Signed) A. SMITH,
Director General.

No. 300.

Dr. Smith to F. Peel, Esq., M.P.

Army Medical Department,
18th September 1855.

SIR, I HAVE the honour to acknowledge the receipt of your letter of the 11th instant, forwarding a communication addressed to Lord Panmure by Mr. Bracebridge, pointing to the condition of a streamlet flowing past the Genoese hospital, near Balaklava, as calling for sanitary attention, and requesting to be furnished

with any information it may be in my power to give on the subject.

In reply I beg to state that I possess no knowledge relating to the streamlet referred to, the only information I possess in reference to the supply of water for the Castle hospital was furnished me in a letter from Dr. Hall, dated 23d February 1855, it was as follows, viz. :—"At the Castle hospital there is an abundant supply of water, obtainable from a small running stream in a ravine close at hand, which is a great desideratum for an hospital."

Mr. Bracebridge's letter is herewith returned, and I take leave to recommend that it be sent to the Crimea for the consideration of the proper authorities.

I have, &c.

F. Peel, Esq., M.P. (Signed) A. SMITH,
&c. &c. Director General.

No. 301.

Dr. Dumbreck to the Principal Medical Officer at Balaklava.

Army and Ordnance Medical Department, 1st October 1855.

SIR, I AM directed by the Director General, with reference to his letter of the 9th July, cancelling a previous one of the 21st May, in which he had asked for monthly returns of medical comforts, &c., to inform you that he did not intend thereby that you should discontinue sending the "Weekly Return of the Issue of Medical Comforts" required by order of Lord Panmure, as stated in the Director General's letter of the 14th May last.

You will therefore be pleased to direct the Senior Purveyor to continue his weekly returns of issues (the last received was for the week ending 5th July), and also to call his attention to the fact that he has not yet complied with Lord Panmure's instructions of sending a return of the quantity of medical comforts remaining in store at the close of each week.

When once the quantity of stores of medical comforts has been ascertained, it will of course be a matter of no great difficulty to continue it weekly, by adding the receipts and deducting the issues; but, as the Director General feels that the taking an accurate amount of the state of the stores may involve much time and labour, he will be satisfied, until more accurate information can be obtained, with the nearest approximation it is in the power of the Purveyor General to furnish, as the object of the return is to enable him to regulate the supplies which it may be deemed advisable to furnish.

I have, &c.

(Signed) D. DUMBRECK.

The Principal Medical Officer,
&c. &c.

No. 302.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical Department, 6th October 1855.

SIR, CONSIDERING that cholera has prevailed more or less in the army in the East since July 1854, I am anxious to be informed if you hold the opinion I do, namely, that a belt to encircle the abdomen, especially during the winter season, is likely to prove to some extent at least a preventive of the above complaint, and of others to which the bowels are subject when soldiers are much exposed to fatigue and inclement weather.

If you think the supply of such a belt to every soldier of the army is desirable, I will be glad to be informed if you have the means of immediately issuing what is required, and if not, what should be forwarded to you, in order that you may possess the number requisite, and, moreover, a reserve of 20,000 for emergencies.

The enclosed copy of a return which I have just received will put you in possession of the number of

cholera belts which I am given to understand will be available in the East before this communication reaches you.

I have, &c.

Dr. Hall, (Signed) A. SMITH,
&c. &c. Director General.

No. 303.

Dr. Smith to the Principal Medical Officer at Scutari.

Army and Ordnance Medical Department, 24th October 1855.

SIR, I HAVE the honour to request that you will call on each medical officer who may hereafter arrive at Scutari in charge of troops to furnish a concise statement of the voyage, and should any extraordinary sickness or casualties have taken place, a circumstantial detail thereon must be supplied.

Should any defect in the ventilation of the vessel be found to exist, it must be carefully noted for your information; and you will be good enough in cases of this kind to report to me what measures have been taken to correct what may have been considered objectionable, and what means you would propose to improve generally the ventilation of vessels conveying troops.

I have, &c.

(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 304.

Dr. Smith to the Under Secretary for War.

Army Medical Department, 25th October 1855.

SIR, As the Inspector General of Hospitals in the Crimea, and others of the Senior Medical Officers, have reported that the amount of disease in the army has increased since the augmentation of the pay of the troops has placed more money at their disposal, I feel it my duty to report the circumstance for the information of the Minister for War, as if an increase of sickness has already taken place from this cause, when the men, to a certain extent at least, are actively employed, a much greater accession to the number of sick may fairly be anticipated during the winter, when comparative inaction and suffering from cold combined will induce thousands to resort to the use of spirits to a degree injurious to health, particularly if the men are possessed of the pecuniary means to enable them to do so.

I have, &c.

(Signed) A. SMITH,
The Under Secretary for War, Director General.
&c. &c.

No. 305.

Dr. Smith to the Principal Medical Officer at Scutari.

Army and Ordnance Medical Department, 29th October 1855.

SIR, I HAVE the honour to request that you will inform me whether the mode of treatment recommended by those medical men who have practised in Turkey has been tried in the hospitals at Scutari, if so, with what success; and also if any of the medical officers of the army have become converts to their practice; you will also be pleased to call for a report from Kululie, in which the results of Dr. Bryer's treatment may be contrasted with the plan adopted by the medical officers there.

I have, &c.

(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 306.

Dr. Smith to the Quarter Master General.

Army Medical Department,
30th October 1855.

SIR,

In transmitting the enclosed extract from the Inspection Report of the transport "Niagara," which left Scutari on the 12th instant, I have the honour to state, for the consideration of the Field Marshal Commanding in Chief, that I consider it very essential that his Lordship should be in possession of this information, as I am of opinion that the horse boxes complained of were disadvantageous to the well-being of the sick.

I have, &c.,

(Signed) A. SMITH,

The Quarter Master General, Director General.
&c. &c.

Extract, dated Scutari, 12th October 1855.

"THERE are 12 horse boxes on the deck of the 'Niagara,' which interfere with the comfort and convenience of the sick, are contrary to the printed regulations of the Director General."

(Signed) W. CRUICKSHANK,
D.I.G., Inspecting Medical Officer.

No. 307.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical
Department, 31st October, 1855.

SIR,

OBSERVING in the weekly report of the Staff-Surgeon of the 1st Division, dated the 6th instant, that the supply of tents and blankets for the 13th Regiment was inadequate to the wants of the men, and being also in possession of your Report of the 9th instant, bringing such deficiencies to the notice of the military authorities, I trust that you will be able, in your next communication on this subject, to state that important wants such as those are no longer felt.

If continued pressure in cases of this kind is not made on the Quarter Master General, all ill consequences which are found to exist will be ascribed to the medical department, as our past experience teaches us with how much avidity any charge inculcating us is seized on.

I have,

(Signed) A. SMITH,

Dr. Hall, Director General.
&c. &c.

No. 308.

Dr. Smith to the Principal Medical Officer at Scutari.

Army and Ordnance Medical
Department, 2d November 1855.

SIR,

REFERRING to the painful circumstances attending the conveyance of sick officers from the Bosphorus to Malta, on board of the steamer "Hope," in the month of August last, I have to state that it was found necessary to land four of these officers at the above island, owing to the overcrowded state of the vessel, which is represented to have been in a most filthy condition, and ill provided with accommodation, food, cooks, or attendants on the sick.

As I presume that a rigid inspection of the "Hope" was made at Constantinople, though no report of the performance of this duty has reached this office, I request you will call on the officer by whom such service was executed, to explain why officers in a critical and dangerous condition (two of the four landed at Malta have since died) were permitted to be removed in a conveyance so entirely deficient, as the above vessel was found to be, in everything calculated to minister to their comfort, or to promote their recovery.

I have to add, that I trust the important duty of the inspection of transports, destined for the conveyance of troops, whether sick or well, is invariably performed and entrusted to a medical officer properly qualified for its efficient discharge.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 309.

Dr. Smith to the Director General of Stores.

Army and Ordnance Medical
Department, 2d November 1855.

SIR,

I HAVE the honour to acquaint you that communications have, by last mail, been received from Scutari, urging, in the strongest possible terms, the absolute necessity for more winter hospital clothing; and I beg to call your attention to my letter of the 29th ultimo, and to inform you, that the most serious injury may be expected to result to the sick, if the quantities of clothing, which have been long due to this department, be not forwarded before the expiration of two weeks from this date.

I am anxious to be supplied with full information in reference to what can and will be done, as I must, if the supply cannot be furnished, represent to the Minister for War the evils we may fairly expect to result.

I have, &c.,

(Signed) A. SMITH,

The Director General of Stores, Director General.
&c. &c.

No. 310.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
5th November 1855.

SIR,

As a season of the year is now rapidly approaching when it will not be wise or justifiable to transport sick and wounded from the Crimea to this country for further hospital treatment, I have the honour to submit, for the consideration of Lord Panmure, that the time has now arrived when it becomes imperative to consider how, and in what localities, invalids in the above category may be accommodated during the period they may require medical or surgical treatment elsewhere.

To ensure that, and so to enable men (whom it would have been judicious to have brought direct to this country in the summer) to be treated with safety and advantage in climates more genial in winter than that of England, the hospital establishments of Scutari, Gozo, and Gibraltar, should in my opinion be immediately resorted to, as in these all necessary facilities either exist or can be instantly made available, should the arrangements I propose be sanctioned.

This is a subject which, in my opinion, merits immediate consideration, as the interests of the public, and the well-being of the soldier, alike require that the practice observed for the last six months or more of transferring invalids to England should be discontinued, and that the arrangement I have proposed should be introduced from the beginning of December, and continue at least till the first if not the last week of April.

I have, &c.

(Signed) A. SMITH,

The Under Secretary for War, Director General.
&c. &c.

No. 311.

Dr. Smith to the Deputy Secretary at War.

Army and Ordnance Medical
Department, 6th November 1855.

SIR,

In reply to your letter of the 30th ultimo, I have the honour to enclose a statement of the present position of the supply of winter hospital clothing for the hospitals in the East, as requested, and to state that every exertion has been and will be made to expedite

the shipment of all the stores that have not yet been dispatched.

I have also to inform you, that I have made a further requisition upon the War Department, for 10,000 suits of serge clothing, and 10,000 sheets, in conformity to Mr. Robertson's letter of the 11th October, forwarded by you with your communication above referred to, as at that date he should have been aware, from information furnished by this office, of the supplies arriving in the "Trebizond," and also of everything under preparation for shipment from this country to Scutari, up to the 20th September.

I have, &c.

(Signed) A. SMITH,

The Deputy Secretary at War, Director General.
&c. &c.

No. 312.

Dr. Smith to the Quarter Master General.

SIR,

Army Medical Department,
6th November 1855.

As it is very probable the accommodation which the general hospital at Portsmouth will be able to afford beyond what will be required for the sick of the corps in garrison will not be sufficient during the coming winter to meet the requirements of such sick and wounded as may arrive from the seat of war; and as I cannot, without reluctance, look for assistance to Haslar hospital, or to the "Britannia" hospital ship, which is to be moored in the harbour; I beg to state, for the information of the Field Marshal Commanding in Chief, that I consider it highly desirable that an effort should be made to secure some additional hospital accommodation on the Portsmouth side, so that it may not be necessary to subject men, who, on arriving, require medical or surgical treatment, to be conveyed perhaps in stormy weather over tempestuous waters, instead of being easily and comfortably removed to a hospital on shore belonging to the military branch of the service.

Haslar hospital, when the sick man reaches it, will doubtless afford him all the conveniences he could desire, but to have the opportunity of obtaining them he will have to undergo much discomfort, and probably no little suffering. On the other hand the "Britannia" hospital ship, which I lately inspected, though well fitted up, is not in my opinion suitable for a hospital establishment during winter; its position exposes it to every wind that blows, and being so unsheltered will necessitate the sick constantly to remain between decks, with comparatively little ventilation, whilst languor and listlessness, the enemies to recovery from diseases and injuries of the less serious kinds, will materially operate to the disadvantage of the sufferers.

It is quite possible the additional hospital accommodation which I think to be so desirable might be secured near the present general hospital, if the under part of the building which was erected as barracks for sappers could be given up for hospital purposes. The upper portion, I may add, is at present in use for the treatment of sick.

If, however, it be not practicable to appropriate the lower part for the purpose suggested, I think the object in view might be accomplished by raising two efficient wooden huts, either in the engineer yard or near to the present hospital, if there be sufficient space.

These huts I would not wish to see appropriated to the reception of invalids from the seat of war, but they might be made sufficiently safe and comfortable for the sick of the militia regiments; and by the removal of a portion of the latter, beds in the general hospital could be thereby furnished for the service of sick and wounded arriving from the East.

I have, &c.,

(Signed) A. SMITH,

The Quarter Master General, Director General.
&c. &c.

No. 313.

Dr. Smith to Colonel Mundy.

SIR,

Army Medical Department,
12th November 1855.

WITH reference to my letter of the 25th ultimo, reporting that the amount of disease in the army in the field had increased since the augmentation of pay of the troops had placed more money at their disposal, I have now the honour to forward, for the information of the Minister for War, extracts from reports I have just received from the Crimea, bearing on this question.

If the means of purchasing spirits, particularly such as are sold in camp, be not diminished, the health of the troops, it is to be feared, will seriously suffer.

A certain proportion of spirits, particularly of good quality, may prove beneficial, or at all events not deleterious; but if bad liquor, such as now sold to the soldiers, to be indulged in to excess, nothing but injury to health can be expected. I therefore beg to suggest that a Board of senior medical officers serving with the army, who may be supposed to understand best what quantity of good spirits would be useful to men circumstanced as those composing the army are, should be required carefully to consider the subject, and take the opinion of the regimental medical officers thereon, and then suggest the quantity which might be daily issued without proving injurious to health; that being decided, efforts should then be made to prevent a consumption of ardent spirits beyond the prescribed quantity. The hours of sale ought also to be regulated, and no liquors, the quality of which has not been tested and approved of, should be permitted to be supplied for the use of the troops.

I have, &c.

(Signed) A. SMITH,

Colonel Mundy, Director General.
&c. &c.

No. 314.

Dr. Smith to the Under Secretary of State.

SIR,

Army Medical Department,
15th November 1855.

I HAVE the honour to state, for the information of the Minister for War, as the weather is now becoming cold and stormy, that it will not, in my opinion be safe to transfer sick and wounded from Portsmouth to Chichester or Chatham, without means of some kind being available to secure their being kept warm during the journey. I beg therefore to submit that arrangements should be made at Portsmouth to permit the issue from the Barrack or Ordnance Stores of one or two blankets or rugs for each man, to be used during the railway journey for wrapping round the feet and legs of the sufferers, as these derive no advantage from the great coats with which the soldiers are supplied. If a provision of this sort be not made, the sick and weakly men will suffer much from cold, and the condition of many will be deteriorated, and the prospect of recovery be less after the journey than before it was undertaken.

I am at present having made some quilted coverlets of a kind well adapted to retain warmth, and if they are found to answer, it will be advisable to supply them in sufficient quantities, so as to render the issues of blankets eventually unnecessary.

I have, &c.

(Signed) A. SMITH,

The Under Secretary for War, Director General.
&c. &c.

No. 315.

Dr. Smith to the Principal Medical Officer in the Crimea.

SIR,

Army and Ordnance Medical
Department, 17th November 1855.

OBSERVING that the number of "Ophthalmia" cases is now very considerable, and as it is a very serious disease in Turkey, I am most anxious about it, and

hope you will cause every exertion to be made to eradicate it if possible from the corps in which it has unfortunately appeared.

I would be glad to receive as soon as convenient a return showing the number of cases in each regiment, and their peculiar nature, with such observations as the medical officers who have treated them are able to give, and also the means that are resorted to in order to prevent the spread of the disease.

If this disease gains ground it may prove more destructive to the efficiency of the army than any other from which it might suffer.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 316.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
19th November 1855.

SIR,

I HAVE the honour to state for the information of the Minister for War, that some weeks since I addressed a letter to the Inspector General of Hospitals in the Crimea, in which I requested him to state if it had been found from experience that cholera belts had proved useful in preventing bowel complaints, &c. A copy of the above, together with Dr. Hall's answer thereto, dated 6th October and 20th October, I have now the honour to enclose.

I have long entertained the opinion that an equable support, by means of a broad belt or sash worn round the waist, would be an addition to the soldier's dress on field service likely to prove advantageous in various ways, particularly as a protection for men exposed to variations of temperature, and night duty.

I therefore strongly recommend that every soldier of the army of the East be immediately furnished with a sash such as that referred to in Dr. Hall's letter, and I beg to submit that I now be authorized to purchase the number adequate for the wants of the army.

In the meantime the cholera belts already supplied will continue to be worn; and although they will probably not prove quite so useful as the sashes proposed to replace them, still they will be of great service till the latter can be furnished.

I have, &c.

(Signed) A. SMITH,

The Under Secretary for War, Director General.
&c. &c.

No. 317.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army and Ordnance Medical
Department, 22d November 1855.

SIR,

I HAVE the honour to request that you will have the kindness to send me a special report from the surgeon of the 82d regiment, regarding the state of health of that corps, and which you state in your report of the 5th November to have improved.

I have also to request that, if any particular disease should appear or become more prevalent than usual in any regiment, you will call upon the surgeon for a special and succinct report of the malady.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 318.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army and Ordnance Medical
Department, 23d November 1855.

SIR,

THE gradual increase in the number of ophthalmic cases in the army is causing me much

uneasiness; and as it is mentioned in your weekly state of the 3rd November that there are 136 cases of this disease under treatment, I think it is a matter for your immediate consideration whether it would not be advisable to establish an hospital specially for the treatment of this very serious disease, as it may be productive of the gravest results if it increases generally and rapidly.

In the event of your deeming it necessary to appropriate an hospital for this purpose, you will no doubt select it in a situation as remote as possible from the localities occupied by the healthy troops, and I have no fear but you will easily find medical officers with all the requisite qualifications for the effective treatment, and, if possible, for the thorough eradication, of the disease.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

P.S.—There is at Scutari a large supply of hand towels, which you might find useful in ophthalmic cases.

No. 319.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army and Ordnance Medical
Department, 23rd November 1855.

SIR,

ADVERTING to a previous letter respecting the pathological appearance of diarrhoea, I have now the honour to request that you will direct the attention of medical officers to the morbid anatomy of all cases of disease that may occur in the Crimea and at Scutari.

In order that these researches may be prosecuted in a complete and satisfactory manner, it may be well to constitute a permanent board for the purpose in the camp and at Scutari, with an officer of some standing in the service to preside, and others with the necessary qualifications to assist him. These gentlemen might then, I think, if necessary, be relieved from their duties, as the number on the sick list is now so much diminished; and it will be required of them carefully to enter the post-mortem appearances in a register to be kept for that purpose.

I understand that Staff Assistant Surgeon Greig, and Dr. Ross, 39th Regiment, have been in the habit of pursuing these studies, and might now be available for this duty.

You will also have the kindness to inform me what instruments and appliances are required, in order that I may forward them immediately.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 320.

Dr. Smith to the Under Secretary for War.

Army and Ordnance Medical
Department, 23rd November 1855.

SIR,

I HAVE the honour to state, for the information of the Minister for War, that on the 6th of the present month I addressed a letter to the Quarter-Master General, of which a copy is herewith inclosed.

Three days subsequent to this I received your communication of the 9th instant, informing me that my proposition to Lord Pannure, conveyed in my letter of the 5th, "that the sick and wounded should not be brought from the East to this country during the winter months," had not been approved of by his lordship.

When I addressed the inclosed to General Freeth, I calculated that the course I had recommended would probably be followed; but I nevertheless considered it necessary that accommodation for sick and

wounded at Portsmouth beyond what its military hospital at present affords should be there available to meet any demand which the incidental arrival of invalids might create; for as the cases of such claimants for medical aid would probably not admit of their being safely forwarded during inclement weather either to Chichester or Chatham, it was on this account, in my opinion, requisite to be provided with some hospital accommodation additional to that now existing, so as to be in a condition to meet any emergencies such as I contemplated might possibly occur.

The supplemental hospital accommodation, however, which I then proposed, and considered would be sufficient, will not now—that the practice of sending home sick and wounded is to continue to obtain—be adequate, as during the next four months four or even six hundred men may require to be taken into hospital on their reaching Portsmouth, as it will not, I think, be safe to transfer any portion of such arrivals from the port of disembarkation to hospitals at a distance, before, at least, the beginning or middle of April.

In the enclosed letter to General Freeth I have stated my objection to the sick and wounded being treated either at Haslar or on board the "Britannia;" I therefore feel it to be my duty to urge that means be adopted to obtain, either at Portsmouth or Portsea, a still further increase of hospital accommodation than that I represented to be necessary in the letter above referred to. The necessity for this is now urgent, and I beg to submit that no time should be lost in effecting what is requisite, in order that no difficulty or embarrassment may be experienced when an influx of cases requiring hospital treatment shall take place at Portsmouth.

I have, &c.
(Signed) A. SMITH,
The Under Secretary for War, Director General.
&c. &c.

No. 321.

Dr. Smith to the Under Secretary for War.

Army and Ordnance Medical
Department, 27th November 1855.

SIR, I HAVE the honour herewith to transmit, for the information of the Minister for War, the copy of a communication I have this day received from the Principal Medical Officer at Scutari, reporting the occurrence of 30 cases of cholera from the 13th to the 15th instant.

It is quite possible that disease may cease to prevail as soon as the newly-arrived troops become more acclimated, and accustomed to the trying variations of temperature which occur in Turkey at this season of this year, still there is no certainty that such will result. I am, therefore, most anxious to see the healthy troops removed from the buildings which, till their arrival, had been appropriated exclusively for the accommodation of sick.

I cannot consider apportioning a part of the barrack hospital as the residence of the legion to be a wise or a safe measure, and I trust it will yet be possible to remove them from such a habitation.

The expectations of the Principal Medical Officer, no doubt based on observation and experience, afford reasons for hoping that the violence of the disease may cease; but should the next mail bring intelligence that the epidemic manifests a disposition to extend itself, I will find it my duty again to urge the alteration in the quartering of troops which I think would prove beneficial.

It is quite possible that cholera has not the power of propagating itself from person to person; at the same time its inability to do so has not been established; indeed, much has been advanced to confirm the belief that it may possibly possess the power of reproducing itself; therefore, while such uncertainty

exists in regard to the manner of its extension, it would not be justifiable to keep a body of healthy troops in close contact with a large number of sick, even should it be attempted to prevent their maintaining direct intercourse with each other by means of a wooden railing, as I understand is the case in the barrack hospital at Scutari.

I have, &c.
(Signed) A. SMITH,
The Under Secretary for War, Director General.
&c. &c.

No. 322.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
3rd December 1855.

SIR, I HAVE the honour to acknowledge the receipt of your letter of the 29th ultimo, with its enclosed copy of one from the Admiralty, recommending that two or three horse transports be so fitted as to be made available on their homeward voyage to this country for the conveyance of sick and wounded soldiers from the East.

In compliance with Lord Panmure's desire that I should report on this subject, I beg to submit that I see great objection to the adoption of the measure proposed by the Admiralty, as I am of opinion that no means it will be practicable to employ with the view of remedying the contamination of the transports during the time they have horses on board will justify these vessels being immediately appropriated for the accommodation of sick and wounded during a voyage from the East to this country.

I have, &c.
(Signed) A. SMITH,
The Under Secretary for War, Director General.
&c. &c.

No. 323.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
5th December 1855.

SIR, Now that there is with the army in the East a sufficiency of medical officers for all the ordinary duties of the service, and over and above those, the number requisite to constitute two boards, one in the Crimea and one at Scutari, to collect full information in reference to the diseases which have affected the troops since their arrival at Constantinople, as well as those which still continue to affect them, and thus secure a systematic account of the medical history of the army during the past and present year, I have directed Dr. Hall to take steps to give effect to the object sought. Careful inquiries directed to the sick and attentive observation of the phenomena of the various diseases will do much towards securing the knowledge desired; still much must be obtained by an accurate and minute investigation of morbid appearances presented after death; therefore various instruments and appliances will be required for the efficient prosecution of the inquiry.

The object of this communication is to request permission of the Minister-at-War to incur the requisite expense, which will probably not exceed 120*l*.

Rumour gives it to be understood that Dr. Lyons and his assistants are about to return to this country; in that case a very trifling expense will be necessary, if the instruments with which they were furnished can be given up for the use of the highly qualified army medical officers who will be selected to carry on the investigation.

I have, &c.
(Signed) A. SMITH,
The Under Secretary for War, Director General.
&c. &c.

No. 324.

Dr. Smith to Dr. Hall.

Army Medical Department,
5th December 1855.
SIR,
HAVING perused with attention Dr. Lyons' description of what he states is a very prevalent form of diarrhoea in camp, viz., "without pain, feverish symptoms, or aught else to indicate its approach, a relaxed state of the bowels came on, and, disregarded at first, became troublesome, chiefly from its frequency and continuance. This state was often, but not always, accompanied by loss of appetite; but perhaps the most remarkable feature was the almost total suspension of the digestive, assimilative, and absorbent functions, the egesta differing little from the ingesta."

I am very desirous of knowing if this is a correct description of the prevailing diarrhoea, and if it is, I am inclined to think that the administration of quinine, by improving the general health, might have the effect of preventing the occurrence, as well as of arresting the progress of the disease.

This you must understand is entirely theoretical; but I imagine you will not think the idea objectionable; and if it should meet with your approval, perhaps you might suggest its use to some of the medical officers as a remedy which merits their attention, but leaving its adoption to their own judgment and experience.

I would be glad to learn from you the opinion of some of the more able medical officers, with regard to quinine as a curative and prophylactic in this species of diarrhoea.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

No. 325.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
5th December 1855.
SIR,
REFERRING to the return of cases of cholera to the 19th ultimo, I request you will call on the surgeons of the 1st Dragoon Guards and 4th Dragoons for a statement in regard to the marked prevalence of and great mortality in the corps from the above disease, assigning, as far as may be possible, the reasons which may have rendered these regiments more subject to attack of cholera than the others of the force.

It is also desirable that the mode of treatment should be fully entered into.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 326.

Dr. Smith to the Under Secretary for War.

Army and Ordnance Medical
Department, 5th December 1855.
SIR,
I HAVE the honour to acknowledge the receipt of your letter of the 3rd instant, with the enclosures noted in the margin, and I beg to express a hope, in accordance with my opinion already communicated to Lord Panmure on the subject of the barrack hospital, that the troops will, if practicable, after the subsidence of the epidemic cholera now prevailing, be lodged in some building away from that referred to, as it is most objectionable to accommodate sick and healthy men under the same roof.

I have, &c.
(Signed) A. SMITH,
The Under Secretary for War, Director General.
&c. &c.

No. 327.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
6th December 1855.
SIR,
I SHALL be glad if you will inform me what measures you recommended to be adopted by the military authorities at Scutari when cholera broke out in so severe a form amongst the troops stationed there.

Also, whether the removal of the force was effected in consequence of these recommendations—in fact, you must state fully what part you had in the transaction; and I hope to hear that you, as Principal Medical Officer, took the initiative, and advised and guided the operations of the military authorities at the station.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 328.

Dr. Smith to the Military Secretary, Horse Guards.

Army and Ordnance Medical
Department, 7th December 1855.
SIR,
I HAVE the honour to submit, for the information of the Field Marshal Commanding-in-Chief, that much inconvenience and injury to the public service have arisen from soldiers proceeding on foreign service being permitted to embark while labouring under diseases of venereal origin; and this has been justly ascribed to the want of due examination of the men when about to go on board ship.

The necessity for such examination at Portsmouth I have again and again urged, but the reply has been that the performance of the duty was impracticable, and the reasons assigned were, in the case of troops coming from a distance, that the men on arrival had to march and embark at once, and also the want of a convenient building where an examination could take place.

I may mention on this subject, that a vessel which ran into Plymouth disembarked men labouring under disease; and not a few men destined for the Crimea have been landed at Scutari, thus producing a two-fold evil, in adding to the sick in the hospitals intended for the accommodation of soldiers serving in the field, and diminishing the number of men who ought to be effective on arriving at the seat of war.

As a further exemplification of this matter, I may add, that on a late occasion 30 men of the Land Transport Corps were landed at Balaklava and received into the hospital at that station, no examination having taken place before the troops went on board ship in this country.

Now that the inconvenience to the service from the omission of the duty referred to is becoming very great, as exemplified above, I feel it is absolutely necessary that some arrangement should be made that men may be examined immediately before embarking, and I therefore submit that an application should be made to the Admiralty for the use of some house adjoining to the point where men embark, or, if no such convenience exists, that a wooden shed should be erected for the purpose, as the foregoing will afford sufficient proof that measures should be resorted to to correct the evil represented in this communication.

Some arrangements will also require to be made in this respect for troops embarking at Southampton.

I have, &c.
(Signed) A. SMITH,
The Military Secretary, Director General.
&c. &c.

No. 329.

Dr. Smith to Dr. Bryce.

Army Medical Department,
11th December 1855.

SIR,
IN reference to your report dated August last, on the formation of a sanitarium in connection with Scutari hospital establishment, I have to thank you for the interesting observations on the advantages which you consider would result from such a measure.

Some time since I endeavoured to obtain one of the Princes' Islands, but failed to accomplish this, the French having got possession of it. I have not yet given up the idea, and am now making inquiries about Proti.

The acknowledgment of your report has been accidentally delayed.

I have, &c.

(Signed) A. SMITH,
Director General.

Dr. Bryce,
&c. &c.

No. 330.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
13th December 1855.

SIR,
IN reference to your letter of the 20th October last, recommending that a sash should be substituted for the "cholera belt," now in use in the army, I have the honour to state that Lord Panmure, to whom I submitted the proposition, is not disposed to sanction the adoption of the above article of clothing for the army.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer,
&c. &c. Director General.

No. 331.

Dr. Smith to the Principal Medical Officer at Portsmouth.

Army Medical Department,
13th December 1855.

SIR,
I REQUEST you will call on the Purveyor at Portsmouth to supply, with the least possible delay, two orderlies for service on board the hospital ship "Britannia," and to be prepared to provide a further number for this service in case they should be required. He will, of course, keep the regulations bearing on this matter in view.

You will also require the above officer to provide for use on board the "Britannia" an invalid chair on wheels, of the same description as that made by a workman in Portsea, for the hospital of that station.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer,
&c. &c. Director General.

No. 332.

Dr. Smith to the Under Secretary for War.

Army and Ordnance Medical
Department, 13th December 1855.

SIR,
I REGRET much to find from the reports of the senior medical officer of the divisions of the army in the field, extracts from which I have the honour herewith to submit for the information of Lord Panmure, that even so late as the 24th November several of the divisions were without anything like the number of huts necessary for the accommodation of their sick, and that the prospect was far from satisfactory to the medical officers. I have repeatedly written to Dr. Hall on the subject, and requested him to urge the paramount importance of attention to the wants of the sick, even to the inconvenience of the

healthy, and I have every reason to believe that he has been fully alive to the necessity of duly providing against the deficiencies in question.

The disadvantages and danger of treating sick in marquees during the winter are so great, that nothing short of stern necessity can warrant the continuance of such a course being permitted. I therefore hope I am not asking too much in soliciting to be informed what number of hospital huts have been forwarded to the army, and I earnestly recommend, if a sufficiency has not been sent out, that an adequate supply of huts may be immediately taken from the healthy portion of the troops and appropriately fitted up for the reception and treatment of the sick of corps.

I further fear that the number of stoves necessary to ensure a proper amount of warmth in the hospital huts is not available with the army in the field, as some medical officers state that one stove, which is allowed to each large hut, is not capable of maintaining the temperature which is so essential to the well-being of the sick.

I have again written to Dr. Hall on the above subjects, but I think a hint from Lord Panmure to the proper department on the necessity of ample provision being made for the sick may aid the endeavours of the Principal Medical Officer for the attainment of the object in question.

I have, &c.

(Signed) A. SMITH,

The Under Secretary for War,
&c. &c. Director General.

No. 333.

Dr. Smith to the Under Secretary for War.

Army and Ordnance Medical
Department, 14th December 1855.

SIR,
IN reply to your letter of the 13th instant, I have the honour to state, for the information of the Minister for War, that I have no reason to believe that the "Britannia" is occupied as an hospital ship; I believe a few invalids were placed in her one day and removed the next; she is in the middle of the harbour, and much exposed to weather, and I consider it will not be possible to make her available for the accommodation of sick and wounded during the winter without much risk to the patients.

I have, &c.

(Signed) A. SMITH,

The Under Secretary for War,
&c. &c. Director General.

No. 334.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army and Ordnance Medical
Department, 14th December 1855.

I NOTICE several medical officers report cases of typhoid fever, and as in their description of the morbid appearances formed after death they describe the intestinal ulcerations which are considered to characterize genuine typhus, I will therefore be glad to have your opinion whether the disease is typhus or typhoid fever. If it is the former, it will be necessary to be very vigilant, as that disease was the scourge of the Russians during the campaign of 1829-30 in Turkey.

I have long been fearing an invasion of that fever, and if it should, after all our misfortunes, break out in an epidemic form, there is no calculating what havoc it would make. I think you will agree with me in the propriety of calling the attention of medical officers to the subject, as, besides the morbid appearance, we have also a concurrent symptom of typhus petechia warning us to be on the alert.

Should genuine typhus appear, will you be able to have the sick separated from men suffering from other complaints? You mention you had the inten-

tion of giving up the camp hospital, but I hope you will not do that until you have unquestionable reason to expect all chance of the occurrence of serious disease is past. If you once let it out of your possession, you may find it difficult to recover it should it be wanted.

I am anxious to hear from you on this matter.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General,
&c. &c.

No. 335.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,

14th December 1855.

SIR,

As I found from the last weekly reports of the principal medical officers of divisions serving in the field that nothing like the full amount of hospital huts necessary for the treatment of the sick at this advanced season of the year had been provided, and as I feared you might require some assistance to enable you to secure a due provision of such accommodation, I have accordingly urged on Lord Panmure the necessity of requesting the proper department to attend above all to the wants of the sick.

I have informed him that you have done all in your power, therefore if evils result from the inadequacy of the means referred to, no blame will rest on you.

We have all eyes upon us, and if the sick suffer, and we leave anything untried to provide against such suffering, we shall not only have our own consciences reproaching us, but public opinion will be arrayed against us, as it is now supposed that the doctors have only to represent what is needed to have it supplied.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General,
&c. &c.

No. 336.

Dr. Smith to the Deputy Secretary-at-War.

Army Medical Department,

15th December, 1855.

SIR,

I HAVE the honour to acknowledge the receipt of your letter of the 13th instant, No. ¹⁵⁸⁰³¹₁₉, respecting the winter HP clothing for the use of the sick in the army of the East, and in reply beg to state, for the information of Lord Panmure, that previous to the receipt of your communication I had given all necessary instructions to have the 5,000 suits which had been cancelled from the original order for 10,000 forwarded to Scutari as soon as possible, and in order to meet all possible contingencies I made application also at the same time for an *additional* 5,000.

I have, &c.

(Signed) A. SMITH,

The Deputy Secretary-at-War, Director General,
&c. &c.

No. 337.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army and Ordnance Medical

Department, 17th December 1855.

SIR,

ADVERTING to my letter of the 23d ultimo, in reference to the appointment of two boards of medical officers, one for inquiries in the Crimea, the other at Scutari in regard to the health of the army, I have to inform you that I have not yet obtained the sanction of the Minister for War to incur the expense which will be required to provide the instruments and appliances necessary to the efficient discharge of

the investigations referred to, but this circumstance need not delay the contemplated operations, as much of the information which will be expected from the labours of the boards can be collected without the means necessary for a full examination of morbid specimens, for which the instruments, &c. are required.

A short history of diseases as they appear among the native inhabitants of the localities where the troops have been successively stationed will be a good introduction to that of the diseases which have affected the troops; this, therefore, will perhaps be found sufficient to occupy the attention of the boards till the arrangements in progress have been completed.

The report of each board should, I think you will agree with me, contain all that it is important to record relative to the sanitary condition of the army since its departure from England, and in furtherance of that desirable object I forward a few suggestions which may be of use to the officers you employ in the inquiries; these suggestions are simply intended as hints, and are not to be understood as by any means comprising all the points to which attention must be directed.

Assuming that the two boards will be composed of able, zealous officers, I think the department and the profession may fairly expect a mass of interesting information, which, when amalgamated with that which the statistical board in this office will supply, will enable us to publish a volume which will prove not only creditable to the Medical Department, but valuable to medical science, and most useful to medical officers of future armies. Had a digest of the kind it is now time to attempt, been in existence when the present war was commenced, much of what has proved difficult to you and me would not have been experienced.

With every prospect that what is so valuable and useful may be accomplished by vigorous application on the part of the officers specially employed, and with a hope that a concurrent ardour and willingness will be evinced by others not so directly engaged in the proposed investigation, I sincerely trust that the expectations which are entertained will be even more than realized.

The boards will of course have to depend on the medical officers of regiments for information relative to the diseases, injuries, and wounds which have occurred in each corps during its sojourn in the East; therefore it will probably be found desirable for you to issue a departmental notice, inviting them to promote the object in view, and furnish every possible information calculated to further the labours of the boards.

The information from regimental officers will require to be furnished in the form of reports, and you will give it to be understood that I will recommend the surgeon or assistant surgeon (staff or regimental) who supplies the best report for a step of promotion.

I shall be glad to hear from you with your opinion in regard to the prospect of the ultimate attainment of the object sought by the proposed measure.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General,
&c. &c.

P.S.—You will be good enough to communicate your instructions to Dr. Linton in regard to the above with as little delay as possible.

SUBJECTS suggested for the Inquiry and Report of the Boards selected to investigate the State of Health of the Army of the East.

Climate.—Climate of Turkey generally, but more particularly that of the various localities occupied by or which have been occupied by the army, viz.:—Gallipoli, Scutari, and the neighbourhood of the Bosphorus, Varna, and Bulgaria, the Crimea, and other

stations held by our troops; the physical characters of these countries; production, supply, description, and quality of food; water; means of transit, &c.

Diseases.—Endemic; sources of disease; epidemic visitations; their supposed origin; glance at the native practice of medicines; any available statistics affecting the increase of population; the per-centage of deaths; hereditary diseases; the prevalence of venereal and small-pox, and ophthalmia.

British Army.—State of each regiment on landing in the country; if previously healthy or otherwise; its station prior to arrival in the East, the average age of its men, if regiments seasoned by service in the Mediterranean or elsewhere have proved more healthy than corps brought from home.

Average per-centage of sick of corps at expiration of first quarter after landing.

Average per-centage of sick at the expiration of succeeding quarterly periods.

General averages from the above.

Circumstances affecting the health of particular corps and the army generally which have led to deterioration of health, whether arising from

Endemic influences,

Climate,

Deficient clothing,

Impure water,

Innutritious food,

Insufficient food,

Ill-cooked food,

Food taken without regularity,

Want of fuel,

Insufficient stimulants,

Excessive use of stimulants,

Adulterated quality of stimulants,

Excessive and too long-continued bodily toil with insufficient sleep,

Drilling at improper hours,

Want of means for ablution and personal cleanliness,

Want of tents,

Bad quality of tents,

Overcrowding in tents,

Want of bedding in tents,

Deficient or otherwise objectionable hospital accommodation;

Objectionable hospital marquees, whether from their texture, selection of unhealthy site, want of bedding;

Deficient supply of medicines,

“ “ medical comforts,

“ “ hospital stores,

Want of amusements.

Opinion in regard to means of transport, bearers, ambulances, &c.

Diseases.—Diseases, those more especially which have proved the scourge of the army; their origin, mode of propagation, treatment, and pathology.

Prophylactic measures attempted and recommended.

General sanitary measures adopted, measures which ought to have been adopted, and reasons why they were not put in practice.

Wounds.—Wounds, according to the most approved mode of classification, the consequent operations, with the result, and the improved rules of practice suggested therefrom.

Suggestions for the coming campaign, keeping in view that military reasons may render any proposed measures impracticable. General deductions from the inquiry.

No. 338.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
19th December 1855.

Sir,

In reply to your letter of the 26th ultimo, transmitting the enclosures noted on the margin. I have the honour to state that I do not feel safe in bringing your letter and that of Senior Surgeon

Elliott, of the Royal Artillery, to the notice of the superior authorities at home until I am possessed of fuller information from you respecting the matter in question.

My idea of the case and view of the proper mode of procedure under the circumstances, supposing I rightly understand the statement referred to, is as follows:—

If the medical officer of a battery should require additional hospital accommodation, or anything else for his sick which is not furnished by the Medical Department, he should represent his wants at once to the immediate Commanding Officer, and if the latter does not comply with the demand or take steps to secure what is wanted, should it not be in his own possession or under his control, the Medical Officer should, in that case, at once report the circumstance to the Senior Medical Officer of the Artillery, furnishing him with a copy of any representation unsuccessfully made, and an account of the reasons which rendered such representation necessary. The Senior Medical Officer on receiving this ought then certainly and without delay to communicate in writing with the Assistant Quarter-Master General of the division or train, and urge the necessity for immediate compliance with the requisition.

I suspect I should be told that the above is the course which ought to be pursued under ordinary circumstances, as being that generally observed throughout the whole of the British army.

Occasions, however, will often occur when it will be neither prudent nor justifiable, nor for the good of the soldier or the service, to adhere to the above practice, for instance, when immediate measures are necessary and cannot properly be carried out in the ordinary way without an amount of delay which would prove detrimental. On such occasions I consider the Senior Medical Officer ought, if he has, either from his own observation or by information obtained from medical officers serving under his superintendence, reason to believe that his interference is necessary immediately, to communicate with the Assistant Quarter-Master General, or even the General in command of the Artillery, and if his representation is rejected on the plea that the subject to which it related had not been brought to the notice of some subordinate military authority, the responsibility incurred would be such as few would venture to take.

I consider that Mr. Elliott ought to make at least a weekly inspection of all the stations of the Royal Artillery, examine into the state of the several hospitals, and assure himself that the medical officers have at their command whatever is requisite for the well-being of the sick, and that he should forward to the Assistant Adjutant General of the Artillery, for the information of Sir Richard Daeres, a report embracing a notice of every thing he had observed or had communicated to him affecting the state of the sick, and giving, moreover, his own views and opinions as to what was necessary, provided he did not find every thing in the condition he considered it ought to be for the good of the service.

I think you will do well again to consult Sir William Codrington in reference to this subject, as I feel confident he will, if matters are properly explained to him, see it necessary that Mr. Elliott should have free access to the supreme Artillery authorities, and be even required to communicate to them what he considers objectionable. If he is to be debarred from intercourse of the kind there is evidently no necessity for retaining him in his present position.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 339.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
21st December 1855.

SIR,
ADVERTING to my letter of the 14th instant, I have the honour to state for your information that a telegraphic message, dated 24th ultimo, to the following effect has been received by the Minister for War from Sir William Codrington, viz.:—

“The huts for 26,000 are now able to be, or being delivered. Hospital accommodation for 4,300 men; of these about 2,000 in new huts.”

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 340.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
24th December 1855.

SIR,
REFERRING to the representation in the weekly report of Senior Surgeon Elliott, O. M. D., that the use of lime juice has been discontinued in Captain McKay's Company, “W” battery, Royal Artillery, I request you will inform me under what circumstances it has been found necessary to abandon the employment of this very important prophylactic of scorbutic disease.

If there is a deficiency of lime juice immediate measures must be taken to procure an additional supply.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 341.

(EXTRACT.)

Army and Ordnance Medical
Department, 29th December 1855.

SIR,
“Now with reference to a subject of much importance, treated on in General Breton's letter of the 12th instant, namely, his never having intended the ‘Britannia’ for an hospital ship, I can only say that I was directed by a letter of the Quarter-Master General to prepare an hospital for fifty sick on board that vessel, and in obedience to orders I took immediate steps to do so, and all that was required, except a few hospital utensils, which were always to be had from the barrack-master, were provided as long since as last July. I was also desired to provide a medical staff, as well as hospital servants, for the above service, and some of these have been for many months past in waiting in Portsmouth till the time when recourse would be had to the ‘Britannia.’

“During the time the ‘Britannia’ was fitting up, and ever since her equipment was reported as completed, I have been adverse to putting sick and wounded men on board, from the suffering which many of them would probably experience in being hauled up the side of a ship necessarily standing high out of the water, and let down below; and further, from the injury many of them would sustain during the winter season from the inclemency of the weather, in a situation so exposed as that in which the ‘Britannia’ is moored.

“Assuming, then, that General Breton does not intend to occupy this vessel as an hospital, and that during the depth of the winter it will not be practicable to convey nearly as many sick to Chichester or Chatham as it was during the summer, I cannot

understand how the General is to provide the necessary hospital accommodation on shore, if he adds none to that at present existing.

“There is this day in Portsmouth spare accommodation for only 58 sick, and that is for any increase which may be furnished by the garrison or from ships arriving with sick and wounded from the East. Now I shall suppose that three ships with invalids arrive at Portsmouth on the 30th of the present month, after a stormy passage, and that each lands 25 men requiring hospital treatment,—not an unlikely occurrence,—in this case where would the accommodation be found, even should no increase of the sick from the corps in garrison have reduced between this date and the 30th instant the number of beds available?

“The danger of trusting to so small a supply of spare beds appears to me so great, that I must state distinctly, if such accommodation is not to be augmented that I must beg to be relieved from the responsibility.

“My own opinion is, that at least 50 or 60 additional beds should be available at Portsmouth during the next four months, and that they ought, if possible, to be provided at once. I am told it is difficult to obtain any building that will supply such accommodation; in that case I would recommend that the building in the Camber bastion, which was at one time a hospital but an objectionable one, be again used as a regimental hospital for the winter, as the causes which render it objectionable do not operate nearly so perniciously during cold as during hot weather.

“I am accordingly anxious on this subject, as I fear some sudden influx of sick into the hospital now existing may exhaust all the accommodation it is able to afford, and, moreover, leave some surplus sick to be otherwise provided for.

I have, &c.
(Signed) A. SMITH,
“Director General.”

“The Military Secretary,
“&c. &c.”

No. 342.

Dr. Smith to the Under Secretary of State for War.

Army Medical Department,
2d January 1856.

SIR,
I HAVE the honour to acknowledge the receipt of your letter of the 31st ultimo, with its enclosed copy of a despatch from Major General Storks, reporting the hospital at Kululie has been set apart for the accommodation of a certain number of sick.

In reply I beg to state that it is very gratifying to me to find that two regiments of the British German Legion are not, as was contemplated on their reaching the East, to occupy a portion of the hospital at Scutari, and I feel satisfied that the interest of the sick and the service will benefit by the more recent arrangements. The difficulty, nay impossibility, however, of landing sick at Scutari during very heavy weather renders it very desirable that a certain amount of hospital accommodation should be available in a situation where a disembarkation can be secured at any time: it therefore appears to me that the arrangement effected by General Storks is a highly judicious one, and I sincerely trust no circumstances will arise to render it necessary to change it, and that it will be found practicable to retain space sufficient for the treatment of 160 sick at Kululie.

I have, &c.
(Signed) A. SMITH,
Director General.

The Under Secretary for War,
&c. &c.

No. 343.

The Director General to the Quarter-Master General.

Army Medical Department,
7th January 1856.

SIR,

I HAVE the honour to state, for the information of the Field Marshal Commanding in Chief, that I have heard from a letter just received from the Principal Medical Officer at Portsmouth, that the wooden huts proposed to be erected in the engineer yard of that station for the accommodation of sick have scarcely been begun, not more than their foundations being laid; I therefore earnestly recommend that their erection should be advanced and completed as quickly as possible, as no one can foresee at what hour they may be required. The number 2, each to receive 20 sick, is, I suspect, not likely to prove equal to the demands which will arise during the winter months; I therefore beg to recommend that additional huts of the above dimensions, or perhaps two of a larger size, may be provided.

Fortunately at present the weather is so mild that it may be practicable without danger to the sick to send on many to Chichester, but if a change should take place in the weather, the few beds available in the chief hospital at Portsmouth will soon be occupied, and it will be necessary to have recourse to the buildings in the Camber bastion and the huts as soon as they are ready for the reception of sick.

I have, &c.

(Signed) A. SMITH,
Director General.

The Quarter-Master General,
&c. &c.

No. 344.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
8th January 1856.

SIR,

ENCLOSED you will receive for your consideration certain extracts from a report made by Dr. Lyons, and I will be glad to hear from you respecting each of the subjects adverted to as soon as your time will admit of your furnishing a few observations thereon. If the water is impure, as stated, you have as a corrective of this, available at Scutari, a number of filters which might perhaps be used advantageously in the hospitals.

If diarrhoea of the form described by Dr. Lyons is a common complaint, would the prophylactic use of quinine not prove serviceable towards preventing the condition which is supposed to give rise to it?

I am anxious to know if you consider that the removal of sick to the Bosphorus to the extent mentioned in the enclosed would be an advantageous measure.

I have hitherto been of opinion that the climate of the Crimea is more conducive to the restoration of health than Scutari, or the other localities in which the hospitals are placed.

I have, &c.

(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

(Extracts.)

"The water supply in many instances throughout the camp has not been as good as could be wished; flowing over or through a soft limestone and clay, it contains earthy particles and other impurities in a state of fine division.

"A supply of filters of adequate capacity and simplicity of construction would be an invaluable acquisition to regiments in the Crimea."

"Camp diarrhoea has presented itself in several very distinct forms; one very common was that in which, without pain, feverish symptoms, or aught else

to indicate its approach, a relaxed state of the bowels came on, and, disregarded at first, became troublesome chiefly from its frequency and continuance.

"This state was often, but not always, accompanied by loss of appetite; but perhaps its most remarkable feature was to almost total suspension of the digestive, assimilative, and absorbent functions.

"The egesta differing but little in appearance from the ingesta.

"If continuance of this state, often with a remarkable and obstinate resistance to the action of medicines for many days, or, as was not unfrequently the case, for several weeks, produced very great depression of strength, complete change of air seemed in the very obstinate cases to offer the only chances of immediate and permanent relief.

"The circumstances and difficulties attending the transmission of numbers of men to a distance by sea or land rendered this measure less available, though not less necessary, in the case of soldiers affected with diarrhoea than in that of officers. I doubt not, however, that had facilities existed for the transport of those amongst the men affected with atonic diarrhoea to a locality more suitable to their condition, the disease could, in a large number of cases, have been arrested in this stage, and that thus many valuable lives would have been saved to the British arms.

"To be effectual, however, this measure should be adopted early in the disease, and on a large scale. The noble establishments on the Bosphorus, the Dardanelles, and at Smyrna, with the splendid transport fleet of the English service, would seem to me to present admirable facilities for the extension of the system of sick and convalescent leave on a very considerable scale to the troops on active service in the Crimea; and this remark applies not only to those affected with the disease now under consideration, but also, and in a more forcible degree perhaps, to those labouring under the effects of maladies of a still graver character.

"I doubt not that, if facilities for this purpose were placed at his disposal, your most indefatigable and invaluable Inspector General Dr. Hall would be but too anxious to avail himself of them for the due carrying out of so obviously important a measure.

"In the anticipation of active operations in the field, and in the absence on sick leave of some of the medical staff of the general hospital in camp, and the continued severe illness of others, I had to volunteer for actual hospital duty; and after the assault of the 8th September a larger number of operations fell to my lot than to any other member of the medical staff of the general hospital, the care of which cases has continued to occupy me."

No. 345.

Dr. Smith to the Purveyor-in-Chief at Scutari.

Army Medical Department,
9th January 1856.

SIR,

WITH reference to your letter of the 24th ultimo, respecting the bottling of some of the Port wine in cask at the general store at Scutari, I have the honour to request that you will make every effort to get the whole of the 4,000 dozen referred to in my communication of the 10th December last bottled by the 1st April next, so as to be ready to meet the wants of the sick in the event of the army advancing.

From the number of cases sent out from this country from time to time since the commencement of the war, I cannot conceive that much difficulty will occur in obtaining a sufficient supply, and I presume that all necessary repairs can be effected with the means at hand in Constantinople.

I have, &c.

(Signed) A. SMITH,
Director General.

The Purveyor-in-Chief,
&c. &c.

No. 346.

Dr. Smith to Dr. Hall.

Sir,
Army Medical Department,
9th January 1856.

IN reply to your letter of the 7th December, I am much pleased to find that you had anticipated me in effecting the segregation of the cases of ophthalmia. In dealing with this disease we cannot be too cautious, as should it from any cause assume an epidemic form, and extend itself, much mischief would arise therefrom.

I have, &c.
(Signed) A. SMITH.

Dr. Hall,
&c. &c.

No. 347.

Dr. Smith to Dr. Linton.

Sir,
Army Medical Department,
10th January 1856.

OBSERVING in the weekly report of the Staff Surgeon in charge of the Hospital at Kululie, that the amount of sickness in the British German Legion is attributed by him to want of beds and bedsteads, I have to request that you will make a careful inspection of their barracks, and if this deficiency exists, bring it at once to the notice of the military authorities at Scutari; and you will have the goodness to inform me what quantity of bedclothes is supplied to the soldiers of the Legion.

I have further to request that you will cause a copy of the meteorological register to be made from the commencement of the observations, and send it to this office.

I have, &c.
(Signed) A. SMITH,
Director General.

Dr. Linton,
&c. &c.

No. 348.

Dr. Smith to the Principal Medical Officer in the Crimea.

Sir,
Army Medical Department,
10th January 1856.

OBSERVING by the last weekly returns that I had received from you that a large number of cases of gelatio have occurred in the army, and as this may arise from inattention on the part of the soldier, I have the honour to request that you will cause inquiries to be made if the men generally are supplied with good boots, and if the supply of worsted socks is sufficient to provide a change after exposure to wet.

I think it would be well to impress upon the men the necessity of attending to this, as damp feet must in some measure render them more liable to frost bite.

A recommendation has been forwarded to you of Mr. Selby's project of rubbing the soldier's boots and feet with oil; I shall be glad to learn what you think of the plan, if it has been tried, and, if so, with what effect.

Is it your opinion that any of the cases of gelatio may be traced to the fact of men having been much exposed while in a state of intoxication?

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 349.

Dr. Smith to the Principal Medical Officer in the Crimea.

Sir,
Army Medical Department,
10th January 1856.

As it appears upon examination of the last ten weekly returns up to the 22d December of the expen-

diture of medical comforts at Balaklava, that none of the port wine in cask has been used, but that the consumption has entirely taken place in the bottled wine, I have the honour to bring the above circumstance especially to your notice, in order that you may take into consideration whether it would not be advisable to draw upon the wine in cask during the time that the troops are in winter quarters, so as to have a large supply on hand in bottle convenient for transport, in the event of the army advancing in the spring.

Mr. Purveyor Fitzgerald, having stated in a communication to you dated 21st ultimo, and forwarded to this department, "that the two dozen cases of bottled porter are most convenient and available for all purposes, both of camps and expeditions," I imagine the same observation will apply to bottled wine and brandy.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 350.

Dr. Smith to the Principal Medical Officer in the Crimea.

Sir,
Army Medical Department,
10th January 1856.

WITH reference to Mr. Fitzgerald's letter dated 21st ultimo, forwarded by you, in which he states that the half-pint tins of essence of beef were not distinguished from the quarter-pint tins in his weekly returns of medical comforts, as it had been found, as already represented, that the strength or nutritious properties of the latter equalled the former, I have the honour to state that I am not aware of any such representation having been made to this department, and have therefore to request that you will call upon Mr. Fitzgerald to inform me whether both sizes bore the name of "Hogarath," as one is double the price of the other, and both are supposed to be of precisely the same strength, consequently the half-pint tins should contain double the quantity of nutriment to the quarter pint.

As regards the continued supply of essence of beef, Mr. Fitzgerald's explanation is satisfactory, and I shall take care that the 20,000 quarter-pints required monthly be forwarded until I hear they are no longer wanted.

A supply of bottled porter will also be regularly transmitted.

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 351.

Dr. Smith to Dr. Linton, Principal Medical Officer at Scutari.

Sir,
Army Medical Department,
11th January 1856.

OBSERVING in the weekly report (22d December) a description of fever (pernicious) prevailing at the general hospital, I am of opinion that even should the disease in question not be on its first appearance contagious, yet it may become so in some situations and with certain adjuncts.

I therefore think it would be well to set apart a portion of the hospital for the reception of such cases.

With regard to the accommodation provided for the cavalry regiments in the neighbourhood of Haidar Pasha, and which is stated in the same report as having been hitherto insufficient, I would be glad to

learn if there is any prospect of improvement in their huts or barracks.

I have, &c.
 (Signed) A. SMITH,
 &c. &c. Director General.

P.S.—In the weekly report of the staff surgeon of the 2d division barrack hospital, a number of men are stated to be suffering from a low form of cachexia; such cases, I suspect, will only recover satisfactorily by being sent to this country.

No. 352.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
 17th January 1856.

SIR,
 As the army in the East will in all probability take the field in the ensuing spring with an increase to its present strength of about 30,000 men, I am anxious to be informed whether you consider the number of ambulances and other provisions for the carriage of the wounded now available in the East sufficient to meet the probable requirements of the increased force.

It is proposed in this office to send, in addition to the different conveyances already forwarded from this country, the numbers named in the margin;* but before doing so I shall be glad to learn whether, in your opinion, they will prove enough for the wants of the sick and wounded.

As regards hospital stores and medical comforts, in the event of there not being a sufficiency now in the East, it will be necessary that I should be furnished, with as little delay as possible, with a complete list showing the quantities of whatever articles you may think requisite to be supplied.

I have, &c.
 (Signed) A. SMITH,
 The Principal Medical Officer, Director General.
 &c. &c.

No. 353.

Dr. Smith to Dr. Hall.

Army Medical Department,
 18th January 1856.

SIR,
 It having been stated to me from a private source that the persons of several men, particularly of the land transport corps, arriving at Renkioi from the Crimea, have been found infested with vermin, I have to call your attention to my letter of the 28th July last in regard to the "insecticide" used with success in the Belgian army, and sent out to the Crimea under the care of an operative accustomed to its use.

As this machine was supplied at considerable expense, and after a careful and, to a certain extent, satisfactory inquiry into its efficacy for the object for which it was procured, I trust the advantages likely to be derived from resorting to it have not been lost sight of.

In the letter already adverted to, I expressed a wish to learn if the powers of the machine for the destruction of vermin had been successfully tested or otherwise, as I was anxious, in the event of the former result, to take measures for increasing the number of the "insecticides" at the seat of war, as I attach great importance to the discovery of any successful method of effecting so desirable an object as that in question.

I have, &c.
 (Signed) A. SMITH,
 Dr. Hall, Director General.
 &c. &c.

* 50 ambulance cars; 200 litters, pairs; 200 chairs, pairs; 1,000 bearers with slings.

No. 354.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
 18th January 1856.

SIR,
 I HAVE the honour to call your attention to the following article, copied from the "Lancet" of 12th January 1856:—

"More Flogging and Death in the British Army.—The 'Morning Herald' Correspondent, dating from the Crimea, describes the case of a private in the Artillery, who was flogged for drunkenness while in a sickly condition.

"He received fifty lashes, fainted under the torture, was conveyed to hospital, and died in a few hours."

I have to request you will cause inquiries to be made, and forward to me as soon as possible a report of the truth or falsehood of this statement.

I have further to call your attention to a case of flogging that took place in the 8th Hussars on the 5th October last; and from copies of letters forwarded with the monthly return of that regiment, I have learnt that the punishment was continued after the man had fainted, contrary to the opinion and recommendation of the Assistant Surgeon of the regiment present on the parade.

I have, &c.
 (Signed) A. SMITH,
 The Principal Medical Officer, Director General.
 &c. &c.

No. 355. (Duplicate).

No. 356.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
 18th January 1856.

SIR,
 I HAVE the honour to forward for your perusal a letter from the Under Secretary of State for War, enclosing a report on cholera by the Rev. Mr. Cannon, a military chaplain, and request you will endeavour to ascertain from the regimental surgeons who may have had experience during both periods, if the drafts which arrived in the Crimea from England in June, July, and August, suffered more from cholera and other diseases than those that landed there in January, February, and March.

I have, &c.
 (Signed) A. SMITH,
 The Principal Medical Officer, Director General.
 &c. &c.

No. 357.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
 18th January 1856.

SIR,
 In reply to your letter of the 2d instant, regarding the ventilation, &c., of the "Albert huts" erected in the vicinity of the barrack hospital at Scutari, I have to impress on you the necessity of recommending every improvement in regard to their sanitary condition calculated to affect favourably the health of their inmates. Especial care must be taken to prevent the accumulation of decaying vegetable or animal matter, either in the ravine adjoining to, or in the vicinity of the huts.

I have, &c.
 (Signed) A. SMITH,
 Director General.
 The Principal Medical Officer,
 &c. &c.

No. 358.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
 19th January 1856.

SIR,
 THE quality of the water left in the Crimea having been stated to be unwholesome in a recent report

furnished by Dr. Lyons, and also in a memorandum on cholera, transmitted to the Minister for War by the Reverend Francis Cannon, I have to direct your attention to this subject.

In my letter of the 8th instant, I transmitted an extract from Dr. Lyons' report, and suggested that filters, of which I believe a supply exists at Scutari, should be resorted to, if necessary, with a view to improve the quality of the water.

I have now to forward for your consideration an extract from the memorandum of the military chaplain, and I shall be glad to receive your report on the subject, in regard to which, the two gentlemen above named have respectively written.

I cannot conceive that these statements can be correct, as it seems to me highly improbable that a subject of so much moment as the bad quality of the water supply should have escaped your attention, and that of the medical officers of the army.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

EXTRACT FROM MEMORANDUM OF FRANCIS CANNON,
Military Chaplain to the Forces, relative to
Cholera in the British Army.

"BUT the pernicious influences of climate may be strengthened by the circumstances, and I believe they were so in the present case in no ordinary degree, one of these was bad water. Good water is only next in importance to good air towards the preservation of animal life and health. In the camp before Sebastopol there was little good water at all; the nature of the soil and strata is such that, instead of purifying the water, it taints it; there is, first, a deep black clayey loam, then under that sandstone grit and limestone. In passing through these formations, the water cannot fail to be impregnated more or less with particles of matter injuring its purity. Beds of sand would remove these, did they lie beneath, but of these there are none. Let the water stand for a week and insects will be brought to live in it, and be seen crawling about; the effects of such water on the bowels cannot fail to be pernicious, and must increase the disordered state of the system. Soldiers coming from hard duty drink incautiously and freely of it, for their system requires to be replenished with liquids more fully in a country like the Crimea than in one where the climate is less wasting."

No. 359.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
28th January 1856.

SIR, In the beginning of August last year, a machine for the destruction of vermin infecting the clothes of soldiers was sent from this country for the use of the army in the East; it had been used with success in Belgium, and a native of that country, M. Frederickx, was sent in charge of the insecticide, in order that its trial should have the advantage of an operative accustomed to its use.

It appears, however, that M. Frederickx and the machine are at Scutari, though it was intended that Balaklava should have been the station where the powers of the apparatus were to be tested.

I request therefore that you will lose no time in taking measures for having the insecticide together with M. Frederickx despatched to Balaklava, and you will be good enough to communicate to Dr. Hall that you have done so, and to notify to me when these instructions are carried out.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 360.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
28th January 1856.

SIR, REFERRING to my letter of the 28th July last, and of the 18th instant, I am just informed that the "insecticide" sent from this country at so much expense is still at Scutari; I am disappointed at this, as, though it may have been erroneously conveyed to the above station, you were aware that its destination was Balaklava, and that it was intended for the extirpation of the vermin at one time infecting the clothes of the soldiers of the army in the field.

The insecticide was not sent from this country until very satisfactory proofs had been obtained of its fitness for the object for which it was procured; and as an operative accustomed to its use was brought from Belgium and accompanied it to the East, it is a disappointment to find that no further step was taken to have it available for the army in the field in case of need.

I have written to Deputy Inspector General Dr. Linton to despatch M. Frederickx, the Belgian operative, and the insecticide to Balaklava, and I shall be glad to have your report on the subject as soon as an opportunity for testing the apparatus presents itself.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

P.S.—Within the last two days a reference from the Minister for War has been made to me in regard to the above machine.

No. 361.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
31st January 1856.

SIR, SINCE the commencement of this war numerous articles of various classes, all having for their object the maintenance or restoration of the health of the soldier, have been sent to the seat of war; and as farther supplies of such articles were to be dependent on reports as to their usefulness or efficacy after their experimental trial, I am constantly applied to by the Minister for War for copies of such reports, documents which I am not in a condition to supply. I am well aware that the nature and extent of your labours preclude the possibility of your yourself furnishing the information desired and called for, but as other than the true cause and motive may be assigned for the absence of information in regard to these matters, I have to suggest that it would be expedient that you should select some specially qualified officer of standing, should you have one disposable, to whom you could consign the duty of collecting reports and information for the different medical officers who have tested the various articles referred to, amongst the multiplicity of which it is but fair to believe something of real value may be found which will prove of service for general use.

The reports in question can be collated and arranged by the officer employed on this duty, and might form a general one to be signed by him or by yourself should you think proper to do so.

In the event of the articles or remedies not having been tested, you will be good enough to say so; and if you are aware of any reasons why they have not been tried, you will be pleased to state them, and so relieve me from the embarrassment I now experience.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 362.

Dr. Smith to Dr. Hall.

Army Medical Department
4th February 1856

SIR,

As I am informed that all the huts as well as tents in the Crimea are provided with a boarded flooring, on which the men sleep, and as it is moreover stated that this universally obtains in the encampment, and that no man is required to sleep without such interposed protection from the chill and humidity which would arise from contact with the earth itself, I request you will inform me if I may rest satisfied with the accuracy of my information, and if what I have stated be the actual condition in the above respect of the tents and huts occupied by the army in the Crimea.

I have, &c.

(Signed) A. SMITH,
Director General.Dr. Hall,
&c. &c.

No. 363.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
6th February 1856.

SIR,

I HAVE the honour to state, for the information of Lord Panmure, as cases of scurvy continue to appear in the army in the field, that I am necessarily anxious that a sufficient provision of lime juice should be available in the Crimea. I have, therefore, the honour to submit that I may be informed what supplies of this article are being secured, as it will be perceived, from the accompanying extract of a letter from Sir George Maclean in December last, he seemed to think it probable that it might be necessary to have recourse to this country to obtain a portion of the lime juice which might be required.

I have, &c.

(Signed) A. SMITH,

The Under Secretary for War, Director General.
&c. &c.

(Extract above referred to.)

"THE large demand for lime juice for the army, 14,000 gallons monthly, has exceeded the supply in the accessible markets, but it will be obtained as far as possible from England, or wherever it can be purchased to the extent required."

No. 364. (Duplicate).

No. 365.

Dr. Smith to Dr. Hall.

Army Medical Department,
7th February 1856.

SIR,

As it has been repeatedly stated, by the medical officers in charge of divisions, that the supply of fuel for the hospital huts is insufficient, I should be glad to have your opinion on the subject. I conclude you do not concur in this opinion, the reports being repeated from week to week, and consequently no measures can have been taken to have the supply increased.

I have, &c.

(Signed) A. SMITH,
Director General.Dr. Hall,
&c. &c.

No. 366.

Dr. Smith to the Under Secretary for War.

Army Medical Department,

12th February 1856.

SIR,

In returning the letters, enumerated in the margin,* conveyed in your communication of the 9th instant, I have the honour to state, for the information of the Secretary of State, that these documents appear to me to convey very satisfactory intelligence as regards the supply of lime juice for the use of the army serving in the Crimea. I trust it will be found practicable to obtain the quantities expected; if so, means will be available whereby much serious disease will be averted.

I have, &c.

(Signed) A. SMITH,
Director General.The Under Secretary for War,
&c. &c.

No. 367.

Dr. Smith to the Members of the Medico-Chirurgical Society, 1st Division, Crimea.

Army Medical Department,

15th February 1856.

SIR,

I HAVE had the honour to receive the minutes of the two first meetings of your society, forwarded to me through Dr. Hall.

It is most gratifying to me to see such zeal and proper feeling displayed under circumstances of difficulty; and I have no doubt your laudable endeavours will prove most useful to yourselves, creditable to the department, and beneficial to medical science.

The example you have set is worthy of imitation; and I sincerely trust I shall soon hear it has been followed in the other divisions of the army, or that one general society has been formed having a subsection in each division.

I trust the various methods of conveying sick and wounded in the field, as also the description of tents best suited to military purposes, and the most efficient and convenient method of carrying medicines with a division of an army, will have a full share of attention, as we have yet much to learn in these respects.

Your proceedings will no doubt have such a value as to render it desirable that they should be published; I shall therefore feel much pleasure in being the medium of communicating them, from time to time, to any journal in which you may desire them to appear, should you feel disposed to entrust that duty to me.

I have, &c.

(Signed) A. SMITH,
Director General.The Members of the Medico-Chirurgical Society,
&c. &c.

No. 368.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,

16th February 1856.

SIR,

I HAVE the honour to inform you that 250 bottles of Dr. Bastler's Vienna Specific for Cholera, presented through the War department for use in the army hospitals of the East by Baron de Stenitzer, have been forwarded to Scutari by the steamer "Peninsula," in a case marked as per margin.

You will be pleased to instruct the medical storekeepers to forward to Balaklava half the quantity above noted, and to intimate its

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* Letter from General Sir C. Maclean, dated 27th November 1855. Draft of Letter and of Reply to Commissary General Wild. Letters from Commissary General Wild, dated 2d and 18th January 1856. Return of Supplies in the Crimea to 15th January 1856.

arrival to the medical officers, in order that they may give the preparation a trial, should they be inclined to do so, on occasion offering.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 369.

Dr. Smith to the Under Secretary for War.

SIR, Army Medical Department,
16th February 1856.

WITH reference to your letter of the 7th ultimo, and to my communication of the 11th ultimo, I have now the honour to acquaint you, for the information of the Minister for War, that the 250 bottles of Dr. Bastler's (Vienna) Cholera Specific, presented by the Baron de Stenitzer, therein referred to, have been forwarded to the East per steamer "Peninsula," and that the principal medical officers have been instructed to place the remedy in question within reach of the medical officers, and to notify its arrival in case of any of them being induced to give it a trial, should cholera unhappily re-appear among the troops serving in the East.

I have, &c.
(Signed) A. SMITH,
Director General.
The Under Secretary for War,
&c. &c.

No. 370.

Dr. Smith to Dr. Hall.

SIR, Army Medical Department,
18th February 1856.

I HAD the honour, on the 2d instant, to send an extract from the "Times" respecting the cases of sufferers from frost-bite transferred from the Crimea to the hospital at Renikoi.

In the same journal of the 12th instant, the substance of the former remarks is repeated. I herewith enclose the observations referred to, and I beg you will inform me if you have reason to think the statement is entitled to credit.

I have, &c.
(Signed) A. SMITH,
Director General.
Dr. Hall.
&c. &c.

No. 371.

Dr. Smith to the Principal Medical Officer in the Crimea.

SIR, Army Medical Department,
18th February 1856.

THE "Times" Newspaper of the 30th of January contains a letter from Renikoi which I have caused to be extracted, and herewith forwarded for your perusal and information.

I sincerely hope that the assertion made by the above writer on the assurances of the sufferers themselves that they were attacked by frost-bite while actually undergoing medical treatment in the hospital huts and marquees in the Crimea admits of disproof, as I cannot believe it possible, with the full supply of bedding at command, which I have reason to believe is available, that the medical officers could have overlooked the necessity of guarding their patients from the effects of the severity of the climate. I hope the medical officers thus impugned possess the means of rebutting this imputation which, unless contradicted by authority, will leave an unfavourable impression against the department.

The fact stated, "that the persons of several were covered with vermin," would seem to prove that I was warranted in the anxiety I entertained that the

insecticide should have been in operation in the Crimea, for which station it was provided.

I shall be glad to hear from you on these subjects.
I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 372.

Dr. Smith to the Under Secretary of State for War.

SIR, Army Medical Department,
18th February 1856.

I HAVE the honour to state, for the information of the Minister for War, that the Inspector General of Hospitals in the Crimea states, in returns received yesterday of his late medical inspection of the second and light divisions of the army, that many of the huts are not watertight.

In the first brigade of the 2d division the 3d regiment, and in the 2d brigade of the same division the 49th and 62d regiments, are thus situated.

In the 1st brigade of the light division the hut accommodation of the 7th Regiment, and in the 2d brigade of the same division that of the 19th, 77th, 88th, and 97th Regiments, is stated to be in a like faulty condition.

I take leave to observe that it might be well to order out a full supply of felt and tar, if there is any reason to think that ample quantities of each of these articles are not already in the Crimea and at Scutari.

I have, &c.
(Signed) A. SMITH,
Director General.

The Under Secretary for War,
&c. &c.

No. 373.

Dr. Smith to the Deputy Secretary at War.

SIR, Army Medical Department,
25th February 1856.

I HAVE the honour to state, for the information of the Minister for War, that I have received communications from the officers named in the margin,* reporting that the animals slaughtered for the provision of the sick in the hospitals on the Bosphorus are in so thin a condition that an undue proportion of bone is issued in the different diets, and recommending in consequence, that the quantities of meat should be increased.

The fact of this circumstance being so attested induces me to concur in these officers' opinions; and I therefore beg to submit that in future the quantities of meat allowed should be in conformity with the following scale:—

Full diet,	16 ounces.
Half "	12 "
Low "	6 "

I have, &c.
(Signed) A. SMITH,
Director General.

The Deputy Secretary at War,
&c. &c.

No. 374.

Dr. Smith to the Principal Medical Officer in the Crimea.

SIR, Army Medical Department,
23d February, 1856.

HAVING been indirectly informed of the sudden death of the man named on the margin,† while under-

* Dr. Linton, D. I. G.; Dr. Humfrey, D. I. G.; Dr. Cruikshanks, D.I.G.; Mr. Robertson, Purveyor in Chief; Mr. Hagger, Purveyor.

† 62d Foot. P. Martin Hennessey, died 27th August 1855.

going an operation under the influence of chloroform, to the action of which preparation the fatal event has been attributed, and having reason to believe that Assistant Surgeon Young, of the 62d regiment, has now in his possession some of the chloroform which was administered on that occasion, I have the honour to request you will be good enough to cause the bottle containing the article in question to be sealed up, carefully packed, and forwarded to this office.

I have, &c.

(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 375.

Dr. Smith to the Purveyor in Chief.

Army Medical Department,
3d March, 1856.

SIR,

WITH reference to your letter to Dr. Linton, dated 15th ultimo, respecting the supply of preserved potatoes, I have the honour to request that you will ascertain whether it is considered necessary by that officer that these articles should be issued to the sick; and on all future occasions you will be pleased to inquire from the medical authorities the course they intend to pursue, before making requisitions to this country for any medical comforts.

I have, &c.

(Signed) A. SMITH,
Director General.

The Purveyor in Chief,
&c. &c.

No. 376.

Dr. Smith to the Purveyor in Chief.

Army Medical Department,
3d March 1856.

SIR,

I HAVE the honour to inform you that I have given instructions for 1,000 dozen port wine, the usual monthly supply, to be forwarded to Balaklava early in April; and also that 4,000 dozen has been ordered to be bottled in Scutari, which I intend to be available for the Crimea.

Should you therefore see no objection to depend upon that source of supply, I beg you will immediately inform me, so that the following monthly supply need not be forwarded from this country.

I have, &c.

(Signed) A. SMITH,
Director General.

The Purveyor in Chief,
&c. &c.

No. 377.

Dr. Smith to the Principal Medical Officer at Scutari.

Army and Ordnance Medical
Department, 5th March 1856.

SIR,

IN the weekly report of the 15th February from the general hospital I have observed it stated as the opinion of the surgeon of the 4th Light Dragoons that the prevalence of boils amongst the cavalry stationed at Scutari is owing to a scorbutic diathesis, and had accordingly recommended an extra issue of lime juice or vegetables; I would be glad to hear from you what steps have been taken in the matter.

IN the same week's report of the Staff Surgeon in charge of the 4th division barrack hospital, it is stated that three orderlies, and three orderlies under treatment for other diseases, had been attacked with fever; as the occurrence of cases of fever in this manner appears to indicate that the disease in question is of a contagious nature, I am anxious to learn

if you have made any arrangements to segregate the fever patients, or in any other way prevent the extension of the malady.

I have, &c.

(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 378.

Dr. Dumbreck to the Director General of the Commissariat Department, Spring Gardens.

Army Medical Department,
6th March 1856.

SIR,

IN conformity to the desire of the Director General, who is absent from London on duty, I have the honour to state, for the information of the Secretary of State for War, that a considerable number of cases of scurvy have appeared at Constantinople; and as it may consequently be necessary that the means of furnishing the troops with a ration of lime juice should exist at that station, and as Dr. Smith does not feel assured that that is obtainable there, he has requested me to suggest that 5,000 pounds of the 40,000 gallons of lime juice, which he has been informed is ready at Malta for shipment to the Crimea, may be forwarded as soon as possible to Scutari, consigned to the chief commissariat officer at that station.

I have, &c.

(Signed) D. DUMBRECK,

In absence of the Director General.

The Director General,
&c. &c.

No. 379.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
7th March 1856.

SIR,

REFERRING to the appearance of cases of scurvy in the troops at Scutari, as stated in the reports of medical officers serving in the general hospital, dated 15th ultimo, I have the honour to inform you, that steps have been taken to forward 5,000lbs. of lime juice to the Principal Commissariat Officer at Scutari, to be available should it seem advisable that a ration of this article be supplied to the troops.

I beg you will inform me if the above quantity would in your opinion be sufficient for the possible demand on it, or if more will be necessary, in which case you will be good enough to state the additional supply deemed requisite.

IN the event of it not being considered necessary to have recourse to the use of lime juice at Scutari, you must inform Sir John Hall when the above quantity of lime juice arrives at Scutari, and ascertain if he wishes it to be sent to Balaklava.

I have, &c.

(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 380.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
14th March 1856.

SIR,

REFERRING to your letter of the 22d ultimo, transmitting a communication from Senior Surgeon Elliott, Royal Artillery, on the subject of a disease resembling itch, contracted from contact with many animals, I have in reply to observe, that the opinion arrived at seems to have been formed on reasonable

grounds; if therefore it is believed that animals, suffering as above, have the power of exciting a cutaneous affection of the nature referred to, it will be necessary to observe caution to guard against its transmission.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

will be developed during the hot weather, and therefore that the station will prove ineligible for troops as soon as the weather begins to become warm.

I have, &c.

(Signed) A. SMITH,

The Under Secretary for War, Director General.
&c. &c.

No. 381.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
19th March 1856.

SIR,

As there must be still a very large supply of port wine at Scutari, I have the honour to inform you that I have written to the Principal Medical Officer in the Crimea, stating that no more will be forwarded at present direct to Balaklava, and requesting him to communicate with you from time to time what quantities he will require, and the periods when he wishes you to forward it.

It will therefore be your duty to impress upon the Purveyor in Chief the necessity of always having a supply ready to transmit to the Crimea, whenever such is required; and you must further take care that I be immediately informed whenever the quantity of port wine is so reduced at Scutari as would render longer dependence on it for the wants in the Crimea dangerous to the interests of the service.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 382.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
19th March 1856.

SIR,

WITH reference to the supply of port wine for the use of the hospitals in the Crimea, I have the honour to inform you that it has been decided not to send any more at present direct to Balaklava after the shipment referred to in my letter of the 3d instant, as a very large quantity is now at Scutari.

You will therefore be pleased to communicate with Dr. Linton, and keep him constantly aware of what quantity of port wine you will require, and further instruct him from time to time when he must forward you supplies.

I think there is no danger in this arrangement, but should you see any you will be pleased immediately to inform me, as every care must be taken that no deficiencies of that article shall be experienced.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 383.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
19th March, 1856.

SIR,

I HAVE the honour to forward, for the information of the Secretary of State for War, an extract from a Report of the Principal Medical Officer at Scutari, relative to the station of Ismid.

Assuming that Dr. Linton's information in regard to the locality referred to is correct, there appear sufficient grounds to believe that the endemic sources of disease which are rife in close proximity to Ismid

EXTRACT from a Report addressed by the Principal Medical Officer at Scutari to the Director General relative to the Station occupied by the British Light Cavalry Brigade at Ismid.

"IN conclusion, I have to observe that although this (Ismid) may be considered a good winter quarter, yet from its vicinity to very extensive marshes,* and its proverbial unhealthiness during the hot weather, it should not, I conceive, be occupied as a quarter for troops in summer."

No. 384.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
22d March 1856.

SIR,

REFERRING to your letter of the 21st December last, conveying a memorandum from the Rev. Francis Cannon, Military Chaplain to the Forces in the East, relative to the causes and effects of cholera, and offering suggestions as to the most desirable season for sending soldiers to the seat of war, I have the honour to state, for the information of the Secretary of State for War, that I called on the medical officers serving in the Crimea for their views and opinions on the principal topics on which the Rev. Mr. Cannon treats, and I am now in possession of the reports in answer to my queries.

By an overwhelming weight of testimony, the causes to which Mr. Cannon ascribed the attacks and presence of cholera are not admitted to have been in existence at the period when he wrote, and Mr. Cannon's recommendation, in regard to the most desirable season of the year for reinforcements to arrive, is met by ample statistical facts proving that the liability to attacks of cholera was not influenced by the particular period of the year at which men arrived, but by other causes which Mr. Cannon, as might have been expected, failed to appreciate.

I have, &c.

(Signed) A. SMITH,

The Under Secretary for War, Director General.
&c. &c.

No. 385.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
22d March 1856.

SIR,

I HAVE the honour to acknowledge the receipt of your letter dated the 2nd ultimo, with its enclosures, on the subject of condensed milk. One of the enclosures is a Board representing 253 pint tins of Concentrated Milk (Moore's patent), as "sour and damaged;" but, as the cause of damage is not stated, I am at a loss to determine whether Messrs. Moore and Co. are responsible for the condition of the milk or not; you will, therefore, be pleased to call on the members of the said Board and Mr. Fitzgerald, to furnish the information required, and the latter must also state, if possible, by what vessel the milk arrived.

With regard to the preserved milk of Messrs. Howarth and Co., condensed, as I observe the accounts transmitted by you only include the receipts up to the "John Bowes" inclusive, you will instruct

* Marshes extend for miles from the head of the Bay where the town of Ismid is placed.

Mr. Fitzgerald to take proper care that all milk found bad in the subsequent shipments, as per margin,* is notified to me.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 386.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
24th March 1856.
SIR,

I HAVE the honour to state, for the information of the Secretary of State for War, that I have received from the principal medical officer in the Crimea a further series of half-yearly reports of regiments in the field, including the Artillery Corps, and I think it my duty to bring it to the notice of Lord Panmure that these reports present a favourable view of the general condition of this branch of the army. Only a few huts are not "water tight," and that a small proportion of the men remain under canvas in double tents.

It appears that in a number of the batteries the duty is severe, two nights in bed being in several instances the amount of rest obtained. This is in striking contrast with the regiments of the line, the men of which have five, six, seven, and even in some cases from eleven to fourteen nights in bed.

I have, &c.
(Signed) A. SMITH,
Director General.

The Under Secretary for War,
&c. &c.

No. 387.

Dr. Smith to the Chairman of the Transport Board.

Army Medical Department,
26th March 1856.
SIR,

I HAVE the honour to request that tonnage to the amount of 90 tons measurement of medical comforts may be allotted to this department for Balaklava on or about the 4th proximo, and that particular directions may be given that the goods intended for that station may be kept distinct, so that no confusion may arise in the unloading of the vessel.

I have, &c.
(Signed) A. SMITH,
Director General.

Chairman of the Transport Board,
&c. &c.

No. 388.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
28th March 1856.
SIR,

WITH reference to my letter of the 10th January last, stating that it was my intention to forward regularly every month to Balaklava a supply of 20,000 tins of essence of beef, in conformity with the wishes of Mr. Fitzgerald, as expressed in his communication of the 21st December last, I have now the honour to request that you will call upon that officer to state whether he considers there is still a necessity for forwarding the above-named article.

My reason for this is, that I have received a letter from the Secretary of State for War, suggesting a revision of the large supply of medical comforts to the East, in order to reduce the amount in store of all articles where it can safely be accomplished; and as it appears by the last weekly return from Balaklava, ending 1st instant, that 31,938 half-pint tins remained

	Quarts.
* Imperatrice	- - 8010.
Ge. Hawkins	- - 2010.

in store, and that in another weekly return ending 16th February it is mentioned that the shipments per the "George Hawkins" and "Caroline," containing 20,000 half-pints, were sent to Scutari for storage, I am anxious to know whether this article may not be discontinued until you inform me an additional supply is required.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 389.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
28th March 1856.
SIR,

WITH reference to your letter of the 7th ultimo, with its enclosures, recommending that an increased quantity of meat should be allowed in the diets issued to the sick in the different hospitals on the Bosphorus I have the honour to inform you that the Secretary of State for War has approved of the following scale being adopted for the future, viz.,

Full diet	- -	16 ounces.
Half	- -	12 "
Low	- -	6 "

I have, &c.
(Signed) A. SMITH,
Director General.

The Principal Medical Officer,
&c. &c.

No. 390.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army and Medical Department,
29th March 1856.
SIR,

AS I learn from various quarters that typhus fever, or fever of a type closely allied to that disease, is extremely prevalent in the French army in the Crimea, I request you will, assuming that the above information is correct, communicate to me all the information you possess, or may be able to acquire, concerning it. It would be particularly desirable to know if there is reason to believe that the form of malady existing possesses the power of propagating itself from man to man; and I am anxious to learn, as far as you know or can ascertain, what has been the average mortality from the disease.

Should the reports in circulation on this subject be correct, you will I doubt not ere this have taken all the measures possible to guard against the introduction of typhus into the ranks of the army under your medical superintendence; and the necessity will, I feel equally assured, have occurred to you of calling the attention of the medical officers to the precautions which in such circumstances are necessary, as the most watchful care will require to be exercised by them, with a view to the detection of the first indications of so terrible a disease as camp typhus.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 391.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
29th March 1856.
SIR,

I LEARN from various quarters that typhus fever, or fever of a type very much resembling that form of disease, is at present very prevalent in the hospitals of the French army at Constantinople; if, therefore, I have been correctly informed in regard to the existence of the above malady, I request you will communicate to me all the information you possess, or can

obtain, in reference to it, stating whether there exists reason to believe that it has the power of propagating itself from person to person, also, as far as you know or can ascertain, what has been its average mortality.

Assuming that the reports of the presence of this disease are correct, you will doubtless, I feel confident, have adopted every measure calculated to prevent its introduction into the English military hospitals, and have cautioned the medical officers serving under you to make every exertion to keep separate from other patients any sick of our army who may be introduced into Scutari hospital, or its subordinate establishments, affected with fever of a character similar or approaching to that said to prevail in the French hospitals.

As I further learn that some of the cases of fever occurring in soldiers of the German Contingent, at Kululie, show a disposition to assume the typhoid form, this part of the force, and its hospitals, will require your special vigilance and attention, as I suspect, should typhus fever show itself among the soldiers of the Legion, or be introduced into their hospitals, that its tendency to spread will be much greater, and that it will be more difficult to deal with than it would be were British soldiers the subjects of attack.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 392.

Dr. Smith to the Principal Medical Officer in the Crimea.

SIR,
Army Medical Department,
31st March 1856.

I HAVE to request that you will call upon the medical officers in charge of regiments in the Crimea to furnish me at their earliest convenience with a regimental return of gun-shot or other wounds received in action, on duty or accidentally, adopting Deputy Inspector General Taylor's form of return, or any other that you consider the best suited for the purpose.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 393.

Dr. Smith to the Under Secretary for War.

SIR,
Army Medical Department
5th April 1856.

As nearly 800 sick from regiments in the Crimea are now in the hospitals at Scutari and Renkioi, and as many of them, it may be inferred, will require prolonged treatment before they will be restored to health, or brought into a condition to admit of their being discharged the service, I feel it my duty to bring this to the knowledge of the Secretary of State for War, and to recommend that the earliest possible opportunity should be taken to transfer them to England.

My reasons for considering this measure desirable are:—

1st. To admit of the men mentioned above being disposed of before the general sick of the army arrive.

2ndly. To remove them in their weakly state from the chance of becoming the subjects of cholera, which we may fairly expect will again re-appear in the East as the hot weather approaches. And,

3rdly. To secure an extension of the hospital accommodation at Scutari, in order that the establishments there may be able to meet any demands which may arise on the occasion of the army leaving the Crimea.

No possible advantage can be obtained, as far as I am able to discover, from longer delaying the removal

of the sick above referred to, as the only reason which under other circumstances might have rendered their detention in the East desirable, namely, the hope that a portion of them might be cured and restored to the ranks of the army, is no longer an important one, as such men as recover (and the number of recoveries will be greater if the sick be sent home than if they are detained in their present position) will be able to join their corps on their return to this country.

With regard to the more immediately regimental sick now under the charge of the medical officers of their corps, either in the Crimea or at Scutari, I think it would be advantageous if all of them not likely to be restored to health before their corps shall embark were likewise to be removed to this country as quickly as possible, as it is far from desirable that regiments embarking should be hampered with any considerable number of sick, for it must be borne in mind that each corps, more especially from the change in their circumstances, will present during the voyage a certain proportion of sickness sufficient in all probability to absorb all the hospital accommodation which will be forthcoming in transport ships.

Trusting that the propriety of the measures I recommend will be recognized, I have only further to observe that I consider it would be highly advantageous in every respect to cause the sick in the Crimea, whom it may be thought necessary to send in advance of the army, to be brought direct to England rather than leave them at any intermediate station.

If the plan I propose be adopted, it will naturally facilitate the arrangements it will be necessary to make in this country, and enable us to have continually available ample hospital accommodation for all possible wants as they arise.

The circumstance of cholera having prevailed in the East during the last two years, and the probability of its again being roused into activity during the present summer, will render it highly necessary to avoid overcrowding on shipboard, and hence it will be requisite to the safety of the service that such a supply of ships be afforded as will give the best chance of keeping those embarked in them free from a disease which proves above all destructive in situations where persons are closely congregated, particularly when the means of perfect ventilation are deficient.

In reference to the local precautions and arrangements in a sanitary point of view which it will be necessary to make in the East, I shall offer no observations, as I feel satisfied they will be ably attended to and executed under the advice and guidance of Sir John Hall.

I have, &c.
(Signed) A. SMITH,
Under Secretary for War, Director General.
&c. &c.

No. 394.

Dr. Smith to the Purveyor-in-Chief at Scutari.

SIR,
Army Medical Department,
7th April 1856.

WITH reference to your letter of the 20th ultimo on the subject of preserved potatoes, I have the honour to remark, that I observe in your return of medical comforts in the general store on the 1st March last 5,380 lbs. preserved potatoes remained in hand; and as it is the intention to bring home the sick from the hospitals at Scutari as soon as possible, you will be pleased to inform me immediately whether, under these circumstances, you will require any further supply of this article, and if so, what quantity?

I have, &c.
(Signed) A. SMITH,
The Purveyor-in-Chief, Director General.
&c. &c.

No. 395.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
10th April 1856.

SIR,
As there seems to be a large quantity of the different articles of medical comforts at Balaklava, I have the honour to inform you that it is proposed not to forward any more from this country unless you should find that the expenditure is such as to warrant a replenishment.

The necessity for this, should it arise, must be communicated to me in time; and in the event of it appearing urgent, I have no doubt you will be able, on applying to Sir E. Codrington, to have the information transmitted by telegraph; and in order that I may feel perfectly easy on the subject, you will be good enough to continue your periodical returns of expenditure.

The return herewith forwarded will show you the total supplies at Balaklava on the 15th ultimo, at Scutari on the 1st ultimo en route to Balaklava, and the quantities sent from Balaklava to Scutari for storage.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 396.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
11th April 1856.

SIR,
HEREWITH you will receive a copy of a letter I have addressed to the Minister for War, and I hope Lord Panmure will give effect to my recommendations. I am very anxious to get the sick away from the East as soon as practicable, to give every chance of their escaping the risk of contracting cholera, which, I fear, will reappear when the warm weather sets in. Such speedy removal, of a portion at least, will also relieve you, and moreover facilitate our proceedings and arrangements in this country.

I am satisfied you will see the advantage which the plan I proposed to Lord Panmure, if carried out, will confer, and that you will do all you possibly can to expedite arrangements for successfully effecting it.

I am not inclined to lessen overmuch the number of medical officers with the troops. I therefore think you had better appoint civil surgeons for the charge of sick during the voyage, and assist them with dressers or acting assistant surgeons.

Should there, however, arise any great delay in the embarkation of troops, you may, I think, with safety recommend that half of the civil surgeons be sent away at once without any medical charge.

I have written a similar letter to Dr. Linton, so that I presume he will act in reference to the civil surgeons accordingly, as circumstances shall render necessary.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

No. 397.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
11th April 1856.

SIR,
I HEREWITH enclose, for your information and guidance, an extract from the report of 2nd Class

Staff Surgeon Adams, who has recently arrived in this country from Scutari in charge of invalids in the hospital ship "Saldanha."

In reference to Mr. Adams' statement, I am of opinion that advantage to the sick on shipboard would result if an increase of the supply of fresh and preserved meats could be secured; and it is quite possible that the amount of the latter you have in store will admit of its being put on board ship in augmented quantity.

It would appear also highly desirable to obtain, if practicable, the aid of a steamer to assist sailing vessels on their voyage; and I think you cannot impress that too strongly on the authorities. I have more than once brought the necessity for such assistance to the notice of the Minister for War, and until the receipt of Mr. Adams' report, I was under the impression that such aid was being generally afforded.

I have, &c.
(Signed) A. SMITH,
The Principal Medical Officer, Director General.
&c. &c.

(Extract.)

"THE scale of dieting is good, and the ingredients ample. It would be an improvement if there was a greater admixture of preserved fresh meat, as the majority of the invalids were labouring under bowel or hepatic diseases, to whom salt provisions were strictly forbidden. The addition of peas for soup, at the rate of $\frac{1}{4}$ pint per man, was found beneficial on the days salt pork was issued.

"In conclusion, as an hospital ship, I believe the "Saldanha" is perfect in the necessaries requisite for the comfort and health of invalids. At the same time it must be borne in mind that, without a steamer attached, the voyage would be uncertain and prolonged, and that during a long period at sea evils might arise which would more than counteract the advantages she may otherwise possess over a steamer, and particularly during the summer months, when calms and baffling winds prevail in the Mediterranean. The long passage from Gibraltar to Queenstown (26 days) was beginning to exercise an injurious effect, particularly on the weak and debilitated cases afterwards landed at Queenstown. They continued to improve as long as the voyage was speedy and prosperous, and the fresh provisions and delicacies lasted; but as soon as the latter began to fail, and contrary winds set in, all their symptoms became aggravated, and I am confident, had we continued at sea much longer, two of the cases would not have survived."

No. 398.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
22d April 1856.

SIR,
I HAVE the honour to enclose, for the information of the Secretary of State for War, an extract from a communication I have received from the Principal Medical Officer, and I beg to submit, in reference thereto, that it is desirable that the medical officer who inspects a vessel as to her fitness for the conveyance of troops or invalids, should be put in possession of full information as to what she is destined to carry, so as to enable him to furnish a report which can be depended on.

I have, &c.
(Signed) A. SMITH,
The Under Secretary for War, Director General.
&c. &c.

No. 399.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
25th April 1856.

SIR,

In reply to your letter of the 10th instant, reporting, amongst other matters, the prevalence of typhus fever among the natives of the village of Kululie as well as at Pera, I have to express a hope that it will be found practicable, by the observance of every possible precaution, to prevent the soldiers resorting to localities where the above disease is known to prevail.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 400.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
10th May 1856.

SIR,

WITH reference to your letter of the 5th instant, with enclosures respecting a statement submitted by me, on the 24th of March last, that in a number of the batteries in front of Sebastopol the men of the Royal Artillery had only two nights in bed,* I have the honour, in reply, to state, for the information of Lord Panmure, that I was made acquainted with the circumstances adduced from the half-yearly reports of inspections made in December 1855 by the Principal Medical Officer in the Crimea.

I beg herewith to forward extracts from the reports in question on which my communication of the 24th March was founded.

I have, &c.

(Signed) A. SMITH,

The Under Secretary for War, Director General.

No. 401.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
12th May 1856.

SIR,

REFERRING to the sanitary report on the Land Transport Corps from the 3d to 9th April, with your annotation on its margin respecting the appearance of seven cases of maculated typhus, I have to express my satisfaction at the vigorous measures resorted to in order to check the extension of so formidable a disease as that in question.

The complete abandonment of the dwelling, in a case like that described, is the only safe measure in my opinion.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 402.

Dr. Smith to the Principal Medical Officer in the Crimea.

Army Medical Department,
16th May 1856.

SIR,

WITH reference to your letter of the 28th ultimo, enclosing a report from 1st-Class Staff Surgeon Taylor on the contagious fever in some of the hospitals of the Land Transport Corps, I have to express my satisfaction at the measures of precaution you yourself ordered to be adopted. They leave nothing to be desired, and seem to have been very successful in limiting the extension of the disease which rendered their adoption necessary.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 403.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
5th June 1856.

SIR,

WITH reference to the board of survey, dated Scutari, 9th May, held upon oatmeal, sugar, and butter, and which recommended that the last-mentioned, consisting of 19 jars, should be sold in consequence of its being found rancid and unfit for use, I have the honour to acquaint you that I have received instructions from the Secretary of State for War to ascertain on what date, and by whom, the butter was supplied.

You will be pleased, therefore, to forward me, as soon as possible, the above information.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 404.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
11th June 1856.

SIR,

AGREEABLE to the request of Sir John Hall, Inspector General of Hospitals, with the army in the field, I have the honour to forward, for the information of the Minister for War, a copy of a series of observations offered by the Inspector General in explanation of portions of the report of Sir John McNeil and Colonel Tulloch on the supplies of the British army in the Crimea during the winter of 1854-5, wherein comments were made relative to the disadvantages which the army experienced owing to the deficiency of the stores, means of conveyance, and shelter necessary for the use of the sick.

On this occasion I will take leave to observe, that I think it would be seen, on perusal of the enclosed document, that the difficulties the Medical Department had to encounter, and the disadvantageous circumstances under which it was placed, must have crippled it to such a degree as to have rendered it impossible for medical officers to extend to the sick of the army the full and efficient aid which, had they been differently situated, they would doubtless have bestowed.

I have, &c.

(Signed) A. SMITH,

The Under Secretary for War, Director General.
&c. &c.

No. 405.

Dr. Smith to the Principal Medical Officer at Scutari.

Army Medical Department,
14th June 1856.

SIR,

OBSERVING that there are a number of cases of "ophthalmia" in hospital at Scutari, and as it is a disease which often proves severe and inveterate in the East, I think you would do well to send home every case you may have in hospital which is not likely to recover. I allude more especially to chronic cases with granular lids, and I have no doubt you will not deem it prudent to send many in one vessel.

I have, &c.

(Signed) A. SMITH,

The Principal Medical Officer, Director General.
&c. &c.

No. 406.

Dr. Smith to the Senior Medical Officer at Smyrna.

Army Medical Department,
14th June 1856.

SIR,

WITH reference to the warm season now present, which is always in the Levant productive of a considerable accession of ailments among the unaccli-

* Extracts from Dr. Hall's Report of Inspection of Artillery, as marked with Dr. D.'s initials.

mated, I have to request your special attention to the measures best calculated to avert injurious local and other influences and preserve health among the men of the British Swiss Legion now under your medical superintendence at Smyrna.

While it is necessary to retain these troops in that station, you must exercise the utmost vigilance in regard to their state, and must suggest to their commanding officer whatever measure you may deem necessary to preserve their efficiency, and ward off disease.

I have, &c.
(Signed) A. SMITH,
The Senior Medical Officer, Director General.
&c. &c.

No. 407.

Dr. Smith to the Under Secretary for War.

Army Medical Department,
14th June 1856.

SIR,
I CONSIDER it my duty to report, for the information of the Secretary of State for War, the occurrence of a case of genuine spasmodic cholera in a man of the Royal Artillery stationed in front of Sebastopol.

The date of seizure was the 29th of May; but though the true character of the disease admitted of no doubt, I am glad to say that the accounts of its progress, which extended to the 31st of the same

month, are favourable, and a fatal termination was not apprehended.

I have, &c.
(Signed) A. SMITH,
The Under Secretary for War, Director General.
&c. &c.

No. 408.

Dr. Smith to the Deputy Secretary at War.

Army Medical Department,
15th July 1856.

SIR,
WITH reference to my letter of the 3rd ultimo, relative to the barley at Gozo which had been found unfit for use by a board of survey, I have the honour to inform you that I have caused a full investigation to be made with respect to its deterioration, and finding that every precaution having been resorted to in frequently sifting and airing it, and the storage being suitable and dry, no blame attaches to any one, the damage having been occasioned by weevils, a contingency to which such articles are liable in hot climates.

I have, &c.
(Signed) A. SMITH,
The Deputy Secretary at War, Director General.
&c. &c.

LETTERS OF SIR JOHN HALL, M.D., K.C.B., Principal Medical Officer of the Army in the East.

CORRESPONDENCE between Sir JOHN HALL, Inspector General of Hospitals, and the Military Authorities in Bulgaria and the Crimea.—His Letters to the Director General of the Army Medical Department are not included in this Series.

No. 409.

To Major Sillery.

Principal Medical Officer's Office,
General Hospital, Scutari,

(Memorandum.) 21st June 1854.

It is requested that 10 orderlies may be given without delay for the service of this establishment, and that a fatigue party of 15 men may be immediately ordered here, as, in consequence of no fatigue party having been furnished for the last four days, the hospital has not been properly cleansed, and a nuisance prevails which may prove detrimental to the health of the patients.

(Signed) J. HALL,
Major Sillery, Inspector Gen. of Hospitals.
&c. &c.

Note.—On the 23rd of the same month, Dr. Menzies, Principal Medical Officer at Scutari, applied to Major Sillery for a fatigue party of 15 men to attend at the general hospital morning and evening.

No. 410.

To Dr. Alexander.

Officer of Inspector General of
Hospitals, Varna, 1st July 1854.

SIR,
WITH reference to your letter of the 29th ultimo, giving cover to one from Surgeon Fraser of the Rifle

Brigade, with copy of a communication from that gentleman to his commanding officer, pointing out the injurious effects on the men's health of the long drills in the heat of the day that he was adopting, may I ask what has been the result of Dr Fraser's representation? Have the drills in the heat of the day been discontinued? or has Lieut.-Colonel Lawrence acted on Dr. Fraser's suggestion, and appointed an earlier hour of the day for the drill taking place? Be good enough to inform me at what hour of the day the drill took place which affected so many of the men, and whether any serious results have followed in any of the men taken ill on that occasion.

I have, &c.
(Signed) J. HALL,
Dr. Alexander, Inspector Gen. of Hospitals.
&c. &c.

Note.—Mr. Alexander's representation ought to have been addressed either to the Brigadier or General of Division, as, by a General Order issued on the 12th of May 1854, paragraph 8, all parades, drills, or field-days, whether for practice, instruction, or punishment, were directed to be held either before eight in the morning or after four in the evening, and before I could submit the complaint to the Commander-in-Chief it was necessary to obtain the particulars mentioned in the above communication.

J. HALL.

No. 411.

To Lord De Ros.

My Lord,

Varna, 4th July 1854.

By a Cavalry Divisional Order it has been directed that one bāt animal shall convey the surgeon's panniers and the medicines and apparatus of the veterinary surgeon. Now, setting aside the mere matter of weight the animal may be supposed able to carry, it appears to me that the arrangement will be found highly inexpedient on actual service in the field, because the surgeon ought, in my opinion, to have his surgical panniers not only near at hand, but totally unencumbered when his regiment goes into action, and so important do I consider this, that I should feel obliged by your obtaining the decision of the General Commanding the Forces on the subject.

I have, &c.

Lord De Ros,
&c. &c.

(Signed) JOHN HALL,
Inspector Gen. of Hospitals.

Note.—As only one animal had been appropriated for this service by the General Order of the 11th June 1854, Lord De Ros declined to submit the matter to Lord Raglan, and I had to do it myself. His Lordship directed the arrangement to be altered, and two bāt animals to be given, viz., one to the surgeon for his panniers, and one to the veterinary surgeon for his medicines and apparatus. Vide General Order, 13th July, paragraph 3.

J. HALL.

No. 412.

Extract of a Letter of the 6th July, addressed to Dr. Menzies, Principal Medical Officer at Scutari.

"I HOPE you will be able to get the catgut manufactory and drain nuisances removed. I recollect Lord Raglan's mentioning the catgut manufactory, which, I think, he said had been brought under the notice of the Turkish authorities, who were anxious to get it removed.

"The drain at all events, I should think, would come within your and the Commandant's authority. By the way, was anything ever done about getting the pipes leading from the waterclosets cleared?—as I notice you mention bad smells within the hospital, which ought not to exist if that had been done."

J. HALL, I.G.

Note.—When I was at Scutari in June, verbal instructions were given to Mr. Ward, the Purveyor, by me to get the pipes of the waterclosets in the General Hospital cleared of the foreign substances, such as pieces of cloth, old shoes, and other articles that had been thrust down them by the soldiers; and to prevent similar irregularities in future I recommended that gratings should be placed over the pipes.

J. HALL, I.G.

No. 413.

To Lieut.-Colonel Steele.

Sir,

Varna, 15th July 1854.

1. IN obedience to instructions received from his Excellency the Commander of the Forces, I have the honour to state that I visited the camps of the 1st, 2nd, and light divisions of the army, on the 12th and 13th instant, and inspected the hospital marquees of all the regiments in them, and I take leave to submit the following observations for his Lordship's consideration. In doing so I shall follow the course of my own journey, and commence with the camp of the light and cavalry divisions at Devna.

2. The camp at Devna, though on rising ground, is, in my opinion, too near to the lagoon at the head of the lake; and later in the season the health of the men will, I fear, be influenced by it, for even now the smell of the marsh is very perceptible early in the morning; and as the infantry division is out at drill from six to eight in the morning, five or six days in the week, those men who do not take either coffee or some other stimulant before going on parade will be liable to contract either fever or bowel complaints. At present the chief ailments of the men are bowel affections, some of which have assumed the character of Asiatic cholera, but as yet no deaths have occurred under that head.

3. The cavalry are encamped in the valley below; the 5th Dragoon Guards nearest to the marsh, on ground that, I should say, would scarcely be habitable after heavy rain of any duration. The position of this regiment had attracted the attention of Lieut.-General Sir George Brown, who mentioned that it was his intention to move the camp of the heavy brigade of cavalry a little higher, on the eastern slope of the valley, when Brigadier Scarlett arrived.

4. The light cavalry brigade is encamped higher up the valley, near the boggy ground where the river which feeds the lagoon springs. The cavalry have already a larger proportion of sick than the infantry, and the chances are that this will increase if they remain where they are; but I suppose the site of the camp was selected on account of its proximity to water, and it becomes a question whether it might not be removed half a mile higher up, on either the eastern or western slope of the valley, without any very serious inconvenience. The infantry, too, would be better away from the vicinity of the morass, which cannot be more than from one half to three quarters of a mile distant from their camp, but which the military people seem to think is quite sufficient to protect the men from its noxious influence; but, as the wind blows over it towards the camp at this season of the year, I must confess I am not of the same opinion.

5. Those regiments which do not give their men coffee before they go out to drill in the morning, the 23d and 88th for instance, I noticed had a larger proportion of sick than others, and this proportion will increase as the autumn advances.

6. The rations of the men are indifferent, though perhaps as good as the country affords. The meat is thin, and without fat; the bread heavy, sour, and badly baked on some occasions; and there is a want of vegetables, and seasoning for the men's soup. Onions are the chief fresh vegetable the men can procure, and a capital one it is, but it is not sufficient of itself to make the soup nourishing and palatable. Rice ought to be made an integral part of the ration, as it was at the Cape of Good Hope during the wars in Kaffirland; and if that cannot be sanctioned, the Commissariat Department should be instructed to have a sufficient supply in store to meet the wants of each division when the men cannot procure the article through any other channel, as is often the case now. Salt and pepper should also be Commissariat supplies, to ensure the men having these essential articles always within their reach. The present system of trusting mainly to the resources of the country is an uncertain and expensive one, for when the demand is great the articles become dear and scarce where there is little or no mercantile enterprise amongst the inhabitants; so that it would be economical for the men had they even to pay a moderate fixed price to the Commissariat for their rice, salt, and pepper, and certainly it would be beneficial for them always to have these articles within their reach. About one halfpenny a day from the man's pay, added to the allowance of coffee and sugar which he draws now from the Commissariat, would ensure him not only coffee before his morning drill, but a comfortable meal in the evening, which is very desirable.

7. The site of the camp of the 2nd Division is unobjectionable, the only drawback is the limited supply

of water near at hand; but there is abundance within an easy distance. Some of the tents of the 2nd Brigade are closer together than there is any occasion for; and they are interspersed among dwarf oak bushes, which are not high enough to shade, but quite sufficient to impede the circulation of air. There is, however, an abundance of unexceptionable ground to the northward and eastward of that which the brigade now occupies, so that the defect admits of easy remedy.

8. The tents of the 1st Division are too much crowded, and many of them, as in the 2nd Division, are interspersed among low oak bushes. There is a good deal of sickness in the camp, particularly in the Guards and Artillery. But the Artillery are encamped on a very objectionable piece of ground, and it would be well to remove them to some other locality, as well as to give the whole Division more space; but I would not recommend, what Dr. Linton mentioned, that they should occupy any portion of the ground where the Light Division was formerly encamped. It would be better to extend it to the north, or put it on the ridge in front of the present site to the westward, if the ground admit of it.

9. The supplies brought into camp by the country people are more abundant at Devna than at either of the other camps, and consist of eggs, milk, poultry, onions, pumpkins, and cucumbers. Latterly they have commenced bringing apricots in an unripe state, which are less desirable than the other articles enumerated above, and it would be advisable to restrict their sale as much as possible, as they have obtained the unenviable designation in the Mediterranean of "kill Johns."

The following is a Statement of the Number of Sick in each Regiment that I visited in the Devna and other Camps:—

LIGHT DIVISION.				2d DIVISION.			
Regiments.	No. of Sick.	Fevers.	Bowel Complaints.	Regiments.	No. of Sick.	Fevers.	Bowel Complaints.
7th Fusiliers	29	12	6	50th Regiment	12	12	1
10th Regiment	7	3	1	41st do.	15	14	6
23d Fusiliers	14	3	1	47th do.	11	11	1
Do.	24	12	12	49th do.	24	24	9
77th Foot	12	9	12	55th do.	16	16	4
33d do.	11	12	4	95th do.	13	6	1
88th do.	39	6	8	Artillery	14	1	6
7d Battalion Rifles	14	1	6				
Royal Artillery	10	6	2				
Royal Sappers and Miners	4	—	—				
Total	156	28	52	Total	105	15	28

CAVALRY DIVISION.				1st DIVISION.			
Regiments.	No. of Sick.	Fevers.	Bowel Complaints.	Regiments.	No. of Sick.	Fevers.	Bowel Complaints.
2d Dragoon Guards	8	5	—	Greenadier Guards	62	10	44
8th Hussars	15	1	7	Coldstream do.	22	14	4
11th do.	13	2	3	Fusilier do.	38	11	9
13th Light Dragoons	18	—	9	42d Highlanders	17	1	—
17th Lancers	11	1	4	73d do.	26	1	—
				10d do.	25	1	—
				Artillery	14	2	7
Total	68	9	21	Total	199	39	74

I have, &c.
(Signed) JOHN HALL,
Inspector Gen. of Hospitals.

No. 414.

To Lord de Ros.

MY LORD,
I HAVE this day received intimation that 44 men of the Light Division require to be sent to the general

hospital in Varna for treatment, and as the hospital has nearly its full complement of sick at present, reserving one entire ward for cholera patients, which may at any moment come on us in numbers, I request you will be pleased to obtain Lord Raglan's permission for 110 of our present lighter cases being sent either on board a transport in the bay, or to the general hospital at Scutari.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.
Lord de Ros,
&c. &c.

Note.—"Monarchy" transport ordered to receive the sick.—J. H.

No. 415.

Medical Department Order.

Varna, 22nd July 1854.

1. Two thousand cholera belts having arrived at Varna out of a consignment of 20,200, you will be good enough to direct the surgeons of the five regiments composing the 3rd Division to indent at once on the purveyor's store for 400 each, and you will direct them to distribute the belts to the weakly men of their respective corps, or to those who have a tendency to looseness of bowels.

2. You will be careful, now that cholera unhappily prevails, that medical officers of corps make diligent inquiry daily about the health of the men, and endeavour to impress on them the importance of immediately reporting any looseness of bowels, and applying for appropriate remedies for checking it.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

No. 416.

WE, the undersigned, being a committee appointed by order of General Lord Raglan, G.C.B., Commander of the Forces in Turkey, to report on the necessity or advisability of issuing a spirit ration to the soldiers of this army during the present prevalence of cholera and diarrhoea, are of opinion that a small ration of spirit would be beneficial to the health of the men under existing circumstances, and beg to recommend that one, in the proportion of $\frac{1}{4}$ of a gallon, be issued mixed with water, and given after dinner, and that a basin of hot coffee and biscuit be given in the evening.

We further take leave to recommend that cholera belts be issued and worn by the men; that no drills or fatigues take place in the morning until the men have had either breakfast or, at all events, some coffee and biscuit; and that commanding officers of corps be enjoined to keep a vigilant watch over their canteens by causing frequent inspections to be made at uncertain periods both by the medical officers and officers of the day. As diarrhoea is very prevalent at present, that the men be enjoined, and advised to report their sickness at once to the medical officers, because the disease has hitherto been found manageable when seen in the early stages, but if neglected very liable to terminate in cholera.

We are of opinion the bread issued to the soldier is of an inferior quality, being dark, heavy, badly baked, and very liable to disorder the bowels; and we suggest that better should be provided, composed of wheaten flour alone, which we are inclined to believe is not the case with the present contract bread.

A portion of wheat might be ground in the mills at Devna, under the supervision of military authority, and made into bread, which we think, by contrast, would soon show the inferior quality of the contractor's meal; and if this cannot be carried into effect, we are of opinion that it would be desirable

to issue biscuit in place of bread during the prevalence of cholera.

(Signed) JOHN HALL, M.D.,
Inspector General of Hospitals.
DAVID DUMBRECK, M.D.,
Deputy Inspector General of Hospitals.
WILLIAM LINTON, M.D.,
Deputy Inspector General of Hospitals.
JOHN FORREST, M.D.,
Deputy Inspector General of Hospitals.
WILLIAM CRUIKSHANK,
1st Class Staff Surgeon.

Varna, 27th July 1854.

No. 417.

Extract of a letter addressed to Dr. Menzies, Principal Medical Officer at Scutari, dated 27th July 1854, and numbered 424.

Paragraph 7. "I mentioned to Lord Raglan the difficulty you had in obtaining beef, and that you had been compelled to recommend salt meat to be issued to the troops; he seemed surprised to hear there should be any difficulty in the troops obtaining fresh beef, and said variety ought to be insisted on. Have you any reason to regret the issue of salt rations to men predisposed to diarrhoea?"

No. 418.

To Lord Raglan, G.C.B.

MY LORD, Varna, 29th July 1854.

SINCE my letter to you of the 24th instant, I am sorry to say cholera has prevailed to a greater or less extent in all the divisions of this army; but, unfortunately, I cannot give you such precise information as I could wish, or as I should be able to do after the receipt of the weekly states, which will be due the day after to-morrow. It is true I receive almost daily communications from all the camps, but still the chain of events is not so correctly recorded in that way by some officers as it is in their official returns of sick.

I mentioned to you in my last letter that cholera in a severe form had manifested itself in the camp of the Light Division at Devna on the 22nd instant, and that 16 casualties had been reported to me up to the period of my addressing you on the 24th. In the course of that evening and the following day I heard of the death of 5 more men, and since then 17 other deaths have been reported, making a total since the disease broke out of 91 admissions and 38 deaths.

The attacks were so numerous and the disease so fatal at its onset, that on the 24th it was deemed prudent to move the camp from Devna to a place called Monasteria, about five miles from its former site, and for a day or two there appeared to be considerable improvement in the health of the men, but this morning I regret to say I have received reports of the death of 11 men, 10 in the Light Division, and one in the 5th Dragoon Guards. In addition to which Mr. Hogan, Quartermaster of the 7th Fusiliers, died on the 26th.

Dr. Alexander's report, dated yesterday morning, was, that there were several serious cases of diarrhoea, but no cholera, in the 1st Brigade; and that the bowel complaints which had presented themselves in the 2nd Brigade were much milder.

The Light Cavalry Brigade encamped at Devna has escaped cholera, but as their sick list was becoming heavy from other complaints, they have been removed about 20 miles in advance on the Shumla road.

The only case of cholera which has occurred in the cavalry took place in the 5th Dragoon Guards, and proved fatal.

It is a remarkable circumstance that the regiments encamped at Devna were struck with the pestilence nearly in the ratio of their proximity to the morass

at the head of the lake; and it is nearly equally curious that the disease is said to have followed a shift of wind to the south east, which blew right across it to the encampment.

In the 1st Division at Aladyne, so far as I know, only one death, and two other admissions, from cholera, have taken place in the camp, but several cases of the disease have occurred amongst the native arabah drivers attached to it.

In the 2nd Division three admissions and two deaths have been reported. The case of recovery was a drunken tailor, and the disease may have been the penalty of his dissolute habits. The two fatal cases occurred in recruits just arrived from England, who were marched in one day from Varna to the camp of 2nd Division.

The distance is not beyond that of an ordinary march, but the recruits who have been sent out this year are many of them young lads, and not equal to much fatigue; they were just from on board ship, and their hour of march was not judiciously chosen, as, Dr. Cruikshank states, they did not reach their camp until 2 p.m.

At Gallipoli three admissions and one death are reported to have taken place from cholera in the camp of the 4th Foot up to the 22nd instant, and two deaths in the general hospital in town to the same date. Cholera prevails also amongst the French troops encamped there.

At Scutari dysentery has been prevalent, but no cases of cholera have appeared there since the first of the month.

On the 24th it was found necessary to remove 110 invalids from the general hospital here, and put them on board the "Monarchy" transport in the bay to make room for the sick of the Light Division sent in from Devna. On the 26th six men were attacked with cholera on board the "Monarchy," and two died, but since then there has been no recurrence of the disease.

In the 3rd Division, encamped on the plain outside the walls of Varna, two cases of cholera occurred in the 28th Regiment on the 25th instant, one of which recovered and the other proved fatal. In the 38th Regiment two men were attacked with cholera on the 24th, both of whom died.

A case of cholera occurred in the 44th Regiment on the 25th, and recovered. The regiment was then sent to the opposite side of the lake, and encamped at the top of a ravine leading from the camp of the heavy cavalry below. After their removal two cases of cholera occurred, one of which proved fatal. The camp was then moved to the high open ground facing the Black Sea, and since that period the disease has not re-appeared.

As cholera had manifested itself in every regiment of the 3rd Division encamped near Varna, with the exception of the 50th, the camp was removed on the 26th to the dry open slope of the promontory on the other side of the bay facing the Black Sea, and the 50th was left in the old camp to take the duties of Varna. The day after the removal of the division two cases of cholera occurred in the 28th Regiment, and 40 men reported themselves ill with diarrhoea, but since then a wonderful improvement has taken place in the health of the men.

Yesterday a case of cholera occurred in the 50th Regiment, and proved fatal, to-day three other admissions are reported.

A company of Sappers and Miners, which was encamped outside the Shumla gate, and suffering severely from cholera and diarrhoea, was also removed to the high ground on the opposite side of the bay with the happiest result.

On the 25th two men were attacked with cholera in the camp of the depôt companies, and recovered. The site of their camp has since been changed.

On the 27th the heavy cavalry, which were encamped between the head of the bay and the lake on the opposite side of the valley, and had begun to suffer from bowel complaints, were removed to the high

ground near the 3rd Division. Yesterday two men who had been suffering from diarrhoea for some days were attacked with cholera, and this morning one is reported dead, and the other in great danger.

The ambulance corps which arrived only a few days ago from England, and is encamped at the head of the bay, about half a mile nearer the lake than the camp where the cavalry was, were attacked with cholera on the 26th, since which date five cases have been admitted, and one death has taken place. This morning they had 21 sick, 4 with cholera and 13 with diarrhoea, many of them of a slight character.

In the general hospital at Varna the admissions, chiefly from amongst the patients under treatment for other diseases, have been,—

On the 25th July	12 admitted	6 died	
" 26th "	13 "	7 "	
" 27th "	8 "	8 "	
" 28th "	15 "	10 "	
" 29th "	9 "	9 "	One was a native Turk.
	57	40	
At other stations	100	36	
	157	76	

The French lost 116 during the same period.

I have, &c.

(Signed) J. HALL,

Lord Raglan, G.C.B. Inspector Gen. of Hospitals.
&c. &c.

With regard to the removals of camps alluded to in the foregoing letter, they were all personally recommended by me to the Commander-in-Chief, with the exception of that of the Light Division, which was promptly carried into effect by the divisional authorities after the appearance of cholera; but in my letter of the 15th July addressed to Lieutenant-Colonel Steele, I had pointed out the objectionable nature of the site of the camp which it occupied near Devna.

No. 419.

To Dr. Alexander.

SIR, Varna, 30th July 1854.
THOUGH you have made no demand that I have seen for cholera belts, I send 5,000 for the Light Division, as Lord Raglan has forwarded to me your letter of this date to General Airey on the subject. You will be good enough to sign and receipt the indent for these stores, and return it to me, and you will take immediate steps for the distribution of the belts amongst the men of the Light Division.

I have, &c.

(Signed) J. HALL,
Inspector General of Hospitals.

P.S.—I request you will keep me accurately informed in future concerning the medical affairs of the Light Division, as I do not hear of medical events for two or three days after they have been reported to the Commander-in-Chief through the military authorities, which places me in a very awkward position.

Dr. Alexander, J. HALL.
&c. &c.

No. 420.

To Dr. Cruikshank.

SIR, Varna, 31st July 1854.
A SMALL supply of cholera belts having arrived, I have directed 2,000 to be sent out to your care to distribute among the weakly men of the 2nd Division, particularly those who have a tendency to diarrhoea; and when the remainder of the belts invoiced from Eng-

land reach this, a sufficient number will be sent to complete the issue to every man.

I have, &c.

(Signed) J. HALL,

Dr. Cruikshank, Inspector Gen. of Hospitals.
&c. &c.

A similar letter written to Dr. Linton, Deputy Inspector General of Hospitals, Principal Medical Officer, 1st Division, that 3,000 cholera belts had been sent to him for distribution.—J. H.

No. 421.

To Dr. Linton.

SIR, Varna, 1st August 1854.

IN answer to your letter of this date, I think, under the circumstances you mention, it would be inexpedient to attempt post-mortem examinations in fatal cases of cholera.

With regard to the bedding, should cholera extend, you will soon expend all you have if you follow the system of destroying it. It is desirable to burn the stuffing of paillasses at once, to expose to the sun and air all the bedding that has been used until an opportunity permits of getting it washed, which I have no doubt the regimental surgeons can readily manage by paying for it, and including the charge in their contingent account of petty expenses for the hospital. The propriety of preserving or destroying the effects of men rests on the question of contagion, which is, as you are aware, a point on which the opinions of medical men widely differ.

It is not desirable for men to bear cholera cases to the grave. Here we employ an arabah for that purpose, which I should think you could obtain also in your camp from those attached to the Commissariat Department. The ambulance corps is not in working train yet, and never will be, I fear.

The wine I have sent you; but some of the medicines demanded are not kept in military stores, and others we have nearly run out of, so that I have been compelled to curtail your demand on the present occasion.

I have, &c.

(Signed) J. HALL,

Dr. Linton, Inspector Gen. of Hospitals.
&c. &c.

No. 422.

To the Quartermaster General at Varna.

SIR, Varna, 13th August 1854.

I HAVE the honour to enclose a report from Assistant Surgeon O'Leary, in medical charge of the dépôt companies, stating that, in his opinion, the health of the men is suffering from the proximity of their camp to an extensive cemetery where the French bury their dead from cholera. I can easily imagine this to be a source of much mischief, as the trenches in which the dead are deposited are shallow, and the emanations from the ground must be very offensive during this hot weather, and will continue to increase until such time as the bodies are decomposed.

I have, &c.

(Signed) J. HALL,

The Quartermaster General at Varna, Inspector Gen. of Hospitals.

No. 423.

To Dr. Menzies.

SIR, Varna, 13th August 1854.

I HAVE received your communications of the 6th, 7th, and 8th, and approve very much of what you have done, as you have recommended what I have all along been advocating; and in a conver-

sation I had with Lord Raglan this afternoon he urged the propriety of your taking immediate steps for purifying by washing and whitewashing that portion of the barrack which you propose occupying as an hospital for sick and wounded, which, if I understand your letter rightly, is that which faces Constantinople, and half along the side which looks towards the Sea of Marmora.

I would not recommend you to put either sick or wounded into that part of the building where the 47th Regiment was quartered, as the drains and privies are out of order, the stench great, and the ventilation of the rooms indifferent. His lordship seemed to think your application to the ambassador through Admiral Boxer might fail from some omission on his part, and recommended your taking an opportunity of putting yourself in communication with the chief dragoman of the embassy by calling on him, and personally ascertaining what steps had been taken, and whether there was any prospect of your demand for the whole of the general hospital at Scutari being complied with.

The hospital at Kululie, I quite agree with you, is objectionable on account of its site, and the small one at Bujuk Leinan, higher up the Bosphorus, from a report Lord Raglan sent me yesterday to read, appears to be still more so. Besides, a number of small establishments will fritter away our means and numbers, the latter of which is decreasing fast from the number of medical officers taken ill, frightened, and gone away.

We have removed a number of boards and tressels and a quantity of bedding; but I cannot form an idea of what you are likely to want until I get the returns from Mr. Ward and Mr. Reade. I have to-day submitted a code of instructions for purveyors for his lordship's approval, and in future they must be enforced.

This outbreak of cholera is a sad calamity just now, and I am sorry to say it does not abate the least in some of the camps. I should say our loss by the disease was more than 400, but I have not yet got in the weekly states to the 12th instant.

I have, &c.
(Signed) J. HALL,

Inspector Gen. of Hospitals.
Dr. Menzies,
&c. &c.

No. 424.

To Lieut.-Colonel Steele.

SIR, Varna, 15th August 1854.
In obedience to Lord Raglan's order, I directed Dr. Dumbreck, Deputy Inspector General of Hospitals, to proceed on board the "Star of the South" transport, No. 49; and I have now the honour to enclose his report for his lordship's information.

Dr. Dumbreck does not recommend the men to be landed at present, in which opinion I concur, and he points out an intolerable nuisance on board, which, it is to be hoped, will be speedily removed, as he has recommended.

I take the liberty of forwarding this report to you as the readiest means of reaching his lordship.

I have, &c.
(Signed) J. HALL,

Inspector Gen. of Hospitals.
Lieutenant Col. Steele,
&c. &c.

Note.—Some cases of cholera had occurred amongst the men on board the "Star of the South," and Dr. Dumbreck found the stock pens on deck in a most offensive state.—J. H.

No. 425.

EXTRACT of a letter to Staff Surgeon Dr. Macdonell, Principal Medical Officer of the Light Cavalry

Brigade, informing him that 1,350 cholera belts had been sent out to him for distribution, as well as an extra supply of quinine.

No. 426.

To General Airey.

Lines before Sebastopol,
26th October 1854.

SIR, In returning the enclosed communications, I beg to state, for the information of the Commander of the Forces, that, in my opinion, it would be highly objectionable to place either sick or wounded on the orlop deck of vessels that have carried horses.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

General Airey,
&c. &c.

No. 427.

To the Quartermaster General of the Army in Turkey.

Camp before Sebastopol,
27th October 1854.

SIR, I HAVE the honour to state, for the information of the General Commanding in Chief in Turkey, that there are many men whose ailments unfit them for military duty at present, and are likely to do so for some time to come, but yet are not of sufficient gravity to require their being sent to England. This class of patients, I think, would be benefited, and, perhaps, more speedily restored to the ranks, by a change to Malta than by any other means; and I take leave to submit the proposition for his lordship's consideration.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

The Quartermaster
General, &c.

No. 428.

To Brigadier General Airey.

Lines before Sebastopol,
20th November 1854.

SIR, If the army is to remain in position here much longer, it will be absolutely necessary to provide more effectual shelter for the sick than they have at present, or many of them will perish. The storm of the 14th blew down all the hospital marquees, and damaged many, some to such a degree that I question whether they can be repaired or not.

The means of transport to get the sick on board ship is very defective, as the Commissariat can lend us no assistance, and the few ambulance waggons that are here are rapidly becoming inefficient from the mules knocking up, and the waggons themselves getting out of repair. I recommend that a further supply of waggons and mules be imported at once from Varna or wherever they are at present, and that temporary wooden buildings be erected without delay for the sick in camp.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Brigadier Gen. Airey,
&c. &c.

No. 429.

To Brigadier General Airey.

Lines before Sebastopol,
21st November 1854.

SIR, In continuation of my letter to you of the 19th instant, regarding shelter for the sick and wounded, I beg to call your attention to a new building at the Military School, Balaklava, at present occupied as a general hospital, which is nearly

finished, and, if completed, would accommodate about 30 sick, and afford cellarage for stores.

When we first took possession of the building, I applied to the late Colonel Alexander of the Engineers to have it covered in, and doors and window shutters made for it; and he went with me to inspect the building.

At that time there was planking and timber on the spot all ready to complete the building, and he said it could be easily done, but that they had no workmen to spare.

Now a great portion of the planking and boards has been taken away, I understand, by the Engineers themselves to make platforms for the batteries; but still a sufficient number remain, I think, nearly to complete the work; and I request instructions may be given to some Engineer officer to examine the building.

I wish also for authority to be given to occupy such other houses in the village as are best suited for the reception of sick and wounded, our present accommodation being totally inadequate to the purpose.

Another question I wish to ask. Is it safe, and have I authority, to re-land the hospital equipment that was ordered to be shipped when Balaklava was threatened some little time ago?

I have, &c.
(Signed) J. HALL,

Brigadier Gen. Airey, Inspector Gen. of Hospitals,
&c. &c.

No. 430.

To Brigadier General Airey.

Lines before Sebastopol,
22d November 1854.

SIR,

HAVING directed inquiry to be made concerning the accommodation for sick which could be obtained in the village of Karani, I have the honour to enclose communications which I have this day received from Assistant Surgeon Thornton of the Royal Artillery,* and Staff Surgeon Dr. Macdonell, Medical Superintendent of the Cavalry Division;† and if it be consistent with the arrangements existing, I beg to recommend that the sheds alluded to be at once appropriated for the reception of sick, and that the Commissariat mule drivers and arabagees who are now in possession of them be directed to vacate them and find accommodation elsewhere.

The village of Karani is sheltered, and well adapted, I think, for the reception of sick during the winter.

I have, &c.
(Signed) J. HALL,

Brigadier Gen. Airey, Inspector Gen. of Hospitals,
&c. &c.

No. 431.

ON the 23d of November the following correspondence was submitted for my remarks by Colonel Gordon, Deputy Quartermaster General:—

MY DEAR SIR, November 23d.
I ENCLOSE a report from the officer in charge of our transport dépôt, representing that it is proposed to convert the stables at present occupied by our mules at Karani into an hospital (regimental).

I do not know by what authority the medical officer is acting in the matter; but I can only say, that if the measure is carried into effect, the transport of the army will be destroyed.

Yours, &c.
The Quartermaster General. (Signed) W. FILDER.

Referred to Dr. Hall for his remarks.

By order,
(Signed) A. GORDON,
23rd Nov. 1854. Acting Quartermaster General.

* Letter from Assistant Surgeon Thornton, Royal Horse Artillery, dated 21st November 1854.

† Letter from Dr. Macdonell, Staff Surgeon, 1st class, dated 22nd November 1854.

(Copy of letter enclosed in the foregoing.)

Transport Camp, Karani,
22nd November 1854.

SIR,

I HAVE the honour to acquaint you that I understand it is in contemplation to convert the stables now occupied by the mules of the Commissariat transport service into hospitals for the Cavalry Brigade. Should this plan be carried into effect, I have no hesitation in saying that it is my opinion it will prove most injurious to the animals, if not fatal; for, having once been housed, they will be unable to bear the cold and wet to which they would be exposed under these altered circumstances. I therefore most strongly urge that steps be taken to prevent an arrangement which threatens the total destruction of the transport of the army, more particularly as other accommodation can be procured in the village for the object in view without interfering with our department.

I have, &c.
(Signed) E. J. BARROW,
Acting Dep. Assistant
Commissary General.

To Commissary General
Filder, C.B.,
&c. &c.

Note.—All the other houses in the village fit for the reception of sick were occupied by the French.—J. HALL.

The following is Dr. Hall's remark on the above letters from the Commissariat Department, submitted to him by Colonel Gordon, a Quartermaster General at head quarters:—

"By this statement it would appear that the donkey stood higher in the scale of creation than man, and that his preservation was matter of greater importance to the state.

"Only one shed, I understood, was occupied by the Commissariat until it was discovered that the sick soldiers were to be placed there, and then they took possession of the whole. I give this from hearsay, and not from my own knowledge; but even if it were as represented in this letter, the question between the sick man and the healthy brute does not, I should hope, admit of two moments' consideration.

(Signed)
"J. HALL,
"23rd Nov. 1854. "Inspector Gen. of Hospitals."
Note.—The brutes carried the day.—J. H.

No. 432.

To Mr. Marshall.

Camp before Sebastopol,
Head Quarters, 22nd Nov. 1854.

SIR,

IN reply to your letter of this date, I have the honour to inform you that all regiments were supplied with A and B canteens when the army first took the field, and there are none in store, as it was not contemplated that any would be required beyond those that were in possession of the different surgeons of regiments.

Surgeons of regiments ought to have taken steps to recover their hospital stores when the transports on board of which they were left came into harbour at Balaklava, as no one but themselves know where they had been left, and no other person could so readily identify them.

Your messenger, I imagine, must have gone to the purveyor's clerk here, who has only a medicine chest to draw on in cases of emergency, in place of to the dispenser of medicines at Balaklava.

I have, &c.
(Signed) J. HALL,
Staff Surgeon Marshall, Inspector Gen. of Hospitals,
&c. &c.

No. 433.

To Quartermaster General of the Army in Turkey.

Lines before Sebastopol,
23rd November 1854.
SIR,
HAVING, with Lord Raglan's sanction, spoken to Dr. Forrest, Deputy Inspector General of Hospitals, in medical superintendence of the 3rd Division, about digging, and hutting the sick of the regiments, I take leave to forward a note I have received from him, pointing out the difficulties he has met with in carrying out the scheme, and request, if possible, the aid he requires may be given to him.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.
The Quartermaster General,
&c. &c.

Camp, 21st Nov. 1854.
SIR,
I FEAR you will not be able to carry out your views about the hospital huts unless Lord Raglan gives an order on the subject, and sends fatigue parties of Turks to build them. Commanding officers of regiments cannot furnish fatigue parties, as the troops are already over worked in the trenches. For instance, a regiment that was relieved in the trenches yesterday morning at four o'clock went on duty again last night.

Captain Chapman, of the Engineers, has selected a piece of ground for the hospital huts. All we now require are fatigue parties.

I have, &c.
(Signed) J. FORREST,
Deputy Inspector General of
Hospitals.
Dr. Hall,
&c. &c.

No. 434.

To Brigadier General Airey.

Lines before Sebastopol,
24th November 1854.
SIR,
I HAVE the honour to enclose a communication I have this day received from Lieutenant-Colonel Daveney,* Commandant of Balaklava, by which you will observe that, with the exception of the Commander-in-Chief's house, there is no house accommodation in the village fit for the reception of sick and wounded men. I beg, therefore, to recommend that the "Pride of the Ocean" transport, now lying in Balaklava harbour dismantled, be cleared at once, moored near the shore, and given over as a receiving hulk.

I take leave also to submit a sketch of an hospital for 30 men, and to enclose a letter from 1st Class Staff Surgeon Dr. Pine,† attached to the 4th Division, suggesting that Turkish soldiers be employed to hut the men, which I beg to recommend to the favourable consideration of the Commander of the Forces.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.
Brigadier General Airey,
&c. &c.

On the 24th November 1854 I received a note from the Adjutant General, stating that Lord Raglan had sent him back the morning state of the day

* Letter from Lieutenant-Colonel Dourney, dated 23rd November 1854.

† Letter from 1st class Staff Surgeon Dr. Pine, dated 24th November 1854. Ground plan and elevation of an hospital for 30 men.

before, in which he observed with alarm that there were 2,010 sick present in camp, and asking me if I took measures to send away all the cases I thought ought to go.

To this I replied at once, "that the sanitary condition of the army was alarming enough, and with the severe duty and exposure the men had to undergo at that inclement season I had no doubt it would increase."

The 46th Regiment, I stated, was suffering from cholera, and so, I feared, would all the troops that had recently arrived, most of whom had been landed late in the day, in heavy rain, and some of them, the 46th, for instance, without tents. Even those that were provided with tents had to pitch them on the wet ground.

The sick, I informed him, were taken down to Balaklava daily, as far as our limited means of transport would admit, but it was very inadequate to the purpose, and the Commissariat could afford us no assistance, as their transport was not sufficient for their own wants. I informed him that the prospects of the army were miserable enough; and if we were to remain in the condition we were then in, there would be a very small army indeed by the time the winter was over.

The following detail was given:—

	Non-commissioned Officers, Drummers, and Privates.
Present, and fit for duty	22,906
" sick	2,160
Absent, sick	6,843
" on command	3,140
" on employ	2,053
Missing	130
Total	37,232

No. 435.

On the same day, 24th November 1854, I received the following note from Brigadier General Estcourt:—

DEAR SIR,

LORD Raglan thinks that the Commissariat carts which go down for provisions may very well take sick with them. Of course there must be no delay in despatching them in the morning, as the carts have other duties to perform on their return. The divisional medical officers ought to see whether this can be made to work.

I have, &c.
(Signed) J. B. B. ESTCOURT.

(Reply.)

DEAR GENERAL,

THE experiment of sending sick down by the Commissariat carts has been attempted by the divisional medical officers, and has failed, chiefly, I think, from the period at which the carts leave camp,—about or a little before daybreak; but I will try again and see what can be done, for I feel it is of the utmost importance to get the sick under cover of any kind better than that of a tent.

I have, &c.
(Signed) J. HALL.

No. 436.

(Medical Memorandum.)

Lines before Sebastopol,
25th November 1854.

The General Commanding the Forces is anxious medical officers should avail themselves of the Commissariat transport of their respective divisions to

send the sick into Balaklava, and if there is any difficulty in carrying out the plan, superintending officers will be good enough to state them to the Inspector General of Hospitals.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

Reports made by all superintending officers of divisions that the Commissariat could afford no aid, as they had not transport sufficient for their own purposes.

No. 437.

To Lieut.-Colonel the Hon. A. Gordon.

SIR, Lines before Sebastopol,
26th November 1854.

IN reply to your letter of the 24th November, I have the honour to inform you that the house in Kadekoi you allude to would answer remarkably well for a small military hospital, say for 40 or 50 men, but it is occupied at present, as is the house adjoining it.

I have, &c.
(Signed) J. HALL,

The Hon. A. Gordon, Inspector Gen. of Hospitals.
&c. &c.

No. 438.

To Brigadier General Airey.

SIR, Lines before Sebastopol,
26th November 1854.

I HAVE the honour to enclose a communication which I have this day received from Dr. Alexander, Staff Surgeon 1st Class, Medical Superintendent of the Light Division, reporting the death of two men of the 7th Fusiliers from cold and exposure in the trenches on the 24th instant, and recommending appropriate buildings to be erected for the reception of the sick, huts and cooking places to be made for the men, and fuel and extra blanket issued to them, all of which are, in my opinion, reasonable and proper requests, and I beg you will have the goodness to submit them to the General Commanding the Forces for his favourable consideration.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Brigadier General Airey,
&c. &c.

No. 439.

To Lieut.-Colonel Daveney.

SIR, Lines before Sebastopol,
29th November 1854.

I HAVE the honour to enclose a letter I have received from Lieutenant-Colonel Gordon,* of the Quartermaster General's Department, stating that the Commander of the Forces approves of the house in Kadekoi, lately occupied by Mr. Filder, being appropriated for a military hospital, and directing me to apply to you for possession. I shall be in Balaklava to-morrow.

I have, &c.
(Signed) J. HALL,

Lieut.-Col. Daveney, Inspector Gen. of Hospitals.
&c. &c.

No. 440.

To the Quartermaster General.

SIR, Camp before Sebastopol,
29th November 1854.

WITH reference to my communication of the 26th instant, giving cover to a letter from Staff Surgeon

Alexander, 1st Class, concerning the want of fuel, huts, and cooking places for the men of the Light Division, I have now the honour to enclose another letter from that gentleman, forwarding one from the Surgeon of the 19th Regiment, reporting the death of five, and the dangerous sickness of eight other recruits of that corps. Mr. Longmore mentions the want of fuel, dry clothing, and blankets as the exciting cause of this outbreak of disease. The want of camp kettles, fuel, and blankets, as well as proper shelter for the men, is being seriously felt just now in the whole army, and I cannot too strongly urge the necessity of these wants being supplied as speedily as possible.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

The Quartermaster General,
&c. &c.

No. 441.

To the Adjutant General.

SIR, Camp before Sebastopol,
1st December 1854.

I THINK it my duty to bring under the notice of the General Commanding the Forces the subject of the enclosed copy of a letter from the surgeon of the 23rd Fusiliers, which has been forwarded to me by 1st Class Staff Surgeon Alexander, in medical superintendence of the Light Division, in order that more care may be taken in future in the disembarkation of troops arriving during this inclement season of the year.

I have, &c.
(Signed) J. HALL,
Inspe. Gen. of Hospitals.

The Adjutant General,
&c. &c.

Mr. Watt's letter referred to a draft of 100 men for the 23rd Regiment that arrived from England in the "Ottawa" steamer, on the 28th November, were landed at 4 P.M. the same day, and sent off to camp, —a distance of seven miles—without guides or notice to the regiment. About 30 of the men found the camp of their regiment between 10 and 11 o'clock; but the rest wandered about, and found shelter as best they could in other camps.

No. 442.

To Dr. Humfrey.

SIR, Inspector General's Office,
4th December 1854.

THE miserable state of discomfort the sick men of the 4th Division are in is quite lamentable. Some cots of a new construction, with sacking bottoms, have just been landed, and I request you will at once apply for a fatigue party of 24 men from each regiment to go to the Purveyor's store at Balaklava, and bring out 24 of these cots for the use of the sick of each corps. One cot can easily be carried by each man; and I think you will find them of great service. Pray don't delay a single day in having this done, as I consider the matter of the utmost importance.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Dr. Humfrey,
&c. &c.

P.S.—Indent for 144 cots on the Purveyor, and I will write to him to comply with your demand without further reference to me.

(Signed) J. H.

* Letter from Lieutenant Colonel Gordon, dated 26th November.

* Letter from Surgeon Watt, 23rd Fusiliers, dated 1st December 1854.

Wrote to Dr. Forrest on the same day to send for 84 of Dr. Smith's cots for the 3rd Division from the Purveyor's store.

To Dr. Alexander to send for 100 for the Light Division.

To Mr. Marshall to send for 144 for the 2nd Division.

To Dr. Linton to send for 80 for Guards' Brigade of the 1st Division, the sick of the Highland Brigade being in houses.

To Mr. Elliot to send for 34 for the Siege Train.

No. 443.

To Dr. Alexander.

Camp before Sebastopol,
5th December 1854.
SIR,

THE picture you draw of the condition of the men is a melancholy, but I fear too true a one. By yesterday's orders you will observe that fuel and lights are to be issued to the troops, which is one point gained.

How is it that the Light Division has not got its proportion of the blankets and warm clothing brought out in the "Jura," on account of the Quartermaster General's Department, for distribution to the army? A large quantity of warm clothing is on its way out from England, and, I understand, huts for the men; but they ought to have been here at the beginning of October to have been beneficial. Now the cold will be on us, as the rain has already overtaken us, before their arrival.

We are going to get the loan of the French ambulance to assist us in removing our sick down to Balaklava; a humiliating position to be placed in, I must admit, but as relief is now of the most vital importance, we shall be glad to avail ourselves of it.

It is not for want of representation that matters are as they are at present, I assure you; and I am glad you have represented it to General Codrington.

The duty is too severe for any human being to bear up against for any length of time; but I suppose the effort is necessary and unavoidable if we are to retain our position against Sebastopol.

I send you the dispenser's explanation about the calomel. The loss of the "Prince" was a misfortune to us, and will require time to remedy.

I am, &c.

(Signed) J. HALL,

Inspector Gen. of Hospitals.
Dr. Alexander, &c. &c.

No. 444.

To Brigadier General Airey.

Camp before Sebastopol,
6th December 1854.
SIR,

HAVING visited Balaklava to-day, I find there is accommodation for about 600 men on board ship, which will be filled as soon as ever we can obtain transport to carry the sick down from camp. I request, therefore, application may be made for further accommodation; and I take leave to observe, that employing such vessels like the "Blundell" and "Joseph Sheppard" is not an economical way of applying the resources of the Medical Department.

I have, &c.

(Signed) J. HALL,

Inspector Gen. of Hospitals.
Brigadier Gen. Airey, &c. &c.

No. 445.

To Brigadier General Airey.

Camp before Sebastopol,
7th December 1854.
SIR,

I TAKE leave again to call attention to the want of hospital accommodation at Balaklava, and to the unfinished state of the new building at the general hospital there; and I request you will be pleased to obtain the sanction of the General Commanding the Forces for a portion of the planking and timber recently received to be appropriated for its completion.

A small quantity of planking is also required to make some necessary repairs in the chapel at Kadokoi before its conversion into an hospital.

It is of the most vital importance to obtain better cover for the sick in camp, for as they are at present situated, medical treatment is in a great measure counteracted by the dampness and exposure they are subjected to in wet weather, as the bell tents, in which many of them are necessarily placed for want of hospital marquees, are thin, and the rain beats through them.

I have, &c.

(Signed) J. HALL,

Inspector Gen. of Hospitals.
Brigadier Gen. Airey, &c. &c.

No. 446.

14th December 1854.

Letter to Staff Surgeon Marshall, Principal Medical Officer, 2nd Division, informing him that the Purveyor in Balaklava could supply him with dried potatoes, and directing him to apply to the Quartermaster General for blankets and warm under clothing that had come out to be distributed regimentally, and of course the sick in hospital were entitled to receive their proper share.

No. 447.

To the Quartermaster General at Head Quarters.

Camp before Sebastopol,
15th December, 1854.
SIR,

APPLICATION is made to me constantly for a supply of blankets and warm under clothing for the sick in camp, but as no supplies of that nature have been sent out to the medical department, are not the sick entitled to their share of the quantities of these articles drawn by regiments from the Quartermaster General's department? and would it not be desirable for some instruction to be issued on that head?

I have, &c.

(Signed) J. HALL,

Inspector Gen. of Hospitals.
The Quartermaster General, &c. &c.

No. 448.

To Brigadier General Airey.

4th December 1854.
SIR,

FROM the daily increasing number of sick, I consider it absolutely necessary, and beg you will have the goodness to submit the question for the favourable consideration of the Commander of the Forces, that two large and commodious steamers, fitted with all necessary appliances for the comfort and convenience of sick officers and soldiers, should run regularly between Balaklava and Scutari, by which arrangement much of the discomfort and confusion of the present system of embarking the sick hurriedly on board of any vessel that may casually be in port at the time would be obviated; and if a large

* "Timandra," 216; "Joseph Sheppard," 64; "Victoria," 230; "Pride of the Ocean," 100; in addition to marines, 30; total, 640.

vessel like the "Pride of the Ocean" were moored in the harbour in aid of the general hospital, I am of opinion there would be sufficient accommodation for the reception of sick from camp during the periods between the trips of the steamers.

I have, &c.

(Signed) J. HALL,

Brigadier Gen. Airey, Inspector Gen. of Hospitals.
&c. &c.

No. 449.

To Brigadier General Airey.

Camp before Sebastopol,
17 December 1854.

Sir,

I HAVE the honour to state that the two steamers, the "Sydney" and the "Candia," which have been appropriated for the conveyance of sick and wounded men from Balaklava to Scutari, will not, I fear, in the present state of the army, be sufficient to keep the hospitals free from overcrowding, as each steamer is only calculated for the conveyance of 150 sick.

Nothing has as yet been done to the roof and building of the new building at the general hospital at Balaklava, which, as I have stated before, is most urgently required.

The windows of the church at Kadekoi have been boarded up, but before it can be occupied as an hospital, a cookhouse and other conveniences must be erected; and I request you will have the goodness to give the necessary directions for their being completed as early as possible.

As the building is spacious, stoves will be required to warm it.

When completed, I think the 42nd ought to occupy it, and give over the house they now have in the Cavalry lines to the sick of the Cavalry Division.

I have, &c.

(Signed) J. HALL,

Brigadier Gen. Airey, Inspector Gen. of Hospitals.
&c. &c.

No. 450.

22nd December, 1855.

DR. MACDONELL directed to make application for the house for the sick of the Cavalry.

J. HALL.

No. 451.

To Brigadier General Estcourt.

Camp before Sebastopol,
19th December 1854.

Sir,

IN reply to the note from the Commander-in-Chief of this date, I have the honour to enclose a weekly state of sick and a return showing the number that require removal, which amounts to 457.

The sick are got down daily so far as our limited or nearly total want of transport will admit; but the transport for the sick is so inadequate, and the accumulation so rapid, that it is fearful to contemplate.

The duty is so heavy, the exposure so great, and the supply of food and means of cooking it so uncertain, that it is not surprising disease prevails so extensively among the men, particularly in the newly arrived regiments.

When I was in Balaklava to-day I ascertained that Captain Christie had appropriated the "Australian" steamer (told off for the reception of sick) to other service, and had substituted the "Lady M'Naughten" transport, which will not accommodate more than 90 sick, and is quite inadequate to our present wants.

The general hospital at Balaklava, the "Pride of the Ocean" hulk, and the "Ottawa" steamer, are all full of sick to the extent of their accommodation.

I have, &c.

(Signed) J. HALL,

Brig. Gen. Estcourt, Inspector Gen. of Hospitals.
&c. &c.

On this occasion I suggested that the cavalry horses should be employed for the transport of sick from camp to Balaklava.

On the 9th of December the Quartermaster General having suggested that the artillery waggons should be employed for the removal of sick from camp, the following department memorandum was issued by Dr. Hall, Inspector General of Hospitals.

(Memorandum.)

"The artillery waggons will take the sick down from the divisions daily, and horses will be ordered for the ambulance waggons until the sick list is relieved.

"Superintending medical officers are requested to send in at once to the Inspector General of Hospitals a return of the bearers they have available in their respective divisions specifying the regiments, in case a party of Turks can be procured to carry them. In this list Clark's and Smith's stretchers might be included."

(Signed) J. HALL,

Inspector Gen. of Hospitals.

No. 452.

10th December 1854.

Medical memorandum issued, informing principal medical officers of divisions that on the 11th the French would lend ambulance conveyance for 1,100 sick, and directing them to be prepared by 8 a.m., so that the mules might not be kept waiting.

They were instructed to see that the men were dressed and had had their breakfasts before that hour; and each man was directed to take his blanket and great coat with him.

A medical officer, mounted if possible, was ordered to accompany the sick from each division, and directed to carry with him some restorative, such as a portion of wine or spirit and a drinking cup.

No. 453.

To all the Superintending Officers of Divisions.

(Medical Memorandum.)

12th December, 1854.

THE French will lend 300 of their ambulance mules to take sick into Balaklava early on the morning of the 14th instant; you will therefore warn and have ready the sick of your division to go down by them. The men will take their blankets and great coats. You will give directions that they have their breakfasts before they start, and you will apply to have a fatigue party at each hospital ready to assist in loading the mules, so that the ambulance may not be detained.

(Signed) J. HALL,

To all the Superintending Insp. Gen. of Hospitals.
Officers of Divisions.

No. 454.

To Superintending Medical Officers.

(Medical Memorandum.)

13th December 1854.

SUCH regiments as have not their hospital canteens should draw camp kettles through the regimental

authorities from the Quartermaster General's department, and the purveyor at Balaklava will now be able to furnish smaller saucepans in limited numbers.

(Signed) J. HALL,
Inspector Gen. of Hospitals.
To Superintending Medical Officers.

No. 455.

To all Superintending Medical Officers.

(Medical Memorandum.)

Camp before Sebastopol,
20th December 1854.

COLONEL DAVIES of the Royal Artillery says that nine Flanders waggons go down to Balaklava every morning from the different divisions, and would be able to take on an average 72 sick daily. Is advantage taken of this means of conveyance, and if not, why?

(Signed) J. HALL,
Inspector Gen. of Hospitals.
To all Superintending Medical Officers.

Difficulties were experienced in carrying this arrangement out, and very little advantage was derived from it.

No. 456.

To the Superintending Officers of Divisions.

(Medical Memorandum.)

HOSPITAL marquees have arrived. Medical officers in charge of divisions will therefore be good enough to see that the regiments which are in want of them make demands at once through the usual channel.

(Signed) J. HALL,
Inspector Gen. of Hospitals.
The Superintending Officers of Divisions.

No. 257.

(Medical Memorandum.)

Before Sebastopol,
1st January 1855.

SUPERINTENDING medical officers of divisions will instruct regimental surgeons and medical officers in charge of corps to indent at once for stores for their hospital marquees, and those that have not marquees should make demands for wooden huts.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

No. 458.

To Lieut.-Colonel Steele.

Camp before Sebastopol,
22nd December 1854.
DEAR COL. STEELE,
MR. ASPINALL's plan of cleansing muddy water by means of alum I know is extensively used at the Cape of Good Hope.

The experiment can do no harm, and as it may do good, I will call the attention of medical officers to it; but I am afraid that in the production of bowel complaints here other causes are at work besides muddy water.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.
Lieut. Colonel Steele,
&c. &c.

No. 459.

To the Principal Medical Officer at Scutari.

Camp before Sebastopol,
24th December 1854.

SIR,
I HAVE to inform you that the under-mentioned steam ships have been named, and are to be fitted up for the conveyance of sick from Balaklava to Scutari; and I have appointed the officers named as a permanent medical staff to remain on board, and I request you will have the goodness to see that these vessels are fitted up with every necessary comfort and convenience for the service on which they are to be employed; and you will impress on the officers in charge the necessity there is of their being vigilant in the discharge of their duty in every respect. They will see that the sick are properly put up, that their food is of good quality and properly cooked, and that they receive all the medical comforts which are ordered for them.

They will pay attention to the cleanliness and proper ventilation of the ship, and on this head you will draw their attention to the detailed instructions laid down in Her Majesty's regulations.

You will furnish them with medical journals and printed forms of monthly and weekly states, as well as Forms 1 and 2, for medical comforts, and you will carefully examine these on the arrival of each vessel, and ascertain that the expenditure of medical comforts corresponds with the entries in the medical journals.

You will also cause a staff surgeon of the 1st class to visit each vessel before the sick are landed, and make a written report to you of the state he found the sick and wounded in, and whether in his opinion due attention had been paid to them during the voyage.

The ships named for this service are,—

- The "Melbourne,"—2nd Class Staff Surgeon
Dr. W. Rutherford.
Staff Assist. Surgeon Mich.
Allen, Jun. " Thomas
Sheehy.
The "Australia,"—2nd Class Staff Surgeon Dr.
Thos. Moorhead.
Staff Assist. Surgeon Ancell.
The "Sydney,"—2nd Class Staff Surgeon
Donnall.
Staff Assist. Surgeon L. G.
Hooper.
The "Brandon,"—2nd Class Staff Surgeon J.
A. Wishart.
Staff Assist. Surgeon Palio-
logus.

Each 2nd class staff surgeon must provide himself with a case of capital instruments, his own property; and you will direct a medicine chest, and such other medical and surgical appliances as you may think necessary to be supplied from the apothecary's store, as well as a complete equipment of purveyor's stores, and an ample supply of medical comforts to be put on board from the purveyor's department. Amongst the purveyor's stores it would be well to include a slipper bath.

I have, &c.
(Signed) J. HALL,
The Prin. Medical Officer, Insp. Gen. of Hospitals.
&c. &c.

No. 460.

To the Adjutant General at Head Quarters.

Camp before Sebastopol,
25th December, 1854.
SIR,
I HAVE the honour to enclose a communication I have received from 2nd Class Staff Surgeon Hanbury, and I request you will submit to the Field Marshal Commanding the Forces the necessity there is of

putting a stop to the practice of sending men out at this season of the year without their great coats, and more especially in such inclement weather as it was on Saturday last.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

The Adjut. General,
&c. &c.

No. 461.

To Field Marshal Lord Raglan, G.C.B.

Camp before Sebastopol,
26th December 1854.

MY LORD,

I TAKE leave to submit a letter from Deputy Inspector General of Hospitals, Dr. Humfrey, on the subject of fresh vegetables or rice for the men as a portion of their rations; and as I perfectly concur in the view he takes of the matter, I beg respectfully but urgently to recommend the subject to your lordship's favourable consideration.

Fatigue and exposure, added to sameness and insufficiency of diet, will be sure to produce scurvy, though, as yet, very few cases of that complaint have been returned. Rice, pepper, and salt, your lordship may remember; I submitted to your lordship for favourable consideration when the army was serving in Bulgaria, and rice was for a time made an integral part of the soldier's ration, but a supply of salt and pepper, I believe, was not considered necessary to be kept in the Commissariat stores for the supply of the army; but here, where the articles cannot be procured from shops, I consider it of the very greatest importance that they should be placed within reach of the soldiers, for without them their food cannot be made palatable or easy of digestion.

I may mention I have heard from Dr. Smith, Director General Army Medical Department, that a very large supply of lime juice has been shipped at his recommendation, when it was reported to him by me that symptoms of scurvy had made their appearance in some few cases. A supply of lime juice was obtained from the navy at the time (October), and has been in use ever since.

It would be highly desirable to have a supply of fresh vegetables brought from Constantinople, or any other quarter where favourable; and, perhaps, the steamers which are to be fitted up for the conveyance of sick and wounded to Scutari might be made available for this purpose.

I think if fresh vegetables, salt, and pepper were placed within the reach of the men, they would readily purchase them, and consider it a great boon to be enabled to do so.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Field Marshal Lord Raglan, G.C.B.,
&c. &c.

No. 462.

To the Quartermaster General at Head Quarters.

SIR, 27th December 1854.

IN reply to your communication of this date, informing me that the "Tynemouth" and "Harbinger" steamers had been appropriated for the conveyance of sick and wounded to Scutari, I beg to observe, that as the accommodation of the "Harbinger" is very limited, it will be necessary to have some other ships told off at once to meet the wants of the sick in camp.

I have, &c.
(Signed) J. HALL,
Inspec. Gen. of Hospitals.

The Quartermaster General,
&c. &c.

No. 463.

To Field Marshal Lord Raglan, G.C.B.

Camp before Sebastopol,
28th December 1854.

MY LORD,

IN explanation of the report of Brigadier General Airey, that there was no medical officer present in the general hospital at Balaklava when he visited it yesterday, I trust, in justice to the officer who was on duty for the day, your lordship will permit me to submit the enclosed statement from Staff Assistant Surgeon Carte, which, from personal inquiry, I have every reason to believe is perfectly correct.

It appears the orderly sent by General Airey to call the medical officer never went to his quarters, and he, not knowing who General Airey was, seeing the purveyor, Mr. Jenner, speaking to him, did not know his presence was required.

The deficiency of orderlies yesterday arose from the withdrawal of the men of the Provisional Battalion before the arrival of those of the 71st Regiment, but that had been remedied when I visited the hospital to-day.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Field Marshal Lord Raglan, G.C.B.,
&c. &c.

General Hospital, Balaklava,
28th December 1854.

SIR, With reference to the statement made by General Airey, viz., that he visited this hospital on the 27th instant, and found no medical officer on duty, I have the honour to state that I was on orderly duty that day, and that I did not absent myself from the hospital while on such duty.

I beg further to state, that on the day above mentioned I remarked an officer in a fur-coloured coat speaking to the purveyor in the hospital yard. This I have since learned was General Airey.

I have, &c.
(Signed) W. CARTE,
Staff Assistant Surgeon.

Dr. Hall,
&c. &c.

No. 464.

To the Adjutant General, Head Quarters.

Camp before Sebastopol,
30th December 1854.

SIR,

I HAVE the honour to enclose a death report of three men of the 19th Regiment, and as it is of the utmost importance the men should not be over-fatigued in the way Private Thomas Dooly appears to have been, perhaps measures can be taken to prevent such occurrences in future.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

The Adjutant General,
&c. &c.

(Copy of Report.)

19th Regiment.—Private Thomas Doody, spasmodic cholera; admitted 27th December; died 28th December 1854; 13 hours ill.

This man on returning from piquet, where he had been for 24 hours, was sent on fatigue to Balaklava. He was so much exhausted on his return in the evening that he had to be taken to the hospital at once, and died in 13 hours. He had until lately been a remarkably healthy soldier.

(Signed) THOMAS LONGMORE,
Surgeon, 19th Regiment.

No. 465.

To Major General Airey.

SIR,
Camp before Sebastopol,
1st January 1855.
THE "Monarchy" and "Star of the South," told off by the agent of transports for the reception of sick, will not accommodate more than one half of the number now requiring conveyance to Scutari. It will be necessary, therefore, to make application if you please, for more vessels to be set apart for that purpose; and as there does not appear to be any immediate prospect of getting the new building at the General Hospital, Balaklava, roofed in, I take leave strongly to recommend, that some of the wooden sheds, which I hear have arrived, be put up in the garden in front of the hospital for the reception of sick; and I also think it of the utmost consequence, that the sick of the different regiments in camp should be similarly accommodated at the earliest opportunity, as their present shelter is in a great measure very inadequate, and the sanitary condition of the army is very alarming.

I have, &c.
(Signed) J. HALL,
Major General Airey, Inspector Gen. of Hospitals.
&c. &c.

No. 466.

To Major General Airey.

SIR,
Before Sebastopol,
4th January 1855.
I HAVE the honour to enclose a communication from Mr. Jenner, purveyor, pointing out certain repairs urgently required in the General Hospital at Balaklava, which I request you will have the goodness to instruct the engineer department to have executed as early as possible.

At the risk of being thought importunate, I beg to call your attention to the subject of cover for the sick, and that wooden huts with stoves in them be erected at once, both at Balaklava and in camp, for their accommodation.

I consider this of the utmost consequence. It is in vain to attempt to treat sick or wounded with any prospect of success under the circumstances in which they are now placed. Bell tents do not afford sufficient protection for sick men during this inclement weather, and proper shelter is necessary for their preservation.

I have, &c.
(Signed) J. HALL,
Major General Airey, Inspector Gen. of Hospitals.
&c. &c.

No. 467.

To the Quartermaster General.

SIR,
6th January 1855.
I HAVE the honour to transmit for consideration, as the repairs required are urgent, a letter and requisition from the purveyor of the General Hospital in Balaklava.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.
The Quartermaster General,
&c. &c.

No. 468.

To Major General Airey.

SIR,
Before Sebastopol,
5th January 1855.
I HAVE the honour to enclose a communication from Surgeon Marshall, principal medical officer of the 2d Division, urging the necessity of better shelter

for the men, and pointing out the lamentable result of exposure during this inclement weather.

This is a subject of vital importance to the army, and I request that early attention be paid to it, or the consequences will be fearful I am quite convinced, from the exhausted state the men are in, which renders them incapable of resisting the effects of extreme cold, such as they are now exposed to.

I have, &c.
(Signed) J. HALL,
Major General Airey, Inspector Gen. of Hospitals.
&c. &c.

(Copy of Mr. Marshall's Report.)

SIR,
Camp, 2nd Division,
6th January 1855.
I HAVE the honour to report that requisitions were sent in yesterday for wooden huts and stoves for this division, and to request that you will urge on the authorities the necessity of their immediate transmission.

I beg to report that gangrene of the feet from the severe cold is becoming of frequent occurrence among the men; five cases occurred last night in the 55th Regiment alone. I regret to say that many of the men of this division have not yet been supplied with the warm under-clothing, and in very numerous cases have only one blanket.

I have, &c.
(Signed) J. MARSHALL,
Dr. Hall, Staff Surgeon, &c.
&c. &c.

No. 469.

6th January 1855.
Extract of a letter to Surgeon Lockwood, 7th Fusiliers, from Dr. Hall:—"The wooden huts are a Quartermaster General's store, and you ought to lose no time in making a demand for them."

No. 470.
To Dr. Brown.

SIR,
Before Sebastopol,
6th January 1855.
YOUR letter of this date has just been forwarded to me by Dr. Anderson, and I regret I was not made acquainted earlier with the condition of your sick, for being so much occupied I have never had time to pay you a visit, but I am surprised Dr. Hunter, the superintending staff surgeon of your brigade, did not report it.

There are wooden huts now in Balaklava, and plenty of warm under-clothing, shoes, and blankets in the Quartermaster General's store in Balaklava, and you ought not to lose a single day in making a demand through your commanding officer for what you require, and getting them up the hill.

If there is any thing else I can help you in I shall be very happy, but the necessity of huts for the sick I have represented to the Quartermaster General as strongly as I can, so that I imagine the only difficulty you will experience will be the transport up the hill.

I am having three erected in the garden in front of the General Hospital, which will give us accommodation for about 75 additional sick, so that what between them and the "Pride of the Ocean" receiving ship, you will, I hope, at any rate be able to obtain accommodation for urgent cases of disease; but it will be more satisfactory to you, I dare say, to have them under your own care, if you can obtain proper cover for them, but it must be bitterly cold on the hill tops now. For God's sake do not delay in getting blankets and warm clothing for the men! The duty men ought to have the warm watch coats that have been sent out. Go down into Balaklava with your quartermaster, and ferret out what you

want. There are so many claimants now, that those who do not exert themselves get nothing.

I have, &c.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

Dr. Brown,
&c. &c.

Note.—Though Dr. Brown very properly made a strong representation of the wants of the wing of the regiment he had medical charge of, it is satisfactory to state that it enjoyed comparatively good health during the whole quarter; was free from scurvy, and only lost two men, one a case of dysentery, the other a case of apoplexy.

J. HALL.

No. 471.

To Major General Estcourt.

SIR,

Before Sebastopol,
6th January 1855.

I HAVE the honour to enclose a communication which I have received from Assistant Surgeon Jeeves of the 38th Regiment, complaining of interference with his professional duties on the part of Captain Howard of the 44th Regiment, who was put in military command of the party of sick proceeding to Scutari on board the "Ripon" steamer, in December last.

It appears that Captain Howard, with better intention it is to be hoped than judgment, drew wine on his own authority, and administered it to the sick on board in its pure state, to their prejudice in some instances, without either consulting or mentioning the circumstance to Mr. Jeeves, who was the person held responsible for the care of the sick and due administration of the comforts put on board for their use.

In acting thus Captain Howard, in my opinion, overstepped the duties of his position, and interfered in matters he could not understand, and with which he had no authority to meddle.

He also took upon himself needlessly to destroy public property, by ordering blankets to be thrown overboard that could have been washed and rendered serviceable again on the arrival of the vessel at Scutari.

Captain Howard makes no complaint of Mr. Jeeves to the authorities at Scutari on the arrival of the vessel there, when the matter could have been promptly and properly inquired into at once, but reserves it until his arrival at Balaklava, and Mr. Jeeves is ordered on a fresh tour of duty.

I have, &c.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major General Estcourt,
&c. &c.

No. 472.

To Mr. Marshall.

SIR,

Before Sebastopol,
7th Jan. 1855

In reply to your letter of this date, enclosing one from Surgeon Blake, 55th Regiment, pointing out the want of blankets for the sick, I request you will be good enough to instruct him, and the other surgeons of regiments, to make demands for what they require, and send them to Balaklava.

There are plenty of blankets and warm clothing in store, which ought to be drawn for the sick as well of regiments; and I beg you will see that this is done with as little delay as possible.

I have, &c.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

Mr. Marshall,
&c. &c.

No. 473.

To Surgeon Blake.

Camp before Sebastopol,
7th January 1855.

SIR,

Your letter of yesterday's date, stating that five men had been frost-bitten in the hospital tents, has been forwarded to me by Staff Surgeon Marshall. I see you complain of want of blankets, bedding, and bedsteads. Have not extra blankets, warm clothing, and shoes been served out to the men of the 55th Regiment?—and do not they bring their own blankets with them when they come sick? as, unfortunately, you have no storage in camp to keep an extra supply ready for their use.

Most regiments have got warm clothing and blankets for their sick—how is it that this is not the case in the 55th Regiment? Let me know what difficulties you have met with, and, if I can help you, I need not say I shall be most happy. I rode over to see Mr. Marshall after the receipt of your letter this afternoon, but it was nearly dark before I reached his tent, and I had not time to visit your tents.

Have you made a demand for wooden huts for your patients? because bell tents, unfortunately, do not admit of bedsteads being placed in them.

The wooden huts, I understand, have raised platforms for the men to sleep on, which would answer as well as bedsteads.

Mr. Marshall mentioned that a difficulty had been made about issuing blankets from the Quartermaster-General's store for the sick. Has this been the case in the 55th Regiment? It ought not, I think, to have existed, as every man ought to have been supplied with warm clothing and an extra blanket, whether sick or well.

I have written for blankets, but if they are wanted, and the difficulty mentioned by Mr. Marshall exists, let me know, and I will endeavour to remedy the matter of form by directing the purveyor to indent on the Quartermaster General for what you require.

I have, &c.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

Surgeon Blake,
&c. &c.

No. 474.

To Major-General Airey.

Before Sebastopol,
8th Jan. 1855.

SIR,

I HAVE the honour to enclose a communication I have received from Dr. Pine, staff surgeon, in medical superintendence of the 3rd Division, pointing out a serious omission in landing and marching up to camp, at this season of the year, a detachment of troops without a single blanket to protect them from the inclemency of the weather.

I have, &c.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major-General Airey,
&c. &c.

No. 475.

To the Quartermaster-General.

Before Sebastopol,
13th Jan. 1855.

SIR,

In returning Dr. Anderson's report of the crowded state of the men on board the "Golden Fleece" steamer, and Major M'Kenzie's letter giving cover to it, I have the honour to observe that, with fever and cholera on board, I fully concur in the opinion Dr. Anderson has formed, and take leave to suggest that the drafts be separated from the 39th Regiment and placed on board of some other vessel in the harbour, as this is not desirable weather to encamp

on shore, and shelter in the village of Balaklava cannot be obtained at present.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

The Quartermaster General,
&c. &c.

No. 476.

Extract of a Letter from Dr. Hall to Dr. Linton, Principal Medical Officer, 1st Division, dated 15th January 1855.

"WE have received more boards and tressels by the 'Manilla;' but above all things try and get wooden huts for the sick of the regiments. Go and see the one we have put up in front of the general hospital at Balaklava, and you will be a convert at once; or ask some of the commanding officers when they are down in Balaklava to look at it, and I am quite sure they will at once afford you all the aid in their power to get them up for their men, many of whom, if so housed, would get well as soon as at Scutari."

No. 477.

To the Quartermaster General, Head Quarters.

Before Sebastopol,
18th January 1855.

SIR,
In returning the enclosed papers, I beg to observe that, so long as numerous ships have to be fitted up at a few hours' notice for the reception of sick from limited stores, articles will occasionally run short, or be altogether wanting, but every effort is made to remedy this as much as possible.

The only effectual way of remedying the evil altogether would be for positive orders to be given to fit out properly the steam vessels recommended for the conveyance of sick; and so soon as that is accomplished, all these frequently-recurring defects and complaints would be removed, as each vessel would arrive comfortably equipped with medicines, materials, medical comforts, and surveyor's stores, and would be ready to receive the sick on board at once.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

The Quartermaster General,
&c. &c.

Some delay had taken place in fitting out the hospital ships at Constantinople, and one or two of them were ordered off to the Crimea by the port admiral without their medical equipment.

No. 478.

To Major-General Airey.

Before Sebastopol,
19th January 1855.

SIR,
I HAVE the honour to submit a complaint from the surgeon of the 19th Regiment,* of his utter inability to get up a hut from Balaklava for the use of the sick, through any means within his power; and as better shelter for the sick is of such vital importance, I beg to urge this on your serious attention, or the whole army will speedily melt away.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major-General Airey,
&c. &c.

* Letter from Surgeon Longmore, 19th Regiment, dated 6th January 1855.

Letter from 1st Class Staff Surgeon Alexander, enclosing the same, dated 17th January 1855.

No. 479.

To the Quartermaster General.

Before Sebastopol,
19th January 1855.

SIR,
I HAVE the honour to enclose a letter from the purveyor at Balaklava pointing out the necessity of having fresh privies erected at the hospital, as those now in use are full and very offensive, and there is no means of hiring labour to empty them.

This service is urgently required, and I request you will have the goodness to draw the attention of the Engineer department to the subject.

I think, too, if the earth was taken out of the new building so as to make the ground floor as deep at one end as the other, storage might be obtained for many articles.

The huts answer well for sick, and it would be desirable to erect six or seven more in front of the hospital, which, with the hospital, would afford comfortable accommodation for 400 sick. This too is urgent, and ought to be carried out at once in my opinion.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

The Quartermaster General,
&c. &c.

No. 480.

To Major General Estcourt.

Before Sebastopol,
24th January 1855.

SIR,
I HAVE the honour to enclose a communication from Doctor Hume, staff surgeon* in medical charge of the 3rd 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 Quartermaster, or whoever has charge of the baggage animals of the division. I myself saw an artilleryman brought from the direction of the huts two days ago in a state of intoxication at midday.

When on the subject of camp nuisances, I may mention that proper latrines should be dug in all the camps, and the soil covered over daily with earth.

All dead animals ought to be buried in place of being allowed to decay and taint the air above ground.

It would also be highly desirable to direct the pioneers to clear round the hospital marquees and tents daily, collect all offal, dirty and condemned clothes, and rags, &c., 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 officers are spoken to by me on these matters, 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 in camp economy. If the present system be allowed to go on, diseases of a graver character than even those now prevailing among the men will make their appearance to a certainty, 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

* Letter from Staff Surgeon Dr. Hume, dated 24th January 1855.

men, as their bare throats, with either a very dirty shirt or no shirt at all, has an unseemly look, and gives them an unnecessary appearance of misery and destitution.

I have, &c.
(Signed) J. HALL,
Major Gen. Estcourt, Inspector Gen. of Hospitals.
&c. &c.

No. 481.

To Major General Airey.

Before Sebastopol,
28th January 1855.

SIR,
WITH reference to your letter of the 26th instant requesting to know what quantity of quicklime I think would be sufficient to consume the carcasses of 100 dead animals, I have the honour to state that much would depend whether the bodies were collected together or detached. If detached, it would require at least one bushel of lime for each (100 bushels), and even that quantity would only temporarily correct the stench that would arise as the process of decay went on in warm weather. The best and most effectual way of getting rid of the dangerous nuisance would be, in my opinion, to bury the bodies, and throw some quicklime 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 attempts have been made to bury animals. This imperfect mode of disposing of dead animals is worse than useless, as it only prolongs the 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 regiment, quicklime would scarcely be needed; but as it is managed at present the men have no accommodation to sit on,—in many cases 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 for 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 about and rot in the different camps should be removed daily, and either burnt or buried.

While on the subject of health, it is right I should bring under the notice of the Commander of the Forces the highly objectional site that has been selected for erecting the barrack huts on at the entrance to Balaklava.

They are placed between a newly filled and imperfectly covered graveyard and a perpendicular rock, and when hot weather comes on the very worst consequences may naturally be expected.

I have, &c.
(Signed) J. HALL,
Major Gen. Airey, Inspector Gen. of Hospitals.
&c. &c.

No. 482.

To the Quartermaster General, Head Quarters.

Before Sebastopol,
6th February 1855.

SIR,
I HAVE the honour to enclose a return of repairs required to be made at the general hospital, Balaklava; and as they are all of importance and urgently

demand, I request that instructions may be given for their speedy completion.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.
The Quartermaster General,
&c. &c.

Hut wards front of building.—Raised pathways required.

The necessary means of drainage required to prevent the influx of rain water.

The washhouse.—A covered drain required to carry off the water from the wash-tubs now flowing with offensive effluvia past the principal entrance road to the hospital. A covered shed with fixed stands for tubs required to be constructed in front of the washhouse, supported by end of hospital. Posts required to be erected for the clothes lines in appropriate positions for drying.

Purveyor's store near guard room.—A secure lock and hasps to be affixed to the door, the former one having been forced with fraudulent intent.

Purveyor's store.—Repair stone pipe.

Surgery.—Repair shelves.

No. 483.

To Major General Airey.

Before Sebastopol,
9th February 1855.

SIR,
I HAVE the honour to enclose a letter which I have received from Dr. Pine, staff surgeon in charge of the 2nd Division, and if the move he alludes to be in contemplation, I quite agree with him that it would be absolutely necessary to have wooden huts erected for the reception of the sick, and boards to place in the tents for the men to sleep on before the move takes place. By marking out the site of the new encampment, and sending fatigue parties from each regiment, much might be accomplished in a short time for the comfort of the whole division, and, perhaps, much additional sickness prevented.

I have, &c.
(Signed) J. HALL,
Major General Airey, Inspector Gen. of Hospitals.
&c. &c.

No. 484.

To Major General Airey.

Before Sebastopol,
11th February 1855.

SIR,
I HAVE the honour to enclose a communication I have received from Dr. Hume, staff surgeon 1st class, superintending 3d Division, pointing out the condition of the tents of the 28th Regiment, which are so much out of repair as to afford imperfect protection to the men from the inclemency of the weather, and that the number of sick in the division is rapidly increasing.

He also reports that no boards have been procured for the men to sleep on either in the 38th, 88th, or F battery of artillery, and that this is the fourth day the men have been on salt rations, sick and well.

The sick report yesterday contained 1,465 men, and the list is so rapidly increasing, that he considers, and so do I, the sanitary state of the division is deserving of immediate and serious consideration.

I have, &c.
(Signed) J. HALL,
Major General Airey, Inspector Gen. of Hospitals.
&c. &c.

No. 485.

Extract of a Letter from Dr. Hall to Major General Airey, dated 11th February 1855, regarding the "Brandon" Hospital Ship.

"As the 'Brandon' is supposed to be set apart for the conveyance of sick and wounded from the Crimea to Scutari, and ought at all times to be ready to receive sick on her arrival at Balaklava, it is manifest that crowding her with mules, Turkish labourers, or mere convalescents is not the best way of securing that desirable end, as the ship then requires to be cleaned and fumigated when she comes into port in place of being ready to receive sick."

"The question of fresh meat has been arranged and I see no difficulty in a similar arrangement being carried out regarding fresh bread when the sick remain on board after the arrival of the ship at Scutari."

No. 486.

To Mr. Hanbury.

Before Sebastopol,
10th February 1855.

SIR,
I HAVE the honour to acknowledge the receipt of your letter of this date, stating that you feel compelled, by a grave sense of public duty, to record your opinion that the artificial diet which has been in use in this army is utterly inadequate, and suggesting that it should be pointed out to the Commander-in-Chief that a diet more in accordance with the resources of the age and the peculiar exigencies of our position be adopted, in which lime juice, preserved potatoes and other vegetables, preserved milk, bread, fresh and preserved meat, might find a place, and in reply have to observe, that the correctness of your view cannot be doubted; and if you refer to the General Orders of this army you will observe that measures have been taken to improve the diet of the men, that lime juice, which had previously been liberally supplied for medical purposes, is there directed to be issued as an integral portion of the soldier's ration; that preserved potatoes have been issued generally from the Commissariat stores to the troops; that Government are sending out preserved vegetables periodically, and the Commissary General has orders from the Commander-in-Chief to purchase all the onions, potatoes, and other vegetables that come into the market; and that large quantities of onions and potatoes have been issued to the troops lately; and fresh meat, which has been scantily supplied for some time past, will be more abundantly supplied in future.

I shall, however, be happy to submit any other suggestions you may favour me with; and I will take an opportunity of submitting your present letter for his lordship's consideration.

In some of the Scotch regiments, I may add, oatmeal has been issued.

In the early part of the winter it was little better than a struggle for existence. The men were indifferently fed, hardly worked, badly clad, and insufficiently sheltered. No wonder, therefore, that disease prevailed, and such would have been the case whatever quantity of lime juice had been provided.

Indeed, many medical officers who were induced to try it in diarrhoea, on your favourable report, state that, so far from doing any good, it aggravated the complaint, and brought on dysentery. So that you see, though you have much faith in it, others have not; and the views of medical men differ as much in this as on many other points.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Mr. Hanbury,
&c. &c.

No. 487.

To the Quartermaster General, Head Quarters.

Before Sebastopol,
12th February 1855.

SIR,
I HAVE the honour to enclose a note from 2nd Class Staff Surgeon Hanbury, in charge of the general hospital at Balaklava, mentioning a suggestion of Major Hall's about building a small room, opening from the nurses' apartments, for cooking extra articles of diet in, the wooden hut which has been erected not answering well for the purpose. I think the place a good one, and if you coincide in opinion with me, perhaps you will be good enough to obtain authority for the work to be completed without delay.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

The Quartermaster General,
&c. &c.

No. 488.

To Major General Airey.

Before Sebastopol,
13th February 1855.

SIR,
I HAVE the honour to submit a copy of a letter from Dr. Hume, principal medical officer of the 3d Division, pointing out the unserviceable condition of the tents of the 28th Regiment, and beg to draw your attention to his observation about taking the most serviceable portion of the tents from the healthy men for the accommodation of the sick. Such an arrangement, as he very properly observes, could have no other result but that of rendering the men now effective non-effective. 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.

I have &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major General Airey,
&c. &c.

No. 489.

To Commissary General Filder.

Before Sebastopol,
13th February 1855.

SIR,
I HAVE the honour to inform you, that the principal medical officer of the 3d Division, Dr. Hume, has reported to me that this is the fifth day the whole of the sick of the 3rd Division have been on salt rations.

With the tendency there is to scorbutic dysentery, this is very prejudicial to the welfare of the sick, and it would be highly desirable to take steps to prevent a recurrence of this if possible.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Commissary General Filder, C.B.
&c. &c.

No. 490.

To Field Marshal Lord Raglan, G.C.B.

Before Sebastopol,
13th February 1855.

MY LORD,
DIET is a question of so much importance to the welfare of an army, that I think it advisable, and beg to recommend your favourable consideration, that a committee be appointed to take into consideration the present mode of rationing the troops in the Crimea,

and see if any and what changes can be effected by way of improving it.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals,
Field Marshal Lord Raglan, G.C.B.,
&c. &c.

No. 491.

Extract of a Letter from Dr. Hall to Major Hall, with a Letter from Mr. Hanbury concerning the Hospital at Balaklava.

"The hospital is from necessity over-crowded, and free ventilation is of the most vital importance to the welfare of the sick. If it is not carried out fever will spread and become very destructive. I trust, therefore, you will be able to send a couple of men to do what is required."

No. 492.

To all Superintending Medical Officers of Divisions.

(Medical Department Order.)

Camp before Sebastopol,
17th February 1855.

THE Inspector General of Hospitals is sorry to find from recent inquiries that itch, scurvy, ulcers, and personal filth prevail amongst the men of the different regiments for want of due attention on the part of the regimental medical officers in making the periodical inspections of the men in their tents required by the regulations of the service. 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 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 and shirts.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

To all Superintending Medical Officers of Divisions.

No. 493.

To all Superintending Medical Officers.

(Medical Memorandum.)

Before Sebastopol,
14th March 1855.

MANY of the hospital huts in the divisions are over-crowded with sick, particularly where fever is the prevalent disease. Dr. Hall requests that the number in each hut may be limited to 16 or 18 with fever patients, and 18 or 20 with other complaints, and that these numbers be never exceeded.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

To all Superintending Medical Officers.

No. 494.

To the Quartermaster General, Head Quarters.

Before Sebastopol,
20th February 1855.

SIR, I HAVE the honour to furnish the annexed letter from Dr. Anderson, Principal Medical Officer at Balaklava, complaining of the unfinished state in which the new privy at the General Hospital has been left, and pointing out the necessity of having some improvements made in the latrines of the wooden huts in front of the hospital.

Both these representations are so reasonable, and the accommodation so urgently demanded, that I trust you will have the goodness to give directions that the work may be completed at once.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals,
The Quartermaster General,
&c. &c.

No. 495.

22d February 1855.

Dr. Hall to Quartermaster General, forwarding two letters from Mr. Fitzgerald, purveyor, about repairs urgently required at the General Hospital, Balaklava.

No. 496.

To Dr. Hume.

Head Quarters, Camp before
Sebastopol, 21st February 1855.

SIR, 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 every second day, to prevent accumulation of filth of every kind which is so apt to collect if this be not attended to.

It would be a good thing for you to recommend to 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 establishment and near the men's tents collected daily, and either burnt or buried. I think your graveyard, at least the one to the eastward of the hospital huts, is too near to them; but I do not know if you bury your dead there or not at present.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Dr. Hume,
&c. &c.

No. 497.

To the Quarter-Master General, Head Quarters.

SIR, 1st March 1855.

I HAVE the honour to enclose a communication from the purveyor at Balaklava regarding a dunghill at the southern extremity of the hospital, recently deposited there, which I have directed him to get removed; and as the nuisance is one of serious importance, I request you will be pleased to give instructions for its immediate removal.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

The Quartermaster General,
&c. &c.

No. 498.

To the Quarter-Master General, Head Quarters.

Camp before Sebastopol,
1st March 1855.

SIR, HAVING visited all the regimental encampments of the 3d Division this morning, I am of opinion that the lines of the 44th and 50th Regiments are too much crowded, and that in the immediate vicinity of none of the regiments of the division is there eligible ground for placing hospital establishments.

I think by erecting hospital huts for the 18th, 38th, and 50th Regiments, on the slope of the hill between the present hospitals, and the lines of the 89th Regiments, space will be given, and the necessity for occupying the ground in the neighbourhood of the ravine to the eastward of the hospitals avoided.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

The Quarter-master General,
&c. &c.

No. 499.

To the Quarter-master General, Head Quarters.

Before Sebastopol,
7th March 1855.

SIR,

I HAVE the honour to state, for the information of the Field Marshal Commanding in Chief, that in company with Lieut.-Col. Gordon, Major M'Kenzie, Captain Keane, and Dr. Anderson, I visited the ground on the western side of the entrance into Balaklava harbour for the purpose of examining and seeing if it would be an eligible site to erect hospital huts on.

The situation is dry and open, and there is a well of water at hand which would supply water at present, but whether it would be sufficient during the dry weather is questionable. The other objections are distance from supplies, inconvenience of boat conveyance, and fear of difficulty in landing when the wind is southerly, and the swell sets in from the sea.

We afterwards visited the hill near the castle, and found, by lengthening the foundations already dug, we could erect six of the hospital huts on the western or castle end of the plateau, and nine in a vineyard to the eastward, in all fifteen; perhaps eighteen, might be got in, and one house for officers. This, with the huts at present erected, would give accommodation for ten officers and 650 patients; and it was our opinion that it would be most advantageous to place the huts there, as the site is good, the supply of water abundant, and it would economise our resources.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

The Quarter-master General,
&c. &c.

Mem.—Since the gutta percha tubing was applied for, an arched reservoir fed by piping leading from a spring has been discovered in the ravine near the old castle, which renders the tubing unnecessary.

(Signed) J. HALL.

The Quartermaster General,
&c. &c.

No. 500.

To Field Marshal Lord Raglan, G.C.B.

Before Sebastopol,
8th March, 1855.

MY LORD,

I TAKE leave to recommend, and request your Lordship's sanction for the assembly of a board of health, composed as below, to take into consideration the sanitary condition of the army, and that their attention be directed to the following points, viz. :—

- Diet and water ;
- Accommodation for sick and well ;
- Clothing ;
- Duty ; and
- Locality ;

and that the board be instructed to report on the

best means of remedying, removing, or abating whatever may appear to be prejudicial to health,—

Dr. Hall, Inspector General of Hospitals.
Dr. Linton, do. do.
Dr. Alexander, do. do.
Dr. Macdonell, do. do.
Dr. Hume, Staff Surgeon, 1st Class.
Dr. Wood, do. do. do.
Dr. Mouat, do. do. do., to act as Sec.
Dr. Anderson, do. do. do., for Balaklava

only, as it would be inconvenient and prejudicial to the service for him to attend the meetings of the Board at the different divisions in camp, but his opinion will be taken on all general points when the board assembles at Balaklava.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Field Marshal Lord Raglan, G.C.B.,
&c. &c.

No. 501.

To Major General Airey.

Before Sebastopol,
14th March, 1855.

SIR,

IN anticipation of any plan of ventilation that may be recommended by the board now sitting, I beg to call the attention of the Field Marshal Commanding in Chief to the necessity of some immediate measures being taken to remedy that defect in the hospital huts, and I would suggest that a small party of sappers be sent at once to bore holes through the sides of the huts just under the eaves, with either augurs or centre bits, and through the bottoms of the doors, and under the windows opposite; half a dozen men could perform this duty in a day or two. I think there ought to be at least one hole in each plank along the sides, and two rows of six or eight holes through the bottoms of the doors, and under the windows opposite, one row about four and the other six inches from the ground—^{o o o}so.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major General Airey,
&c. &c.

No. 502.

To Major General Airey.

Before Sebastopol,
14th March 1855.

SIR,

I NOTICED last evening on my way home from the 2d division that the officers of the Land Transport Corps are pitching their tents to the eastward and not far distant from the hospital establishments of the 4th Division. It will be very detrimental to the sick to have such a number of animals as the Land Transport Corps will consist of congregated so near to hospitals, and I think it would be desirable to fix on some other locality before the animals are brought up.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major General Airey,
&c. &c.

No. 503.

To Major General Airey.

Before Sebastopol,
17th March 1855.

SIR,

I BEG to bring to your notice the slow progress they are making in erecting the huts at the convalescent hospital at the old castle, Balaklava, for want of carpenters and labourers. Not one of the

hospital huts has been got up yet, and the sappers at work—two—will be some days in completing the common huts which have already been erected. It is of the utmost importance that we should have a certain portion of spare accommodation ready at present to meet any emergency that may arise, and I beg most earnestly to call your attention to this subject.

Are the huts that were occupied by the 39th disposable at present?

I have, &c.

(Signed) J. HALL,

Major General Airey, Inspector Gen. of Hospitals,
&c. &c.

No. 504.

19th March 1855.

REPORT with weekly state to the Commander-in-Chief, pointing out that the health of the men of the 79th and 93d Highlanders was affected by the locality of their camps, but that strong reasons prevented their removal.

No. 505.

To Major General Airey.

Before Sebastopol,

23d March 1855.

SIR,

WITH reference to accommodation for wounded men, in the event of any emergency arising, I have the honour to state, for the information of the Field Marshal Commanding in Chief, that in addition to the accommodation which the regimental establishments of the divisions in front will afford, say from 250 to 300, I propose to occupy thirty of the new huts in rear of the 3d Division at present in possession of the 14th and 39th Regiments, which would afford comfortable accommodation for 480; and as these huts are built on dry, elevated, clear ground, with water not very distant, I calculate thirty more of the huts might be given over in case of any very great emergency, and the troops put under canvass, which would afford room for 480 more.

At the sanitarium at Balaklava, I calculate an accommodation for 200 wounded in addition to the convalescents there at present, when the huts now in course of erection are completed.

From the crowded state of the general hospitals at Scutari, the length of time they have been occupied, and the amount of traffic that has prevailed in them of late, I am most unwilling to send wounded men there if I can possibly avoid it, but should necessity compels us to that measure, the

Melbourn	-	-	-	130
Brandon	-	-	-	110
Sydney	-	-	-	100
Australian	-	-	-	100
Severn	-	-	-	180
				620

steamers are already fitted as hospital ships, and would be capable of transporting with ease and comfort 620 wounded.

The hospital establishments at Smyrna and Abydos, are full; and as typhoid fever is reported to have made its appearance in the hospital at Smyrna, it would not be desirable to send wounded men there during its continuance.

If compelled to form another hospital establishment out of the Crimea, I should suggest, from what I have heard, that Sinope be selected. I speak from hearsay, for I have never been there myself; but, perhaps, the Commander-in-Chief might be pleased to have it surveyed by some competent person, and a report made of its capabilities.

Our accommodation for wounded, taking minimum numbers, will therefore stand thus:—

Regimental hospitals	-	-	250	to	300
New huts occupied by 14th and 39th Regiments	-	-	480	to	960
Sanitarium at Balaklava	-	-	200		

Additional - - - - - 930

On board transports - - - - - 620

Total - - - - - 2,080

I have, &c.

(Signed) J. HALL,

Major General Airey, Inspector Gen. of Hospitals,
&c. &c.

No. 506.

To Field Marshal Lord Raglan, G.C.B.

Before Sebastopol,

25th March 1855.

MY LORD,

I HAVE the honour to submit the report of the sanitary board* ordered to assemble on the 10th instant, as well as a report on the advantage of giving tea, coffee, and cocoa, on alternate days to the troops serving in the field.

I have, &c.

(Signed) J. HALL,

Inspector Gen. of Hospitals,

Field Marshal Lord Raglan, G.C.B.,
&c. &c.

11th March 1855.

Proceedings of a board of medical officers assembled by order of Field Marshal Lord Raglan, G.C.B., Commanding in Chief, to inquire into and report on the sanitary condition of the army encamped before Sebastopol.

PRESIDENT.

Dr. Hall, Inspector General of Hospitals.

MEMBERS.

Dr. Linton, Deputy Inspector General of Hospitals.
Mr. Alexander, " " "
Dr. Maedonell, " " "
Dr. Hume, 1st Class Staff Surgeon.
Mr. Roberts, " "
Mr. Mout, " "
Dr. Anderson, " "

The board having duly and carefully inspected and inquired into the state of the camps, hospitals, and interior economy of the different regiments and divisions of the British army in the Crimea, beg to offer the following suggestions for adoption:—

1st, Diet and Water.—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 attributable to two causes, a distaste or dislike for food which affords little variety, and the well-known penchant of the British soldier for spirits. Although fresh meat is now 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.

* Proceedings of a sanitary board.

† Proceedings of a board on tea, coffee, and cocoa.

This Report refers to the present month, but the Board are aware that in the winter the troops were for too long a period on salt rations exclusively, which were sometimes eaten half raw, or quite so, for want of adequate means of cooking. This contributed undoubtedly to the generation of scurvy, and 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 three times a week at least, alternating with salt, and that the salt meat be soaked—the pork twelve and the beef twenty-four 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 recommended by a special Board on that subject on the 22d instant.

Water.—Too little attention appears to be paid to the water, which, though limited, is allowed to run to waste, and, from the absence of tanks or proper means of collecting, is often charged with mud, or animal and vegetable impurities. It is, therefore, suggested that immediate steps be taken to husband the water, and dig wells in different directions before the summer season, or the effects of a dearth may be experienced. Referring to the water supply of the 3d division especially—but the same principle applies to all the other divisions—it is recommended that the tank No. 1 nearest the spring be cleansed 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 houses, and that No. 3 be appropriated to the purposes of ablution; as these tanks are all on different levels, and fall one into the other, this arrangement can be easily effected. At present there is great waste both of time and water, and the latter is polluted, and rendered unfit for use by washing clothes, &c. in the tanks.

2d. 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 may be likely to experience, and that the ventilation cannot be tampered with by the men themselves.

The plan of ventilation proposed is as follows:—Three wooden tubes, eight inches square and eighteen inches long, to be inserted in the roof of each hut, twelve inches projecting outside and six inches in, with a penthouse covering; that holes be bored at the bottom of the doors, and a ventilation placed over the fixed windows. With a view to prevent unwholesome crowding, that the accommodation of every hut for sick be limited to eighteen—in fever cases to even less—and that twenty-four be the maximum of those in health.

Clothing.—That all superfluous warm clothing, such as sheepskins, buffalo 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 medium of propagating 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 very few regiments, they 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 of boots and clothes, and be compelled to appear at least once a week in clean under garments, and that daily personal ablution be enforced.

Camps.—The locality of many of the camps appears 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 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 vicinity—that great attention 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 deodorising, ashes and refuse charcoal, as well as lime, should be frequently used; that the men's tents be boarded, and not over-crowded; the outer walls to be raised daily when the weather will admit of it, and in marquees the inside walls to be lowered as well. The tents should be struck in fine weather at least once a week, and the men's blankets and clothes ought frequently to be put out to air.

Duties.—The onerous nature of the duties performed by the troops in front have attracted the attention of the Board—in most regiments the men passing only every alternate night in bed. This has been considered by all the medical officers as one of the principal exciting causes of disease, and has been productive of frequent relapses in all men recently recovered from sickness. It in a great measure accounts for the large number of sick and convalescents in camp, as well as the fatality of some diseases, relapse being productive of incurable organic change. The Board abstain from offering any comment on this subject, being aware that the nature and amount of the duties must depend on the strength of the force and the service to be performed, but think it necessary to point out that the men returned from night work in the trenches should not, if possible, be employed on fatigues, but be allowed, if so inclined, to sleep in the daytime.

Having adverted to the chief predisposing and exciting causes of sickness under the several heads laid down for their consideration. The Board beg to call the special attention of the authorities to the burial of the dead, particularly with reference to the depth of the graves, and their contiguity to camp. They consider the depth of the graves should be at least four feet, covered with two feet of earth, and a portion of quick lime thrown in. That, in their opinion, the site of the huted encampment at present occupied by the Coldstream Guards is highly objectionable,—

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.

2ndly, 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 imperfectly buried, as well as by the accumulated filth at the head of the harbour. Spotted typhus fever having shown itself in the regiment 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; the encampment of the 71st Highlanders, and Horse Artillery especially, 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 Kadekoi to the head of the harbour.

The attention of the Board has been called to the state of the latrines at the General Hospital, Balaklava, which require remedying; and as the state of the soil and absence of water render it impossible to construct privies for a large establishment, it would be advisable to have small carts and tubs to carry away all impurities daily, with paid labourers to perform this necessary work.

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 being likely to produce disease. In order to stop irregularities, such as the sale of spirits and camp nuisances, they strongly recommend that an efficient camp police be established, which should be directed to exercise a thorough surveillance of the bazaar establishment near Kadekoi, complaints of which have been brought to the notice of the Board.

Signed by Dr. HALL, the President, and the different members of the Board.

Before Sebastopol,
22d March 1855.

WE, the undersigned, being a committee appointed by Field Marshal Lord Raglan, G.C.B. Commanding-in-Chief, to take into consideration the advantage of giving

Tea,
Coffee, and
Cocoa,

on alternate days to the troops serving in the Crimea, are of opinion that the change would be both agreeable and beneficial to the men, and beg to recommend it particularly as regards tea and coffee; and cocoa, from our previous experience, we have seldom seen relished by soldiers, and unless the prepared kind be used, it requires too much boiling to be usefully employed as an article of diet in the field.

(Signed) JOHN HALL, M.D.,
Inspector-Gen. of Hospitals.
WILLIAM LINTON, M.D.,
Dep. Inspector-Gen. of Hospitals.
THOMAS ALEXANDER,
Do. Do.
A. S. MACDONNELL,
Do. Do.
T. D. HUME, M.D.,
Staff Surgeon, 1st Class.
FRANCIS ROBERTS,
Do. Do.
JOHN S. WOOD, M.D.,
Do. Do.
J. MOUNT,
Do. Do.

No. 507.

DR. HALL, in his Weekly Sanitary Report to the 24th March, calling the attention of the Commander-in-Chief to the prevalence of febrile complaints in some corps, particularly the 79th and 93d Highlanders, and pointing out that it was owing to

the localities of their camps, which it would be desirable to change.

No. 508.

To Major General Airey.

Before Sebastopol,
27th March 1855.

SIR,

I HAVE the honour to bring to your notice a representation that has been made to me by Staff Surgeon Roberts, Principal Medical Officer of the 4th Division, viz. :—

“ On the 7th instant a recommendation was made to the military authorities of the division to exercise better ventilation in the company’s tents; but I regret to say that I have never seen it practised, although I am in camp daily. Some better means of cleanliness and ventilation should be enacted than at present exist, as the tents are unevenly tenanted according to returns I have procured, some being occupied by from 15, 14, 12, to 2 or 3. The average throughout the division would be nine in each tent, were they equally tenanted.

The surgeon of the 38th also remarks: “ I beg particularly to call attention to the crowded state of the tents occupied by the men in camp. On an average there are no less than 12 or 14 in each tent; by far too many, considering the want of personal cleanliness. 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 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.

I have, &c.
(Signed) J. HALL,
Inspector-Gen. of Hospitals.

Major General Airey,
&c. &c.

No. 509.

To Major General Airey.

Before Sebastopol,
29th March 1855.

SIR,

I HAVE the honour to bring under your notice the very slow progress that is being made in completing the hospital huts at the old castle, Balaklava, and how very important it is that they should be finished as soon as possible, so as to be ready for the reception of sick or wounded when required.

The only hospital hut that has been erected, you will observe by the enclosed letter from Dr. Jephson, the medical officer in charge, is without felting for the roof; and from personal observation of the building to-day, I quite agree with him that in its present state, from the open condition of the boarding, it would be quite uninhabitable during wet weather. I believe there is felting in store, though not belonging to these huts, and I would beg to recommend that they be covered with it.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major Gen. Airey,
&c. &c.

No. 510.

To Major General Airey.

Sir,
Before Sebastopol,
4th April 1855.
I HAVE the honour to submit, for the favourable 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 this place are apparently so superior to many others as a convalescent station, I beg to recommend that one or more 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.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.
Major Gen. Airey,
&c. &c.

No. 511.

To Major General Airey.

Sir,
Before Sebastopol,
5th April 1855.
I HAVE the honour to enclose a communication* which I have this day received from Dr. Macdonell, Principal Medical Officer of the Cavalry Division, pointing out a nuisance prejudicial to the health of the 2d and 6th Dragoons.

If the ground admit of the latrines and bat horses of the Scots Fusilier Guards being placed more to the right of the cavalry, as stated by Dr. Macdonell, and in a position less offensive and injurious to their health (men of 2d and 6th), I would recommend its being immediately done.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.
Major Gen. Airey,
&c. &c.

No. 512.

15th April 1855.
DR. HALL forwarding to the Quarter-Master General a letter from Mr. Fitzgerald, pointing out certain repairs of the roof of the park store at Balaklava which were necessary.

No. 513.

To Major General Airey.

Sir,
Camp before Sebastopol,
16th April 1855.
I HAVE the honour to submit two communications, one from the surgeon of the 79th Highlanders, and the other from Dr. Linton, Deputy Inspector General of Hospitals in medical charge of the 1st Division, pointing out the want of tents for the accommodation of the 79th, and the objections there are to removing the 79th to the ground occupied by the Zouaves. I quite agree with those gentlemen that the change of location is not sufficient to ensure benefit to the men, and it is highly objectionable to place them on ground recently occupied. It would be better to move the 79th a little higher up, near to where the 63d regiment is encamped at present, as the ground there is dry, and the troops encamped there comparatively healthy.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.
Major Gen. Airey,
&c. &c.

No. 514.

20th April 1855.

DR. HALL to Lord Raglan, returning a communication from Dr. Thompson (civil), recommending Surtiah in the valley of the Orontes as a sanitary station for the army in the Crimea. Not recommended on account of its distance from the seat of war.

No. 515.

23d April 1855.

DR. HALL in reply to Dr. Parkes' letter of the 19th, informing him (Dr. H.) that he had been sent out to form a civil hospital on the shores of the Bosphorus. Sinope recommended to his notice, but a preference was given by him to a place on the Asiatic side of the Dardanelles.

No. 516.

To the Adjutant General, Head Quarters.

Sir,
Before Sebastopol,
24th April 1855.
THE surgeon of the 18th Royal Irish, amongst other things, reports in his weekly state of sick to the 21st instant the case of a man of that corps who had been four nights out of five on duty, and that other cases of equal hardship have occurred, I have thought it right to bring the subject under your notice, as it is nearly impossible for the men to retain their health, if called on to perform such excessive duties.

I have, &c.
(Signed) J. HALL,
The Adjutant Gen., Inspector Gen. of Hospitals.
&c. &c.

No. 517.

DR. HALL to Major General Airey, forwarding a requisition from the Purveyor at Balaklava for certain repairs required to be done to the General Hospital there.

No. 518.

To Major General Airey.

Sir,
Before Sebastopol,
25th April, 1855.
IN reply to your communication of the 23d instant, regarding the disposal of forty hospital huts just arrived from England, I have the honour 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 possibility 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 of Balaklava harbour, both of which are good, and would be desirable localities.

The situation of Cossack Bay, to the westward of 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 to 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 position or more to a distance to act against the enemy.

I have, &c.
(Signed) J. HALL,
Inspector General of Hospitals.
Major General Airey,
&c. &c.

* Letter from Dr. Macdonell, dated 5th April 1855.

No. 519.

To Major General Airey.

SIR, Before Sebastopol, 30th April 1855.
 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 during the daytime, is described as very great, partly arising 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 quicklime, and earth and quicklime to be covered 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.

I have, &c.

(Signed) J. HALL,

Major Gen. Airey, Inspector Gen. of Hospitals.
 &c. &c.

No. 520.

To Superintending Medical Officers of Divisions.

MEDICAL MEMORANDUM.

Before Sebastopol, 30th April 1855.

AS cases of spasmodic cholera have occurred in different quarters during 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 diarrhoeal stage to pass over without treatment, for if collapse once set in the result is doubtful, whereas in the diarrhoeal stage it is for the most part amenable to medical treatment.

(Signed) J. HALL,

Inspector Gen. of Hospitals.

The Superintending Medical Officers,
 &c. &c.

No. 521.

To the Adjutant General, Head Quarters.

SIR, Before Sebastopol, 1st May 1855.
 I HAVE the honour to enclose a communication from Dr. Anderson, Principal Medical Officer, Balaklava, pointing out the filthy condition of the precincts of the tents occupied by the sick Croats.

It is highly desirable that the sanitary condition of the locality where the tents are should be improved, and that a proper interpreter should be provided, to enable the officer in charge to perform his duty with credit to himself and advantage to his patients.

I have, &c.

(Signed) J. HALL,

Inspector Gen. of Hospitals.

The Adjutant General,
 &c. &c.

No. 522.

To the Quarter Master General, Head Quarters.

SIR, Before Sebastopol, 1st May 1855.
 I HAVE the honour to enclose a communication from Staff Surgeon Dr. Wood, conveying a suggestion of Sir John McNeill's, that the roofs of all the tents in camp should be covered with white calico.

I have, &c.

(Signed) J. HALL,

Inspector Gen. of Hospitals.

The Quarter-Master General,
 &c. &c.

No. 523.

To Major General Airey.

SIR, Before Sebastopol, 2d May 1855.
 I HAVE the honour to enclose a communication* from the Purveyor at Balaklava, stating the difficulty that exists at present in disposing of the filth in the hospital, and suggesting a mode of getting rid of it which I think is a very good one, and I beg to recommend that it be adopted,—the expense will be trifling, and the removal of this daily-increasing nuisance complete and effectual.

I have, &c.

(Signed) J. HALL,

Major General Airey, Inspector Gen. of Hospitals.
 &c. &c.

No. 524.

To Major General Airey.

Before Sebastopol,

2d May 1855.

SIR, IN returning the inclosed communication of the 28th April, I take leave to observe that the waterproof blankets therein alluded to are of too fine a texture for the bottom of tents, and if so used they would be destroyed in a week.

Their answer admirably, the finer kind in particular, for covering mattresses in hospitals, and preventing them from getting soiled and stained, and are now extensively used for that purpose, or they would answer equally well to spread under the men's blankets on service in the field, and protect them from damp.

In August last, when writing to Dr. Smith in answer to a communication of his about matting for tents, I find the following passage, which, perhaps, you will excuse me for quoting:—

“What I would recommend, if anything of the kind is adopted, would be, a piece of india rubber sheeting, about six feet by two, to spread under the man's blanket, which would effectually protect him from moisture. It would not add much to the weight of the baggage of an army, and by a very little ingenuity the sheets of a squad might part of them be easily converted into temporary tents to protect the same from rain.”

I have, &c.

(Signed) J. HALL,

Inspector General of Hospitals.

Major General Airey,
 &c. &c.

No. 525.

To Major General Airey.

Before Sebastopol,

10th May 1855.

SIR, I HAVE the honour to enclose a report from Senior Surgeon Hadley,† in charge of the Castle Hospital, Balaklava, pointing out the wretched condition of the huts since the rain commenced for want of felt roofing, and to request that you will have the goodness to give instructions that this most serious defect be remedied with as little delay as possible.

I have, &c.

(Signed) J. HALL,

Inspector General of Hospital.

Major General Airey,
 &c. &c.

* Letter from Mr. Fitzgerald, dated 1st May 1855.

† Letter from Staff Surgeon Hadley, 10th May 1855, on the leaky condition of the roofs of the hospital huts, Balaklava.

No. 526.

To Major General Airey.

Before Sebastopol,
12th May 1855.

SIR,

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 second division, and in some of the newly-arrived regiments, the 48th, Buffs, 71st, and 2d Battalion of Royals, for instance; and I would recommend that the coarse water-proof blankets which have been sent out, be issued to them 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 advisable to cover them with either lime or charcoal.

I have, &c.

(Signed) J. HALL,
Inspector General of Hospitals.

Major General Airey,
&c. &c.

No. 527.

To Lieut.-Colonel Steele.

Before Sebastopol,
13th May 1855.

SIR,

IN returning the enclosed communication from Sir Robt. Gardiner, on the subject of sending convalescents from the Crimea to Gibraltar, I have the honour to state, for the information of the Field Marshal Commanding in Chief, that from my experience of Gibraltar, derived from a residence of four years on the rock, I should not consider it a desirable station to send convalescents to during the summer months.

Invalids do not readily gain strength there after serious disease, and I think if invalids get as far as Gibraltar it would be better to send them on to England at once, where their native air would restore them to health and efficiency in one half the time.

I have, &c.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

Lieut.-Colonel Steele,
&c. &c.

No. 528.

Before Sebastopol,
13th May 1855.

LETTER from Dr. Hall to the Quartermaster General about the defective condition of the roofs of the hospital huts at Balaklava, informing him that much of the bedding had been wet, and acquainting him of the measures that had been taken to preserve it by spreading waterproof blankets over it.

No. 529.

Extract of Dr. Hall's Sanitary Report to the Commander-in-Chief, dated 14th May, with the Weekly State of Sick, to 12th May 1855.

"THE weather which, for some days previous to the 10th had been extremely warm, was followed on that day by heavy rain, which continued, alternating with periods of dense fog, during the whole of the 11th and 12th, but it has now cleared up again, and the temperature has been considerably reduced.

"The Buffs and 71st, which had only just marched up to their new encamping ground before the rain set in, were ill prepared for such an occurrence, and their tents, which had not been properly trenched round, were speedily flooded.

The 48th Regiment in the 4th division, and the 2d battalion of the Royals in the 2d division, both newly-arrived regiments, had been a few days longer in camp and were somewhat better prepared; but the sites of their camps are not good, nor are those of the Buffs or 71st either. The 48th are on a level piece of ground, where the 63d hospital establishments were. In the winter the soil is tenacious, and the water lodges in pools, and remains until evaporated by the sun's rays.

"The Buffs and 2d battalion of the Royals are on low ground between the 2d and 4th divisions, with the same disadvantages as the 48th. The 71st occupy rather better ground, as their tents are pitched just where the ground begins to rise to form the hill on which the huts of the 14th and 39th have been built; but I think all these regiments might be removed, with great advantage to their health, to the higher and drier ground above, and I hope, from the short distance, without any very material detriment to their military position."

This advice was immediately acted on, and the camps of the Buffs, 48th, and 51st were removed in the course of that and the following day, but military reasons prevented the camp of the Royals from being changed.

In another paragraph of the same report, his lordship was informed that every precaution was taken to remove nuisances from the camps and their neighbourhood, and to improve their sanitary condition, as well as that of the locality.

No. 530.

To the Quarter Master General, Head Quarters.

Before Sebastopol,
18th May 1855.

SIR,

I HAVE the honour to enclose a communication from Dr. Wishart, 2d class staff surgeon, in medical charge of the "Brandon" steamer, recommending improvements and alterations on board that vessel, which I think judicious, well calculated to improve the health and comfort of the sick, and worthy of attention.

The improved space and ventilation is of great importance, as is an awning spread fore and aft in hot weather. A few common benches which could be made at little cost would contribute in no small degree to the men's comfort. A small screen round the close stool pans may be useful for privacy, but if the orderlies are attentive, and deodorants be properly used, both in the pans themselves, and sprinkled in the immediate vicinity of them, this nuisance ought not to exist.

I have, &c.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

The Quarter Master General,
&c. &c.

No. 531.

To the Adjutant General, Head Quarters.

Head Quarters before

Sebastopol, 18th May 1855.

SIR,

I HAVE the honour to enclose an application from Staff Surgeon Hadley, in charge of the Castle Hospital at Balaklava, for a small party of Croats to keep the precincts of the establishment in order; And as the buildings are scattered over a considerable space of ground, the regulated number of soldier orderlies would never be able to keep the place in proper order, in addition to their other duties. I take leave to second it.

I have, &c.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

Adjutant General,
&c. &c.

No. 532.

To Major General Airey.

Before Sebastopol,
27th May 1855.

SIR,
In returning the enclosed correspondence,* I have the honour to observe, that in my opinion, the temperature of the huts depends more on the state of ventilation than on the colour of the roof, and I would strongly recommend the plan of roof ventilation, mentioned by the Board†, to be adopted at once, but means must be taken at the same time to admit currents of fresh air near the ground, so as to ensure at all times a free circulation of pure air within the huts, and this, I think, may be accomplished by boring rows of auger holes through the bottoms of the doors, and at the opposite ends of the huts.

Without projecting eaves, removing a board entirely from the sides of the huts would, in most situations, subject the inmates to great inconvenience from the beating in of rain in stormy weather. If this plan be adopted, it would be better to secure the ventilating boards by means of hinges; pieces of leather would answer for this purpose, if iron hinges could not be obtained, as by that means all the advantages of ventilation would be obtained without the disadvantages, and risk of exposure to wet on the weather sides of the huts in stormy weather.

Painting the roofs as a preservative is good, and covering them with old tents would render them cooler in summer, and dry in winter.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major Gen. Airey,
&c. &c.

No. 533.

To Major-General Airey.

Before Sebastopol,
27th May 1855.

SIR,
In returning the enclosed two letters from Dr. Sutherland, President of the Sanitary Commission, dated 16th May 1855, I have the honour to state, for the information of the Field Marshal Commanding in Chief, that I fully concur in all that Dr. Sutherland has stated; and I beg to observe, that on almost all points the doctor's suggestions have been anticipated.

His recommendation of more tentage accommodation is one of great importance in epidemic seasons; and if the state of supply in store admit of it, I would strongly recommend an extension to be granted.

I take leave to enclose a copy of a memorandum‡ which I thought it prudent to issue to Superintending Medical Officers on the 30th April, and on the 7th May more detailed instructions on sanitary matters, sent out by the Director General at the suggestion of the Minister at War, were circulated among them.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major-General Airey,
&c. &c.

No. 534.

To Staff Surgeon Moore, Light Division.

Before Sebastopol,
2d June 1855.

SIR,
In your weekly report of the sanitary condition of the Light Division, you state that much of the disease amongst the men may be attributed to the state of the trenches, but you do not specify what the objectionable is to which you allude, or on

* Correspondence about covering the huts with calico.

† Proceedings of a Board assembled to consider the subject.

‡ Extract from Sanitary Journal of January 1855. Paper by Mr. J. W. Rogers, C.E.

what you ground your observation. I request you will be good enough to do this, that I may submit the matter for consideration and remedy.

You also state, with reference to the appearance of cholera in the Land Transport Corps, that the ground on which they are encamped is dirty, and their tents not kept clean inside.

What steps have you taken to get these serious evils remedied?

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Staff Surgeon Moore,
&c. &c.

No. 535.

To the Adjutant General, Head Quarters.

Before Sebastopol,
4th June 1855.

SIR,
STAFF SURGEON MOORE, 1st Class, in medical charge of the Light Division, having reported, in his weekly state, the offensive nature of the latrines in the trenches, and the dirty condition of the ground where the men of the Land Transport Corps attached to the Light Division are encamped, I requested him to state his authority for the first, and what steps he had taken to remedy the second.

You will observe his information regarding the trenches is from hearsay; but where complaints of this nature are so frequently made, there must be some grounds for them, and I think it would be well to send down charcoal powder, either peat or common, to throw into the pits night and morning.

The use of tubs would not, in my opinion, answer better than the present system; for if the men will not take the trouble to throw earth into the latrines daily, they would not pay more attention to the tubs, and, without being washed, they would soon become very offensive. However, tubs can be easily provided, and the experiment tried.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

The Adjutant General,
&c. &c.

No. 536.

To William Govett Romaine, Esq., Deputy Judge Advocate General, Head Quarters.

Before Sebastopol,
14th June 1855.

SIR,
In returning the enclosed report from the Sanitary Commissioners, which was referred to me, I have the honour to state that I fully concur in all the opinions and recommendations therein contained, and beg to observe that nearly all the points alluded to by the commissioners had previously engaged the attention of the military medical authorities in camp, many of them had been acted on, and all will in future receive that consideration which their importance deserves.

I have, &c.
(Signed) J. HALL,
Insp. Gen. of Hospitals.

W. Govett Romaine, Esq.
&c. &c.

No. 537.

To Major-General Estcourt.

Before Sebastopol,
19th June 1855.

SIR,
I HAVE the honour to enclose a communication I have received from Dr. Fraser, Surgeon 10th Hussars, pointing out the amount of duty the men have to perform in taking care of spare horses belonging to the corps; and as this will naturally increase in proportion to the reduction of the number of effective men at head quarters, perhaps means might

be devised for relieving the regiment altogether of these horses by drafting them into corps.

I have, &c.
(Signed) J. HALL,
Major-Gen. Estcourt, Inspector Gen. of Hospitals.
&c. &c.

No. 538.

Before Sebastopol,
19th June 1855.
SIR,
IN reply to your observations about premonitory diarrhoea contained in your letter of this date, I have the honour to inform you that you will find the measures you recommend were pointed out by me, in a department memorandum, when the present epidemic first made its appearance. You cannot be too vigilant on this point; and I should recommend you to go amongst the men once or twice a day, and make inquiries yourself about their state of health. You must impress on the men's minds the importance of checking this formidable disease in its early stage, which is easily done; and, I think, you will be successful when the men see that you take an interest in their welfare.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

No. 539.

To Lieutenant Colonel Steele, Military Secretary,
Head Quarters.

Before Sebastopol,
23d June 1855.
SIR,
I HAVE the honour to return the report of the Sanitary Commissioners on Sinope* as an hospital station, and regret to find that a deficiency of water renders it ineligible for that purpose.

I have, &c.
(Signed) J. HALL,
Lieut.-Colonel Steele, Inspector Gen. of Hospitals.
&c. &c.

No. 540.

To Lieutenant Colonel Steele, Military Secretary,
Head Quarters.

Before Sebastopol,
24th June 1855.
SIR,
IN returning the enclosed despatch from Lord Panmure, No. 163, dated 8th June 1855, with its enclosure from Dr. A. Smith, Director General of the Army Medical Department, I have the honour to observe that the amount, and occasional unequal distribution, of night duty which I considered it my duty to bring under the notice of the Field Marshal Commanding in Chief has, I believe, so far as circumstances will admit, been remedied.

Great care is taken to preserve cleanliness in the camps, and the attention of medical officers was drawn by me, in a circular memorandum, dated 30th April, to the importance of detecting and treating the diarrhoeal stage of cholera.

I have, &c.
(Signed) J. HALL,
Lieut.-Colonel Steele, Inspector Gen. of Hospitals.
&c. &c.

No. 541.

To Lieutenant General Simpson, Chief of the Staff,
Head Quarters.

Before Sebastopol,
28th June 1855.
SIR,
IN returning Lord Panmure's despatch, No. 170, dated 11th June, enclosing a copy of a letter from

* Report of Commissioners on Sinope, dated 19th June 1855.

Dr. Macloughlan, Member of the Legion of Honour, recommending that every individual of this army should be paraded and seen by a medical officer three times a day during the prevalence of cholera, and that medical officers should be in attendance from 1 to 5 a.m., I have the honour to state, for his Lordship's information, that Dr. Macloughlan does the medical officers of this army an injustice in supposing them to be ignorant of so well-known and long established a fact as that of premonitory diarrhoea in cholera; and he is equally unjust towards them in the inference which he has drawn, that no precautionary measures were adopted for arresting the progress of the disease in its early stage. On the contrary, I beg to assure his Lordship, that so far back as the 30th April last, when the first cases of cholera made their appearance, this important point was urged on the attention of all officers in a Circular Memorandum issued by me, and precautionary measures were recommended. I verily believe every medical officer of the army is as fully alive to the necessity of checking cholera in its diarrhoeal stage as Dr. Macloughlan himself, and every practicable measure is resorted to; but what the Doctor recommends, I have no hesitation in stating, would be found totally inapplicable under the circumstances in which the army is at present placed.

To order three additional parades a day for men and officers already worn down by duty would be found a grievous punishment. Besides, without a long and individual examination, no information could be obtained beyond what is acquired by the present system of impressing on the men's minds the importance of attending to and reporting the least relaxation of their bowels, which is found to work well, as there is no reluctance on the part of the men in reporting their ailments.

I have, &c.
(Signed) J. HALL,
Lieut.-Gen. Simpson, Inspector Gen. of Hospitals.
&c. &c.

No. 542.

To the Adjutant General, Head Quarters.

Before Sebastopol,
29th June 1855.
SIR,
GREAT inconvenience having been occasioned by the state of the privies at the General Hospital, Balaklava, I have the honour to submit a letter from the Purveyor to the Forces, applying for four scavengers to carry off the soil daily, which appears to me to be a good, indeed almost the only, means of getting rid of the daily increasing nuisance.

I have, &c.
(Signed) J. HALL,
The Adjutant General, Inspector Gen. of Hospitals.
&c. &c.

No. 543.

2nd July 1855.
Two letters, one from Colonel Parby, and the other from Major General Scarlett, relative to the position of the camp of the 10th Hussars.

"I visited the encampment of the two squadrons of the 10th Hussars this afternoon, and I think it may be changed with advantage to a higher and drier piece of ground that they propose occupying to-morrow. When I was there there were two men ill with cholera in the hospital, both in a very dangerous state. The men in general, who were on parade when I was there, looked healthy. The valley where the 10th and Turkish army are encamped is moist, and I should say fevers would soon make their appearance amongst the men if they were to remain there any length of time. I have given instructions for some quinine wine to be prepared for them, and a

portion to be given night and morning to every individual encamped there."

(Signed) J. HALL,
Inspector Gen. of Hospitals.

No. 544.

To Major General Airey.

SIR, Before Sebastopol,
8th July 1855.

I HAVE the honour to report that cholera has broken out with severity in the 13th Foot at Kadekoi; and as the vicinity of the huts and hospital is covered with rank vegetation, I beg to recommend that immediate measures be taken to clear the whole away. The men should be separated as much as the extent of their accommodation will admit of; and if a portion of the regiment could be sent to the heights, where either the Guards or the 63d Regiment were formerly stationed, I think it would be beneficial.

I have, &c.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major Gen. Airey,
&c. &c.

No. 545.

To the Quartermaster General, Head Quarters.

SIR, Before Sebastopol,
11th July 1855.

I BEG to call attention to the number of carcasses of animals that are lying about in the vicinity of the new hospital at the monastery of St. George. If measures are not taken to remove these, they will taint the air, and produce disease. When I visited the hospital yesterday I found two dead animals within 150 yards of the building, and a third not far distant.

As these animals drop from the French herds that are pastured in the neighbourhood, perhaps some arrangement could be entered into for the speedy removal of a nuisance so dangerous at this season of the year.

I have, &c.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

The Quartermaster General,
&c. &c.

No. 546.

To Major General Airey.

SIR, Before Sebastopol,
18th July 1855.

I HAVE the honour to enclose a communication from 1st Class Staff Surgeon Mount, in charge of the General Hospital in camp, complaining of the defective drainage of the huts employed for the hospital, and to request you will have the goodness to direct this defect to be remedied as early as possible. In giving over the huts for hospital purposes, in place of taking a clear section of the number required, officers have been allowed to retain huts interspersed amongst those appropriated for the accommodation of the sick, and to build kitchens between the huts, to the prejudice of good order and cleanliness, and to the detriment of the sick and wounded.

I have, &c.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major Gen. Airey,
&c. &c.

No. 547.

To Major General Sir Richard Airey, K.C.B.

SIR, Head Quarters, Camp before
Sebastopol, 1st March 1855.

I HAVE the honour to acquaint you that loud and universal complaints have been made of the leaky condition of the hospital huts in camp, 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.

I have, &c.

(Signed) J. HALL,

Major General Sir Richard Airey, K.C.B.
&c. &c.

No. 548.

1st August 1855.

ESTIMATE of huts required for the medical department, per detail given in original letter.

58 hospital huts.
22 store huts.
80 officers' huts.

160

No. 549.

To Major General Sir Richard Airey, K.C.B.

SIR, Before Sebastopol,
3d August 1855.

WITH reference to my memorandum of the 1st instant, of the number of hospital huts required for the army during the ensuing winter, I have the honour 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 building purposes, 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 tents 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 allow 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 adopted for ventilating the tents than now exists. The mode of ventilation used in the French tents might be adopted in the British service with great advantage.

I have, &c.

(Signed) J. HALL,

Major General Sir Richard Airey, K.C.B.
&c. &c.

No. 550.

*To Lieutenant Colonel Steele, Military Secretary,
Head Quarters.*

SIR, Head Quarters, Camp before
Sebastopol, 14th August 1855.

In returning Lord Panmure's despatch of the 28th July, No. 52, with its enclosures from the Sanitary Commissioners, I beg, in the first place, to state that

my not having sent a special reply to Dr. Sutherland's two letters of the 16th May last arose from no disrespect to that gentleman, for whom I have the highest esteem, but simply because I did not know that such was expected from me.

Dr. Sutherland paid the visit to camp, to which he alludes, in company with myself, when I pointed out to him the ground from which I had had the Buffs and 48th regiment removed, and in conversation explained to him what we had been doing; and to convince his Lordship that precautionary measures had not been overlooked, I take leave to annex a copy of the Medical Memorandum I issued on the 30th April, when cholera first made its appearance, and a copy of my letter of the 14th June, returning the Commissioner's General Report.

I have now the honour to state, for Lord Panmure's information, that great attention is paid to cleanliness in the camps, and to prevent over-crowding in either tents or huts; the men too are fully impressed with the importance of attending to, and seeking relief for, any derangement of their bowels, and I believe, from the numbers that daily apply for relief, that little improvement can be made on this head. Setting men to watch privies answers well enough in fixed barracks, but is not equally applicable to service in the field. Besides which, many of the most malignant and fatal cases have not been preceded by purging, beyond, perhaps, one or two profuse evacuations, ushering in the state of collapse.

I may also mention that some of the batteries of Artillery, recently arrived from England, which were encamped on high, dry, and perfectly fresh ground, between this and the sea, did not escape cholera; so that there must be other exciting causes beyond mere locality. That certain conditions of the atmosphere favour the diffusion of the miasm of cholera is undoubted, as we have had several examples of it since the appearance of the present epidemic; and this is so true that the re-appearance of the disease can be predicted immediately the wind shifts to a certain quarter.

I have, &c.
(Signed) J. HALL,
Lieut.-Colonel Steele, Inspector Gen. of Hospitals.
&c. &c.

No. 551.

To Lieut.-Colonel Steele, Military Secretary,
Head Quarters.

Before Sebastopol,
26th August 1855.

SIR,
IN returning the enclosed letter from the Sanitary Commissioners, dated 24th instant, I have the honour to observe that I fully concur in the opinions given, and recommendations made, under heads 1, 2, 3, and 4, and I would strongly recommend additional tent accommodation to be given, and at least three or four regiments to be removed from the Kadekoi valley, and encamped for a season on the open plain in front.

With regard to No. 5, perhaps more difficulty will be found in carrying its provisions into effect than is generally supposed by mere casual observers. A parade, involving the examination and questioning of each man separately, must necessarily be a long and tedious affair; and setting men to watch the latrines, unless the same individuals be continued from day to day, and furnished with nominal rolls to mark the men's names whom they observe to frequent the latrines more than ordinary, would not be attended with much benefit, nor could the watchmen, without some such aid, furnish the medical officer with information that could be relied on. However, as the Commissioners attach much importance to the measure, I would recommend the experiment to be tried, and the result reported for the information of the Commander-in-Chief.

I have, &c.
(Signed) J. HALL,
Lieut.-Col. Steele, Inspector Gen. of Hospitals.
&c. &c.

No. 552.

To the Quartermaster General, Head Quarters.

Head Quarters, Camp before
Sebastopol, 25th August 1855.

SIR,
I HAVE the honour to transmit a communication from the purveyor at Balaklava, pointing out the offensive condition of the privy at the General Hospital, and recommending a new privy to be dug, or the present one to be fitted with moveable tubs that can be emptied daily. The latter plan is universally adopted in barracks in India, and is found to answer remarkably well; I beg, therefore, that it be adopted in preference to digging a new privy.

I have, &c.
(Signed) J. HALL,
The Quartermaster General, Insp. Gen. of Hospitals.
&c. &c.

No. 553.

MEMORANDUM on a communication from Sanitary Commissioners, relative to overcrowding of the tents in the Cavalry Division returned to General Airey; "six men in a tent calculated to hold fifteen."

No. 554.

To Lieutenant General Barnard, C.B.

Head Quarters before
Sebastopol, 30th August 1855.

SIR,
BEING of opinion that it is not desirable for men to go on duty in the morning fasting at unhealthy seasons of the year, and more especially when any disease prevails epidemically, as cholera unfortunately does at present, I called the attention of medical officers to the subject.

By the enclosed communication from the acting surgeon of the 18th regiment, you will observe that a difficulty has arisen about sugar, and he proposes to add one ounce more, which would make the quantity considerable, but I think if the ration of sugar were raised from 1½ oz. to 2 oz. it would be sufficient; and I take leave to recommend the subject to the favourable consideration of the Commander-in-Chief.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.
Lieutenant General Barnard, C.B.,
&c. &c.

No. 555.

To Lieutenant General Sir Richard Airey, K.C.B.

Head Quarters, Camp, Sebastopol,
3d October 1855.

SIR,
I BEG to call attention to the objectionable site that has been selected for the camp of the Royal Regiment.

It is close to, and has even 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.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals,
Lieut.-General Sir R. Airey,
&c. &c.

No. 556.

*To General Sir James Simpson, G.C.B.*Head Quarters, Camp, Sebastopol,
15th October 1855.

Sir,

On my visit to the Castle Hospital at Balaklava to-day, I found the engineers at work erecting a 10-foot boarded fence within a few feet of the sea front of the huts.

This will not only obstruct the free circulation of the air, but will favour the accumulation of all kinds of filth. If the roofs had been repaired and secured, the huts lined, and the interspace filled with earth and proper supports put to them, which Mr. Rawlinson, the Civil Engineer of the Sanitary Commission, was of opinion would be ample security, I think the projected fence might be dispensed with, and the men's labour more profitably employed in putting the huts into a proper state of repair, and repairing and improving the road leading to the hospital.

In a sanitary point of view, I consider the projected fence decidedly objectionable, and I feel it to be my duty to bring under your special notice.

I have, &c.

(Signed) J. HALL.

Inspector Gen. of Hospitals.

General Sir James Simpson, G.C.B.

&c. &c.

No. 557.

*To Lieutenant General Sir Richard Airey, K.C.B.*Head Quarters, Camp, Sebastopol,
21st October 1855.

Sir,

I HAVE the honour to enclose a communication* from Dr. Connell, Staff Surgeon, 1st Class, in medical charge of the 2d Division, giving cover to a letter† from the Surgeon of the 95th Regiment, calling attention to the condition of the hospital huts of that corps, and suggesting that double huts should be substituted for them for the comfort and welfare of the sick.

Dr. Connell also calls attention to the strange proceeding of the assistant quartermaster general of the division, in issuing and causing to be erected for the sick of the 3d Buffs, one of the small single boarded huts in place of a regular hospital hut, or one of the double-planked huts now in course of erection in every direction. With the number of proper hospital huts, either here or soon expected, it is difficult to discover a reason why the sick of the Buffs, or indeed of any other regiment, should be put into the very worst and most imperfect form of hut that exists.

I have, &c.

(Signed) J. HALL.

Inspector Gen. of Hospitals.

Lieut. Gen. Sir R. Airey, K.C.B.

&c. &c.

No. 558.

*To Lieutenant General Sir Richard Airey, K.C.B.*Head Quarters, Camp, Crimea,
25th October 1855.

Sir,

WITH reference to my letters of the 1st and 3d August last, pointing out the repairs that would be necessary to render the present hospital huts habitable during the winter, I have the honour to observe, that no steps have been taken to carry out my recommendations; and as we may look for wet 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.

* Letter from Dr. Connell about hospital huts of Buffs and 95th Regiments, dated 21st October 1855.

† Letter from Dr. Fatson, Surgeon 95th Regiment, dated 21st October 1855.

Porches to the huts are essential, and I beg to recommend their erection, in addition to what I mentioned in my former letters.

I have, &c.

(Signed) J. HALL.

Inspector Gen. of Hospitals.

Lieut. Gen. Sir R. Airey, K.C.B.,

&c. &c.

No. 559.

*To Lieut. General Sir Richard Airey, K.C.B.*Head Quarters, Camp, Crimea,
27th October 1855.

Sir,

I BEG to call attention to the defective state of the roofs of the huts at the Castle and General hospitals Balaklava, and 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 labour 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 ten feet elevation, is a proceeding I cannot understand.

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 the huts, it will not, most assuredly, improve their sanitary condition.

I have, &c.

(Signed) J. HALL.

Inspector Gen. of Hospitals.

Lieut. Gen. Sir R. Airey, K.C.B.

&c. &c.

No. 560.

*To Dr. Milroy, Sanitary Commissioner.*Head Quarters, Camp, Crimea,
27th October 1855.

Sir,

As one of the Sanitary Commissioners sent out by Government, I beg to draw your attention to the gabion barricade that is in course of erection within two feet of the hospital huts at the Castle, Balaklava, on the sea front.

The barricade is erected to guard against someone's dread of the huts being blown away, and consists of three rows of gabions filled with earth placed within two feet of the huts at its base, and reaching as high as their ridge poles, thus effectually obstructing the free circulation of air by this huge mound of earth, which, being loose, will of course retain moisture after rain.

The original plan was to have a wooden fence ten feet high, but this it was thought would not resist the force of the wind, and then this warlike device was hit on, certainly not to the improvement of the sanitary state of the huts, whatever security, real or assumed, it may afford to them.

I have, &c.

(Signed) J. HALL.

Inspector Gen. of Hospitals.

Dr. Milroy,

&c. &c.

Notwithstanding my own protest and this appeal, the gabion rampart was proceeded with, and remained until the following spring, when it was kicked over the precipice into the sea by my order. It was, in

* Gabion rampart had been substituted for the projected wooden fence.

my opinion, perfectly uncalled for, and there never was a single day during the whole winter that gave a shadow of justification for its erection. With whom the sapient scheme originated I never could discover.

No. 561.

To Lieut. General Sir Richard Airey, K.C.B.

Head Quarters, Crimea,
1st November 1855.

SIR,

IN returning the enclosed documents, I beg to inform you that I have called for a detailed return of the repairs necessary for each hospital. But the readiest and most effectual way would be for an engineer officer of each division to visit the regimental hospitals belonging to it, along with the principal medical officers, and ascertain what repairs are required; and I beg to suggest this for your consideration.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Lieut. Gen. Sir R. Airey, K.C.B.
&c. &c.

No. 562.

(Memorandum.) 2d November 1855.
Communication from Dr. Milroy, Sanitary Commissioner, Balaklava, forwarded through the Quartermaster General for Dr. Hall to report upon.

Returned to the Quartermaster General with the following marginal observation:—

“The Commanding Engineer, with whom Dr. Hall visited the Castle Hospital, considers the protection absolutely necessary for the safety of the huts. This is a point on which Dr. Hall can give no opinion, and it of necessity outweighs all other considerations. The gabions are to be placed at a greater distance from the huts than the first were.”

(Signed) J. HALL,
Inspector Gen. of Hospitals.

No. 563.

To Major General Windham.

Head Quarters, Camp, Crimea,
17th November 1855.

SIR,

I HAVE the honour to enclose a return of damages occasioned to the hospital huts of the 2d Division by the explosion of the 15th instant, and request you will be pleased to give instructions that they may be repaired with as little delay as possible.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major General Windham,
&c. &c.

No. 564.

To Major General Windham.

Head Quarters, Crimea,
17th November 1855.

SIR,

I HAVE the honour to enclose a communication from Mr. Elliot, Senior Surgeon, Ordnance Medical Department, pointing out the damages and destruction sustained in the hospital of the Light Siege Train and Royal Sappers and Miners by the explosion on the 15th instant, and pointing out the amount of additional hospital accommodation required.

From the amount of damage sustained by the huts, I think two large hospital huts will be necessary in

addition to the huts that can be constructed out of the ruins of the former huts, and I request you will be pleased to give instructions that these may be furnished and erected with the least possible delay, as the number of sick in the Light Siege Train is always considerable.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major General Windham,
&c. &c.

No. 565.

To Major General Windham.

Head Quarters, Camp, Crimea,
18th November 1855.

SIR,

IN returning the enclosed statement of repairs and additions required for the hospitals of the Fourth Division, I beg to suggest that provision be immediately made for the accommodation of the sick, as they are in a condition to be more seriously injured by discomfort and exposure than men in health; and I would recommend that the hospital huts now in use be put in thorough repair, and occupied until the new hospital huts arrive, and can be made available. It is equally necessary that the stores should be protected from the weather, otherwise much valuable public property will be either destroyed or materially damaged.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major General Windham,
&c. &c.

No. 566.

To Major General Windham, C.B.

Head Quarters, Camp, Crimea,
18th November 1855.

SIR,

I HAVE the honour to enclose an application* from the Senior Surgeon of Ordnance, pointing out the injured condition of the hospital marquees of Travers' Small Arm Brigade and Y Battery of Artillery from the explosion of the 15th instant; and I beg to call attention to the circumstance that A and Y Batteries of Artillery and Travers' Small Arm Brigade have no huts for the accommodation of their sick, and the hospital marquees of the two latter have been rendered totally unserviceable by the accident of the 15th.

It is absolutely necessary, therefore, that steps should be taken for replacing the damaged marquees at once, and I would recommend huts to be erected with as little delay as possible.

I think it would facilitate arrangements of this kind if the Commanding Officer of Artillery were to act on the representations of the Senior Surgeon of Ordnance in all matters connected with the welfare of the sick, without waiting for applications to be made by captains of batteries, or commanding officers of brigades, whose attention, without imputing any blame to them, may be directed to other matters which are, in their estimation, of greater importance.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Major Gen. Windham, C.B.,
&c. &c.

* Letters from Senior Surgeon Elliot, 18th November 1855, and Assistant Surgeon Peacock, 17th November 1855.

No. 567.

Enclosing representations to the Chief of the Staff of repairs required at the General Hospital, Camp—Mr. Monat's letters, dated 20th November and 1st December 1855.

No. 568.

To Major General Windham, C.B.

Head Quarters, Camp, Crimea,
17th December 1855.

SIR,

I UNDERSTAND from the Adjutant General that, on account of deficiency of land transport, it is in contemplation to take the field without tents next campaign; and as this is a subject of such vital importance in a sanitary point of view, I trust I shall be excused for urging on the Commander-in-Chief, in the strongest manner, that the plan be not adopted; for whether the army take the field in the Crimea, in Georgia, Kherson, or the Danubian Provinces, it would, in my opinion, prove alike fatal to one half of the force in a couple of months.

I would, therefore, recommend, if the present tents cannot be carried, that a small tent, similar to that in use in the French and Sardinian armies, with a light waterproof cloth for the men to sleep on, and protect them from terrestrial emanations, be provided at once for future use.

I have, &c.

(Signed) J. HALL,

Inspector Gen. of Hospitals.

Major Gen. Windham, C.B.,

&c. &c.

No. 569.

To Major General Windham, C.B.

Head Quarters, Camp, Crimea,
27th December, 1855.

SIR,

HAVING this day made an inspection of the hospitals of the 1st Division, I take leave to bring under the notice of the Commander of the Forées the very small amount of hut accommodation that has been provided for the sick of the 2d Brigade, and even from that little, one hospital hut, erected and formerly occupied as such, has been taken and converted into a reading room for the Brigade, by order of the Brigadier commanding.

The 9th Regiment has sufficient tent accommodation for the present sick list, 31.

The 13th Regiment has one large hospital that is capable of accommodating 22 men. There are 72 sick, and the remainder are accommodated in marquees which are neither boarded nor provided with stoves.

The 31st has a sick list of 75 men. They have two huts capable of accommodating 44 sick, the remainder are under canvas.

The 56th Regiment has a sick list of 94. They have three huts and three marquees. The sick of this regiment were turned out of the hut mentioned above to make room for the brigade library. They have a most wretched place for cooking in for this number of sick. A new kitchen has been commenced, but the frost has put a stop to the masonry. It would have been better had it been commenced earlier and completed before the frost set in.

On inquiring into the cause of frost-bite, I find that most of the men whose fingers had suffered had been employed on fatigues, in carrying stones on the roads, or wood from Balaklava. And in one regiment a fatigue party proceeding to Balaklava with the thermometer a few degrees above zero were prohibited from wearing their fur caps.

Another point I take leave to submit for his Excellency's consideration is, that when the cold is intense, as it was on the 19th and 20th, the men on sentry should be relieved at least every hour; and that fatigues requiring the handling of stones and other substances which rapidly abstract the heat from the hands should be restricted as much as possible; and that, when parts unfortunately become frost-bitten, the men should be instructed not to bring them near the fire, as that destroys the vitality of the frost-bitten part altogether, but to invite back warmth and circulation by gentle friction with a fur glove or snow.

I have, &c.

(Signed) J. HALL,

Major Gen. Windham, Inspector Gen. of Hospitals.
&c. &c.

No. 570.

To Lieutenant Colonel Blanc at Head Quarters.

Head Quarters, Camp, Crimea,

16th January 1856.

SIR,

IN returning the enclosed report of the Sanitary Commissioners, I notice what is said concerning the ventilation of some of the hospital huts. The same thing struck me occasionally in going round the hospitals, and whenever I noticed it I called the attention of the medical officer in charge to the subject; but it is not an easy matter to impress on the minds of the soldiers the importance of an abundant supply of fresh air, and they are apt the best devised means of ventilation when left within their control.

The adaptation of the huts for winter occupation has in some degree impaired the free ventilation that was established in them during the summer; but with due attention sufficient means remain to guard against any injurious effects, as the tents are now never overcrowded.

In the course of my inspection I noticed that some of the men's huts were overcrowded, portions of them were screened off for non-commissioned officers, and the huts themselves were neither so clean nor so well arranged as they might and ought to have been; and the attention of commanding officers might be drawn to this important subject with advantage.

I would also recommend the blankets to be taken out frequently, daily if possible, and well shaken in the open air, the state of the ground not admitting of their being exposed on it at this season of the year, and there being no bushes or lines to hang them on.

If this be not done, the animal exhalations which accumulate in crowded and imperfectly ventilated sleeping places will soon generate the poison of typhus fever, and we shall have that plague making its appearance amongst the men, which they are happily quite free from at present.

I have, &c.

(Signed) J. HALL,

Lieut.-Col. Blanc, Inspector Gen. of Hospitals.
&c. &c.

LETTERS OF DR. CUMMING, INSPECTOR GENERAL OF HOSPITALS, Principal Medical Officer, Scutari.

No. 571.

Dr. Cumming to Brigadier General Lord William Paulet, Commandant, Scutari.

Inspector General of Hospitals' Office,
MY LORD, Scutari, 6th February 1855.

CONNECTED with the sanitary condition and regularity of this hospital, I think it most desirable that as many as possible of the women and children should be removed from it; and as there appears great difficulty in obtaining accommodation for them elsewhere, I beg leave to suggest to your Lordship, that some of the tonnage placed at your disposal should be appropriated for their conveyance to England.

These women are very indifferently lodged, they are to my knowledge the cause of much irregularity, and for their own welfare I feel myself imperatively called on to urge their removal from the hospital as soon as possible.

I have, &c.
Lord Wm. Paulet, (Signed) A. CUMMING,
&c. &c. I. G. H.

No. 572.

Dr. Cumming to Brigadier General Lord W. Paulet, Commanding on the Bosphorus.

Inspector General of Hospitals' Office,
MY LORD, Scutari, 14th February 1855.

I FEEL myself called on to point out to your Lordship, as I have often done verbally, how necessary it is that the depôt should be separated from this hospital—for without this it is in vain to look for improvement. Its strength is daily increasing, and as all have ready communication with the different corridors, every attempt to prevent this has been unsuccessful. It is consequently the cause of a great deal of irregularity, and from the barrack having become a public thoroughfare, and the patients able to purchase at the canteen, and to have brought in to them from the village all kinds of improper articles of diet, their treatment is not only interfered with, but much injury is no doubt produced.

Our embarrassments will, I apprehend, be added to instead of lessened as soon as the huts are occupied. Our numbers will be increased far beyond what the sanitary condition of the accommodation admits of; irregularities will be augmented and with more difficulty checked, and should an epidemic make its appearance amongst us, the consequences may be more serious. Until the whole of the building is given up for hospital purposes and we have the power of controlling its police, preventing the introduction of forbidden articles of diet, and all persons connected with the establishment prevented from freely communicating with the patients as they now do, the medical officers cannot be held responsible for the proper performance of their duties.

I beg leave to add that the men composing the depôt, and more especially the women and children, are very insufficiently lodged, and their presence here seriously interferes with, or rather prevents, the sanitary arrangements, every day becoming more necessary as the warm weather approaches. We are, I fear, not merely inviting epidemics but tending to create them.

I have, &c.
Lord W. Paulet, (Signed) A. CUMMING,
&c. &c. I. G. H.

No. 573.

Dr. Cumming to Brigadier General Lord W. Paulet.

MY LORD, Scutari, 18th February 1855.

WITH reference to the Secretary at War's letter which you showed me to-day, I have the honour to submit to your Lordship that patients receiving pay when in hospital is so contrary to the usages of the service, so subversive of hospital discipline, and so injurious to the men themselves, that I hope your Lordship will take upon yourself to suspend it until the opinion of higher authority is obtained.

This arrangement, as it enables patients to obtain whatever articles of diet or intoxicating drinks they may fancy, has been the cause of much irregularity and great embarrassment to the medical officers in the discharge of their duties, and imperatively requires that it be put a stop to without delay.

As the use of tobacco is a habit so inveterate that it can hardly be expected they will abandon it even in hospital (although contrary to hospital regulations), notwithstanding every restriction, I would propose that a ration of it should be issued to those who wish for it, or some other convenient way adopted.

I have, &c.
Lord W. Paulet, (Signed) A. CUMMING,
&c. &c. I. G. H.

No. 574.

Dr. Cumming to Brigadier General Lord William Paulet.

MY LORD, Scutari, 22d February 1855.

I BEG leave to bring to the notice of your Lordship the state of the barrack yard and its precincts, more especially betwixt the new kitchen and the part of the barrack occupied by the depôt. Heaps of rubbish of an offensive and objectionable kind are there piled up and urgently require removal.

It also appears to me most desirable that all wet and miry ground on both sides of the square should be filled up, and all decaying and decayed matter daily and carefully removed.

With so many sick, and the strength of the depôt so great, the most unremitting attention will be required to every point connected with the sanitary condition of the establishment.

I have, &c.
Lord W. Paulet, (Signed) A. CUMMING,
&c. &c. I. G. H.

No. 575.

Dr. Cumming to Lord W. Paulet, Commanding on the Bosphorus.

Inspector General of Hospitals' Office,
MY LORD, Scutari, 9th April 1855.

IN consequence of the number of sick at present in this hospital, and the daily apprehension that more may arrive from the Crimea, compelling me to set apart wards for the reception of the wounded with a diminished number of beds; taking into consideration likewise that the half of the sheds is appropriated to the depôt, and a considerable number of carpenters in occupation, which I believe was not in the first instance intended; and further, as the "Bombay" has been given up, and the Turkish hulk about to be so, arrangements encroaching very much on the accommodation and interfering with the sanitary condition of the building, I wish to suggest to your

Lordship whether it would not be practicable to encamp part of the effective men, feeling confident that their health would be benefitted by it, and the long desired separation of the dépôt from the hospital (apparently as remote as ever) in part effected, and now becoming daily more urgent in consequence of the increasing temperature and the continued prevalence of fever.

I have further to state that there are many men in all the hospitals, lists of whom I have caused to be made out, who will never be again fit for service in this climate, and whose health would probably be soon restored by a change to England; and as there are many likewise who are permanently unfit, I hope every effort will be made to obtain transport for their conveyance home, by which means our numbers would be considerably diminished, and I should then be enabled to dispense with the second row of beds in the corridors, and ultimately perhaps clear them entirely.

Should it be impossible to make the arrangements I have suggested, I feel it incumbent on me to impress on your Lordship the necessity of obtaining more hospital accommodation.

I have not in what I have stated alluded to the probable increase of the number of sick on the arrival of reinforcements from England or elsewhere.

I have, &c.
 Lord W. Paulet, (Signed) A. CUMMING,
 &c. &c. I. G. H.

To the foregoing letters I received no replies, and, with the exception of tonnage, I cannot say that the suggestions they contain were at all fully carried out. With respect to tentage, I believe it did not exist.

No. 576.

Dr. Cumming to Dr. Smith.

SIR, Scutari, 22d February 1855.
 IN acknowledging your letter of 5th instant, advertent to the mode in which corpses are removed to the dead house, I have to observe that your proposal appears to me more objectionable than the mode now in use, viz., the corpses being decently wrapped up in a blanket and carried on a bearer by two orderlies to the place appropriated to their reception. A coffin or shell would, I conceive, be doubly suggestive.

The sketch which Mr. Lawson, Deputy Inspector General of Hospitals, sent recently of the burial ground will show its distance from the general hospital, and which, he told me, is 100 yards. Of course, the hospital wall is nearer.

A new burial ground has, within a day or two, been conceded to us by the Turkish authorities, at a greater distance, and is now, I believe, being used. Its site is pointed out in Mr. Lawson's sketch.

Every attention will be given to the proper conveyance of the bodies to the graveyards, and that no deleterious effects may arise from the graves being of insufficient depth, or imperfectly covered over.

I have, &c.
 (Signed) A. CUMMING,
 Dr. Smith, Inspector General of Hospitals.
 &c. &c.

No. 577.

Mr. Lawson to Dr. Cumming.

SIR, General Hospital, Scutari,
 9th February 1857.

I HAVE the honour to acknowledge the receipt of a letter from the Director General, of 18th January last, calling for information respecting the sewerage of the general hospital here, together with the condition and position of the burial ground, &c.

The annexed sketch gives the position of the hospital with reference to the sea and burial ground, and shows the position of the sewers. The surface slopes

for some distance in front of the hospital to the top of the cliff over the sea, and no water lodges anywhere near it. The cliff is from 30 to 50 feet high.

The sewers require constant attention, and, as well as the pipes of the privies leading to them, are frequently obstructed by the soldiers throwing soiled articles of clothing and other matter into them, which cannot be removed by water. The condition of the privies had been the subject of consideration previous to the receipt of the Director General's letter, and they are now undergoing a process of cleansing, which will be continued throughout the whole of the sewers.

The position of the burial ground is given in the sketch. The bodies are mostly placed in considerable numbers in large graves, and in some instances they must have been in two tiers at least. The graves, I have learned from the Catholic clergyman, have, owing to the shallowness of the soil, occasionally not been more than four feet deep, though generally the depth is from six to seven feet deep; and latterly only one tier of bodies is placed in each. The soil in which the graves are dug is a sandy clay, which, when moist, forms a tenacious mass, but which becomes friable on drying.

The bodies are brought to the burial ground at present on stretchers, carried by natives. An attempt was made to bring them on a bullock cart, but the arrangements, unfortunately, were faulty, and the plan failed. I can see no difficulty in having a proper conveyance prepared for the purpose on the spot, using bullocks for traction.

I have, &c.
 (Signed) R. LAWSON,
 Deputy Inspector General
 of Hospitals.
 A. Cumming, Esq.
 &c. &c.

No. 578.

Dr. Cumming to Dr. Smith.

SIR, Scutari, 25th March 1855.
 I HAVE to acknowledge the receipt of your letter of 10th instant respecting the grave yard, and to acquaint you that it has been inspected by the Sanitary Commission, of which Drs. Sutherland and Gavin are members, and who have made such suggestions as they deemed necessary. There never appeared to me to be any injurious consequences to be apprehended from it. The sense of smell of some persons may have been offended by the sewer which discharges itself into the Sea of Marmora close by, and which, to my knowledge, has deceived some.

The peat charcoal will be of much use for many purposes.

I have, &c.
 (Signed) A. CUMMING.
 Dr. Smith,
 &c. &c.

I may mention here that I was in the habit, when my duties permitted, of attending some of the funerals, and frequently visiting the burial ground, but I never could detect the presence of any effluvia arising from it. The sewer to which I have alluded, and which passed by the eastern side of it, and discharged itself into the Sea of Marmora, might, under particular states of the wind, be feebly discernible.

It is somewhat remarkable the Sanitary Commissioners did not notice the celebrated Scutari burial ground, which is only four hundred yards from the barracks and general hospital, and which has been calculated to contain twenty times the population of the Turkish dominions. Yet, immediately under it, in fact sheltered by it, our army was encamped previous to moving to Bulgaria. I believe that the conduits for the water for the use of the barracks and general hospital pass under part of it.

A. C.

No. 579.

Mr. Cumming to Dr. Smith.

SIR, Scutari, 25th April 1855.

I BEG leave to offer the following observations on your letter of 23d March last, noticing certain points connected with localities and sanitary condition of the hospitals at Scutari and its neighbourhood.

1. There is no ward at the general hospital occupied as an apothecary's store; but as a central position appears to have been considered desirable for a surgery, one has been so appropriated ever since the hospital has been in our possession. As soon as a suitable room can be obtained for a purveyor's office one will be given up.

2. Anything defective in the drainage of the general hospital is being remedied. Some suggestions respecting the drains by Drs. Sutherland and Gavin, with a civil engineer, were made some time ago.

3. In my opinion, much unnecessary importance has been attached to the burial ground. It is fully 100 yards from the hospital, and situated near the edge of the cliff overlooking the Sea of Marmora. The graves are well covered, and are not shallow, and peat charcoal has been freely used to guard against deleterious influences. The use of lime for this purpose is questioned.

4. I am at a loss to conceive what vermin can harbour under the flooring of the wards, some of which are of stone; fleas, I apprehend, do not, but, like bugs, reside near their feeding places. Turkish carpentering is so bad, and gaping seams so general, that it would require many months to remove this cause of complaint.

5. Previous, probably, to its being required.

6. The huts are now occupied by upwards of two hundred convalescents, which diminishes by so many the numbers in the wards. This arrangement has been found very advantageous, and I should regret its being given up.

7. See my letter, 7th April.

8. No ill consequence can be detected as having arisen from this; but as other accommodation has become available at Kulleli, the rooms over the stable have been partially dispensed with, and will probably soon be entirely given up.

9. The unsatisfactory state of the privies has been noticed by all, but no means have yet been found altogether to amend it. It is entirely, or nearly so, attributable to the careless and dirty habits of the patients themselves. Suggestions on this point were made by the civil engineer who accompanied the Sanitary Commissioners.

I have, &c.

(Signed) A. CUMMING,
Inspector General of Hospitals.

Dr. Smith,
&c. &c.

No. 580.

Mr. Cumming to Dr. Smith.

SIR, Scutari, 7th April 1855.

WITH reference to your letter of 23d ultimo respecting the Palace Hospital, I beg leave to state to you that nothing which has come to my knowledge leads me to think that the site is unhealthy, and since its occupation the returns show that disease has not been more prevalent there than elsewhere.

Fever has been more or less rife everywhere, and every station, Abydos and Gallipoli, and, as I am informed, Constantinople also, have suffered from it; and from this circumstance medical officers, confining their observations to their own locality, have not very logically pronounced it unhealthy.

The states you receive are not altogether safe guides in this matter, because the greatest mortality generally occurs immediately, or two or three days, after the arrival of sick, and it may happen that one hospital gets more bad cases than another.

The hospital in question has had a large number of sick officers, who arrived from the Crimea and who occupy the Kiosk, but only one death has taken place amongst them, and he was a recent arrival from the camp, and who during convalescence had a relapse and died. In my opinion all the hospitals here might be pronounced as unhealthy as the Palace. The ground it stands on is a shallow valley, and in rear of the buildings are rather extensive gardens and vineyards, the whole apparently well drained by a small rivulet. In rainy weather, during the winter season, water no doubt lodges, from some of the ditches having been neglected; but, at present, the site is perfectly dry, and will, I conceive, remain so during the summer.

A few of the medical officers doing duty there have, as well as those doing duty at the other hospitals, had attacks of fever, although not to the extent to excite the least apprehension, but some of them had got alarmed, and wished to be immediately removed; a proceeding not very encouraging to the patients, and which I resisted; all are now well.

The Turks, I believe, are considered not bad judges of sites, and had this been an unhealthy one, it is not very likely that the Sultan would ever have made it his residence.

I have just returned from making an inspection of this hospital (which is, by-the-by, in excellent order), the gardens are in full bloom, the vineyards are being put in order, and the little meadow in front, which has probably obtained for it such a bad name, is covered with wild flowers and full of ants—an indication, I am inclined to think, of the natural dryness of the soil.

I have, &c.

(Signed) A. CUMMING, I.G.H.
Dr. Smith, &c. &c.

LETTERS of MR. ALEXANDER, C.B., INSPECTOR GENERAL OF HOSPITALS, Principal Medical Officer of the Light Division.

(Mem.)
No. 581.

HAVING accompanied General Sir George Brown, as Principal Medical Officer of the first Expeditionary Troops, to the East, and having disembarked at Gallipoli on the 8th April, 1854, finding that there were no hospital supplies, &c. I immediately wrote (viz., the same day) to Dr. Burrell, Principal Medical Officer at Malta, desiring the same to be forwarded. As I was summoned lately from Canada, and not being informed for what duty, I cannot lay my hands on the letter referred to, &c.; but the correspondence

on the right will show that such was done without delay.

T. ALEXANDER,
Inspector General of Hospitals.

Principal Medical Officer's Office,
Malta, 15th April 1854.

MY DEAR SIR, MANY thanks for your letter. I have only time to say that I have sent a requisition for hospital supplies for your station. Strange to say none of the expected supplies have arrived.

Lord Raglan is expected here on the 16th.

I am under orders to proceed till my successor arrives, and will probably leave this in a day or two with Dr. Tice and Mr. Ward—where Lord Raglan will probably determine—I believe Constantinople.

I am sorry to learn you are so badly off for supplies of every kind.

I have just heard of this opportunity of writing, and must conclude. Believe me, in great haste,

Yours truly,
Dr. Alexander, W. H. BURRELL.
&c. &c.

No. 582.

Staff Surgeon Alexander to Assistant Adjutant-General, at Gallipoli.

SIR, Gallipoli, 15th April 1854.

As no medical comforts or hospital supplies, in the way of paillasses, blankets, rugs, &c., for field or other hospitals, have been forwarded to this place, each battalion having arrived totally unprovided with such necessary field equipments (with the exception of marquees), I have the honour to suggest that an application be made to Malta for the above necessary supplies to be forwarded at once, as the sick now under treatment in the field have but one solitary blanket to cover them. I have already written twice to Malta on the same subject, the first time the very day we disembarked; and I will do so again to-day.

I have, &c.
(Signed) T. ALEXANDER,
Assistant Adjutant General, Staff Surgeon, &c.
&c. &c.

No. 583.

Staff Surgeon Alexander to Principal Medical Officer, at Malta.

SIR, Gallipoli, 15th April 1854.

I have the honour to request, should the supplies of medical comforts and the necessary articles for field or other hospitals, &c., have arrived, that a supply be forwarded of the same with as little delay as possible, as you may imagine what the sick in the field are suffering, having only one blanket to cover them; the thermometer for the last two nights being at 28° or so.

No army ever took the field worse provided; each battalion before leaving England ought to have had its own field equipment, &c., along with it, so that a hospital could have been established on the field at once with any requisite for the sick.

I have, &c.
(Signed) T. ALEXANDER,
Principal Medical Officer, 1st Class Staff Surgeon.
&c. &c.

Principal Medical Officer's Office,
17th April 1854.

MY DEAR SIR, AS soon as I received your note, informing me of your want of bedding, I immediately forwarded a requisition for bedding to be supplied from the stores of the station. On inquiry this morning, I found that the General had not yet approved, in consequence of the limited stores here; and under hopes of the transport, bringing those of the "Expedition," arriving soon.

This morning, however, I have strongly urged the necessity of their being granted and shipped as soon as possible, which I believe will be done.

I am only now waiting the arrival of Lord Raglan to ascertain my destination, when Dr. Tice, Mr. Ward, and myself will leave this by the first favourable opportunity. Lord Raglan is expected to-day, and I shall endeavour to follow him immediately. But what to do without medical stores—

Dr. Smith has by this time received my letter informing him of the non-arrivals, and it is not improbable he will ship some by steamer. We hear a

report here that the Rifles are suffering from diarrhoea to a great extent. We are comparatively idle here none but the Guards remaining.

Pray look out for some corner for the Principal Medical Officer and four animals, should we land at Gallipoli, which is doubtful, as it is said the bulk will be about Constantinople.

In haste,
Yours truly,
Dr. Alexander, (Signed) W. H. BURRELL.
&c. &c.

Principal Medical Officer's Office,
MY DEAR SIR, Malta, 18th April 1854.

I have just learned from the military secretary, that the hospital supplies for Gallipoli will be embarked on board the "Trent." We have sent 300 sets of bedding, and six or eight hospital tents. I have had the greatest difficulty in serving out that number.

No appearance yet of the transport with medical stores. But medical officers have arrived, and proceed in the "City of London." I have only seen one of them. There is also Assistant Surgeon Reade in the "Tonning." I am glad to see in your letter, received by the "Vulcan," that you do not mention any cases of diarrhoea.

I regret I cannot send you any comforts for the sick. A letter from Sir George Brown requiring them is the only chance of procuring them until our own arrive.

I have drawn the attention of the naval authorities to the condition of the "Golden Fleece," through the military authorities. The Guards embark in her.

The "Trent," "City of London," and "Tonning" arrived this morning, bringing 23 sappers. Sir Colin Campbell, Sir De Lacy Evans, and Brigadier Pennefather, they all go forward to-day.

You have half frightened us with the want of comforts. Dr. Tice now congratulates himself he escaped being the pioneer.

Yours very truly,
Dr. Alexander, (Signed) W. H. BURRELL.
&c. &c.

"Tonning" arrived at Gallipoli on 23d April with some hospital stores.

No. 584.

Staff Surgeon Alexander to Dr. Smith.

SIR, Gallipoli, 15th April 1854.

I HAVE the honour to inform you that I arrived here with Lieut.-General Sir George Brown, K.C.B., on the 6th instant, and since then all the troops that are to remain here, viz., six battalions, in all about 5,000 men, have arrived; but I regret to state that none of them have come provided with the necessary field equipment or medical comforts (with the exception of marquees), and none are to be found here; so you may imagine what the sick in the camps here suffered with one solitary blanket to cover them; the thermometer for the last two nights having been below the freezing point.

Since my arrival I have been looking out for houses for hospitals, and have got several, but they are all much in want of repairs, white-washing, cleaning, &c., and men are now busy at them.

I have also been to the Dardanelles, and took over the Lazaretto and other store buildings, which will hold about 5,000 men.

We keep healthy; two cases of variola occurred among the rifles, but it has not extended as yet further; two cases of the same were landed from the ship at Malta before the rifles embarked.

Water is good, but not very abundant; the mornings and evenings are very cold, and the middle of the day is generally scorchingly hot.

Six medical officers arrived here the other day, viz., 2nd Class Staff Surgeon Mickleham, and five assistant

surgeons. I have written twice to Malta already, and will write again to-day, for the stores and comforts to be forwarded with as little delay as possible. I am at present the senior medical officer here. The "Himalaya" steamer arrived two days ago with the 33d and 41st Regiments on board, but they sailed the same evening, 'tis said, for Constantinople.

I have, &c.
(Signed) T. ALEXANDER,
1st Class Staff Surgeon.
Dr. Smith,
&c. &c.

No. 585.

Staff Surgeon Alexander to Assistant Commissary General at Gallipoli.

SIR, Gallipoli, 13th April 1854.
I HAVE the honour to request that you would be pleased to inform me whether you are now prepared with the necessary articles of diet for the use of the hospitals, so that I may be enabled to open the hospitals and place the patients on hospital diets, &c., &c., and if not so, what articles of diet you are in possession of, and when you will be fully prepared.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
Assistant Commissary General,
&c. &c.

(Mem.)

No. 586.

Gallipoli, 13th April 1854.

REQUIRED for the use of the hospital at Gallipoli, 50 mats.

T. ALEXANDER,
1st Class Staff Surgeon.
Assistant Commissary General,
&c. &c.

Not obtained, the same not allowed to be carried away.

(Mem.)

No. 587.

Gallipoli, 14th April 1854.

REQUIRED a fatigue party of one non-commissioned officer and 10 men for four days to white-wash and clean buildings for hospitals.

T. ALEXANDER,
Staff Surgeon 1st Class.
Assistant Adjutant-General,
&c. &c.

Granted.

No. 588.

Gallipoli, 16th April 1854.

GOT possession of 400 odd blankets on wharf, on my own responsibility, which I distributed in the hospital and regimental marquees.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.

No. 589.

Staff Surgeon Alexander to Assistant Surgeon Smith.

SIR, Gallipoli, 28th April 1854.
In answer to your letter received yesterday, I have the honour to inform you that as regards the pay of the engineers, that rests entirely with the captain of the company, to whom you ought to report it.

The Commissariat will supply you with tea, sugar, candles, wine, oatmeal, and rice, if applied for.

No medical comforts have as yet arrived from England or Malta, although I have written repeatedly to the latter place for the same to be forwarded. The bedding has been sent to the Commissariat as you desired. Serious cases, of course, ought to be sent in to the general hospital; and the commissariat will supply mule waggons for that purpose, if applied for by requisition.

I have, &c.
(Signed) T. ALEXANDER,
Assistant Surgeon Smith, Staff Surgeon 1st Class,
&c. &c.

No. 590.

(Mem.)

Gallipoli, 29th April 1854.

MEDICAL officers in charge of corps or detachments will be pleased to forward the weekly states of sick to the principal medical officer every Monday morning in future, so that the senior medical officer may be enabled to send one to the General Commanding early on Tuesday morning.

T. ALEXANDER,
Staff Surgeon 1st Class.

No. 591.

Dr. Alexander to Sir George Brown, K.C.B.

SIR, Scutari, 13th May 1854.

WITH reference to the remarks in the paper, I have the honour to inform you that no supplies of medical comforts or hospital stores for the troops taking the field had arrived at Malta when the "Golden Fleece" sailed for Gallipoli; that I received orders late one evening to proceed in her, and embarked the following. As soon as I found there were in hospital stores, I wished above 300 hair mattresses and bolsters to be landed; and the following day I was informed by Captain Halliwell that he had received instructions from you not to land them. We disembarked on the 8th April, and I wrote to Dr. Burrell, principal medical officer at Malta, the same day, urging him to have supplies and comforts with stores forwarded; and he (Dr. B.), in consequence of my letter, wrote on the 13th April to General Ferguson, on the same subject, which will show that no time was lost. In the meantime some arrowroot, tea, and wine were obtained, and I had the good fortune to obtain possession of about 400 blankets on my own responsibility, which were applied to the comforts of the sick in hospital, as well as in the marquees.

The house used as an hospital was a new one, clean, and in good repair, and one of the very best in the town.

I have, &c.
T. ALEXANDER,
Staff Surgeon, &c.
Sir George Brown, K.C.B.,
&c. &c.

No. 592.

Dr. Alexander to Dr Burrell.

SIR, Scutari, 15th May 1854.

IN answer to your question about my not having reported my arrival at Gallipoli to the Director General, I have the honour to inform you that I wrote a private letter to the Director General from Gallipoli on the 14th April, as also an official one on the 15th April, giving him every information requisite up to that date. These letters were posted in time to have gone by the same steamer as that of General Brown's of the 13th April mentioned to the Duke of Newcastle.

I have, &c.
T. ALEXANDER,
Staff Surgeon 1st Class.
Dr. Burrell,
&c. &c.

No. 604.

Staff Surgeon Alexander to Dr. Dumbreck.

SIR, Camp, Aladyn, 19th June 1854.
 IN reply to your communication of the 18th instant, marked "immediate," I have the honour to inform you that I reported the case of cholera to you officially on the 17th, at the same time enclosing a statement of the case, along with the post-mortem appearances by the surgeon. I also wrote officially to the authorities at camp the same day, and I have no doubt ere this you must have received the same; I posted it about 6 p.m. on the 17th instant.

Enclosed, however, is a copy of the statement of the case, with the post-mortem appearances already forwarded. I forwarded also the receipts for the medicines and comforts from the different officers which were sent out by the panniers. I return you the correspondence about the servants' rations. I cannot see why Captain Bent, who receives 1s. 6d. a day for a servant, should be allowed rations for him any more than the soldiers.

I have also to report that many cases of diarrhoea are occurring among the troops, attributable to the want of vegetables, exposure to the sun, drinking bad country wine, and an insufficient breakfast.

I have, &c.

(Signed) T. ALEXANDER,

Dr. Dumbreck, Staff Surgeon 1st Class.
 &c. &c.

No. 605.

Staff Surgeon Alexander to Dr. Dumbreck.

SIR, Camp, Aladyn, 23d June 1854.
 I HAVE the honour to forward to you a letter from Surgeon Longmore, 19th Regiment, regarding lights for his hospital marquee, as also his requisition upon the Commissariat for the same, with their remarks, and will feel obliged by your obtaining a supply of lights, viz., oil or candles for the marquees, which are really necessary.

I have, &c.

(Signed) T. ALEXANDER,

Dr. Dumbreck, Staff Surgeon 1st Class.
 &c. &c.

No. 606.

Staff Surgeon Alexander to Dr. Dumbreck.

SIR, Camp, Aladyn, 24th June 1854.
 I HAVE the honour to forward to you a letter from 1st Class Staff Surgeon Tice, enclosing one from the Surgeon of the 77th Regiment regarding drills, &c.

I have, &c.

Dr. Dumbreck, (Signed) T. ALEXANDER,
 &c. &c. Staff Surgeon 1st Class.

SIR, Varna, 27th June 1854.
 IN reply to your letter of the 24th instant, received yesterday afternoon, referring to drills, &c. &c. at improper hours, I have the honour to acquaint you that it and its enclosures have been brought to the notice of the Lieutenant-General Commanding, who will take immediate steps to give effect to the recommendation conveyed in these documents.

I have, &c.

(Signed) D. DUMBRECK,

Dr. Alexander, D. I. G. Hosp.
 &c. &c.

No. 607.

Staff Surgeon Alexander to Dr. Dumbreck.

SIR, Camp, Aladyn, 25th June 1854.
 I HAVE the honour to forward to you enclosed a letter from Surgeon Watt, 23d Fusiliers, respecting no lights for the hospital marquee, and would feel

obliged by your taking the necessary steps to have the same supplied.

I have, &c.

Dr. Dumbreck, (Signed) T. ALEXANDER,
 &c. &c. Staff Surgeon 1st Class

No. 608.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Aladyn, 29th June 1854.
 I HAVE the honour to forward to you a letter from Surgeon Fraser, Rifle Brigade, enclosing a copy of his to his colonel regarding drills, &c. &c., and in doing so I beg to add that I coincide with him in his views, and beg to recommend that all parades and drills should take place early in the morning.

I have, &c.

Dr. Hall, (Signed) T. ALEXANDER,
 &c. &c. Staff Surgeon 1st Class.

Office of Inspector of Hospitals,
 Varna, 1st July 1854.

SIR, WITH reference to your letter of the 29th ultimo, giving cover to one from Surgeon Fraser of the Rifle Brigade, with a copy of a communication from that gentleman to his commanding officer, pointing out the injurious effects on the men's health of the long drills in the heat of the day that he was adopting, may I ask what has been the result of Dr. Fraser's representation. Have the drills in the heat of the day been continued, or has Lieutenant-Colonel Lawrence acted on Dr. Fraser's suggestion, and appointed an earlier hour of the day for their taking place? Be good enough to inform me at what hour of the day the drill took place which affected so many men, and whether any serious results have followed in any of the men taken ill on that occasion.

I have, &c.

Dr. Alexander, (Signed) J. HALL,
 &c. &c. Insp. Gen. of Hosp.

No. 609.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Devna, 3d July 1854.
 WITH reference to your letter of the 1st, received last evening, regarding drills, &c., I have the honour to forward to you enclosed a letter from Surgeon Fraser, Rifle Brigade, and beg to add that all divisional drills in the Light Division have taken place after 8 or 9 a.m., and continued for several hours, until this day, when the same took place at 5 a.m.

I may also state that I consider all drills, parades, &c., in this country during the hot season should take place early in the morning.

The departmental order has been made known to the different officers in charge of corps in detachments, &c., and the returns specified will be duly forwarded to you.

I have, &c.

Dr. Hall, (Signed) T. ALEXANDER,
 &c. &c. Staff Surgeon 1st Class.

No. 610.

Staff Surgeon Alexander to the Assistant Adjutant General, Light Division, Devna.

SIR, Camp, Devna, 9th July 1854.
 I HAVE the honour to report, for the information of the Lieutenant-General Commanding, that three cases of cholera spasmodica occurred this morning in the 19th Regiment.

I have, &c.

Assist. Adj. General, (Signed) T. ALEXANDER,
 &c. &c. Staff Surgeon 1st Class.

No. 611.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Devna, 9th July 1854.
I HAVE the honour to inform you that three men of the 19th Regiment were admitted into hospital this morning with cholera spasmodica; I am, however, happy to state that they are doing well.
I have, &c.

Dr. Hall, (Signed) T. ALEXANDER,
&c. &c. Staff Surgeon 1st Class.

No. 612.

From Dr. Alexander.

Camp, Devna, 14th July 1854.

REQUIRED a reserve detachment chest of medicine for the use of the staff of the Light Division.

(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.

Received.

No. 613.

Staff Surgeon Alexander to the Assistant Adjutant General, Light Division, Devna.

SIR, Camp, Devna, 23d July 1854.
I HAVE the honour to report, for the information of the General Commanding, that since 9 p.m. yesterday seven cases of cholera have occurred in the division—three in the 23d Fusiliers, two of whom died in seven hours; two in the 33d Regiment, and two in the 88th Regiment, all of whom are serious cases.

With the view of preventing the extension of a disease so formidable, I would beg to recommend most strongly that the sale of the country wine in the canteens be discontinued, and also that all stone fruit, &c. be prohibited from being brought into camp.

I have, &c.
(Signed) T. ALEXANDER,
Assist. Adjt.-General, Staff Surgeon 1st Class.
&c. &c.

No. 614.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Devna, 23d July 1854.
I HAVE the honour to inform you that seven cases of cholera have occurred in the division since 9 p.m. yesterday, viz., two in the 33d Regiment, two in the 88th Regiment, and three in the 23d Regiment; two of the latter died in seven hours. Enclosed are the death reports of the same.

I have, &c.
(Signed) T. ALEXANDER,
Dr. Hall, Staff Surgeon 1st Class.
&c. &c.

No. 615.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Devna, 6 p.m.,
23d July 1854.

I REGRET to have to report to you that three additional casualties have occurred from cholera since my letter of this morning, and beg to state that there are now seventeen cases under treatment, viz., three in the 7th Regiment, one in the 19th, seven in the 23d, three in the 33d, and three in the 88th Regiment. Enclosed are the death reports.

I have, &c.
(Signed) T. ALEXANDER,
Dr. Hall, Staff Surgeon 1st Class.
&c. &c.

No. 616.

Staff Surgeon Alexander to General Airey.

SIR, Camp, Devna, 23d July 1854.
SINCE my last interview with you I have to report another fatal case of cholera in the 88th Regi-

ment, and also several fresh admissions. The 19th Regiment, previously free from it, having just reported a severe case, a proof that the affection is becoming more general; and, as I have just been informed by a regimental surgeon "that the men look upon themselves as doomed should they remain here" (the place having been reported as unhealthy by the Inspector General of Hospitals), under these circumstances, I have the honour to suggest the propriety of removing the troops from the present encampment, my objection to a sudden move being the fear of producing an unfavourable impression on the minds of the men, which I now find already exists.

I have, &c.
General Airey, (Signed) T. ALEXANDER,
&c. &c. Staff Surgeon 1st Class.

No. 617.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Devna, 24th July 1864.
I HAVE the honour to report that eleven more deaths have occurred since my last letter to you, making in all up to this period, viz., 9 a.m., sixteen, viz., three in the 88th Regiment, one in the 19th, six in the 23d, five in the 7th, and one in the 33d Regiment. There are now 33 cases in hospital, and several of them of a serious nature.

I have, &c.
Dr. Hall, (Signed) T. ALEXANDER,
&c. &c. Staff Surgeon 1st Class.

No. 618.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Monastir, 24th July 1854.
I REGRET to inform you that five more deaths took place from cholera from the time I wrote to you this morning and my leaving our late encampment, viz., 12 noon—two in the 23rd Regiment, two in the 33d, and one in the 19th Regiment. Surgeons Muir, 33d Regiment, and Moore, 88th Regiment, with several assistant surgeons, are left at Devna with those patients that could not be moved. I have just returned, viz., 5 p.m., from visiting the hospital marquees here, and find that only two cases of a choleraic character have been admitted, viz., one in the 7th Regiment and the other in the 19th Regiment; the latter was suffering from diarrhoea when we left Devna.

I have, &c.
(Signed) T. ALEXANDER,
Dr. Hall, Staff Surgeon 1st Class.
&c. &c.

No. 619.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Monastir, 25th July 1854.
I HAVE the honour to inform you that at present, 5 p.m., there are in the division eight cases of cholera, viz., six in the 7th Fusiliers, one in the 23d, and one in the 19th Regiment. Of the above, two are of so serious nature that their recovery is doubtful.

Several cases of diarrhoea still exist, more particularly in the Rifle Brigade, and these are chiefly amongst those recently arrived; they are, however, of a mild type.

I regret to be under the necessity of enclosing two death reports, one in the 23d, and one in the 19th Regiment, from the prevailing epidemic.

I beg also to add that I have received no official report from Devna since my writing to you last.

I have, &c.
(Signed) T. ALEXANDER,
Dr. Hall, Staff Surgeon 1st Class.
&c. &c.

No. 620.

Staff Surgeon Alexander to Medical Officers in the Light Division.

(Mem.)

Camp, Monastir, 25th July 1854.

MEDICAL officers in charge of corps and detachments will be pleased to forward twice in the day, viz. 5½ a.m., and 5½ p.m., to the medical officer in charge of the division, a mem. stating the number of sick in their hospital, whether any new admissions of cholera or diarrhoea, and how those under treatment are progressing, so that the General Commanding may be enabled to forward a report twice in the day to the Commander-in-Chief, Lord Raglan.

Medical officers are requested to be punctual in transmitting the above documents, and will be pleased to sign this mem. as soon as they have read it.

(Signed) T. ALEXANDER,
Staff Surgeon 1st class, &c.

Medical Officers, Light Division.

No. 621.

Staff Surgeon Alexander to General Airey.

SIR, Camp, Monastir, 27th July 1854.

As I find that the tents of the 2d Brigade are still very close together, I have the honour to recommend that more space be allowed between the rows than at present, so that a thorough current of air may pass readily between them; and also that those of the 7th Fusiliers and 33rd Regiments be extended upwards towards the open space used as a parade ground.

The horses of the brigade should also be placed at a greater distance from the tents of the men.

I regret to have to report to you a serious case of cholera in the 77th Regiment.

Enclosed is a letter from 1st Class Staff Surgeon Tice on the above subjects.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.

General Airey,
&c. &c.

No. 622.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Monastir, 27th July 1854.

I HAVE the honour to inform you that requisitions for medicines and medical comforts were forwarded yesterday to Varna, recommended by me, and I have to request that you would be pleased to sanction the same being sent out as early as possible, as we are in want of several articles.

I regret to inform you that cholera has made its appearance in the 77th Regiment to-day, one very serious case having been admitted.

Six deaths have occurred to day, two in the Rifle Brigade, one in the 7th Fusiliers on his way from Devna to this place; two others that have been labouring under diarrhoea for some days degenerated into cholera and rapidly sunk, viz., one in the 33rd and one in the 88th Regiment.

There are at present 20 cases of cholera here in the division; two of those arrived to day from Devna, five of the above are of a serious nature; only one, however in the 19th Regiment, being a new admission to day.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.

Dr. Hall,
&c. &c.

No. 623.

Staff Surgeon Alexander to General Airey.

SIR, Camp, Monastir, 27th July 1854.

As everything tending to the preservation of the health of the troops at the present is of consequence during the prevailing epidemic, I have the honour to

suggest that ½ lb. additional of meat should be included in the daily ration, so that good soup, with rice daily, pepper and salt, may be had by the men, the meat in this country being of a very inferior quantity compared to that at the Cape, where the ration was 1½ lbs. I beg also to recommend that during the discontinuance of the sale of country wine, good rum should be issued either in a certain quantity as a ration, or, if not, that the same may be allowed from the canteens at certain hours, and under certain restrictions as to time and quantity as may be deemed advisable.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.

General Airey,
&c. &c.

No. 624.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Monastir, 29th July 1854.

I HAVE the honour to request that you would be pleased to desire the purveyor to forward immediately the supplies of brandy, arrowroot, &c. applied for on the 26th inst.; as we have now none of the former, I have desired the same to be purchased here; also the apothecary to forward to day the supplies of medicines, as we are in want of several articles, for instance, pulv. opii. Should there be any naphtha in store, I would feel obliged by your desiring some to be sent out.

A horse araba could soon arrive here.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.

Dr. Hall,
&c. &c.

No. 625.

Staff Surgeon Alexander to General Airey.

SIR, Camp, Monastir, 30 July 1854.

I HAVE the honour to bring again to your notice the subject of flannel or cholera belts for the men, and to recommend that the same be obtained for the soldiers, as I feel convinced the best results would be found to arise from their being worn during the present epidemic.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.

General Airey,
&c. &c.

No. 626.

Staff Surgeon Alexander to General Airey.

SIR, Camp, Monastir, 30 July 1854.

I HAVE the honour to forward to you two letters on a subject which is of some importance during the present epidemic, and beg to recommend that the suggestions be carried out.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.

General Airey,
&c. &c.

No. 627.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Monastir, 30th July 1854

I HAVE the honour to inform you that the supplies of medical stores and medicines applied for on the 26th instant have not yet reached us, and we are much in want of several articles, viz., pulv. opii, hydrocyanic acid, &c. being finished, as also the brandy and arrowroot. The wine is also all but expended, a few bottles only remaining.

I therefore have to request that you would be pleased to order them out immediately, as cholera is

still raging, and there is a great demand for those articles.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.
Dr. Hall,
&c. &c.

P.S.—The orderly dragoon could bring out some pulv. opii, as also some hydrocyanic acid.

No. 628.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Monastir, 31st July 1854.
HAVING written letters to you on the 27th, 29th, and 30th, requesting that the supplies of medical comforts and medicines applied for on the 26th should be forwarded at once by the purveyor and apothecary, and as none have as yet been received, although urgently required, I have obtained from General Airey an orderly to take in a pack horse for some few articles to bring back with him, viz., some hydrocyanic acid, liquor ammonia, sp. tercinthina, mustard, pulv. opii, camphor, sal volatile, tinct. opii, naphtha, carbonate of soda, and tartaric acid. Also for the purveyor to forward by the bearer some arrowroot, sago, brandy, and port wine, as we are now out of all the above articles, &c. I sincerely trust that you will desire them to attend to the above, and desire the remainder of the requisitions to be at once sent out to us, as we are in great want of them, and the disease is still raging among us.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.
Dr. Hall,
&c. &c.

No. 629.

Staff Surgeon Alexander to the Assistant Adjutant General, Light Division.

(Mem.)

Camp, Monastir, 31st July 1854.
RECOMMENDED that the 7th and 33d Regiments should be removed from their present encampments, as also that the 19th, 77th, and 88th Regiments be widely extended. Also that the 23d regiment should open up more, and cover much more ground than at present.

(Signed) T. ALEXANDER,
Assist. Adjt. General, Staff Surgeon 1st Class.
&c. &c.

Dr. Hall to Staff Surgeon Alexander.

SIR, Varna, 30th July 1854.
As you have made no demand that I have seen for cholera belts, I send 5,000 for the Light Division, as Lord Raglan has forwarded to me your letter of this date to General Airey on the subject. You will be good to sign and receipt the indent for these stores and return it to me; and you will take immediate steps for the distribution of the belts amongst the men of the Light Division.

I have, &c.
(Signed) J. HALL,
Inspector General of Hospitals.

P.S. I request you will keep me more accurately informed in future concerning the medical affairs of the Light Division, as I do not hear of medical events for two or three days after they have been reported to the Commander-in-Chief through the military authorities, which places me in a very awkward position.

Dr. Alexander,
&c. &c.

No. 630.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Monastir, 1st August 1854.
HAVING written several letters since the 26th instant, urgently requesting that supplies of medicines and medical comforts should be forwarded at once, I again embrace the opportunity of an orderly going through direct to Varna to draw your attention to the subject, in case the others may have miscarried, and to request that you would be pleased to order to be forwarded per the panniers immediately, or if possible by a quicker route, some pulv. opii, tinct. opii, camphor, sal volatile, calomel, turpentine, mustard, hydrocyanic acid, tartaric acid, bicarbonate of soda, naphtha, liquor ammonia, as we are out of all these medicines; and we have also no wine, brandy, arrowroot, and the sago is all but finished, and all are in great demand, as the cholera still rages amongst us, several new cases having been admitted, and two deaths amongst them. No deaths reports have as yet been furnished, so I sincerely hope that a large supply of the above comforts and medicines will be here to day or early to morrow by some mule waggons.

I regret to inform you of the death of Ensign Massey, 77th Regiment, from cholera and Assistant Surgeon Jenkins is also in a most dangerous state.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.
Dr. Hall,
&c. &c.

No. 631.

Dr. Alexander to Medical Officer, Light Division.

(Mem.)

Camp, Monastir, 1st August 1854
MEDICAL officers in charge of regiments are informed that an assignment of cholera belts having arrived this day, they can, on requisition approved of by me, on the purveyor's clerk in charge of stores, obtain for their respective regiments any number not exceeding 740.

(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.
Medical Officers, Light Division.
&c. &c.

No. 632.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Monastir, 1st August 1854.
I HAVE the honour to forward to you enclosed a letter from 1st Class Staff Surgeon Tice, enclosing two from Surgeon Longmore of the 19th Regiment.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.
Dr. Hall,
&c. &c.

No. 633.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Monastir, 2d August 1854.
I HAVE the honour to acknowledge the receipt of yours of the 30th ultimo, received this morning, and beg to inform you that the indent for 5,000 flannel or cholera belt swas received by Mr. Harrington, purveyor's clerk in charge, and forwarded yesterday to the purveyor at Varna.

I am surprised at the non-arrival of my letters to you regarding the cholera, as I wrote to you two letters on the 23d, two on the 24th, one on the 25th, one on the 27th, and on the 1st Aug., and all the other days up to this period; certainly one hospital weekly medical state, stating the actual state, was forwarded daily, and occasionally two.

I will, however, in future write to you daily on the subject. 2 p.m., I have just returned from visiting

the markees, and find 13 serious cases, viz., two old cases in the 7th Regiment, sinking; two new cases in the 19th, but most likely to do well; two in the 23d, one being a new case; two in the 33d; two in the 77th; and two in the 88th, old cases; one in the Rifle Brigade. Two officers are also very low, viz., Assistant Surgeon Jenkins, 23d Fusiliers; and Paymaster Newbury, Rifle Brigade, both from cholera.

I regret much to inform you that Captain Levinge, Horse Artillery, being unwell, had taken himself an overdose of laudanum, and was found this morning in a comatose state, from the effects of which he sank. Dr. Grier and myself saw him this morning, but he was then past recovery.

The monthly returns are also forwarded.

I have, &c.

(Signed) T. ALEXANDER,

Dr. Hall,
&c. &c. Staff Surgeon 1st Class.

P.S. Enclosed is the report of Captain Levinge's death, by Dr. Rudge, as also that of Quartermaster Serjeant of the 23d Fusiliers, one of the two cases mentioned above.

Dr. Hall to Staff Surgeon Alexander.

SIR, Varna, 2d August 1854.

I HAVE to acknowledge the receipt of your two letters of the 30th July, which reached me yesterday evening, and of your letter of yesterday's date, which came to hand about ten o'clock last night.

The stores you are in want of were despatched from this at daylight on the 31st July, together with 5,000 cholera belts, and ought, I think, to have reached your camp before the date of your last letter, or, at all events, I hope they did soon after, as they were sent from this with an escort. If they have not reached you, be good enough to let me know at once, that inquiry may be made about them.

Lord Raglan is anxious about the progress of the cholera; and as your reports have been hitherto so irregular and unconnected, I have been unable to draw up a satisfactory report for him concerning Devna and Monastir. Indeed, his information through Brigadier-General Airey is much more precise and accurate than any I have received from you.

You will, therefore, be good enough to furnish me with a daily state of cholera in the Light Division, stating the number remained, admitted, and died in each corps. The names and corps of those who die you will insert on the back of the state.

I should also wish to know how many of the men who have died contracted the disease at Devna; and how many have been taken ill and died since the division moved to Monastir. I have been called on for statements to be sent home by the two last packets, and the unconnected nature of your information has embarrassed me considerably.

I have, &c.

(Signed) JOHN HALL,

Dr. Alexander,
&c. &c. Inspector General of Hospitals.

P.S. 11 a.m. Since the above was written I have received your second letter and memorandum of the 31st, with enclosed death reports of seven men.

(Signed) J. H.

No. 634.

Staff Surgeon Alexander to Dr. Hall.

Camp, Monastir,

SIR, 7½ p.m., 3d August 1854.

I REGRET to have to inform you of the appearance of cholera among the Artillery (hitherto exempt from it). Two cases of severe diarrhoea were reported last evening to have been admitted, but one soon changed to cholera, and died at 5 a.m. this day. I have mentioned the circumstance to General Airey, and

the propriety of their being removed to a fresh camping ground. I would feel greatly obliged by your desiring the purveyor to forward immediately the requisitions for medical comforts applied for on the 28th and 31st ultimo, as those received on the 1st instant will soon be expended.

I have, &c.

(Signed) T. ALEXANDER,

Dr. Hall,
&c. &c. Staff Surgeon 1st Class.

P.S. I regret to inform you of the death of Assistant Surgeon Jenkins, 23d Regiment. The report is enclosed.

Paymaster Newbury is also very low. A return of cholera and diarrhoea is also enclosed.

No. 635.

Staff Surgeon Alexander to Dr. Hall.

Camp, Monastir,

8 A.M. 4th August 1854.

SIR,

I HAVE the honour to inform you that six new cases of cholera have been admitted during the night, one in the 19th, two in the 33d, one in the 77th, and two in the 88th Regiment. Two deaths have also occurred since last report. The reports are enclosed.

Paymaster Newbury, Rifle Brigade, is stated to be in a very feeble state.

I would feel greatly obliged by your sending out the servants asked for from the pensioners, as we are much in want of them.

I have, &c.

(Signed) T. ALEXANDER,

Dr. Hall,
&c. &c. Staff Surgeon 1st Class.

No. 636.

(Mem.)

Staff Surgeon Alexander to General Airey.

Camp, Monastir, 4th August 1854.

RECOMMENDED that the 33d Regiment should be moved from their present camping ground to a new one, as the diarrhoea cases are assuming a choleraic character.

I have, &c.

(Signed) T. ALEXANDER,

General Airey,
&c. &c. Staff Surgeon 1st Class.

Dr. Hall to Staff Surgeon Alexander.

SIR, Varna, 4th August 1844.

I HAVE given instructions to the purveyor to comply with your requisition so far as the store will admit of it, but the unexpected demand and lavish use of some articles, arrowroot in particular, has exhausted the stock sent out from England and all the purveyor could procure here, but I have indented on England for more, and have sent orders down to Scutari to purchase the article in Constantinople, if any can be procured there.

I see in your answers to Brigadier Airey's queries you state that a demand was made on the 28th for medical comforts; it has never come to hand; another on the 31st. I find that two confused documents, partly repetitions of each other, were sent in by Purveyor's Clerk Harrington to Purveyor Tucker, which is irregular, as all demands for stores should come through you to me, and then they would be sure to meet with attention. The requisition you state to have been made on the 1st of August has never reached its destination any more than the one of the 28th July; that of the 2d August for 2,000 cholera belts I have approved of. I have no wish to withhold anything that the public stores contain either from the Light or any other Division. Why should I? and I mention the above particulars to point out to you how necessary it is for you to be precise as to

dates and facts when you forward complaints and statements to be laid before the Commander-in-Chief.

I have, &c.
 (Signed) JOHN HALL,
 Dr. Alexander, Inspector General of Hospitals,
 &c. &c.

No. 637.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Monastir, 5th August 1854.
 I HAVE the honour to acknowledge the receipt of yours of the 2d instant, yesterday, and herewith enclose to you a return of the admissions and deaths in each corps since the outbreak of cholera up to last night, as also another return showing the number attacked and who died at Devna, as also those at Monastir.

As regards the reports from General Airey to Lord Raglan, I give the former the same twice in the day; and had I been aware that you wished for more information than what I forwarded to you, copies of those to Lord Raglan would have been also sent to you; but as I never heard from you from the breaking out of the cholera, viz., 9 p.m. 22d ultimo, until I received yours of the 30th ultimo on the 2d instant, I conceived that those forwarded to you were satisfactory.

I have, &c.
 (Signed) T. ALEXANDER,
 Dr. Hall, Staff Surgeon 1st Class,
 &c. &c.

No. 638.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Monastir, 5th August 1854.
 I HAVE the honour to inform you that our brandy, port wine, arrowroot, and essence of beef are all expended, and that I would feel greatly obliged by your desiring the requisitions forwarded from this on the 28th, 31st, 1st, and 2d, instant, being sent out immediately, as the above are urgently required.

I have, &c.
 (Signed) T. ALEXANDER,
 Dr. Hall, Staff Surgeon 1st Class,
 &c. &c.

No. 639.

Staff Surgeon Alexander to Assistant Adjutant General, Light Division.

SIR, Camp, Monastir, 6th August 1854.
 HAVING forwarded the several documents herewith returned on the subject of bread, I have the honour to inform you that I not only consider the bread to be very badly baked, but also that the material of which it is composed to be of an inferior quality, very innutritious, and capable of engendering and keeping up irritation of the bowels, more particularly at the present period.

I consider good bread to be of the utmost importance in maintaining an efficient state of health, and cannot too strongly impress upon your notice the necessity of every attention being paid to the healthy and nutritious dieting of the troops during the present epidemic.

I have also been informed that many of the men are in the habit of purchasing bread and throwing away that issued by the Commissariat.

I have, &c.
 (Signed) T. ALEXANDER,
 Assist. Adjt. General, Staff Surgeon 1st Class,
 &c. &c.

No. 640.

Staff Surgeon Alexander to Assistant Adjutant General, Light Division.

SIR, Camp, Monastir,
 4½ p.m. 6th August 1854.
 I REGRET to have to report to you, for the information of the General Commanding the division,

that a case of cholera has just been reported among the Sappers and Miners.

I have, &c.
 (Signed) T. ALEXANDER,
 Assist. Adjt. General. Staff Surgeon 1st Class,
 &c. &c.

No. 641.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Monastir, 7th August 1854.
 I HAVE the honour to acknowledge the receipt of yours of the 4th inst., received this morning, regarding the requisitions of the 28th, 31st, and 1st inst., for medical comforts; and I have to acquaint you that early one morning, while dressing, Captain Nolan, aide-de-camp to General Airey, brought me the queries to answer at once. I replied I could not until I inquired of Mr. Harrington, purveyor's clerk in charge, when they had been forwarded.

Having done so, I wrote down the dates as given by Mr. H., and gave them to the General, and I herewith enclose to you the dates of the requisitions which were forwarded, signed by Mr. Harrington.

With regard to the last paragraph in your letter, I have to inform you that no one, either in the service or out of it, is more precise or particular regarding dates and facts than myself.

I have, &c.
 (Signed) T. ALEXANDER,
 Dr. Hall, Staff Surgeon 1st Class,
 &c. &c.

Dr. Hall to Staff Surgeon Alexander.

SIR, Varna, 7th August, 1854.
 IN reply to your letter of the 5th inst., I have the honour to inform you that your requisitions of the 31st ult. and 2d inst. were complied with as the store would admit; but I repeat what I stated to you before, that no requisition dated 28th July and 1st August have ever reached this; and as you persist in repeating the statement, I request that duplicates of them may be forwarded under cover to me.

Your demand for essence of beef amounts to almost the whole supply originally sent from England; but surely with the command of fresh beef on the spot, and poultry, you can be at no loss to provide chicken soup in any quantity you require for the use of the sick.

I have, &c.
 (Signed) J. HALL,
 Dr. Alexander, Inspector Gen. of Hospitals,
 &c. &c.

Dr. Hall to Staff Surgeon Alexander.

SIR, Varna, 8th August 1854.
 IN reply to your letter of the 6th, reporting the sickness of Assistant Surgeons Allanson and Rudge, and Surgeon Moore, 88th Regiment, I am sorry to say I have no person at present that I can send, for what with cholera and sickness, most of the divisions are nearly in as great want as yourselves.

I have approved of your requisition, but I fear you will not be able to obtain anything like the quantity of arrowroot you have demanded, for not only has all we had in store been issued, but every ounce that can be purchased here.

I have sent home for more to be sent out, and to Constantinople to purchase what is to be obtained there.

I see you indent for essence of beef. The supply was originally small, and new preparation sent out on trial; but you surely cannot be in want of this particular article when you have the command of fresh meat and poultry. Essence of beef was intended

for use on board ship, or in situations where fresh meat could not be procured.

You did not send in your monthly return of medical staff to the 31st July. Let me have it as soon as you can if you please.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.
Dr. Alexander,
&c. &c.

No. 642.

Staff Surgeon Alexander to Dr. Hall.

Camp, Monastir,
5 p.m. 9th August 1854.
SIR, I HAVE the honour to inform you that the Royal Artillery moved yesterday to new camping ground, as also the 77th Regiment this day.

I regret to inform you that four more deaths have taken place since the morning state was forwarded to you, viz., three of cholera—one in the 33rd, one in the 88th, and one in the Rifle Brigade; also one from fever in the 77th Regiment. Colonel Sullivan is now suffering from fever, and Mr. Barlee, Commissariat, had an attack of cholera this morning, but he is at present progressing favourably.

Enclosed is a return of deaths from cholera up to the present time.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.
Dr. Hall,
&c. &c.

No. 643.

Staff Surgeon Alexander to Mr. Harrington.

Camp, Monastir,
3 p.m. 10th August, 1854.
SIR, HAVING just now received a letter dated 7th August from Dr. Hall, requesting that duplicates of the requisitions dated 28th July and 1st August may be forwarded to him,

I have the honour to request that you would be pleased to furnish me with the same, so that I might forward them to Dr. Hall.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.
Mr. Harrington,
&c. &c.

No. 644.

Staff Surgeon Alexander to Dr. Hall.

Camp, Monastir,
5 p.m., 10th August, 1854.
SIR, I HAVE the honour to inform you that the 7th and 19th Regiments have this day taken up fresh camping ground.

I regret to have to report to you that one, the 23rd Regiment, has been carried off by cholera since my morning state to you, in 8½ hours.

Enclosed is the death report. There are also two serious cases in the Rifle Brigade, and one in the Royal Artillery, also one in the Engineers.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.
Dr. Hall,
&c. &c.

No. 645.

Staff Surgeon Alexander to General Airey.

Camp, Monastir, 11th August, 1854.
SIR, As the Inspector General of Hospitals has, in his letter to me of the 4th inst., stated that I forwarded complaints and statements to be laid before the Commander in Chief,

I have the honour to request that you would be pleased to state whether I at any time made any complaint to you to be laid before the Commander-in-Chief respecting medical comforts.

You may recollect sending your aide-de-camp, Captain Nolan, early one morning with certain queries to be answered by me, when I told him I could not do so then, until I inquired of Mr. Harrington, purveyor's clerk in charge, the precise dates when they had been sent off, and when going thither for that purpose you called me back, when I gave you the same answer as to Captain Nolan.

Having seen Mr. H. and written down the dates as given to me by him when he had forwarded requisitions on my return, I handed the same to you.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.
General Airey,
&c. &c.

General Airey to Staff Surgeon Alexander.

Camp, Monastir, 14th August 1854.
SIR, I HAVE the honour to acknowledge the receipt of your letter dated 11th inst., requesting to be informed whether you had ever forwarded complaints and statements to be laid before the Commander-in-Chief. I am really at a loss to understand what this means. All I know is, that when the prevailing epidemic was at its height, I sent my aide-de camp, Captain Nolan, to you to know how the division was off for medical comforts, which I found to be by no means what it ought to be.

I sent for the dates of the requisitions which had been sent in to head quarters. I found that apparently very unnecessary delay had taken place in meeting the requisitions which you had very regularly and very properly sent in, and which circumstance I lost no time in submitting to the military secretary of the Commander in Chief, and I shall take very good care to do the same whenever the necessities of the troops under my command or the exigencies of the service appear to me to make it desirable that I should do so.

I think it right to add that, owing to the precautions adopted by you and the provisions that you made, it has been in my power to assist the 2nd Division in a small degree with medical comforts which they urgently required; and only yesterday a trooper came in from the medical officer of the 5th Dragoon Guards entreating aid, they likewise appearing to be without the necessary medicines, which, to a limited extent, I felt compelled to afford them.

I have, &c.
(Signed) RICHARD AIREY,
Brigadier Gen. Commanding
Staff Surgeon Alexander,
&c. &c. Light Division.

No. 646.

Staff Surgeon Alexander to Dr. Hall.

Camp, Monastir, 11th August 1854.
SIR, I HAVE the honour to acknowledge the receipt of yours of the 7th inst., and having called officially on Mr. Harrington for duplicates of the requisitions of the 28th ult. and 1st inst., as desired by you,

I beg to forward to you the enclosures, which, along with my letter of the 7th inst., I trust you will deem the same satisfactory.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.
Dr. Hall,
&c. &c.

No. 647.

Staff Surgeon Alexander to Dr. Hall.

Camp, Monastir, 13th August 1854.
SIR, I REGRET to have to report to you the death of Captain Dilke from cholera yesterday. He was

admitted under treatment with diarrhoea on the 8th inst.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.

Dr. Hall,
&c. &c.

No. 648.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp Monaster, 13th August 1854.
I HAVE the honour to request that you would be pleased to desire the medicines to be forwarded to us, with as little delay as possible, which Mr. Green applied for on the 5th inst., as we are much in want of many of them, and more so now, as I have had this day to issue to the Cavalry Brigade several of those most in request at present, as Dr. O'Flaherty has written to me stating they "are completely run out of everything," and wished a supply, which I complied with as far as my limited stores would admit of.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.

Dr. Hall,
&c. &c.

SIR, 13th August 1854.
I HAVE the honour to inform you that your requisition for medicine has been ready for two or three days, but as it is not a load for an arabat, we have no means of sending it out.

Could you not order in one of the bāt horses, with panniers, which would be quite sufficient to carry it?

I have, &c.
(Signed) J. HALL.

Staff Surgeon Alexander,
&c. &c.

SIR, Varna, 14th August 1854.
I WROTE to you yesterday informing you that your medicines were ready, and requesting you to send in a horse and panniers for them. When the package is small an arabat and escort is hardly required, and Mr. McIntosh sometimes experiences difficulties in getting medicines forwarded to their destination.

We have had some rice ground as a substitute for sago, and to-day I have heard of the arrival of a small quantity of arrowroot, but there is so much swell in the bay I fear they will not be able to get it ashore this afternoon.

I have, &c.
(Signed) JOHN HALL,
Inspector Gen. of Hospitals.

Staff Surgeon Alexander,
&c. &c.

No. 649.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp Monaster, 16th August 1854.
I HAVE the honour to acknowledge the receipt of yours of the 13th and 14th inst., with enclosures, and I will at once have a pack-horse sent off for the medicines, as we are out of all the preparations of opium, and medical officers are continually making demands for them. So I will feel obliged by your desiring the same to be forwarded at once by the pack-horse.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.

Dr. Hall,
&c. &c.

No. 650.

Staff Surgeon Alexander to Dr. Hall.

Camp Monaster,
17th August 1854.
SIR, HAVING forwarded to you last evening a requisition for medical comforts recommended by me, I have this day sent in a pack-horse with panniers for the same, and will feel obliged by your desiring the same to be forwarded per bearer to us with as little delay as possible.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.

Dr. Hall,
&c. &c.

SIR, Varna, 18th August 1854.
IN reply to your letter of the 17th instant, in which you state, that you had forwarded to me a requisition the previous evening, I beg to say, that I have not received it, but yesterday there being an arabat, for the conveyance of some medicines, I directed Mr. Fluker to send you some wine, brandy, and ground rice, and to-day I have instructed him forward to you a small supply of arrowroot and sago by the bāt horse and panniers.

I cannot make out why your letters and requisitions should so frequently be mislaid and delayed.

Have you no regular means of transmitting letters from the light division? because it would be better to trust to that than to give them to private individuals.

I have, &c.
(Signed) J. HALL,
Staff Surgeon Alexander, Ins. Gen. of Hospitals.
&c. &c.

No. 651.

Staff Surgeon Alexander to Dr. Hall.

Camp Monaster,
19th August 1854.
SIR, IN reply to yours of the 18th instant, received this morning, I have to inform you that the requisition in question was posted by the regular mail from this on the 16th instant; that I gave the same to the corporal, and saw him take it.

Endorsed is a copy of the same. I have also to inform you that the araba, with some few medicines and comforts, arrived here at 4 p.m. yesterday, and that the medical officers here have complained, and justly, at being out of the medicines required hourly for the treatment of the present epidemic, caused by the unnecessary delay in the transmission of the same from Varna.

The requisition being dated 5th August, and sent early from this on the morning of the 6th and approved by you on the 7th, and yet they only arrived at 4 p.m. of the 18th inst. Surely the Commissariat would furnish a mule and cart if requested for the rapid conveyance of medical comforts and medicines during the present epidemic.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.

Dr. Hall,
&c. &c.

P.S.—Enclosed are the proceedings of a Board of Survey on the Medical Comforts received yesterday per araba.

(Signed) T. A.

No. 652.

Staff Surgeon Alexander to Dr. Hall.

Camp Monaster,
21st August 1854.
SIR, HAVING mentioned to Colonel Airey yesterday, who manages the post here, your statement regarding the miscarriage of my letters, he examined some of the bags this morning, and, much to his surprise,

found one directed to you from me, which he brought to my tent this morning, and on opening it in his presence I found it dated 16th instant, namely, cholera state, and some death reports.

I have, &c.,

(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
Dr. Hall,
&c. &c.

No. 653.

Staff Surgeon Alexander to Dr. Hall.

Camp Monastir,
22d August 1854.
SIR,

As you will have seen, by the proceedings of the Board of Survey on Medical Comforts forwarded from this on the 19th instant, that the port wine had arrived, I have the honour to inform you that we have now only two bottles remaining, and will feel obliged by your desiring the requisition forwarded this day for the same to be sent out to us with as little delay as possible.

As medical officers have latterly been requiring bottled porter, and purchasing the same from the canteens at 2s. per bottle, would it not be advisable to have a supply sent out at once?

I have accordingly desired Mr. Harrington to forward a requisition for the same, which is enclosed.

I have, &c.

(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
Dr. Hall,
&c. &c.

P.S.—Enclosed is report of all the deaths from cholera up to 12 p.m. of the 21st instant.

(Signed) T. A.

SIR, Varna, 24th August 1854.

I HAVE the honour to inform you that I have directed the Purveyor to put up and forward to you the medical comforts demanded in your requisitions of the 16th, 21st, and 22d instant.

It was an oversight of the Purveyor's that you did not receive the port wine which I directed him to forward along with the medicines the other day in anticipation, as I thought of your wants.

I have sent the porter as you demanded it, but it has not been found to answer well by others who have tried it as a restorative after cholera.

I am, &c.

(Signed) J. HALL,
Ins. Gen. of Hospitals.
Staff Surgeon Alexander,
&c. &c.

No. 654.

Staff Surgeon Alexander to Dr. Hall.

(Memorandum.)

Camp Monastir,
26th August 1854.

ONE death from cholera since the return of the 25th instant, viz., Private A. Habden, 7th Fusileers; admitted 19th August, died 25th; duration of disease seven days and eight hours. No morning states as yet received, as the division marches en route to Varna. We bring all our sick with us.

(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.

Dr. Hall,
&c. &c.

No. 655.

Staff Surgeon Alexander to Dr. Hall.

Camp, Heights, Sebastopol,
2d October 1854.
SIR,

I REGRET to inform you that cholera still continues in the Light Division, three deaths having occurred since yesterday, and there being still eight cases under treatment. As the nights are now cold, and we have taken up our position, I would feel obliged by your bringing to the notice of the

Commander-in-Chief the propriety, nay, the necessity, of the tents being provided for the men, as I fear without them our force will soon suffer much.

Enclosed is the return of killed and wounded according to the form forwarded.

Regimental Surgeons state that they are unable to give the return of wounded according regions, as also the operations performed, having been so much engaged attending to the wounded.

The above return might be obtained perhaps with little difficulty from Scutari, whither all the sick were transported.

I have, &c.

(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
Dr. Hall,
&c. &c.

P.S.—I had, at our last camping ground, got a house cleared out for a hospital, but we were immediately ordered off. We arrived here yesterday, and I have got a small house, which, when cleaned, will hold some twenty patients or so.

(Signed) T. A.

No. 656.

Staff Surgeon Alexander to Dr. Hall.

Camp, 11th November 1854.
SIR,

IN reply to your note of yesterday, I have the honour to inform you that all the hospital marquees belonging to the Light Division were left on board the transports when we landed in the Crimea, there being (as you are aware) only one pack-horse for the panniers allowed.

I have, &c.

(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
Dr. Hall,
&c., &c.

No. 657.

Staff Surgeon Alexander to Lt.-Col. Sullivan.

Camp above Sebastopol,
4th November 1854.
SIR,

I HAVE the honour to request that you would be pleased to bring to the notice of the General Commanding the Division the necessity of another blanket being issued to all the men of the division, the nights now being very cold, and the present blanket old, thin, and unfit to afford sufficient warmth.

I have, &c.

(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
Lt.-Col. Sullivan,
&c. &c.

No. 658.

Staff Surgeon Alexander to Lt.-Col. Sullivan.

Camp above Sebastopol,
24th November 1854.
SIR,

HAVING written to you officially on the 4th instant, recommending that you would bring to the notice of the General Commanding the Division the necessity of another blanket being issued to each man of the division, the one in use being old and worn, &c., and as such has not yet been complied with, I have again the honour to request that you would urge most strongly the necessity of the second blanket being issued at once, as the men are now suffering much from the inclemency of the weather, and there is at present much sickness attributable to the cold and exposure, &c.

I beg also to recommend that camp kettles be issued to the men of the division, as well as a supply of wood for cooking; and were large cooking places erected the consumption of the fuel would be less, and hot meals could be more easily obtained, than at present.

I have, &c.

(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
Lt.-Col. Sullivan,
&c. &c.

No. 659.

Staff Surgeon Alexander to Dr. Hall.

Camp above Sebastopol,
26th November 1854.
SIR,
I HAVE the honour to report for your information the deaths of two men of the 7th Fusileers from exposure in the trenches; and, as many men are brought in from the trenches suffering much from cold, &c., I beg to recommend that buildings be erected at once for hospitals, and cooking places, for the more effectual treatment of the sick, as also that huts and cooking places be erected for the soldier, along with an issue of wood for cooking, so that hot meals could be more easily obtained by the men than at present.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
Dr. Hall,
&c. &c.

No. 660.

Staff Surgeon Alexander to General Codrington.

Camp above Sebastopol,
26th November 1854.
SIR,
I HAVE the honour to report for your information that two men of the 7th Fusileers were reported as having died from exposure in the trenches on the 24th instant, one in eleven and the other in thirteen hours; and as many men are now brought in from the trenches suffering much from exposure and cold, I beg to recommend most strongly that immediate steps be taken to have some buildings for hospitals and cooking places erected at once for the more effectual treatment of the sick, &c., and also that huts for the men, and kitchens, be erected. I may also add, that it has been reported to me that in one regiment the men are badly off for boots, shirts, and warm clothing, all which must tend to produce the great increase of sickness in the division; and if steps are not immediately taken to remedy the above wants of the soldier I fear the sickness will increase, and the mortality be great. I trust the extra blanket recommended by me to be issued to each soldier in my letters of the 4th and 24th instant, as well as the supply of wood for cooking, cooking places, &c., will be complied with.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
General Codrington,
&c. &c.

No. 661.

Staff Surgeon Alexander to Dr. Hall.

Camp above Sebastopol,
28th November 1854.
SIR,
I REGRET much to inform you that thirteen deaths have occurred from cholera since my last morning's report; viz., five in the 19th regiment, four in the 23d regiment, two in 7th regiment, and one in the 88th regiment.

Enclosed is a letter Surgeon Longmore, 19th regiment, which will show you how the men will suffer unless some means are taken to protect them against the cold, &c., as well as the means of obtaining hot meals, and having their provisions cooked.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
Dr. Hall,
&c. &c.

No. 662.

Staff Surgeon Alexander to General Codrington.

Camp, 29th November 1854.
SIR,
I REGRET much to have to inform you that thirteen deaths have occurred from cholera since yesterday morning, and I fear much that the mortality will increase unless prompt measures are taken to protect the men from such exposure, as well as providing

them with the means of procuring hot meals, and having their food properly cooked.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
General Codrington,
&c. &c.

No. 663.

Staff Surgeon Alexander to Dr. Hall.

Camp above Sebastopol,
2d December 1854.
SIR,
THE requisition for medicines for the Light Division, approved of by you some days since, was, in some measure, complied with last night. However several important medicines were not forwarded, and of pulv. opii and calomel only four ounces of each, with a sick list of 636, of cholera, dysentery, diarrhoea, and fevers, &c., which is about one dose of three grains of each of these two medicines to each patient.

With such a supply as the above it surely cannot be expected that medical officers can do justice to their patients, much less cure them; and as there must be ample supplies in Balaklava, from the fact that steamers are continually plying between Scutari and that place,

I have the honour to request that you would be pleased to desire the medical officer in charge of the medicines to furnish the full amount of the requisition.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
Dr. Hall,
&c. &c.

No. 664.

Staff Surgeon Alexander to General Codrington.

Camp above Sebastopol,
4th December 1854.
SIR,
As the sick list is rapidly increasing, and there is great mortality at present among the troops, attributable to the exposure, want of huts, cooking places, fuel, &c., I have again the honour to request that you would urge upon the authorities the imperative necessity of an extra blanket being issued to each soldier in the division, as well as that something be at once done in the shape of hutting, cooking places, fuel, &c., as the soldier now, being without fuel, has to consume his miserable rations half raw. Unless some such precautions are soon taken to remedy the above evils I fear the present army will soon be rendered totally inefficient.

I would also strongly recommend that you would endeavour to obtain for the hospitals an issue of fuel or charcoal, so that something hot may be obtained for the poor sick soldiers now lying in the hospitals, marquees, and tents, as well as for those brought in almost in a state of collapse from wet and cold in the trenches.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
General Codrington,
&c. &c.

No. 665.

Staff Surgeon Alexander to Dr. Hall.

Camp above Sebastopol,
4th December 1854.
SIR,
As you will observe from our morning states that our sick list is rapidly increasing, and that there is great mortality in the division, chiefly attributable to exposure to cold and wet in the trenches, insufficient clothing, want of cooking utensils, kitchens, also fuel, the men consequently eating their miserable rations half raw,

I have the honour to inform you that I have this

day written to General Codrington on the above subject, and would feel greatly obliged by your urging upon the authorities the absolute necessity of something being at once done to remedy the above evils.

The extra blanket, which I recommended on the 4th instant, besides several times since then, has never yet been issued, and I fear unless something is done the present army ere long will be rendered ineffective.

I would also strongly recommend that some fuel or charcoal be issued for the use of the hospital, so as to enable something hot to be obtained for the sick now lying in the hospital, marquees, tents, &c., as well as for those who are occasionally brought in almost in a state of collapse from the exposure to cold and wet in the trenches.

I have, &c.

(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
&c. &c.

Sir, 5th December 1854.

THE position you draw of the condition of the men is a melancholy, but I fear too true a one. By yesterday's orders you will observe that fuel and lights are to be issued to the troops, which is one point gained. How is it that the Light Division has not got its proportion of the blankets and warm clothing brought out in the "Jura," on account of the Quartermaster General's department, for distribution to the army. A large quantity of warm clothing is on its way out from England, and I understand huts for the men, but they ought to have been here at the beginning of October to have been beneficial. Now the cold will be on us, as the rain has already overtaken us, before their arrival. We are going to get the loan of the French ambulance to assist us in removing our sick down to Balaklava; a humiliating position to be placed in I must admit, but as relief is now of the most vital importance we shall be glad to avail ourselves of it.

It is not for want of representation matters are as they are at present, I assure you, and I am glad you have represented it to General Codrington. The duty is too severe for any human being to bear up against for any length of time, but I suppose the effect is necessary and unavoidable if we are to retain our position against Sebastopol.

I send you the dispenser's explanation about the calomel. The loss of the "Prince" was a misfortune to us, and will require time to remedy.

I have, &c.

(Signed) JOHN HALL,
Staff Surgeon Alexander, &c. Inspector Gen. of Hospitals.
&c. &c.

No. 666.

Staff Surgeon Alexander to Dr. Hall.

Sir, Camp above Sebastopol,
10th December 1854.

IN reply to yours of the 4th instant, requesting me to forward a monthly summary of the exciting causes of disease in the Light Division for the month of November, I have the honour to inform you that I consider the following as such; viz., want of rest, harassing and continued duties, continual exposure to cold and wet in the trenches and on picquets during the very inclement weather (nearly the whole of the month being wet), insufficiently nutritious food from the want of fuel to cook the same, insufficient clothing (many of the men being almost bootless, and in rags) and having only one miserable worn-out blanket, tents not affording sufficient protection from the weather, they being for several days full of mud. The above have been reported, but I believe neither fuel nor the extra blankets, &c. have as yet been issued.

That the duty the men have had to perform was too harassing and severe is proved by the following facts:—

In the 7th Fusileers, men were in the trenches 24 hours without relief up to or about the 17th instant.

On the 14th two companies were kept in picquet for 36 hours, when of course no cooking took place.

In the 19th regiment, taking the total number of hours of November, viz., 720, 304 have been passed by the men either on duty, in the trenches, or on picquet, which is ten hours daily for each man, the remaining 14 being passed in bringing water, seeking for fuel, cooking, and other duties, &c.

In the 23d Fusileers, the average return gives to each man one night in camp and one on duty; many men had, however, to go on duty with their companies two or three nights running, doing 24 hours duty to 12 in camp.

In the 33d regiment, the men on an average were something less than one night in their tents, with water and fuel fatigues, when off duty. They are in consequence weak and wasted from the incessant and severe duty.

In the 77th regiment, the men were either in the trenches or on outlying picquets every second night. On the intervening days guards, besides water and fatigues, &c.

In the 88th regiment, no man was ever more than one night in three in his tent; was 12 hours in the trenches, and 24 hours on picquet; then look after wood for cooking water, &c.

In the Rifle Brigade, the right wing, consisting of four companies, furnished, during 27 days in November, 19 duties, 16 of which were night duties, extending over a period of 408 hours, and on an average $2\frac{1}{2}$ companies on duty daily of 15 hours' duration for the 27 days, or $21\frac{1}{2}$ hours on each duty, thus showing an average of 9 hours daily off duty. One company was 5 out of 6 nights on duty, 3 companies 7 out of 9.

From the above it will be observed what harassing duties the men have had to perform, and when not on duty most of their time that ought to have been devoted to rest was spent in collecting brushwood for cooking, water, &c.

Had cooking places been erected, and a few weakly men told off for cooks, with proper cooking utensils, fuel, &c., so that men, on coming from the trenches or picquet, cold and wet, could have had at once some hot coffee, soup, &c., they would have been enabled to have gone to their tents and got some rest, instead of attempting to light some miserable fire to make a cup of coffee or cook their victuals. The consequence was, that in many instances the meat was eaten either half cooked or raw, which is no doubt one of the principal causes of so many being on the sick list from affections of the bowels.

The rations, generally speaking, have been 1 lb. of fresh meat or salt, with 1 lb. of biscuit, 1 oz. of coffee (raw) being in the green state, $1\frac{3}{4}$ oz. of sugar, with rice or barley, and 1 gill of rum; but I believe rice was only issued four days and barley one during the month; vegetables were in use for the former portion of the month, as well as the meat alternately fresh and salt, but for the latter portions it was salt, and not always a full ration.

As regards tents being a sufficient protection against the approaching cold season, I look upon them as totally insufficient, and, if the present army is to be kept available and efficient, huts for the men, with cooking places, ought at once to be erected, with an issue of fuel and proper cooking utensils, sufficiently warm clothing with extra blankets (the present one being nearly useless), and less harassing duties.

Should the above not at once be acted upon, which I have several times previously recommended, I fear, great as our sick list and mortality are at present, that both will soon be much more so, and our army ere long be rendered totally ineffective.

I have, &c.

(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
&c. &c.

A FEW practical Suggestions for the ensuing Campaign as regards the Medical Department in the Field.

Staff Surgeon Alexander to Dr. Smith.

Camp, Heights, Sebastopol,
15th December 1854.

A GREAT deal having been written regarding the wants of the sick and wounded soldier, both in Bulgaria and in the Crimea, after the battles of Alma, Inkermann, &c., and the blame having been attempted to be placed on the Medical Department:

Having been in the field in medical charge of the Light Division during the whole of the present campaign, I can bear testimony to the zealous manner the medical officers of that division performed their arduous, trying, and laborious duties under many disadvantages, both in Bulgaria during the ravages of cholera, as well as in the Crimea, after the battles of Alma, Inkermann, &c.:

Having, therefore, had some experience in the field during the late Kafir war, as well as in the present campaign, I trust you will excuse the liberty of my offering a few suggestions, which (if carried out) would I think, in a great measure, remedy, if not wholly prevent, any mal-arrangements in a future campaign.

The grand desideratum of the present campaign has been, the want of a sufficient and separate transport, in the shape of ambulances, carts, waggons, &c. for the conveyance of sick and wounded, men falling out on the march, stores of medicines, comforts, complete hospital equipment, in the shape of hospital marquees, bedding, bearers, water-decks, fracture apparatus, A and B canteens, &c.; and as all departments and general officers have invariably been provided with transport for baggage prior to that of the sick, hospitals, &c., I would suggest, to prevent such taking place in future, that a sufficient transport should be delivered over to the medical department in the shape of ambulances, carts, waggons, &c.; and, in addition, I would recommend most strongly that a large number of strong mules, with a sufficient number of French pack-saddles both for reclining and sitting, be added to our army; two men can be charge of two mules; the above mode of conveyance has been found so exceedingly useful during the present campaign in carrying wounded from the field of battle, as well as to the hospitals, shipping, &c.; the same is also adapted to all kinds of roads; nearly our whole sick and wounded have been conveyed by the same, the roads being so heavy as to render it impossible for our ambulances to travel.

The number of all these should be in proportion to the strength of the army; they should be given over entirely and expressly to the department, holding it responsible for their own transport; but, to carry out such, a hospital staff corps should be raised, of young, active, and intelligent men, from whom would be selected hospital sergeants, orderlies, drivers, men to look after the mules, waggons, carts, &c., and also provide servants for the medical staff, &c.:

The present ambulance corps being composed of old and worn-out soldiers who are totally unfitted for the work required to be performed, and have proved a complete failure.

The above corps should be commanded by really active and practical men, who should always be encamped with the bulk of the army in the field, and not, as at present, some miles from the same. They, again, should be under the principal medical officer, or a medical officer called a field inspector.

The only kind of ambulance belonging to the English army that I have as yet seen is one on four wheels, drawn by six mules, and carries four reclining and six sitting; but it is far too heavy for the six mules allotted to it; the consequence has been, that for a very considerable period, owing to the roads being so heavy, it has been quite useless, while, during the same period, two-wheeled carts, drawn by

one or two mules, have been passing daily to and from Balaklava.

As regards the carts sent out according to Mr. Guthrie's description, not having seen them, I am unable to speak from experience of them; but, from what I have seen during the present campaign, I am much inclined to have all carts, ambulances, &c., on two wheels, and drawn by one or two mules or horses, but so adapted that others could be added, were the roads heavy, &c.

Taking for granted that a sufficient ambulance corps, as above described, has been delivered over for the use of the department, I would recommend that a certain number of ambulances, carts, mules with the French pack-saddles, for the conveyance of a hospital establishment, in the ships; hospital marquees, tents with a certain number of bedding-water-decks; bearers; some reserved medicines; comforts; A and B canteens, as well as panniers, be given over in charge to each of the regimental surgeons, or the medical officer for the time being in charge of the regiment or battalion, with a certain proportion of the hospital staff corps, to act as orderlies, drivers, look after mules, &c. He should be held responsible that all are in good order and repair, so that the regiment or battalion, on being separated from the main body of the army or division, could at once open an hospital with every comfort and convenience for the sick.

The commanding officer, however, of the regiment or battalion must not on any account have anything whatever to do with the same, the whole being in charge of the surgeon, who would be responsible to the divisional medical officer, that officer again to the field inspector.

In addition to the above there should be always in the field a divisional supply of ambulances, carts, caelets, &c., with reserve supplies of stores, medicines, medical comforts, bedding, &c., in charge of an appropriate staff, from which regimental surgeons would from time to time replenish their stock of medicines and comforts, &c., by requisition approved by the divisional officer.

A head purveyor should also always be encamped with the army in the field, and not, as during the present campaign, at Scutari; he would then be fully aware of what was required for the sick and wounded.

Our packages of stores, medicines, medical comforts, bedding, &c., should be made up in such bales or boxes that two or three would make a fair load for a mule; great advantage would be derived from the same, instead of the enormous boxes or bales requiring several men to move them. No box or bale ought to be larger on any account than a fair half-load for a mule or pack-horse.

The principal medical officer of an army in the field should be a thoroughly practical man, active and energetic, one who would do his duty as regards the military authorities respectfully, but straightforwardly and fearlessly, in making known to them the real wants of the sick and wounded, the causes of disease, &c., and by acting so he would give a tone to the department; but as he is generally at head quarters, and as such was once distant about 30 miles from the Light Division of the army, and, besides, as he may be considered sufficiently occupied with a general superintendence of the whole, returns, &c.; the latter, of course, are necessary, still they cannot or ought not to be paramount, so as to place in a secondary position attention to the sick, as well as a supply of medicines and comforts for the sick and wounded in the field. And to remedy the above, which has been greatly felt during this campaign, I would beg to recommend that a medical officer be appointed as a field inspector, who should always be encamped with the army in the field. He should be an active, practical man, as well as a good surgeon, capable of giving advice when required, and performing the more serious operations (if need be); in fact, he should be looked up to by the medical officers in the field as one on whom they could rely in any

professional difficulty. He should also be held responsible that all the hospital establishments in the divisions of the army were so far complete in ambulances, carts, mules, medical comforts, stores, &c. so as to meet any emergency. From the above duties it will be seen that the appointment would be no sinecure, but I conceive the same could be easily carried out by a really active and energetic practical man, and that the system above proposed would work well and easily.

That some such plan as the above is necessary for the ensuing campaign is proved by the fact, that, notwithstanding the ample supplies of medicines, comforts, &c. sent out by you, adapted to any emergency, strange to say, they have not been forthcoming when required, and it has been with the greatest difficulty that small supplies of medicines, comforts, &c. could be had, either in Bulgaria during the ravages of cholera, as well as here now, although in command of the sea, and with steamers continually plying between Scutari and Varna formerly, as well as now between the former and Balaklava.

(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
Dr. Smith,
&c. &c.

No. 667.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, 22d December 1854.
As in the general order issued some days ago regarding fuel none is laid down to be issued for the hospital, and as such is in very great request for the poor wretches that are brought in, almost in a state of collapse, from the trenches;

As I have frequently brought the same subject before the authorities—viz., the necessity of fuel for the hospitals—but as they apparently seem not to endeavour to provide the same,

I have the honour to request that you would be pleased to inform me how fuel is to be obtained for the hospitals of the division.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
Dr. Hall,
&c. &c.

No. 668.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Heights, Sebastopol,
30th December 1854.
I HAVE the honour to inform you that scurvy has made its appearance among several men of the division, as also that gangrene of the fingers and toes has showed itself among the troops.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
Dr. Hall,
&c. &c.

No. 669.

Staff Surgeon Alexander to Dr. Hall.

SIR, Camp, Heights, Sebastopol,
17th January 1855.
I HAVE the honour to forward to you enclosed a letter from Surgeon Longmore, 19th Regiment, respecting the conveyance of the hut as an hospital from Balaklava, and beg to state that all the other surgeons in the division are similarly placed as regards the transport of huts for hospitals, and unless the military authorities provide conveyance in the shape of sleighs, &c. the huts might as well have remained in England.

I have, &c.
(Signed) T. ALEXANDER,
Staff Surgeon, 1st Class.
Dr. Hall,
&c. &c.

No. 670.

Staff Surgeon Alexander to General Codrington.

Camp, Heights, Sebastopol,
12th February 1855.
SIR, HAVING been informed that the sick in other divisions are supplied daily with fresh meat, and as such would be attended with the best results, I have the honour to recommend that the same should be issued, if possible, to the sick of the division.

Some time since, you may recollect that I mentioned the same both to yourself as well as to the commissariat officer in charge, but then it was deemed impossible; perhaps now the issue of fresh meat daily for the sick could be carried out.

I have, &c.
(Signed) T. ALEXANDER,
General Codrington,
&c. &c. D. Insp. Gen. of Hosp.

No. 671.

Staff Surgeon Alexander to Colonel Airey.

Camp, Heights, Sebastopol,
28th February 1855.
SIR,

I HAVE the honour to inform you that the dead horses close to the Light Division which were spoken about still remain unburied, and that a very large number in the same state remain in the gully between the Light Division and the 4th, as well as in the higher ground; and I beg to remark, that unless measures are taken to have the same buried, and also the latrines well covered up, and very great attention paid daily to the cleanliness of the camp, &c., there is no doubt that sickness to a considerable extent will take place among the troops, which may be obviated by the above most necessary precautions being strictly enforced.

I have, &c.
(Signed) T. ALEXANDER,
&c. &c. Dep. Insp. Gen. of Hosp.

No. 672.

Staff Surgeon Alexander to the Assistant Adjutant-General, Light Division.

Camp, Heights, Sebastopol,
28th March 1855.
SIR,

I HAVE the honour to forward to you two enclosures regarding the conveyance of medical comforts from Balaklava to the Light Division. From the remarks, both by Colonel Airey and Captain Dent, you will perceive that no conveyance is to be had. I would therefore feel obliged by your informing me how the same, which are absolutely necessary for the treatment of the sick, are to be brought hither.

I have, &c.
Assist. Adjt.-General. (Signed) T. ALEXANDER,
&c. &c. Dep. Insp. Gen. of Hosp.

No. 673.

EXTRACT from Monthly Report for March 1855.
Light Division.

EVERY precaution is taken to keep the camp clean, as also the latrines limed, covered, &c. A new tank for drinking-water is in course of formation. Several of the hospital huts have been ventilated, and whitewashed both inside as well as out; all would have been so could whitewash brushes have been obtained, but none are to be had at Balaklava.

Dr. Hall, (Signed) T. ALEXANDER,
&c. &c. Dep. Insp. Gen. of Hosp.

No. 674.

Staff Surgeon Alexander to Dr. Hall.

Camp, Heights, Sebastopol,
30th April 1855.
SIR,

IN reply to yours of this day's date, I have the honour to inform you, that, from my experience in

Jamaica, Canada, and the late Kaffir war, and also during this campaign, I am of opinion that were flannels generally worn by our troops next to the skin, that very beneficial results would follow. I may add, that since entering the service I have always advocated the same, and that I consider flannel shirts ought to be the only kind in use among our troops. As regards cholera belts, generally speaking, in the Light Division, there are very few at present either in possession or in use.

I have, &c.
 Dr. Hall, (Signed) T. ALEXANDER,
 &c. &c. Dep. Insp. Gen.

No. 675.

Staff Surgeon Alexander to the Assistant Quartermaster General of the Expedition.

On board Ship "Orient,"
 5th May 1855.

SIR,
 I HAVE the honour to inform you that there are no orderlies on board either of the hospital ships. I reported the same officially at Balaklava before leaving, and they were first to follow. Admiral Boxer stated that he would forward them by the "William Hutt," which has not as yet made her appearance.

I have therefore the honour to request that you would be pleased to arrange that twelve men and one non-commissioned officer be sent on board of each of the hospital ships to act as orderlies.

I have, &c.
 Assist. Quar.-Gen. (Signed) T. ALEXANDER,
 of the Expedition, Dep. Insp. Gen.
 &c. &c.

No. 676.

Staff Surgeon Alexander to the Assistant Adjutant-General, Light Division.

Camp, Heights, Sebastopol,
 20th May 1855.

SIR,
 I HAVE the honour to forward to you the enclosed, and beg to recommend the adoption of the plan for the French latrines proposed by Surgeon Longmore, 19th Regiment.

I have, &c.
 Assist. Adjt.-General, (Signed) T. ALEXANDER,
 &c. &c. Dep. Insp. Gen.

No. 677.

Staff Surgeon Alexander to Dr. Hall.

SIR, Yenikale, 4th June 1855.

I HAVE the honour to report the arrival of the 63d and 77th Regiments with some drafts, and have to express my surprise at Surgeon Seamen, of the 72d Regiment, yesterday reporting himself, and informing me that he had brought no bearers for carrying wounded off the field, &c. His leaving Malta without them was bad enough, but particularly Balaklava, is strange indeed. He also yesterday was supplied with wine, brandy, tea, and sugar from our stores, none having been sent with him. I suppose the 63d Regiment will be in the same state. I desired eight bearers to be given over to Surgeon Seamen.

I regret to have to report to you that cholera still continues among us, more particularly in the Marines and Land Transport Corps. Two cases were also reported among the 72d Regiment, on board of ship. Enclosed is the monthly return of medical officers with the expedition.

I have, &c.
 Dr. Hall, (Signed) T. ALEXANDER,
 &c. &c. Dep. Insp. Gen.

No. 678.

Staff Surgeon Alexander to Dr. Hall.

Camp, Heights, Sebastopol,
 16th June 1855.

SIR,
 I HAVE the honour to acknowledge the receipt of your medical memorandum of this day's date, at 1 p.m. concerning the board on Colonel Campbell, 90th Regiment; and as regards the paragraph "the board was ordered on the 14th instant, but has not yet been received," I have the honour to inform you, that the memorandum for the board was received by me at 4 p.m. last evening, along with the medical memorandum dated 15th instant, for boards on Captain Gwilt, and the Rev. J. McSweeney, and also that the board on Colonel Campbell assembled at 10 a.m. this morning. Enclosed are the proceedings.

It would tend much to expedite business were I authorized to name the members of the board, as soon as the same appeared in general orders, and would prevent such delay as has now taken place.

I have, &c.
 Dr. Hall, (Signed) T. ALEXANDER,
 &c. &c. Dep. Insp. Gen.

No. 679.

Staff Surgeon Alexander to Dr. Hall.

Camp, Heights, Sebastopol,
 26th July 1855.

SIR,
 HAVING understood that sick have proceeded with the cacolets, without their kits, the ambulance people refusing to take them, which is of course attended with great inconvenience to the sick. I have the honour to request to be informed whether it is the duty of the ambulance people to attach the kits to the cacolets in which the sick are carried, and, if not, would it not be advisable to have so many mules with pack-saddles, or mule carts, sent to accompany so many cacolets, for the purpose of carrying the packs of the sick, so that they might not be separated from them?

I have, &c.
 Dr. Hall, (Signed) T. ALEXANDER,
 &c. &c. Dep. Insp. Gen.

No. 680.

Staff Surgeon Alexander to General Codrington.

Camp, Heights, Sebastopol,
 6th August 1855.

SIR,
 I HAVE the honour to report for your information that the six sick of the 34th Regiment, detailed to be sent on board the "Severn" did not proceed yesterday in consequence of the cacolets not taking the packs of the sick. Surely nothing could be easier than that the officers commanding the ambulance should detail so many mules with pack-saddles for the purpose of carrying the packs, according to the number of cacolets sent. I may add, that, on the 26th July, I brought the above subject officially in writing before Dr. Hall, and suggested the above or mule cart; but that in reply I was informed that "transport should be demanded from the Land Transport Corps, when ambulance transport is demanded from the men. Now the orders are, that applications for land transport should be sent in the previous evening, and as we never know whether cacolets are coming before they or the ambulances arrive, the above recommendation was useless; besides, occasionally the order for sick to be sent off arrives in the evening of the same day they are to leave the camp.

I have, &c.
 Gen. Codrington, (Signed) T. ALEXANDER,
 &c. &c. Dep. Insp. Gen.

No. 681.

*Staff Surgeon Alexander to — Darling, Esq.*Camp, Heights, Sebastopol,
6th September 1855.

SIR,

I HAVE the honour to inform you that I have this morning received a communication from the officer commanding the 77th Regiment, respecting some cases of scurvy having shown themselves; also that no lime juice has been served out for a week. I have to request that you would be pleased to obtain a supply (should you be out of the same), and that the same should be issued at once if possible.

I have, &c.

(Signed) T. ALEXANDER,
Dep. Insp. Gen.— Darling, Esq.
&c. &c.

No. 682.

*Staff Surgeon Alexander to Assistant Quartermaster General, Light Division.*Camp, Light Division,
26th October 1855.

SIR,

I HAVE the honour to forward to you enclosed a requisition for fifteen large hospital huts for the sick of the division, as well as two others in addition, being one for purveyor's stores and one for medical staff quarters, according to a memorandum received yesterday from the Inspector General of Hospitals.

I have, &c.

(Signed) T. ALEXANDER,
Dep. Insp. Gen.Assist. Quar. General,
&c. &c.

No. 683.

*Staff Surgeon Alexander to Dr. Hall.*Camp, Heights, Sebastopol,
4th November 1855.

SIR,

IN reply to your memorandum of the 1st November, received on 2d instant, I have the honour to forward to you a return showing the number of large hospital huts required for the sick of the Light Division, and accommodation for hospital staff, as well as the repairs required for those now in possession.

Of the five large hospital huts all are in an incomplete state: that of the 7th Fusileers requires several windows, also a lining of wood for the roof, gables, and surgery, &c.; that of the 19th Regiment requires half flooring and lining of wood for the roof; that of the 33d requires the roof and gables to be lined with wood, also the porches, and some portions of flooring, as well as windows; that of the 77th requires a lining of wood for the roof; and that of the 88th Regiment requires the gables being lined with wood, windows fastened, &c.

Stoves are also required for all; and I may add, that the surgeon of the 77th Regiment, having applied for stoves, as directed by your memorandum, received in answer, "There are no stoves to be issued as yet."

The old huts now used as hospitals, to be rendered habitable for the winter, would require lining inside throughout with wood, with fitting for roof and sides externally.

I may add, that medical officers have been doing all in their power to repair the old ones, but find very great difficulty in obtaining either men or materials for the same.

I have, &c.

(Signed) T. ALEXANDER,
Dep. Insp. Gen.Dr. Hall,
&c. &c.

No. 684.

(Memorandum.)

17th November 1855.

I BEG to recommend most strongly that two new large hospital huts be at once issued, as all the huts of the 7th Regiment's hospital were destroyed, and they have now only marquees, which are quite unfit for the treatment of the sick at this season of the year.

(Signed) T. ALEXANDER,

Dep. Assist. Quar. General, Dep. Insp. Gen.
&c. &c.*Copy of Memorandum sent 7 p.m., 17th November 1855.*

THE signature of the officer commanding the regiment is requisite for all requisitions for hospital huts, stores, &c.

(Signed) H. H. CLIFFORD,
Major, Dep. Assist. Quar. Gen.

No. 685.

(Memorandum.)

Camp, Heights, Sebastopol,
22d November 1855.

FORWARDED the copy of Surgeon Longmore's letter to his commanding officer regarding the large hospital huts, and added the following remarks:— "Forwarded for Dr. Hall's information, and requesting that he would urge upon the authorities the absolute necessity of the wood now called for being at once issued; no end of applications having previously been made for the same, without avail."

(Signed) T. ALEXANDER,

Dr. Hall, Dep. Insp. Gen.
&c. &c.

No. 686.

Remarks on forwarding the Case of Lieut. Brown, 77th Regiment.

RECEIVED on the 17th December 1855, and forwarded for Dr. Hall's information. As this is not the first instance where great delay has taken place in nominating vessels for the sick officers to go to, could it not be very easy for the authorities, when the leave is granted, and placed in orders, at the same time to name the ship, as I should suppose they always know at head quarters what berths are vacant on board the ships in Balaklava? If not, surely each day the same could be telegraphed.

(Signed) T. ALEXANDER,

Dep. Insp. Gen. of Hosp.

17th December 1855.

No. 687.

*Staff Surgeon Alexander to Dr. Hall.*Camp, Heights, Sebastopol,
15th December 1855.

SIR,

IN reply to your communication of yesterday's date regarding the supplies of stores in possession of the regimental surgeons,

I have the honour to inform you, that such was done to secure a supply when they could be obtained, and while the roads were good, medical officers having learned by bitter experience the misery caused by the want of those articles which were not forthcoming last winter at the Balaklava stores, when urgently required for their patients.

I cannot conceive why having a supply on the spot can lead either to waste or extravagance on the part of hospital servants, as the medical officer is held responsible, and keeps a daily account of extras issued to each patient.

Again, each regiment has much better store room for these articles than the purveyor's clerk of the division, he having only half a hut, part of which

he sleeps in and uses as an office. The greater proportion of his stores are in an old building which might tumble down any day, no hut having as yet been issued for a store, although repeated applications have been made for the same; nor do I see the slightest chance of one being issued, when a sufficient number are not even yet issued for the sick of the division. I should think we need be under no apprehension of any regiment moving from its present position for some months.

We have fourteen cases of ophthalmia, which would be as well at the Monastery; I will, therefore, communicate the same to 1st Class Staff Surgeon Jamieson.

I have, &c.
(Signed) T. ALEXANDER,
Dep. Insp. Gen. of Hosp.

Dr. Hall,
&c. &c.

LETTERS of DR. LINTON, C.B., Inspector General of Hospitals, Principal Medical Officer
1st Division, enclosing LETTERS of MR. COOPER, Surgeon 4th Dragoon Guards.

No. 688.

(Department Memorandum.)

Camp of 1st Division, Aladyne,
7th July 1854.

"SECOND-CLASS Staff Surgeon R. Cooper will be pleased to take the superintendence of the sanitary state of the camp of the 1st division; he will place him-self in communication with the surgeons of the different regiments for this purpose, and will report to the principal medical officer in writing, any defects that may require interference."

Staff Surgeon Cooper was most attentive and indefatigable in the performance of his duties as inspecting sanitary officer of the 1st division.

The great amount of experience he had had an opportunity of acquiring regarding sanitary measures during his services in the West Indies, &c., rendered the appointment an exceedingly good one.

No. 689.

(Memorandum.)

(Having reference to some cases of cholera that had occurred in the camp.)

Camp of 1st Division, Aladyne,
8th July 1854.

"It is strongly recommended that any person feeling the least unwell, and particularly with a tendency to diarrhoea, that they should not fail to report themselves at once to the medical officers of their own corps, early treatment in all such cases affording the best chance of checking the disease."

No. 690.

(Memorandum.)

Camp 1st Division, Aladyne,
of 9th July 1854.

"SMALL-POX having appeared in a neighbouring village, it is recommended that the men be not allowed to go there."

This memorandum received due consideration.

No. 691.

(Memorandum.)

Camp of 1st Division, Aladyne,
18th July 1854.

It having been reported to me that bad and unwholesome wine is now selling in the canteen of the 42d Highlanders; and as at this time every precaution should be taken to prevent bad or doubtful wine being used, I have to request that you will cause inquiry to be made into the same.

A board of officers was accordingly ordered to examine it.

No. 692.

(Memorandum.)

Camp of 1st Division, Aladyne,
24th July 1854.

1. "As much bathing in the lake (Devna) is considered unhealthy at this season of the year, it is recommended that there shall be only one bathing parade in the week, for the sake of cleanliness; that this take place early in the morning, or in the cool of the evening, at a part of the lake where it is free from weeds, and with a sound bottom; that the operation of bathing or washing should not exceed five or ten minutes, and that the men should not be allowed to loiter on the banks of the lake, or in its vicinity before or afterwards."

2. It is also recommended that the latrines be covered with several inches of earth morning and evening, and that the manure from the horses, &c. be carefully swept into pits, and also covered daily.

3. That the introduction of all fruit into the camp should be prohibited.

No. 693.

Dr. Linton to Dr. Hall.

Camp, Gevreckler,
31st July, 1854.

SIR,

As several cases of cholera have proved fatal in this division, I beg you will be good enough to let me know your wishes with regard to post-mortem examinations being made in such cases, the performance of which you are aware would necessarily be attended with much difficulty and exposure.

It could not be conducted in the hospital marquee, and there are no tents available for the purpose.

I am also desirous of knowing how the hospital bedding and regimental clothing should be of.

It is customary to bury the men in their blankets, but there is great difficulty in fulfilling the cholera instructions regarding the bedding and clothing, the soaking them in warm water, and otherwise, &c.

In one instance (that of a private of the 79th Highlanders), the mans kit appears to have been sold without the knowledge of the surgeon.

It being desirable that the men should not carry the bodies of the dead to the grave, may I beg to know if there are any ambulance carts suitable and available for the purpose?

I have, &c.
(Signed) W. LINTON, M.D.
Deputy Inspector General.

Dr. Hall,
&c. &c.

No ambulance could be got to convey the dead to the grave, but an araba was purchased for this purpose, and which was found most useful.

No. 694.

(Memorandum.)

Camp of 1st Division, Gevreckler,
2d August 1854.

WITH a view of relieving as much as possible the hospital marquees from overcrowding, and of facilitating the recovery of the convalescents, medical officers in charge of regiments will be permitted to use their discretion in discharging men from the hospitals, for the purpose of attending daily, and of doing such light duty as they think them capable of; these men to be entered in a column of the morning sick state, headed "convalescents attending;" but it is to be distinctly understood that every case of premonitory disease, or convalescents requiring medical treatment, should be taken into hospital.

(Signed) W. LINTON, M.D.
Deputy Inspector General.

No. 695.

Dr. Linton to Dr. Dumbreck.

SIR, Camp of 1st Division before
Sebastopol, 4th Oct. 1854.

I REGRET to have to report to you an increase this morning in the 1st division both of cholera and of choleraic diarrhoea, with four deaths from the former, viz.—

One officer, Captain Joliffe, Coldstream Guards;
Two privates of the 42nd Highlanders; and
One private of the 79th ditto.

These cases are in my opinion caused, or are at all events fostered, by exposure to the damp and cold night of the present season.

I have therefore to request you will be good enough to bring this circumstance to the notice of his Excellency the Commander of the Forces, with the view to the men being supplied as speedily as possible with tents, with which they are not at present provided.

I have also to mention that salt provisions have been issued to them five days consecutively; this should, I conceive, be avoided if possible during the present period.

I have, &c.
(Signed) W. LINTON, M.D.
Deputy Inspector General.

Dr. Dumbreck,
&c. &c.

Every effort had, I believe, been previously made by the divisional authorities to obtain tents, but without success.

(Signed) W. L.

No. 696.

(Memorandum.)

Camp of 1st Division before
Sebastopol, 12th Oct. 1854.

STAFF Assistant Surgeon Francis Smith will be pleased to take the superintendence of the sanitary state of the camp of the 1st division; he will place himself in communication with the surgeons of the different regiments, &c. for the purpose, and he will report in writing to the principal medical officer such defects as may seem to require special interference.

W. LINTON, M.D.
Deputy Inspector General.

Staff Surgeon Cooper had been placed in medical charge of the General Hospital at Balaklava.

Dr. Smith I found a most efficient and valuable medical officer, but I had to regret his sudden death; he contracted fever in the discharge of his duties, and died at Balaklava on the 9th of February 1855.

No. 697.

Dr. W. Linton to Lt. General H.R.H. the Duke of Cambridge.

SIR, Camp of 1st Division before
Sebastopol, 25th Oct. 1854.

I HAVE the honour to acquaint you, that although, at my inspection of the hospitals of the division yesterday, the number actually sick was not large, yet several of the medical officers in charge of corps stated to me that a slight diarrhoea was very prevalent, many of the men being in some degree affected. On examining the mouths and gums of some of the most sickly looking, there was an evident tendency in my opinion to scurvy.

I therefore feel convinced, that although fresh meat is issued to the troops on almost alternate days, yet this, without a due admixture of vegetables, I do not think sufficient, and would recommend the necessity of a supply of vegetables being if possible obtained; or, failing this, that a ration of lime juice may be given to them at least twice a week, and which might be taken with advantage at the same time with a portion of their rum.

I have, &c.
(Signed) W. LINTON,
Deputy Inspector General,
Duke of Cambridge,
&c. &c.

No. 698.

Dr. W. Linton to Assistant Quarter Master General, 1st Division.

SIR, Camp of 1st Division before
Sebastopol, 27th January, 1855.

I BEG to call your attention to the very great number of carcases of horses, mules, and oxen that are lying above ground, many of them in a state of semi-decomposition, almost everywhere within the lines of the division.

I would also notice the filthy state of the Turkish camp and rear of H battery of artillery, and to express my firm conviction that, unless these evils are quickly remedied, they will become sources of disease and death.

I have, &c.
(Signed) W. LINTON,
Dep. Inspector General,
The Assistant Quarter Master General,
&c. &c.

No. 699.

Colonel Cunningham to Dr. W. Linton.

SIR, Camp of 1st Division before
Sebastopol, 30th January, 1854.

By desire of Colonel Upton, Commanding, I have the honour to state, that upon a careful examination of the camp of the Guards and 97th Regiment, they are considered by no means in a dirty state.

Directions have been given respecting the Royal Artillery camp, and intimation of the state of the Turkish camp has been made to head quarters.

In regard to the neighbourhood of the hospitals of the division, the Colonel Commanding has desired me to look out for some more eligible situation within the lines of the division, which I shall be disposed to do, and will be happy to intimate it to you should you consider the present one limited and disagreeable.

I have, &c.
(Signed) A. T. CUNNINGHAM,
Colonel and Assistant Quarter-
master General,
Dr. Linton,
&c. &c.

No. 700.

*Dr. W. Linton to Assistant Quartermaster General,
Head Quarters.*

SIR, Camp of 1st Division, before
Sebastopol, 1st February, 1855.

IN acknowledging the receipt of your letter of the 30th ultimo, I have to state, for Colonel Upton's information, that there are upwards of one dozen dead horses lying within 250 yards of the camp of the Coldstream Guards, together with others lying near the camp of the Scots Fusilier Guards, and there are also three or four lying within 300 yards of the 97th Regiment.

I must, therefore, again repeat my opinion, that unless these animals, together with others lying at even a greater distance, are not removed before the setting in of the approaching hot weather, the effluvia therefrom will be likely to produce the worst forms of fever.

With regard to your suggestion of moving the field hospital of the division should I desire it, I do not see any spot within the lines of sufficient extent that have not dead horses or other abominations in the vicinity.

I have, &c.
(Signed) W. LINTON,
Dep. Inspector General.

The Assistant Quartermaster General,
&c. &c.

P.S.—Major Ingram, now Lieutenant-Colonel Ingram, Commanding the 97th Regiment, accompanied me in the examination of the ground referred to.

W.L.

No. 701.

SIR, Camp of 1st Division,
April 1855.

HAVING repeatedly, both verbally and in writing, urged the necessity of the removal, not only of the hospitals, but of the regiment from its present position, and being aware that it is in anticipation to substitute for my proposal the removal of only one wing of the regiment, and that to the ground just vacated by the regiment of Zouaves (a site in too close proximity to our present unhealthy locality, and ground, moreover, very dirty), I consider it my duty to protest against this measure as one not sufficiently carrying out the sanitary objection in view; and therefore beg to represent this for the consideration of the Brigadier, and likewise of Dr. Hall, the Inspector General of Hospitals, in order that no more time may be lost.

My proposal was to move the whole regiment to the high ground to the eastward of where the 63d Regiment is encamped, where the soil is favourable, and the health of the troops located in it good.

In conclusion, I beg to state, that seeing the regiment has suffered so severely from fever while the troops around it are healthy, I see no prospect of its being arrested unless an immediate and entire change is adopted. I object to half measures as being certain to lead only to disappointment and much inconvenience.

Trusting that you will as much as in your power forward this most important step being carried out,

I am, &c.
(Signed) T. SCOTT,
Surgeon 79th Regiment.

No. 702.

Dr. Linton to Dr. Hall.

Camp of 1st Division, before Sebastopol,
1st December, 1854.

(Monthly Summary for November, 1854.)

THE accompanying Monthly Returns of sick show a considerable increase of sickness during the present

as compared with that of the last month, and which, from the reports of the different medical officers of the Division, is attributable partly to the great amount of duty the men have had to perform, and partly to the constant exposure to wet and cold, their clothes having scarcely been dry since the 14th of the month; the want of means of cooking, and of a sufficient quantity of vegetables and of lime juice, and lastly, their flimsy habitations, the tents neither affording sufficient protection from wet or cold.

The increase of sickness, it will be perceived, has been chiefly in bowel complaints, cholera, diarrhoea, and dysentery. The former has, for the most part, affected regiments and drafts lately arrived in the country. In addition to these, some cases of moist gangrene of the toes have also occurred. I think the cholera, in this instance, more attributable to wet and cold than to epidemic influences; and corroborative of this I may mention, that the 42d and 79th Highlanders, both of which had passed through the ordeal of cholera both in Bulgaria and also on their way to the Crimea, had become quite healthy again until they were encamped on the heights of Balaklava, several hundred feet above the level of the sea, and where they were again attacked, while the 93rd Highlanders, who were encamped near Kadikoi, and in comparative shelter, have hitherto escaped the disease.

It generally runs a rapid course, purging being almost always present, while the general symptoms, vomiting and cramps, are less prominent; collapse quickly ensues, and in many instances the patient is brought to the hospital in this state, and these cases are too frequently fatal.

The diarrhoea, in many of the debilitated and weakly-looking men, is evidently of the scorbutic character, and scurvy has shown itself in several regiments. The greater part of these cases are usually benefited by the use of lime juice. I am aware that this disease (diarrhoea) is much more extensive than it appears on the face of the Returns, as perhaps fully 100 men in each regiment (at least as far as the 1st Brigade is concerned) labour under diarrhoea while they continue to perform their duty.

The cases of dysentery, too, have been of a grave character, many of them having of late proved fatal.

Duty.—I have not been able to ascertain the exact amount of duty performed by each regiment; this is done separately and independently, and depends chiefly on its situation in camp, strength, &c.; but all admit that they are overworked, and that often when in the trenches they are unable to arouse themselves on any account. The Grenadier Guards have about three nights out of seven in bed; the Scots Fusilier Guards are half on duty during the day and one third at night, independent of furnishing fatigue parties; and the 97th Regiment have 325 men on duty daily, causing them to be two nights out of bed in succession.

Rations.—During the early part of the month of November the troops had fresh meat every other day, but during the latter part they were entirely confined to salt meat.

With regard to the means of cooking, their duties are so arduous that very little time can be spared for this purpose; fuel is difficult to be obtained, water distant and muddy if not got at an early hour in the morning, and lastly, their camp kettles have almost wholly been lost or destroyed, obliging them to cook separately each in his own canteen.

Weather.—The weather became cold and boisterous on the 9th, with heavy rains; on the 14th there was a complete hurricane, not a tent having been left standing, and the men one and all remaining exposed to its violence for many hours. This ended towards evening in sleet and snow, after which heavy rains and high winds continued until the end of the month. The country became actually flooded; the different camps were more than ankle deep, and even the interior of the tents which were not impervious to wet were covered with deep mud. The men's clothes

were scarcely ever dry, and even their blankets and great coats were completely saturated with wet, and on several occasions the temperature was below the freezing point. They are still without their under clothing, and many of them are minus shirts and stockings.

The Tents—are, in my opinion, anything but a sufficient protection against the present inclement weather, and will be much less so during the extreme cold of the approaching months; and that unless the men are both more warmly clothed, better housed, better fed, and their strength less overtaxed by duty, the amount of sickness and mortality will, I doubt not, be greatly increased.

I have, &c.
(Signed) W. LINTON, M.D.,
Dep. Inspector General.
Dr. Smith,
&c. &c.

No. 703.

Dr. Linton to Dr. Hall.

Camp of 1st Division before
Sebastopol, 10th January, 1854.
Sir,

In forwarding the accompanying Monthly Reports, and in accounting for the still further increase of sickness therein manifested as compared with the previous month,—the prevailing diseases in each have been bowel complaints, epidemic diarrhoea, and dysentery, common continued fever emerging in some cases into fever of a typhoid type; icterus, colica, and some cases of spasmodic cholera, and latterly several cases of gelatio, and also, I am sorry to say, of scurvy, have been added to the list.

To account for the increase of sickness generally it is necessary, as in the previous month, to take into consideration the continued wet and boisterous weather, the inability on the part of the men to keep themselves dry, and the insufficient protection afforded by the tents, the want of dry covering at night, their blankets and great coats (they have now two blankets each) being generally wet, the increased amount of bodily labour they still undergo, while, owing to the late impassable state of the roads, and the uncertain supply of provision in the camp, the transport afforded by the commissariat being very limited. The want of time, too, to dig roots and cook oblige them often, I am told, to eat their pork in a raw state, while all this time green coffee is continued to be issued, a ration under present circumstances utterly useless. Ground coffee in tins, and also rice, are much required; nor should they ever be without a good supply of vegetables, which would do more than any medicine to arrest the threatening of scurvy, now too evident throughout the army.

We have heard much of huts being sent out from England for the comfort of the soldier, but as yet I have not seen one; and when they arrive at Balaklava the state of the roads and transport are such that I cannot imagine how they are to be got up to the front.

With regard to warm clothing, I am glad to say it has been distributed to some regiments, and that others will be supplied in due course.

I may mention, also, the great difficulty we have, there being no available transport, of getting the sick sent to Balaklava, and for which we are entirely indebted to the French ambulance mules (with their cachelets and litieres), which do their work admirably, whether in snow or in mud. Our ambulance has turned out a complete failure, at least in the present state of the roads; and only during summer, when the roads are good, and with large horses, could they be of any use. They certainly did good service at the battle of Inkerman, but such worn-out drunken old men who now form the ambulance corps—many of them without any knowledge, too, of horses—how could anything prosper with them? Again, the mules selected are much too small, and not adapted for draught. For this purpose the animal should possess good weight of body.

We could not, in my opinion, have a better mode of ambulance for the army than that of the French; they are suited to carry sick in any weather or state of the roads when or where wheel carriages cannot travel; they are excellent for picking up the sick or wounded in any part of the battle field; and when not otherwise engaged they could be employed in carrying provisions or ammunition. And with a well organised corps of young soldiers properly commanded, of from three to four years' service, of good character, and who had been accustomed to work with horses in early life,—or a corps might be enlisted at home, lads of any height, as low as five feet, and accustomed to horses, from the class of farm servants, or Irish cabmen; and these, with a sufficient number of good mules well looked after, and to which might be added either a few light vans, after the form of the American waggon, or some light Irish jaunting cars (Bianconi's), and which would be found useful in various ways during the summer.

I have, &c.
(Signed) W. LINTON, M.D.,
Dep. Inspector General.
Dr. Smith,
&c. &c.

No. 704.

(Memorandum).

Camp of 1st Division, Heights of
Balaklava, 8th March 1855.
Sir,

"As the hot season is rapidly advancing, medical officers are recommended to pay particular attention to the sanitary condition of their respective camps. It is requested that they visit them frequently and point out to the quartermaster such nuisances as they may think necessary to be removed, and also see such other improvements carried out as may be thought necessary for the health of the troops."

No. 705.

*Extract from Medical Transactions of the 42d
Royal Highlanders, for the year ending 31st
March 1855.*

Speaking of the entrenched camp occupied by the 42d Highlanders on the heights of Balaklava;

Dr. Furlong says, "Everything that could possibly be done for the men was done by the colonel and officers, but they could not supply them with huts, warm clothing, and good and abundant food. About the middle of February, when the severest time of the year had passed, wooden huts were got up from Balaklava, and were erected along the line of the defences for the men; cook houses were remodelled and enlarged; the ground well drained, and paths, &c. paved around the huts. Latrines were constructed at a distance from the huts, and as much as possible outside the lines.

"The hospital was erected on a dry and sloping hill a little in rear of the centre, and near a spring of good water. It now consists of four huts for patients, containing 72 beds, one hut hospital serjeant, surgery and store, a cook house and ablution tent, two latrines well covered in, and a good sized hut for a dead house and operating room.

(Signed) J. S. FURLONG, M.D.,
Surgeon 42d Highlanders."

No. 706.

*Extract from Weekly Observations ending the 2d
of June, 1855.*

"Cholera—Admissions 55; deaths 23.

"On inquiry I find that, with few exceptions, these cases have occurred amongst the men who arrived with the last drafts from England, and who are of course quite unacclimatised. Their fatigues have

been chiefly cutting wood for fascines and gabions, and in removing shot and shell in the harbour of Balaklava. The last duty is severe, and the exposure to the emanations from the harbour at this season of the year, while the body is much fatigued, may predispose to the disease, and this seems to be corroborated by Mr. Blenkins, Surgeon of the Grenadier Guards, who states that 'the greater part of the men admitted had been on fatigue duty at Balaklava previous to being attacked.' The situation and sanitary condition of the camp of the brigade of Guards is unobjectionable, at least as far as I can see.

"The great amount of fatigue duty performed at this time in the harbour of Balaklava by the men was represented, and the hours of labour in the heat of the day were diminished."

No. 707.

"The deaths from cholera in the division during the week ending the 9th of June amounted to 68, chiefly in A and H Batteries of Artillery, the Small Arm Ammunition Brigade, the Guards, and 31st Regiment. The Batteries and Ammunition Brigade were recommended to change their ground, which they did, viz., from low ground near the 42d camp to a slightly elevated ridge behind, and not far from Kadekoi and camp of 93d Highlanders, and with immediate and decided benefit. The numbers in the hospital and hut of the 31st Regiment were thinned at once by moving them to huts lately occupied by the 63d Regiment, and where they remained until the middle of the month, and then proceeded to the front, after which very few deaths occurred from this disease."

No. 708.

Extract from Weekly Report ending 16th June, 1855.

"The 31st Regiment arrived from the Ionian Islands in the latter part of May, and encamped on ground previously occupied by the 79th Highlanders, and they have since been suffering from both diarrhoea and cholera. This encampment, from the nature of the soil, &c., should be condemned, and the huts removed."

No. 709.

Extract from Weekly Observations ending 4th August 1855.

"Cholera—Deaths 25."

It is stated, "The situation of the camp of the 72d Highlanders, the greatest sufferers, appears to be unobjectionable; it is clean, and in good order; all the animals, &c. have been deeply buried, and layers of charcoal and lime, in nearly equal proportions, have been put over the graves.

"The tents are not more crowded than usual, the average number being 10 in each bell tent, and some of these are always on duty. Altogether, the health and comfort of the men seem carefully watched and attended to. The inscrutable ways of this disease render its return unaccountable.

"The situation of the burial grounds and latrines were constant sources of anxiety. If the site were not at any time properly selected, I never failed to point out the defect to the military authorities, who usually paid ready attention to any suggestion made on the subject.

"The graves were always dug as deep as possible; and when charcoal and lime became available deep layers of both were put over them.

"The latrines were generally in the rear of the camp, and when the soil admitted they were dug to as good a depth as possible, and several inches of earth were thrown into them morning and evening; but

before Sebastopol, where the ground was rocky, such precautions were impossible."

(Signed)

W. LINTON, M.D.
Dep. Inspector General of
Hospitals.

No. 710-711.

Mr. Cooper to Dr. Linton.

Camp, Geurekler, Bulgaria,
1st August 1854.

SIR,
I AVAIL myself of the earliest opportunity (after arriving at camp) to submit a few observations and suggestions to your consideration.

1. It will be allowed that every precaution which human foresight can suggest in reference to the prevailing epidemic, ought to be observed. We have to contend with a disease the peculiarities of which are well known to the profession. Our duty in reference to the epidemical influence is the more easy on that account. I, therefore, commence on a line of action, unattended with difficulties, provided I receive the support which my position as sanitary officer demands on all sides.

2. The prudent precautions already adopted meet with my entire concurrence, and would have been suggested by myself had I accompanied the division from Aladyn. I am free to admit the full measure of their necessity, and yet at the same time cannot allow that they have altogether encompassed the subject. Being of that opinion, I will take upon myself the task of adding to the stock, from time to time, as occasions warrant.

3. It appears to me highly important to provide against the heavy rains which occur in this climate, and, therefore, I take upon myself to suggest the necessity for immediate attention to a system of complete drainage over the whole encampment. The surface water as the rain falls should be allowed an uninterrupted flow into the valleys.

4. Since dampness predisposes to cholera, every means should be adopted to render the floor of each tent as dry as possible. In addition to the solar influence,* circumferential drainage is next to be observed. I would have the ditches cut at least a foot deep, and wide in proportion, to permit of lateral evaporation, since moisture will make its exit in whatever direction an outlet is permitted. I cannot overlook the occasion for longitudinal channels being dug in a line with each row of tents, to communicate on one side with the encircling trenches, and at one or both extremities with main outlets, to carry the rain away from each regimental encampment, so as to secure a free and uninterrupted communication from the circumference of each tent to the adjacent valleys. Moreover, I am not unmindful of the necessity for draining the surfaces between the rows of tents wherever water is liable to lodge.

5. The latrines need especial attention. They should be dug, in my opinion, at least six feet deep, and should be covered daily with a foot of soil, six inches of which ought to be spread two hours after the men have breakfast, and the other six four hours after the men have taken their dinner meal. No latrine should be used more than three days, to ensure three feet of earth as a covering. Each should be overshadowed with boughs to screen the contents from the powerful sun during his nearly vertical course.

6. Next in importance to human excrement is the deposit from the immense number of animals attached to the division. There is occasion for its being collected daily, and buried every morning. We are not to be unmindful of all other descriptions of refuse matter, both animal and vegetable, which are certain

* The tents were struck every day, for a few hours, to permit the sun to dry the floors, and to ensure ventilation and cleanliness.

to accumulate if not looked after. I need scarcely state that it should be removed and covered daily by a layer of earth.

7. Authority should be conceded to one or more officers to destroy on the spot all unripe fruit, unwholesome vegetables, sour and bad wines, &c., &c., offered for sale.

8. One large bower is advisable between each row of tents as a shelter against the heat of the day, inasmuch that the temperature exceeds 90° Fahrenheit within the tents after midday. I disapprove of the free circulation of air in and about the tents being interrupted by the accumulation of bowers, which is likely to occur if soldiers are permitted to exercise independent action.

In conclusion, I need scarcely apologise for the length of this communication, since it is in keeping with my appointment.

I have, &c.

(Signed) ROBERT COOPER,
2nd Class Staff Surgeon,

Dr. Linton, Sanitary Officer to the 1st Division.
&c. &c.

No. 712.

Mr. Cooper to Dr. Linton.

SIR, Geurekler, 3d August 1854.
HAVING made a very careful inspection of the whole surface of the encamping grounds, I have to report that several tents were unprovided with ditches—many had been dug only an inch deep—and several did not exceed three inches in width. Under such circumstances it would be impossible to prevent the ingress of water during heavy rain.

The latrines were in a very indifferent state, a mere film of earth having been thrown down to cover the soil. One just finished (for the 79th Regiment) scarcely exceeded three feet in depth. Several were surrounded by a bad stench, which in one instance gave rise to a complaint from the men on account of the smell extending as far as their tents. It is highly necessary that latrines should be constructed wherever the native followers congregate.

Manure exists in several places as if untouched for days.

I have, &c.

(Signed) ROBERT COOPER,
2nd Class Staff Surgeon,
&c. &c.

Dr. Linton,
&c. &c.

No. 713.

Mr. Cooper to Dr. Linton.

SIR, Camp, Geurekler,
5th August 1854.

BEING interposed between the military and the sources of disease, it would ill become me to refrain from performing my duty to the officers and men of this division, from a sense of delicacy or fear of being considered troublesome and unyielding, I am therefore constrained to revert to a most important topic bearing upon the sanitary state of the camp, which has already been submitted to the consideration of the authorities, without any permanent amendment having resulted in the form of an abatement of the evil.

The atmosphere being calm during the hours of one and two this morning, I accepted the favourable opportunity of ascertaining whether the latrines were capable of contaminating the air during the stillness of the night. I carefully passed over the entire surface of the ground on which the Highland brigade is encamped. I regret to inform you that a very powerful stench existed amid the tents in the centre of the brigade, emanating from the latrines in the rear. If the officers and men are to be protected

from so potent a cause of disease, it is highly necessary that prompt and immediate steps should be applied to overcome the nuisance. We know that emanations from human debris are very productive of bad types of fever; and, moreover, the youngest member in the profession must be aware that similar ingredients suspended in the air occasion (during the existence of an epidemical tendency) that fearful disease now in operation among us. A mere film of earth daily thrown into the latrines cannot separate the healthy from the causes of disease. An inch or two of soil is altogether useless, being barely sufficient to absorb the mire. There must be abundance thrown into each pit if it is intended to arrest the career of a pestilence which may be only in its infancy. The whole must be accomplished at least twice in the 24 hours. A mere show of improvement will not suffice in these times. My pen will never cease until I fulfil so important a part of my mission. Mine is not an appointment without a function; if it is to be made so, let me be withdrawn from it. The lives of many depend upon my action, and the efficiency of the force hinges on the sanitary improvements effected. Labour cannot in my opinion be more profitably employed during the threatening of an epidemic than by securing health to the troops. If the nature of the ground be such as not to permit of deep latrines being dug, why not open fresh ones daily? The muscular exercise bestowed on their construction of itself will conduce to the vigour and health of the men. Viewing life solely in a military point of view, how necessary it is in these times to adopt every precaution which human prudence can devise to ensure its continuance to the state! Men are not easily replaced when carried off by disease, but the obviation of predisposing and exciting causes is within the grasp of practicability. The routine of parades is surely well known by this time, but the danger attendant upon the existence of pest holes is but little heeded. Let the former be suspended for a time, that the men may be enabled to bestow their energies on the latter, which, unimportant as it may seem to the authorities, has truly a highly political end in view, if strength of arms is to gain everything in the field. Accepting then my statements in all their bearings, the magnitude and importance of the subject must be immediately admitted. The lives of men, in a civil, military, and political point of view require to be saved. The sanitary officer has ventured to assert in forcible language his prerogative; he directs attention to depots of human abomination, containing within the elements of death, the seeds of disease; he announces the danger attendant upon their neglect, and craves assistance of authority to place them on a better footing.

I have, &c.

(Signed) ROBERT COOPER,

Dr. Linton, 2nd Class Staff Surgeon,
&c. &c. &c. &c.

No. 714.

Mr. Cooper to Dr. Linton.

SIR, Camp, Geurekler,
6th August 1854.

HAVING completed a mid-day inspection of the encampment, I have the honour to report that a large excavation has been dug in rear of the Coldstream Guards, into which a great quantity of large bones, dung, and refuse matter has been thrown. I have been given to understand that the mass has been fermenting and decomposing under the conjoined influence of a powerful sun and moisture for the last few days. The smell emanating from it has been such as to occasion complaint from Assistant Commissary General Strickland. Extending in an easterly direction from the pit referred to, there may be seen heaps of manure skirting a newly-ploughed field. I cannot understand why the injurious accumulations of a regiment do not meet with a daily burial!

The latrines of the Coldstream Guards are in a shocking state of filth. I alluded to them in my communication of the 3d instant, in the latter part of the following quotation, "several were surrounded by a bad stench, which in one instance gave rise to a complaint from the men, on account of the smell extending as far as their tents." No amendment appears to have taken place in the mode of conducting them since that report was made. I see no reason why the 1st Brigade should not fall into the plan suggested in orders for the 2d Brigade, viz., "in future a new latrine should be dug every evening after retreat, parallel to the old one, and that the earth from the new latrine should be thrown into the old one, so as entirely to cover it." In reference to Sir Colin Campbell's order I have to offer a few observations and two suggestions,—the one being, that the digging commences rather too late in the evening, inasmuch that the trench cannot be complete before dark, and, therefore, *I would recommend the work to be undertaken half an hour earlier.* If the men are to be permitted to dig only as deep as they please and as wide as they think fit, but little will be accomplished towards sanitary improvement. The depth and breadth of each latrine *should be stated in orders, in keeping with the nature of the ground to be worked upon.* Where it is possible, *the depth in my opinion should be three feet, and the width two, or, perhaps, a little more.*

I have, &c.
 (Signed) ROBERT COOPER,
 2nd Class Staff Surgeon,
 Dr. Linton, &c. &c. &c. &c.

No. 715.

Mr. Cooper to Dr. Linton.

Camp, Geurekler,
 7th August 1854.
 Sir,

It will instantly be admitted by professional men, and be readily understood by everybody else, that it is my duty to be incessantly occupied (even at the risk of being thought troublesome) in submitting to the consideration of the authorities every cause likely to originate and perpetuate disease.

During the prevalence of cholera, a leading axiom of sanitary observance must never be overlooked or forgotten, viz., TO ARREST DIARRHŒA IN ITS EARLIEST STAGE.

In keeping with that most important principle, I have to submit to the consideration of the General in command of the division a fruitful source of bowel complaints hereby in operation among the troops, inasmuch that it is admitted into the system at each meal when the ration is used.

Medical men know too well that mechanical irritation of the intestinal mucous membrane is one of the most powerful causes of diarrhœa and dysentery if permitted to continue in force any length of time. As yet we have escaped the latter disease, but it must not be forgotten that the *season is propitious*, and the *exciting cause* to be brought under consideration favourable to its development.

My attention has been directed this morning to the ration sugar issued to the 93d Regiment. The quartermaster submitted to my notice an experiment replete with information of *the most instructive and*

important nature at this particular period of a visitation. Upon mixing a tea-spoonful of the sugar in half a pint of water, and allowing it to remain at rest for a few minutes, I was amazed at the enormous proportion of large and small particles of sand at the bottom of the vessel after the water had been drained off. The test was repeated three or four times with the same results. Not being satisfied with the information obtained from one regiment, I procured some ration sugar from a soldier of the 42d Highlanders. After manipulating it in keeping with the above exposition, a like amount of residue fell to the bottom. We cannot do otherwise than infer that the whole of the sugar issued to the division is similarly adulterated, since it all proceeds from the same source—the commissariat stores.

It is impossible to be otherwise than alarmed at so much sand being daily admitted into the bowels, knowing that it cannot do otherwise than produce mechanical irritation of the mucous membrane throughout its entire length. If one tea-spoonful of sugar contains so much in it of an irritant nature, what will the daily ration of 1½ oz. conceal? When calculated, medical officers will not be at a loss to account for so much diarrhœa.

It only remains for me now to impress upon the authorities the stern necessity which exists for adopting measures to guard the soldier from so powerful an exciting cause of intestinal derangements. I have entered heartily into the subject, knowing so well the extent of its bearings, if it be thought necessary to protect the men from *debilitating and fatal diseases.* Now that we are in the field, the ranks need the opposite of thinning. Unless attention be paid to the subject, diarrhœa must continue—dysentery arise—and cholera hold its habitation.

I have, &c.
 (Signed) ROBERT COOPER,
 2d Class Staff Surgeon,
 Dr. Linton, &c. &c. &c. &c.

No. 716.

Suggestions offered in Conversation.

1. CONSTRUCTION of latrines for women. 2. Removal of the slaughtering place further from camp. 3. The formation of a new latrine for the Grenadier Guards owing to the filthy state of the existing one. 4. To encamp on an open space away from the bush and forest. 5. To avoid encamping on the margin of the heights which overlooked the unhealthy valley in the vicinity of Varna. 6. To be particular in the selection of a soil (on which to encamp) that it might be free of vegetable and animal matter, and capable of perfect subsoil drainage. 7. When the encampment had been localised for a short period, suggested the advisability of its removal to a new position distant from the valley, that the transfer might have a beneficial effect on the men, it being an acknowledged fact that soil beneath a tent or marquee becomes saturated with the emanations from the persons of the occupants, as well as intermixed with animal and vegetable matters which constitute the daily diets.

The above suggestions proceed from notes in the journal kept by Surgeon Cooper whilst in Bulgaria.

LETTERS of DR. DUMBRECK, Deputy Inspector General of Hospitals.

No. 717.

Dr. Dumbreck to Sir G. Brown.

SIR, Varna, 6th June 1854.

I HAVE the honour again to draw your attention to the most defective sanitary condition of the building destined to be used as a hospital for the sick of this army; it is overrun with vermin, and is obviously to any one visiting it, in its present state, entirely unfit for the reception of soldiers.

I have the honour to suggest that some immediate measures may be taken to make the condition of this building such as will render it in some degree fit for its assigned purpose, as I am entirely at a loss to know, in the event of the arrival of the rest of the army, with the accession of sick such as may be looked for, in what manner provision could be made for their treatment unless something is at once done to remove or at least to mitigate the serious and numerous objections to the locality referred to.

I have, &c.

(Signed) D. DUMBRECK,
Deputy Inspector General of
Hospitals.

Sir G. Brown,
&c. &c.

No. 718.

SIR, Varna, 11th June 1854.

IN reference to your letter of this day's date, its enclosures* herewith returned, I regret that exception should have been taken at the tone of the latter, as Dr. Alexander, I feel persuaded, only meant emphatically to express the strength of his convictions, earnestly seeking, in common with every other medical officer of the division, access to those appliances which we as professional men know to be necessary to meet the contingencies of sickness and the calamities of war, likely to affect the large body of men whose health is committed to our care.

Dr. Alexander having yesterday represented to me the purport of his letter spoken of above, I this day visited the camp, spending some hours there in pursuit of the object of my journey, and I confess that the medical officers have too much reason to complain of the restrictions placed on them in regard to supplies of medicines the exercise of their profession demands.

The pannier supply is merely sufficient to meet the calls on it which a skirmish might create, and I find that the contents of them have already been in many instances largely drawn on. It is true that these may be replaced from the store here, and I have ordered that this may be done, but this is not enough, and sad will be the fate of the division, and grievous our responsibility, if more efficient and extended means than those paltry panniers afford are not at hand in the day of need; they are for a momentary and passing service, not to be regarded as the resources from which the current expenditure for some 7000 men is to be drawn.

Were this division provided with the ambulance supplies, I trust now near at hand for the use of this army, I should feel comparatively little anxiety. It is evidently the intention of the highest authorities, guided in the matter by the counsels of experienced men, that we should have for each division a liberal store, witness, in proof of this, the supplies with which the ambulances are laden. For the division to commence warfare with the pannier supplies alone, would be to court the most disastrous results, would be to secure a large amount of human misery, and would involve those responsible for the care of the sick in well-deserved obloquy, were they to leave their opinions unexpressed, and silently to accept a state of things which they feel is not sufficient to

meet the probable emergencies of their prospective duties.

I have therefore the honour to recommend that the division, provided the due proportion of ambulances be allotted to it, may be permitted to be furnished with that allowance of medicines, medical comforts, &c. which I, as responsible for the guardianship of health may consider necessary. This is purely a professional matter, and I cannot conceive any claim on transport more urgent than that I advocate. A few additional waggons may be an inconvenience, but it is better to suffer this rather than that one life should be needlessly lost, or that human misery should remain unalleviated from the want of those appliances which medical men alone know to be requisite for the exercise of their profession.

We are all striving for a common object, and I earnestly appeal to the General to place that confidence in us which I think we deserve, and that he will allow me unfettered to exercise some discretion in this matter, and to administer to what I know to be the wants of the division under his command.

I have, &c.

(Signed) D. DUMBRECK, M. D.
Colonel Sullivan, Dep. Inspector General of
&c. &c. Hospitals.

SIR, Camp Aladyn, 10th June 1854.

As the light division is now under orders to proceed forward, and may ere long have a brush with the enemy, and as the supply of medicines and hospital equipments, &c. &c., allowed to be brought on are totally inadequate for such a contingency, and in the event of such occurring, the misery and wretchedness of the sick and wounded would be exceedingly great;

The British Government having also in the most liberal manner forwarded to this country supplies of almost everything that could add to the comfort and alleviate the sufferings of the sick and wounded, certainly not with the intention of the same being kept at Sentari or Varna, but that they might be on the spot on the field when required.

I have the honour to recommend most strongly that you will apply for the hospital supplies (I believe now prepared at Varna for this division) to join at once, in charge of a dispenser of medicines and surgeon's clerk, as I can see no reason why the above stores, &c. that are absolutely necessary, should hamper the movements of the light division more than the commissariat supplies that accompany it.

I have, &c.

(Signed) THO. ALEXANDER, M.D.
Brigadier-General Airey, Staff-Surgeon.
&c. &c. &c.

Submitted for the consideration of the Lieut.-General commanding the light division.

(Signed) RICHARD AIREY,
Brigadier General.

10th June 1854.

Refer this letter to the principal medical officer, informing him that I by no means approve of the tone of this, and that in my judgment Dr. Alexander had better defer such suggestions and strictures till they are asked for.

(Signed) Lieut.-Gen. Sir G. BROWN.

No. 719.

Mr. Dumbreck to General Tylden.

SIR, Varna, 16th June 1854.

I HAVE the honour to submit the following suggestions in regard to the sanitary measures which it is desirable should be carried out in the Turkish

* Copy of inclosures referred to transmitted herewith.

barrack, destined as the general hospital of Varna, for the English army.

1st. Ventilation.—The miserably small windows, want of fire-places, and vicious construction of the internal fittings of the rooms or wards, render this most defective. The windows ought to be enlarged, apertures made in the walls near the roof and the ground, and a light railing substituted for the boarded kind of parapet, which goes round the central part of each ward. I should also suggest for your consideration, the expediency of making holes near the roof "plafond," of each ward.

2d. The central part of the ground floor ought to be boarded, and perhaps a careful examination of the masonry of the lower part of the building might point out means to keep out the innumerable swarms of rats which now infest the rooms; these animals are destructive to floors, and will prove a very obvious source of annoyance to patients.

3d. The drains near and leading from the privies, particularly that to the eastward, should be carefully looked to; their covering is broken and out of order, and, unless remedied, will allow the atmosphere to be vitiated by the escape of pestilential miasmas.

4th. The privy to the westward should, as being superfluous, be no longer used; were its openings carefully covered, a large and probably a useful room might thus be added to our hospital accommodation, an ablution house for example.

5th. The preparation of a pack and arm store is requisite.

6th. The fitting up and repair of the room used as an apothecary's store is required.

7th. Provision must be made for heating this establishment during the severe winter of this climate the mode in which buildings in this country are usually warmed by the use of the mangal (a dish of live charcoal), and the most careful exclusion of the external air, is both inefficient and unhealthy.

The introduction of the stove will I think be a matter of absolute necessity, and I trust that this suggestion will be considered and acted on at once, as immediate measures ought to be taken to guard the troops from the trying keenness of a Bulgarian winter.

I have, &c.
(Signed) D. DUMBRECK,
Deputy Inspector General.
General Tylden,
&c. &c.

P.S.—The central court ought to be raised; after rain, from the inequality of its surface, it is a stratum of mud; in autumn it would be marshy enough to do mischief, and its probable effects ought to be neutralized as I have proposed.

No. 720.

To Brigadier General Estcourt.

Principal Medical Officer's
Office, Lines of Sebastopol,
24th October 1854.

Sir,

I HAVE the honour to forward, for the information of the Commander of the army, a tabular view of

the number of sick now actually present, with a distribution of them into categories, as desired by his Lordship.

Since the 10th instant there has been an almost daily withdrawal of sick and wounded from the divisions, and these men (with few exceptions received into the general hospitals at Balaklava) have been placed on ship-board, and sent off to Scutari, as their cases were such as rendered their speedy return to duty improbable; and the hospital accommodation of Balaklava is too limited to have admitted of their retention and treatment there, while to have retained them in hospital ships, in the confined and polluted waters of that harbour, would have been to have subjected these men to influences detrimental to their actual ailments, besides exposing them to the choleraic atmosphere, recently so unmistakably present at that spot.

A large proportion of the men now proposed to be withdrawn from the army might be treated with much advantage in hospital ships removed to a short distance from the harbour, many of the men now comparatively ineffective would be benefitted by this amount of change, which would in many instances obviate the necessity of sending them to Scutari; by adopting the plan of not distant removal from the army, many men might after a brief time of absence rejoin their corps, who now are invariably detained for lengthened periods of absence at Scutari.

I have, &c.
(Signed) D. DUMBRECK, M.D.
Brig. Gen. Estcourt, Deputy Inspector General
&c. &c. of Hospitals.

No. 721.

To the Adjutant General, Crimea.

Principal Medical Officer's
Office, Lines of Sebastopol,
24th October 1854.

Sir,

It having been represented to me, that a tendency to scorbutic disease is present in some (I believe not numerous instances) in this army, and its existence having been ascertained from my personal examination, I have the honour to suggest that means should be taken, to bring from such neighbouring ports, where these articles may be procurable, a supply of vegetables for the troops; onions, potatoes, &c. added to the ration of the soldier, would go far to neutralize any tendency to the above affection, and would, I think, be conducive to an improvement in the general health. The corps where the scattered cases of incipient scorbutic disease at present are is, the 1st battalion Rifle Brigade, long on ship-board, and consequently an extended period without fresh meat or vegetables.

I have, &c.
(Signed) D. DUMBRECK, M.D.
Adjutant General, Deputy Inspector General
&c. &c. of Hospitals.

LETTERS of MR. HUMFREY, Deputy Inspector General of Hospitals, Principal Medical Officer 4th Division.

MEMORANDUM BOOK.

No. 722.

(Circular Memorandum.)

To Dr. Humfrey.

Lines before Sevastopol,
17th November 1854.

Sir,

HIS GRACE the Duke of Newcastle having desired that he should be regularly furnished with a weekly

state of sick of the army serving in Turkey, to be transmitted by each Queen's messenger, the Inspector General of Hospitals requests that superintending medical officers will be punctual in transmitting the returns of their respective divisions in time to reach him early on Sunday mornings, so as to enable him to comply with his Grace's order.

The weekly state for the hospital establishment

at Scutari, on board the convalescent ship, and at Koolali, will be completed so as to meet the periods of departure of the Queen's messenger from Constantinople, which can be easily ascertained at the British embassy. The returns for all other stations had better be made up from Saturday to Saturday, as at present.

The returns from Scutari, Varna, Gallipoli, and Abydos, are to be addressed direct to the Director General, in London, but this is not to interfere with the present order for duplicates being regularly sent from all these stations to the Inspector General of Hospitals at head quarters, for the information of the General Commanding the Forces in Turkey.

The medical officers in charge at Gallipoli and Abydos will also send copies of their weekly states to the principal medical officer.

2. The army in the field will continue to furnish the weekly state called for by Lord Raglan, so that he may know the number of sick likely soon to be effective, and those requiring to be removed.

3. A question has arisen about the efficiency and utility of Moore's concentrated milk, and cocoa and milk sent out to the army in the East, and the Director General requests to be favoured with the opinion of the medical officers as early as possible, both as to the quality of the articles, and expediency of despatching a further supply for the use of the troops during the winter.

I have, &c.
(Signed) J. HALL,
Inspector General.

Dr. Humfrey,
&c. &c.

No. 723.

(Memorandum.)

4th Division,
21st November 1854.

THE accompanying letter is sent for perusal to the medical officers of the 4th division.

It is requested that the weekly states may be made out on Saturdays, and transmitted to the Deputy Inspector General of Hospitals, with the morning states, early on Sundays.

A return of casualties according to the annexed form is required from each corps whenever a man dies or is killed.

RETURN of Casualties					day of	1854.			
Corps.	Killed.	Wounded.			Total Wounded.	Name.	Disease.	Duration.	
		Dangerously.	Severely.	Slightly.					

(Memorandum.)

Lines of Sevastopol,
20th November 1854.

SUPERINTENDING medical officers will be pleased to direct the surgeons of their respective divisions to return into the reserve hospital stores at head quarters, or to the purveyor's stores at Balaklava, such

empty wine bottles as may be in their possession belonging to the public.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.

Sent round to regimental medical officers 23rd November.

No. 724.

(Memorandum for Regimental Medical Officers,
4th Division.)

Camp, 4th Division,
19th November 1854.

A NOMINAL list of men requiring removal to general hospital, showing the regimental number, age, disease, and date of admission of each, should accompany the state of sick as requiring removal, on Saturday mornings.

W. C. H.

No. 725.

To Dr. Humfrey.

(Medical Memorandum.)

Lines of Sevastopol,
25th November 1854.

SIR, THE General Commanding the Forces is anxious medical officers should avail themselves of the Commissariat Transport of their respective divisions to send the sick into Balaklava; and if there are any difficulties in carrying out the plan, superintending medical officers will be good enough to state them to the Inspector General of Hospitals.

I have, &c.
(Signed) J. HALL,
Inspector General.

Dr. Humfrey,
&c. &c.

No. 726.

Dr. Humfrey to Dr. Hall.

Camp, 4th Division near Sevastopol,
27th November 1854.

SIR, In acknowledging the receipt of your memorandum of 25th instant relative to procuring assistance from the Commissariat Department for the transport of the wounded and sick of the 4th Division to Balaklava, I have the honour to inform you that I immediately made application to the Commissariat officer in charge, and left your memorandum for his perusal, and this morning received a reply from him, which I transmit for your information. The means of transport from that department being unavailable, the sick of this division are now entirely dependent on our ambulance waggon, the second being useless in consequence of the death of two of the mules attached to it. These animals are so overworked and ill-fed that they cannot be expected to last much longer, and in the event of an action, very great misery and distress must ensue.

I have, &c.
(Signed) W. C. HUMFREY,
Dep. Inspector General, &c.

Dr. Hall,
&c. &c.

(Enclosure.)

Copy of a Letter from Deputy Assistant Commissary General Bartlett, alluded to in the foregoing.

DEAR SIR, 4th Division,
27th November.

I AM very sorry that I cannot comply with your requisitions for the conveyance of the sick to Balaklava. It is with the greatest difficulty that I can keep up the supply of rations with the limited transport at

my command, and I shall be quite unable to do so, were I to carry the sick from this, owing to the delay which always takes place in disposing of the men at Balaklava, and also in consequence of the mules being overworked, by having to take loads into there and back.

I have, &c.
(Signed) HENRY BARTLETT.
Dr. Humfrey,
&c. &c.

No. 727.

Dr. Humfrey to Dr. Hall.

Camp, 4th Division, before Sevastopol,
29th November 1854.

SIR,
I REGRET to say that from the almost impassable state of the roads, the inefficiency of the overworked mules, and the badness of the weather, the sick of the 4th Division could not be conveyed to Balaklava in the ambulance waggon to-day. The Commissariat Department being (as already reported) unable to afford assistance for their removal, it is to be feared that an accumulation of sick to a great extent must ensue, and that much misery and suffering must be endured by them from the inclemency of the weather, and the insufficient covering of one blanket, as well as the deficient supply of comforts and medicines for their use. This condition of affairs cannot last without occasioning very deplorable results, and from the state of the transport there appears to be little prospect of its alleviation.

I have, &c.
(Signed) W. C. HUMFREY,
Dep. Inspector General, &c.
Dr. Hall,
&c. &c.

No. 728.

(Medical Memorandum.)

Lines before Sebastopol,
29th November 1854.

THE Director General having called for a weekly state of the medical staffs of this army, superintending medical officers will be pleased to insert the names of all the medical officers serving in the divisions under them, noting those that are either sick or absent. This is to include the names of all officers, whether staff or regimental, attached to the division.

There being a portion of dried and preserved potatoes in store, medical officers can obtain them for the sick under their care, on requisition, as the Inspector General has noticed a tendency to scurvy in many of the sick sent down to Balaklava.

2nd Class Staff Surgeon Hanbury, speaks highly of his success in the treatment of cases of diarrhoea and pains in the limbs sent down from camp to the hospital at Balaklava by means of lime juice—1oz. twice a day. Dr. Hall mentions the remedy that other medical officers may try it and report the result of their experience.

Medical officers should take measures to secure for the sick under their care a proportion of the new blankets and warm under-clothing brought out in the "Jura" steamer.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

The following pamphlets having arrived for distribution, medical officers can obtain them on requisition at the medical store, Balaklava:—

- "On premonitory diarrhoea in cholera."
- "Diseases in Turkey."
- "Personnel and matériel of the army in Turkey."

No. 729.

Dr. Humfrey to Major Grant.

(Forwarded through Dr. Hall.)

Camp, 4th Division,
3rd December 1854.

SIR,
I BEG leave to direct your attention to the condition of the mules attached to the ambulance waggon of this division, five only of the original number (12) being available for the transport of the sick at present; and as a very great accumulation of sick must ensue in the division under circumstances most disadvantageous to their recovery, I would beg to suggest that as many animals as may be required to meet the wants of the division should be purchased as speedily as possible.

I have, &c.
(Signed) W. C. HUMFREY.
Major Grant,
&c. &c.

No. 730.

To Dr. Hall.

Camp, 4th Division, before Sevastopol,
5th December 1854.

SIR,
WITH reference to paragraph 3 of your circular memorandum of 17th November, I beg to state that Moore's cocoa and milk has been tried by myself and several medical officers in this division, and found to be highly nutritious and palatable, as well as free from the aperient qualities of coffee, and therefore likely to be an article of great utility to the sick in this army, now so severely affected with bowel complaints.

I have, &c.
(Signed) W. C. H.
Dr. Hall,
&c. &c.

No. 731.

Dr. Hall to Dr. Humfrey.

Inspector General's Office,
4th December 1854.

SIR,
THE miserable state of discomfort the men of the 4th Division are in is quite lamentable. Some cots of a new construction with sacking bottoms have just been landed, and I request you will at once apply for a fatigue party of 24 men from each regiment to go to the purveyor's store in Balaklava and bring out 24 of these cots for the use of the sick of each corps. One cot can easily be carried by each man, and I think you will find them of great service. Pray don't delay a single day in having this done, as I consider the matter of the utmost importance.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.
Dr. Humfrey,
&c. &c.

Indent for 144 cots on the purveyor, and I will write to him to comply with your demand with further reference to me.

(Signed) J. H.

No. 732.

Camp, 4th Division,
5th December 1854.

(7th Dec.)
THE enclosed letter is forwarded for the information of medical officers in charge of regiments, 4th Division, who will be pleased to require a fatigue party of 24 men from each regiment to proceed to Balaklava for the purpose of obtaining the cots al-

luded to, for the use of the sick, as early as possible to-morrow morning.

(Signed) W. C. HUMFREY,
Dep. Inspector General, &c.

(Memorandum.)

Dr. Hall to Dr. Humfrey.

Lines of Sebastopol,
30th November 1854.

DR. HUMFREY, Deputy Inspector General of Hospitals, is informed that a board of medical officers was this day assembled at Balaklava, to examine Paymaster Thorpe of the 53rd Regiment.

For the future, when a certificate regarding the health of an officer is sent in to the Inspector General of Hospitals, by which a medical board is recommended, it should be stated where the officer referred to is located.

(Signed) J. HALL,
Inspector Gen. of Hospitals.
Dr. Humfrey,
&c. &c.

No. 733.

Mr. Mc Kennon to Dr. Humfrey.

Sebastopol,
9th December 1854.

SIR, WITH regard to the article 19 of the instructions furnished to the purveyor of the army in the East, I beg leave to be informed if this article is to be acted on, as it has been found impossible to furnish the sick in camp with any regular meal, more especially as the store of the purveyor is seven miles distant from the camp of the regiment, and the roads almost impassable. Further, that no means of carriage have been provided.

I have, &c.
(Signed) D. R. MCKENNON,
Surgeon 21st Fusiliers.
Dr. Humfrey,
&c. &c.

No. 734.

Dr. Humfrey to Dr. Hall.

Camp, 4th Division, lines of Sebastopol,
9th December 1854.

SIR, I HAVE the honour to forward a letter from Surgeon McKennon, 21st Regiment, requesting to know whether the men treated in the field hospitals, who have received extras, are to be charged with hospital stoppages according to article 19 of instructions to purveyors.

As extras have been on a great many occasions given in lieu of the regular ration, which on these days was not furnished by the Commissariat Department, owing to the want of means of transport, if I might be permitted to give an opinion on the subject, I should say it would be unjust to charge the men with stoppages, particularly as there has been such a lamentable deficiency of the means most required for the treatment of sick in the field hospitals.

I have, &c.
(Signed) W. C. HUMFREY,
Dep. Inspector General, &c.
Dr. Hall,
&c. &c.

No. 735.

Lieutenant Vaughan to Dr. Humfrey.

Camp,
7th December 1854.

SIR, I HAVE the honour to report that, according to an order received from you, I received 74 stretcher frames from the general hospital, Balaklava, and brought 71 complete and three poles, and gave them over in charge of the guard of the 68th light infantry.

I can only account for the loss of the few frames by the men being over-fatigued, and it being so dark before I reached camp that I was unable to keep my eye upon all of them.

I have, &c.
(Signed) H. VAUGHAN,
Lieut. 68th Regiment.
Dr. Humfrey,
&c. &c.

Forwarded to Dr. Hall with the following note,
8th December.

No. 736.

Dr. Humfrey to Dr. Hall.

(Forwarded to Dr. Hall with the foregoing letter.)

Camp, 4th Division,
8th December 1854.

SIR, I HAVE the honour to forward the enclosed letter for your perusal.

I have, &c.
(Signed) W. C. HUMFREY.
Dr. Hall,
&c. &c.

(Memorandum from Dr. Hall.)

SIR, IN reply to your note of this morning, enclosing one from Lieutenant Vaughan, 68th Regiment respecting the loss of some of the new stretchers that a fatigue party under his command was sent down to Balaklava to be brought up.

He does not state the number lost, but I beg you will ascertain it, and report it to me, as well as the cause of the loss, because the reason assigned by Lieutenant Vaughan is not a very satisfactory one.

(Signed) J. HALL.
Dr. Humfrey,
&c. &c.

No. 737.

Dr. Hall to Dr. Humfrey.

SIR, 8th December 1854.

I REQUEST you will be good enough to inform me whether the new cots Lieutenant Vaughan was sent down with a party to bring up from Balaklava, and reported missing, have been found, and how many cots are rendered inefficient by this loss, as I notice Lieutenant Vaughan reports three poles without canvas as having been brought into camp.

I have, &c.
(Signed) J. HALL,
Inspector Gen. of Hospitals.
Dr. Humfrey,
&c. &c.

No. 738.

Dr. Humfrey to Dr. Hall.

SIR, 10th December 1854.

IN reply to your letter of the 8th instant, I have the honour to inform you that on the receipt of it I directed Staff Surgeon Pine to make inquiry respecting the number of cots missing out of 144 ordered to be brought up by a fatigue party from Balaklava, on the 6th and 7th instant, and have ascertained that four frames and sets of poles are missing.

140 cots (complete) have been issued to the several regiments in the division, in the proportion of 20 to each corps, and four mattresses remain over in my charge.

I herewith forward a return of bearers in the 4th Division.

I have, &c.
(Signed) W. C. HUMFREY.
Dr. Hall,
&c. &c.

RETURN of Cots and Bearers in charge of the several Regiments, 4th Division.

Regts.	Cots complete, with Mattresses.	Bearers.		
		Service-able.	Unservice-able.	
20th -	20	9	3	} 1 supposed to be in trenches.
21st -	20	8	2	
46th -	20	10	—	
57th -	20	12	—	
63rd -	20	10	—	
68th -	20	7	3	2 missing.
Rifles-	20	7	1	
R.Art.	—	3	—	
P.	140	66	9	

No. 739.

Dr. Hall to Dr. Humfrey.

(Medical Memorandum.)

Camp before Sevastopol,
9th December, 1854.

THE artillery waggons will take down sick from the division daily, and horses will be ordered for the ambulance waggons until the sick list is relieved.

Superintending medical officers are requested to send in to the Inspector General of Hospitals a return of the bearers they have available in their respective divisions, specifying the regiments, in case a party of Turks can be procured to carry them. In this list Clarke's and Smith's stretchers might be included.

(Signed) J. HALL.

Dr. Humfrey,
&c. &c. Inspector Gen. of Hospitals.

No. 740.

Dr. Humfrey to Dr. Hall.

Camp, Sevastopol,
10th December 1854.

SIR,
WITH reference to your letter of the 8th instant, requesting to know the cause of the loss of four frames and poles belonging to the new stretchers sent from Balaklava for the use of the sick by a fatigue party under the command of Lieutenant Vaughan, 62th Regiment, I have the honour to inform you that Staff Surgeon Pine having made inquiry of that officer as to the cause of their loss, he stated "that the men were tired and done up, that it was impossible to prevent their straggling in the dark (the men having been detained until late in the day at Balaklava in drawing their rations); and that under these circumstances he could not either keep them together, or sufficiently under his own observation to prevent the occurrence of irregularities."

I have, &c.

(Signed) W. C. HUMFREY.

Dr. Hall,
&c. &c.

No. 741.

From Adjutant General Estcourt.

(Memorandum.)

Head Quarters,
10th December 1854.

THE French send their muleteers to carry our sick to Balaklava to-morrow. They are to rendezvous here at daylight—say seven in the morning. They will be sent to the different divisions in companies corresponding to the number of sick to be removed.

It is desired not to detain the mules longer than is absolutely necessary, therefore let a fatigue place the sick men on the mules. To place one man on a mule requires three fatigue men, one to hold the opposite side of the litter and two to help the sick man on.

(Signed) J. B. B. ESTCOURT,
Adjutant General.

No. 742.

Dr. Hall to Dr. Humfrey.

(Medical Memorandum.)

10th December 1854.

THE French ambulance are promised to take 1,100 sick down to Balaklava to-morrow morning; you will therefore warn and have ready 250 of the 4th Division to put on the mules by eight o'clock, so that the ambulance may not be kept waiting. The men should have breakfast and be dressed before that time. Each man will take his blanket and great coat with him, and you will detail a medical officer to accompany the party, mounted if possible, who should carry some restoratives with him, such as a portion of spirit or wine, and a small drinking cup.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

Dr. Humfrey,
&c. &c.

No. 743.

(Memorandum.)

MEN of 63rd Regiment sent down by the artillery waggons at 5 a.m., 11th December 1854.

(Memorandum.)

FRENCH mules arrived at seven o'clock, at the camp, 4th Division, and left at _____, conveying 250 sick. 11th December, 1854.

No. 744.

Dr. Smith to Dr. Hall.

Army and Ordnance Medical Department,
16th November 1854.

SIR,

IN all probability you have heard of the plan of treatment of erysipelas noted on the margin,* proposed by Mr. Hamilton Bell of Edinburgh. But you may not have had an opportunity of knowing the results of more recent and extensive experience of the remedy in the practice of other surgeons of note, from which its superiority over every other constitutional means of combatting that disease appears to be clearly established.

Mr. Bell having in a recent communication suggested the free use of the remedy in gangrene following violent inflammation, as well as in hospital gangrene, I beg to recommend a fair trial of the mode of treatment referred to should these diseases unfortunately appear among the wounded.

I have, &c.

(Signed) A. SMITH,
Director General.

Dr. Hall,
&c. &c.

Communicated to the divisions 10th December. Superintending officers will be good enough to for-

* Tinct. of sesquichloride of iron in xv. to xxv. every 2nd, 3rd, or 4th hour in mild cases, up to 35 minims every 2nd hour in bad cases, may be fearlessly given even when fever and delirium, sthenic or asthenic, exist. A laxative may be premised and repeated if necessary.

ward this from one to another, after each has taken a copy, for circulation in his own division.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

No. 745.

Adjutant General Estcourt to Sir John Campbell.

SIR,
Head Quarters, Camp,
13th December 1854.

150 mules from the French service will arrive at your camp soon after seven o'clock to-morrow morning in order to remove sick men to Balaklava, for embarkation.

You will be pleased to make arrangements so that upon the arrival of the mules there may be no detention.

The principal medical officer of the division will attend.

A fatigue party of sufficient strength to place the sick men on the mules should be prepared and in waiting. You will also be pleased to select one non-commissioned officer from the 4th Division, and two privates from each regiment. These men will repair after their dinners to Balaklava, taking care to arrive there by half-past three p.m. They will on arrival report themselves to the commandant, Lieutenant Colonel Haines, and they will be prepared to embark this day on board the ships in preparation for the arrival of the sick to-morrow, in attendance upon whom they will act as orderlies during the voyage to Scutari.

Lord Raglan desires that great care be taken that the whole of this service be well performed, especially that the French mules be not detained.

I have, &c.

(Signed) J. B. ESTCOURT,
Adjutant General.

Sir John Campbell,
&c. &c.

No. 746.

Dr. Hall to Dr. Humfrey.

(Medical Memorandum.)

Camp, before Sevastopol,
12th December 1854.

THE French will lend 300 of their ambulance mules to take sick into Balaklava early in the morning of the 14th instant. You will therefore warn and have ready 150 sick of the 4th Division to go down by them.

The men will take their blankets and great coats; you will give directions that they have their breakfasts before they start, and you will apply to have a fatigue party at each hospital ready to assist in loading the mules, so that the ambulance may not be detained.

(Signed) J. HALL,

Dr. Humfrey,
&c. &c. Inspector Gen. of Hospitals.

Nos. 747-749.

Dr. Humfrey to Dr. Hall.

SIR,
Camp, 4th Division, Lines of Sebastopol,
18th December, 1854.

WITH reference to the General Order, No. 3, of 27th November 1854, directing regimental and staff officers to provide conveyance for forage for their horses from Balaklava to the camp, I beg to draw your attention to the manner in which officers of the medical staff on active service in the field are effected by it.

Having no right to the services of a soldier, and being allowed only one civilian servant, they are obliged to send him to Balaklava, a distance of from six to eight miles, three days in the week, for forage and fuel (which last they are likewise obliged to

convey themselves), and as in the present state of the roads the entire day is thus occupied, they are without a person to cook, provide water, or perform any of the duties of a servant.

Senior officers of the medical staff, whose duties require that they should keep three or more horses, the care of which fully occupies the time of one servant, are more particularly incommode by this arrangement, as in the event of their civilian servants being unavailable from sickness or any other cause, they have no person whose services they can command. I trust you will therefore represent to the proper authorities the extreme inconvenience to which they are thus subjected, and apply for the allowance for a second civilian servant for all officers of the medical staff taking rank as field officers, or to obtain permission for them to employ a soldier on fatigue in addition to their civilian servant.

I beg particularly to bring to your notice the positive hardship to which all officers of the medical staff are subjected where their civilian servants are sick or have left their service, and from temporary causes it is impossible to procure others in their stead, and to request that under such circumstances the right to employ a soldier servant temporarily, according to their relative rank, may be conceded to them, as if not, it is quite impossible to keep themselves or their horses alive, much more to perform the duties required of them.

I beg to inform you that the wages demanded by civilian servants far exceed the present allowance, six or seven pounds per month are required by them at present.

I have, &c.

(Signed) W. C. HUMFREY,

Dr. Hall,
&c. &c. Dep. Inspector General, &c.

No. 750.

Dr. Humfrey to Sir John Campbell.

SIR,
Camp, 4th Division,
19th December 1854.

WITH a view of preventing the appearance of cholera in the 17th Regiment, which has just arrived, I would take the liberty of suggesting that the regiment be exempted from duty in the trenches for a week or ten days.

I have, &c.

(Signed) W. C. HUMFREY,

Sir John Campbell,
&c. &c. Dep. Inspector General, &c.

No. 751.

(Memorandum.)

22nd December 1854.

150 SICK of the 4th Division, sent to Balaklava by French mules, all supplied with an extra great coat (according to Lord Raglan's order), except seven men of 20th Regiment and the whole of the 46th men, to which regiments application was made for them without success by Dr. Pine (46th), and myself (20th).

No. 752.

SIR,
Camp, 4th Division,
25th December 1854.

THE sufferings which the British army has endured for the last six weeks have produced an amount of sickness quite deplorable, and amongst other diseases thus occasioned, is a tendency to scurvy, which, if not timely checked by preventive measures, must increase to an alarming extent.

The cause of this, in addition to the hardships undergone by the troops, is mainly the want of fresh vegetables. I would therefore take the liberty of recommending,—

1. That a weekly supply of at least 50 tons of such vegetables as can be procured at Constantinople, espe-

cially potatoes and onions, and, if procurable, pumpkins and carrots should be regularly furnished to the troops in the Crimea.

2. That rice should form part of the soldier's daily ration, in the proportion of 2½ oz. to each man, it being the best and most easily supplied substitute for fresh vegetables.

3. That lime juice should be issued in the same quantity as on board ship.

I have, &c.
(Signed) W. C. H.

Nos. 753 and 754.

Camp, 4th Division,
26th December 1854.

SURGEONS in charge of regiments will make requisitions for diet rolls and rolls of extras, and will keep an accurate account of the articles expended; a return of which, together with a statement of the quantities received and remaining on hands, will be required at the end of each month.

(Signed) W. C. HUMFREY,
Dep. Inspector General, &c.

No. 755.

Dr. Humfrey to Dr. Hall.

SIR, Camp, 4th Division,
27th December 1854.

I HAVE the honour to inform you that 124 sick proceeded to Balaklava yesterday on horseback, and that 143 are warned to proceed to-day by the same mode of conveyance.

I have, &c.
(Signed) W. C. HUMFREY,
Dep. Inspector General, &c.

Dr. Hall,
&c. &c.

(Memorandum.)

RATIONS for civil servant discontinued after 14th, resumed on 28th December 1854.

No. 756.

Dr. Humfrey to Dr. Hall.

SIR, Camp, 4th Division,
28th December 1854.

I HAVE the honour to inform you that 100 horses only arrived to take away sick from this division yesterday morning, consequently I have been unable to send any more than that number of sick, although 143 were warned to be in readiness, as stated in my previous letter on this subject.

I have, &c.
(Signed) W. C. HUMFREY,
Dep. Inspector General, &c.

Dr. Hall,
&c. &c.

(Memorandum.)

REQUIRED for the use of the medical staff, 4th Division, for the purpose of conveying medical stores and comforts from Balaklava to the camp, for the use of the troops,—

- One packhorse.
- One pack-saddle and ropes.
- One halter.
- Two picket-poles and rope.

No. 757.

Mr. Roberts to Dr. Hall.

SIR, 4th Division,
13th February 1855.

I BEG to enclose a sample of Dover's powder, issued to the P. battery hospital lately from the medical stores at Balaklava. It appears to be adulterated with sugar, and is unsafe, from the difficulty of calculating the amount of adulteration, to be prescribed.

I have, &c.
(Signed) N. ROBERTS,
Staff Surgeon.

Dr. Hall,
&c. &c.

No. 758.

From Adjutant General Estcourt.

(Memorandum.)

Head Quarters,
29th December, 1854.

THE medical officers in charge of the sick of divisions will report daily the quantity and description of medical comforts in their possession, and the issues they have made in the last 24 hours to each regiment in the division.

(Signed) J. B. B. ESTCOURT,
Adjutant General.

No. 759 to 763.

Dr. Humfrey to the Adjutant General.

SIR, Camp, 4th Division,
30th December 1854.

WITH reference to the memorandum of 29th December, from the Adjutant General, directing medical officers in charge of the sick of divisions to report daily the quantity and description of medical comforts in their possession, and the issues they have made in the last 24 hours to each regiment in the division, I beg to state that I have not any medical comforts in my charge, and have never issued any to the regiments in the division, there never having been a depôt of medical comforts in the camp of 4th Division.

The surgeons of the regiments are obliged to send to head quarters, or to Balaklava, when in need of those or of medicines.

I have, &c.
(Signed) W. C. HUMFREY,
Adjutant General, Dep. Inspector General, &c.
&c. &c.

No. 764.

Dr. Hall to Dr. Humfrey.

(Medical Memorandum.)

Before Sebastopol,
1st January 1855.

SUPERINTENDING officers of division will instruct regimental surgeons and medical officers in charge of corps to indent at once for stoves for their hospital marquees, and those that have not marquees should make demands for wooden huts.

(Signed) J. HALL,
Inspector Gen. of Hospitals.

Dr. Humfrey,
&c. &c.

No. 772.

Dr. Hall to Dr. Humfrey.

SIR, 8th January 1855.
 IN reply to your note of this date, giving cover to a communication from Surgeon Simpson, 17th Regiment, wishing to know if he may issue medical comforts to the officers as well as men of his regiment, I have the honour to state that it is not usual to issue medical comforts to officers under ordinary circumstances, as they are generally supposed to be in a position to provide them for themselves; but of course where the articles are absolutely necessary and cannot be procured in any other manner, the officer's welfare is superior to all other considerations, and they may be issued, but his name must appear in the daily roll of expenditure to account for the issue.

I have, &c.
 (Signed) J. HALL,
 Inspector Gen. of Hospitals.
 Dr. Humfrey, &c. &c.

No. 773.

Mr. E. Howard to Colonel Horn.

SIR, Camp before Sebastopol,
 10th January 1855.
 I HAVE the honour to apply again to you by order of the Deputy Inspector General in reference to the procuring of huts from Balaklava for the accommodation of the sick. Each hut with the necessary tools for putting it together weighs 25 cwt. Under these circumstances I am compelled to apply for 100 men for the purpose of its conveyance, which will burden each individual to the extent of only 28 lbs.

I have, &c.
 (Signed) EDWD. HOWARD,
 Surgeon 20th Regiment.
 Colonel Horn, &c. &c.

No. 774.

SIR, Camp, 4th Division,
 11th January 1855.
 IN reply to your letter of yesterday's date, may I request you to be good enough to present my compliments to the Deputy Inspector General, and explain to him that the following are the reasons under which I am compelled to decline sending soldiers to Balaklava for the purpose required by your letter of yesterday, as it appears to me clearly the duty of Government to provide such transport for the troops.

You have already acknowledged yourself aware of the cause of the present prevalent and increasing sickness of the regiment under my command, and of its consequent inefficiency, that it mainly arises from the man being overworked, exposed to the extreme inclemency of the weather, frequent insufficiency of food, and oftentimes without time or means of properly cooking it; such being the case, I must beg you will also explain to the Deputy Inspector General that an order exists in the 4th Division that no soldier is permitted to proceed to Balaklava until he has been 24 hours clear of the trenches. Supposing, therefore, at the expiration of the above period of exemption from this very severe duty, I were to send a large party of men to the above-named port, they would on their return from this very toilsome duty and march be compelled to a man again to proceed on duty to the trenches, then to pass the night in exposure to the cold air after being overheated by their labours of the day, and most probably without having had the time or means of cooking a proper meal without proceeding there. Is it, therefore, I ask surprising that under such circumstances men should fall sick and die, or that a regiment should become non-effective and struck off duty, as in the case of the 63d Regiment, when such duties are required of it? I do, therefore, hope the Inspector General will lay the matter more

clearly before the Field Marshal than it yet appears to have been done, in order that such matters may undergo proper investigation for the guidance of the authorities, and that soldiers may no longer have duties imposed on them beyond the power of endurance intended by nature.

I have, &c.
 (Signed) FRED. HORN, Col.
 &c. &c.

775.

From A. Cumming, P. B. Maxwell, O. S. Laing, Esqrs.

SIR, Balaklava, 9th January 1855.
 HAVING been instructed by the Minister for War to make certain inquiries into the condition of the sick and wounded officers and men of the British army in the East, we have to request that you will furnish us at your earliest convenience with the following information.

A return of all requisitions made by you or any officers or other persons under your orders for marquees, tents, hospital furniture and stores, medicines and medical comforts, distinguishing the quarter upon which the requisitions were made, showing also what requisitions were and what were not complied with, and stating any causes which were assigned by them on whom the uncomplished requisitions were made as the ground of such non-compliance.

We have, &c.
 (Signed) A. CUMMING,
 Inspector-Gen. of Hospitals.
 P. BENSON MAXWELL,
 O. SINCLAIR LAING,
 2nd Staff Surgeon.

January 25th, sent answers from P battery, 17th Regiment, 21st Regiment, 63rd Regiment. Rifles received not yet sent.

No. 776.

W. C. Humfrey to A. Cumming, P. B. Maxwell, and P. S. Laing, Esqrs.

GENTLEMEN, Camp, 4th Division,
 11th January 1855.
 I HAVE the honour to acknowledge the receipt of your letter of 9th inst., which I have sent to the officers in charge of the several regiments of 4th Division, with orders to furnish the information you require as far as is in their power.

Since I have had the medical superintendence of 4th Division, there has not been any depôt of medicines or medical comforts at the camp, consequently I have not myself made any requisitions for those articles, but have only approved of those of the surgeons of regiments who have sent for them to head quarters or Balaklava.

On receiving information from Dr. Hall that a depôt of medical comforts and medicines would be established at the camp, 4th Division, I made a requisition on the Quartermaster General, approved by Dr. Hall, for two circular tents for the reception of the above-named articles, and the accommodation of the dispenser under whose immediate charge they were to have been placed, which was returned to me with the remark "none in store." A requisition for a packhorse for the use of the divisional staff has been complied with, and one that I made for a marquee for my own use has not been returned or replied to as yet.

I have, &c.
 (Signed) W. C. HUMFREY,
 Dept. Inspector Gen. &c.
 A. Cumming,
 P. B. Maxwell,
 P. S. Laing.
 &c. &c.

No. 777.

From Dr. Hall.

(Memorandum.)

Head Quarters, Camp,
23rd January 1855.

THE legs of a portion of Smith's bedsteads have just been landed. Medical officers in charge of divisions will instruct those regimental medical officers who have had poles and sacking issued to them without feet to make requisitions for as many feet as they require to complete the bedsteads they have.

The Inspector General has received no answers to his memorandum of the 6th inst. about the hospital equipments of regiments, and he requests he may be furnished with them at the earliest convenience from superintending officers.

J. HALL.

No. 778.

Dr. Hall to Dr. Humfrey.

(Medical Memorandum.)

Before Sebastopol,
6th January 1855.

1. SURGEONS of the under-mentioned regiments will be pleased to state whether they have been supplied with field panniers and A and B hospital canteens, with 12 sets of bedding complete, as stated in a communication of 21st December from the Director

General of the Army Medical Department sent this mail:—9th, 14th, 17th, 34th, 39th, 62nd, 68th, 71st, 89th.

2. Superintending medical officers will ascertain what hospital equipment the several regiments under their supervision have in possession at present, and report the same for the information of the Inspector General of Hospitals with as little delay as possible. Those who had hospital canteens A and B, with 12 sets of bedding complete, issued to them in Bulgaria, will be pleased to state what has become of them, whether in possession, lost, and, if so, how and where, or in store.

(Signed) J. HALL,

Dr. Humfrey,
&c. &c. Inspector Gen. of Hospitals.

Received 25th January.

No. 779.

From Dr. Humfrey.

10th February 1855.

WHENEVER sick are to be removed to Balaklava, a medical officers of each regiment will attend, who will be held responsible that no men unable to bear removal are sent away.

(Signed) W. C. HUMFREY,
Dep. Inspector General, &c.

LETTERS of MR. MOUAT, Deputy Inspector General of Hospitals.

No. 780.

*Mr. J. Mouat to The Major of Brigade, Cavalry Division.*Cavalry Camp, near Kadekoi,
25th February 1855.

Sir,

I CONSIDER it my duty, as senior surgeon of the cavalry brigade, (acting in the capacity of staff surgeon, and exercising a degree of sanitary supervision over the condition of the camp,) to bring to your notice, with a view to the matter being represented to the military authorities, the careless manner in which the very large number of dead horses are buried, almost in our very camp; indeed, some are actually in the camp. So superficially are most of these animal remains covered with earth, that in many instances it is possible to distinguish the colour of the carcase. As the sun is said sometimes to possess considerable power in the month of February, the effects of its rays on these putrid remains, combined with moisture, will be rapidly to produce emanations poisoning the atmosphere, and productive of malignant and contagious camp fevers, and other deadly complaints, if we are to retain our present position.

I would therefore beg to suggest the propriety of covering the carcases with a layer of refuse powdered charcoal and lime, both known to be powerful deodorisers; and likewise that an additional two or three feet of earth (at least) be thrown up, so to entirely cover these animal remains.

I have, &c.

The Major of Brigade, J. MOUAT, Surgeon,
Cavalry Division. 6th Inniskillen Dragoons.

Note.—The result of this letter was an early inspection of the camp by General Scarlett, Dr. McLowell, the Brigade Major, and myself. Four of

the camps were found rather dirty, and ordered to be cleansed. A large fatigue-party was likewise ordered to carry out the suggestions regarding the dead horses.

J. M.

No. 781.

*Mr. J. Mouat to Lieut.-Colonel White, Commanding 6th Dragoons.*Camp Kutor-Koi-a-Kach, near Head
Quarters, 10th Nov. 1856.

Sir,

WITH reference to my communication to you of the 2nd instant on the subject of the health of the corps,

I beg again earnestly to bring to your notice, and that of the military authorities, the necessity of supplying the men with sufficient warm clothing; and, above all, the urgent necessity of providing, if possible, some more efficient shelter and protection for the sick than the thin canvass regulation hut, which is a most inadequate cover from such weather as we have lately experienced, and from which, if continued, I anticipate the most deplorable results. It is only necessary to visit a hospital hut after rain, to witness the wretched, cold, and comfortless condition of the sick. For instance, yesterday, and it is not the first time, it was impossible to keep a fire lighted, or to supply the sick with those comforts they so much need, as warm tea, arrow-root, &c. The duties of a dragoon are necessarily very severe, entailing much exposure; and the men in the lines so constantly wet, and their feet so swollen, as to be obliged to seek refuge in hospital, to remove their boots and dry their clothes, which sometimes they are unable to effect. I am aware that many of the hardships and

privations to which soldiers in the field are subjected are unavoidable; but surely some kind of efficient permanent accommodation might be at once provided for the hospitals of the brigade, and earth houses erected, in which warm water, tea, &c. could at any time be provided, irrespective of the weather.

As senior surgeon of the brigade, I deem it my duty to bring the miserable condition of the sick prominently to the notice of the authorities, medical and military, that some steps may be taken, before the weather again changes, to improve their condition. In the above sentiments all the regimental medical staff of the brigade concur; and I trust I shall have your sanction and support, as well as that of the senior officers of the department, in the above suggestions.

I have, &c.

J. MOUAT, Surgeon,

Lieut.-Colonel White, 6th Inniskillen Dragoons,
Commanding 6th Dragoons.

This letter was forwarded by Colonel White, then the brigade major, to the General commanding, but elicited no reply or notice from the military authorities. On the 12th November I received some Turkish huts and two tarpaulins, through the principal medical officer.

J. M.

No. 782.

Mr. J. Mouat to Lieut.-Colonel White, Commanding 6th Dragoons.

Camp near Head Quarters,
2nd Nov. 1854.

WITH reference to the morning state of the sick in the 6th Dragoons not showing the actual sanitary condition of the regiment, for the information of higher authority, medical and military, I am fully aware such is the case; but as a large number of men attend the hospital every morning who are suf-

fering from severe relaxation of the bowels, without any derangement of their general health (unfitting them for duty), such men cannot be taken into hospital without *injuringly crowding our limited hospital accommodation*; nor can they appear on the morning parade whilst under the influence of medicine.

As the cause of these trifling bowel affections is in a great measure dependent on exposure, and the nature of the duties performed, at this inclement season of the year, as well as the want of proper clothing, I would beg respectfully to suggest, for the consideration of authority, whether such parades on wet mornings, in our present position, within an entrenched camp, as well as the night picket, might not be advantageously dispensed with. As it is impossible the men can dry their clothing, or sustain that amount of animal temperature which is absolutely necessary, not to say for their health, but, in instances of delicate men, for their *lives*, I deem this matter of so urgent and important a nature as to desire to press it upon the serious consideration of authority, that no time may be lost in remedying, as far as circumstances will permit, the sad condition of our men, two of whom are at this moment *dying*, apparently from cold, and want of the proper means of sustaining animal heat. I would likewise wish to bring to your notice the difficulty of obtaining fuel, even to cook the men's rations in hospital, to say nothing of the impossibility of affording them warm drinks, &c.

I have, &c.

J. MOUAT, Surgeon,

Lieut.-Colonel White, 6th Inniskillen Dragoons,
Commanding 6th Dragoons.

This letter was duly forwarded by the commanding officer to the General commanding, but elicited no further notice than a casual hint from the major of brigade, that the *duties* alluded to were a purely military matter, and I was rather out-stepping my province.

J. M.

LETTERS of DR. JAMESON, Staff Surgeon, 1st Class.

No. 783.

To Dr. Hall.

SIR, Varna, 14th October 1854.

1. As the weather is often unfavourable, being generally cold and damp, and as colder weather at this season of the year may reasonably be expected, the Commandant suggested that the empty wards of the buildings till lately used as a general hospital, might be appropriated as barrack rooms.

2. Although fully alive to the extreme difficulty of keeping up the discipline so essential to health, when great facility of communication exists between the sick and their comrades in health, I have consented to the above arrangement as the lesser of two evils, one of which appears at present unavoidable.

3. To diminish, however, the inconvenience resulting from the partial appropriation of this building as a barrack, I proposed, and the Commandant has assented to the following precautionary measures:—First, The subaltern of the day will be constantly resident within its walls: he will share the orderly officer's room. Secondly, No woman in health will be allowed entrance on any account. They will occupy tents and marquees pitched close to the south-eastern angle of the building. Fourthly, No soldier in health will be permitted to use the hospital, cookhouse, or privy. A vacant space of ground opposite the women's proposed encampment, and in a north-easterly direction, will be allotted for these purposes. Fifthly, Sentries will be placed to check, as far as possible, intercourse between the sick and their comrades, and

to prevent the latter entering the hospital wards, cookhouse, or privy.

4.
5.
6. The above arrangements appeared to me likely to increase the comfort and improve the health of the men, and may, therefore, I trust, be honoured by your approbation.

I have, &c.

Dr. Hall,
&c. &c.

No. 784.

To the Commandant at Varna.

Office of Principal Medical Officer,
Varna, 19th October 1854.

SIR, An insufferable stench has been complained of in one of the rooms of the hospital. As this probably proceeds from insufficient drainage, and may prove injurious to the health of all in its vicinity, I shall feel obliged by your directing such steps to be taken as may appear to you best calculated to remove this nuisance.

I have, &c.

The Commandant at Varna,
&c. &c.

In consequence of the above letter, the officer commanding the Royal Engineers made the necessary investigation, and the evil was partially remedied.

No. 785.

To Dr. Hall.

General Hospital, Abydos,
16th December 1854.

SIR,

1.

2.

3. I also think it right to mention that there are still a good many articles necessary to be supplied to this hospital, for which I shall make the usual application; such as tables, forms, shelves, &c. The fitting-up of the kitchen and packstore is also still in progress.

I have, &c.

Dr. Hall,

&c. &c.

No. 786.

To Deputy Inspector General Menzies.

General Hospital, Abydos,
2d January 1855.

SIR,

1.

2. The number of patients at present is 336.

3. Every ward is well warmed by a stove, but a high wall in the immediate vicinity renders eight rather dark.

4.

5.

6.

The privy will require some alterations. The fall of water is insufficient to flush it properly; and the sea throws up sand so as partially to choke the drain by which it is cleansed. The packstore is good, and has been arranged for its present purpose by myself. There is one part of this room at present unoccupied. This I destine for a laundry, which is greatly wanted.

7. There is no inspection room. The cookhouse is undergoing a *second* alteration, as it has hitherto smoked so much as to be nearly insupportable. All the flues draw badly, causing the cooking to be at times not so regular as is desirable. A dresser is also required in it.

8. At the end of the two buildings divided into wards, &c., but detached from them, there is a row of small rooms, closely adjoining the cookhouse.

The best of these rooms are occupied by myself, as I find it absolutely necessary at present to reside within the walls. They are really very small, badly ventilated, very dark, and in every way incommensurable. They are also greatly crowded, as, contrary to the custom of the service, in each wardmaster's room there are three inhabitants. I made this arrangement, that the wards might be disposable for the greatest possible number of patients.

9. I would here beg to represent the serious inconvenience resulting from women being in some instances allowed to accompany their sick husbands. They already occupy a room which should be given to the hospital attendants. Should one more arrive, another room must be given up, and its present inmates must sleep in the wards, and thereby diminish by three beds the capabilities of the hospital.

I have, &c.

Deputy Inspector General Menzies,

&c.

&c.

P.S.—I propose to make some alterations in the row of small rooms, but have not yet decided upon them.

No. 787.

(Memorandum.)

General Hospital, Abydos,
6th January 1855.

WROTE to Mr. Calvert, requesting an estimate for tables, forms, stools, and shelves for each ward; for shelves, stove, and screen for laundry; for shelves

for apothecaries' store; for dresser in kitchen; for means of keeping windows open; for alteration in drawers; for tables, pigeon holes, and stools for Principal Medical Officer's Office; for tin plates under each stove.

No. 788.

To the Commandant at Abydos.

General Hospital, Abydos,

11th January 1855.

SIR,

1. You are aware that the principal buildings appropriated here for hospital purposes contain 16 rooms, each large enough to hold 26 beds. You were also aware that one of these was on landing immediately required as a packstore, &c., and that the other 15 had been fitted up as wards: there being room for two orderlies and 24 patients in each.

2. A difficulty has now arisen as to the disposal of men who may seem to me fit for active service, pending the arrival of the usual means of transport to the Crimea or elsewhere. For such men there is at present no separate accommodation, the room originally designed as a barrack having been hitherto used as a purveyor's store.

3. I would, therefore, now submit for your consideration that the only method of meeting this difficulty is by appropriating another ward as purveyor's store, and thus leaving at your disposal a room sufficiently large (in all probability), or nearly so, to hold the men returned by me as fit for duty.

4. This will, however, reduce the hospital accommodation from 360 beds to 336

I have, &c.

The Commandant,

Abydos.

No. 789.

To the Commandant at Abydos.

General Hospital, Abydos,

25th January 1855.

SIR,

1. I HAVE the honour to report, that, in accordance with instructions received through you from Colonel Lord Wm. Paulet, commanding the troops in the Bosphorus, I have this day discharged from hospital all men fit for duty, and have caused the purveyor's stores to be conveyed to the room hitherto occupied as pack store merely. Our stores at the time were *very* scanty. Had it been a few weeks later, the greater portion of the stores must, for want of room, have remained in the open air.

2. Having thus complied with the order, I trust, as Principal Medical Officer of this establishment, I may be pardoned if I now respectfully submit the following observations. I do so, because it appears to me that the arrangement now carried into effect will prove fraught with very grave inconvenience to the service. Should my statement be deemed prolix, may I be allowed to plead the importance of the subject as a sufficient apology.

3. All persons conversant with the principles on which a general hospital is conducted are aware that its discipline and general sanitary efficiency depend materially on the arrangements subsisting in its subordinate establishments. No such hospital can be considered perfect unless these are completely organized and in harmonious operation.

4. It is to the establishment more especially charged with purveyance that I would now wish to direct your attention, and I may also remark, that the three departments undermentioned belong to this establishment, viz., the purveyor's, or rather steward's (provision) store, the pack store, and the laundry.

5. Having on arrival here found only 17 rooms of sufficient size to be properly available for these purposes, 15 were devoted to the accommodation of the sick; the other two as follows: one as purveyor's office and store; this store being two-fold, one of bulk and one of issue, the latter in daily use for the expenditure of wine, porter, sago, arrow root, also bread, &c., &c.; the key under the exclusive charge of the steward; the second as a pack store; the key of this likewise was in the keeping of a separate non-commissioned officer; and so important is this charge deemed, that usually, in a general hospital, he has no other duty. Agreeably to regulations, a patient is denied all access to his pack while in hospital, except by special permission of Principal Medical Officer, and then only in presence of the storekeeper, who has each pack ticketed with a detailed list of its contents; moreover, the whole store is arranged regimentally.

I may also remark, a very few feet of this room was walled off, and devoted to the three-fold purpose, viz., of record room, reception room, and office of Principal Medical Officer.

The remaining space unoccupied by packs I intend to fit up as a laundry; for although the soiled linen, &c., is washed out of the hospital, still no articles are on return sufficiently dry for the use of the sick.

I conceive the condition of sheets, shirts, &c. a matter of considerable importance, and therefore intended that in this apartment the hospital linen should be kept, and both hospital and personal linen thoroughly dried before issue.

6. Through the kindness of the consul (Mr. Calvert), I obtained estimates of the probable expenditure for this and several other very necessary alterations and additions.

This estimate is herewith submitted.

7. The above arrangements, whether existing or merely proposed, are either interfered with or wholly suspended by the order with which I have just complied.

There is no longer a pack store, under the exclusive charge of its own officer, responsible alike for its systematic arrangement and for the safety of its contents.

The purveyor or steward's stores are necessarily so crowded that the usual regularity is impracticable, and in several other respects the effective working of the establishment is impeded.

The projected opening of a laundry, as above detailed, falls to the ground.

8. The only advantage now gained is, that room is afforded for 24 extra patients.

9. In your communication you mention, the alteration just carried into effect is temporary. Of course, if 16 rooms are ultimately to be appropriated as wards, two other additional ones would require to be built for the purposes already detailed.

I humbly submit that the arrangement I contemplate is likewise intended as a temporary device, till the next buildings are erected.

I submit that, out of the 17 large rooms here, if one be used as a barrack, two should be appropriated, the one to serve the triple purpose of store of bulk, store of issue, and purveyor's office, the other as pack store and laundry, &c. The remaining 14 rooms to be used as wards exclusively. Thus the hospital will accommodate 336 instead of 360 patients.

10. I think, Sir, with every deference to your judgment, I may safely maintain that this arrangement would considerably promote the comfort of these 336 patients, and also tend to benefit their health. It would, moreover, render more complete the organization of the whole establishment, and materially increase its general efficiency.

The Commandant,
Abydos.

I have, &c.

Requisition for sundry articles urgently required to complete the General Hospital at Abydos.

No.		£	s.	d.
1.	Fitting up the empty space in the pack store as a laundry*	16	13	4
2.	Tables to hold each 26 persons, 14 wards	30	6	8
3.	Stools, 364	30	6	8
4.	Iron plates for placing under stoves	10	13	4
5.	Three small tables with pigeon holes, and stools, for Principal Medical Officer's office	5	0	0
6.	Fitting up apothecaries' stores with shelves	4	3	4
7.	Dresser for the kitchen	4	3	4
8.	Hooks for keeping windows open	2	8	0
9.	To alter drain under kitchen	4	4	0
10.	To alter drain under privy, about 30l. (estimate not received.)			
Grand Total		£137	18s.	8d.
		£107	18	8

(Signed) W. TUCKER,
Purveyor to Forces.

Memo. of 28 January.—A shelf about 10 feet long, or thereby, on each side of the ward, will also be required.

No. 790.

Before Sebastopol,
19th January 1855.

Sir,
With regard to your communication of the 16th December, in which you mention certain deficiencies in the hospital at Abydos, such as tables, forms, shelves, and racks, which I request you will take measures to have supplied as early as possible, or any other deficiencies which you may consider necessary for the comfort and well-doing of the sick under your charge, so that when I pay you a visit I may be able to report that I have found everything in perfect order, which I fully expect will be the case.

I have, &c.

Dr. Jameson,
Staff Surgeon, 1st Class,
Principal Medical Officer,
Abydos.

No. 791.

To Captain Harrison.

Sir, Scutari, 28th January 1855.

I am directed by Colonel Lord Wm. Paulet to acknowledge the receipt of your letter of the 25th instant, with its enclosures, and to inform you, that, with reference to Dr. Jameson's letters of the 11th and 25th instant, his Lordship approves of the 17 rooms being applied as follows:

One room for pack stores and laundry; one room for purveyor's stores and office; one room for barracks; 14 rooms for wards for the sick. Total, 17 rooms.

Consequently accommodation will exist for 364 men in the 14 wards, and 26 in the barrack room. Total, 390.

I have, &c.

Capt. Harrison, 79th Regt.,
Com. Det., Abydos.

* More properly "linen store and drying-room."

Letter from Capt. Harrison, Commandant, Abydos.

To Dr. Jameson.

SIR, Abydos, 3d February 1855.
I HAVE the honour to enclose an extract from a letter which I received from the Deputy Assistant Adjutant General at Scutari, from which you will see that permission has been granted by Lord Wm. Paulet for one of the rooms originally intended as an hospital ward to be used as pack store and laundry, and another as purveyor's store and office, and the room outside the hospital gate is to be used as a barrack room.

I have the honour to request that you will allow these arrangements to be carried out with as little delay as possible.

I have, &c.

Dr. Jameson, &c. &c.,
Abydos.

To Dr. Hall.

SIR, General Hospital, Abydos,
3d February 1855.

1. I have also received authority to expend on alterations and additions above 100*l*.

Mr. Calvert, the Consul, has, however, informed me, that some delay may be anticipated in carrying out my suggestions, owing to the extreme scarcity of timber existing here at present.

I have, &c.

Dr. Hall,
&c. &c.

To — Calvert, Esq.

SIR, General Hospital, Abydos,
9th February 1855.

I TAKE the present opportunity of calling your attention to the fact that there is in this immediate vicinity a considerable extent of marshy land. Several acres of such I have observed in the opposite side of the hill at the base of which the British hospital is placed, and some other such spots are to be found on the road betwixt here and the Dardanelles.

I would, therefore, very strongly recommend you to represent the insalubrious condition of the localities in question to the Turkish authorities. If this neighbourhood were properly drained, it would very greatly improve the sanitary condition, not merely of the inmates of the hospital here, but that also of the inhabitants of the Dardanelles and the whole surrounding country.

I have, &c.

— Calvert, Esq.,
H. B. M.'s Consul, &c. &c.,
Dardanelles.

The above letter was written after some conversation on the subject to which it refers with Mr. Calvert, who appeared somewhat sanguine in his expectation that Osman Pacha, at the time Civil Governor of the Dardanelles, might be induced to regard favourably the recommendation contained therein.

No. 792.

(Memorandum.)

General Hospital, Abydos,
16th March 1855.

THE following are among the principal alterations and additions still requisite to complete the General Hospital:—

1. Tables and stools (360).
2. Stove for laundry.
3. Considerable alteration in height of walls.

4. Alteration in privy and washhouse (new one to be built over the sea with covered way).

5. Opening of drain below gateway.

The above brief memorandum given to Commandant at his request.

No. 793.

To Captain Blacklin.

SIR, General Hospital, Abydos,
22d March 1855.

WITH reference to previous letters, I have now the honour to submit on sanitary grounds the under-mentioned recommendations:—

2. It being hitherto found impossible to secure a person to wash for the establishment with sufficient regularity and care;

It being also found impracticable to keep down effectually the horrible effluvia from the privy;

Recommended that a privy be erected over the sea, with covered way leading thereto; recommended, also, that the apartment now used as a privy be fitted up as a washhouse. It is possible to exclude all communication with the hospital, and also to hire Greek women as washers. This was the custom at Varna.

3. It being found that the various walls around and within the hospital interfere with proper ventilation, and thereby tend to increase the prominent defect of this locality;

Recommended that said walls be all lowered several feet.

4. It being found that the floor of the ablution room is defective, being uneven, &c. &c., thereby retaining damp;

Recommended that the said floor be altered. To be made * flat, but having a gradual yet considerable slope towards the sea.

5. Owing in general to accident, a great many panes of glass, window-sashes, &c. &c., have been broken or injured throughout the establishment;

Recommended that all these repairs be executed with the least possible delay.

I have, &c.

The Officer Commanding,
Abydos.

No. 794.

(Memorandum.)

General Hospital, Abydos,
9th April 1855.

ALTERATIONS and additions found absolutely necessary to complete the above establishment.

1. Construction of a privy, about twenty yards from the beach, with a covered way from wards leading thereto along the south-west wall.

2. Conversion of present privy into a wash-house. This change, "inter alia," involves the following changes and additions: First, closing of present entrance, and opening of one towards southern aspect; secondly, opening of a doorway in south wall, near principal medical officer's office; thirdly, repair of iron tank near cookhouse; fourthly, alteration of drain; fifthly, construction of wooden paling from washhouse to sea.

3. Alteration of floor of ablution room.

4. Lowering of walls. This implies the erection (on one wall) of a slight paling to prevent men breaking out of hospital.

5. Ventilators in roof of each ward, moveable at pleasure.

6. Alteration of kitchen drain.

7. Additional windows to promote ventilation in small rooms used by wardmasters, &c. &c.

8. The above alterations, additions, and repairs will tend respectively to produce a more perfect system of hospital ventilation, and also to promote considerably personal cleanliness.

In my opinion, all should be carried into effect with the least possible delay, as the hot season is rapidly approaching.

No. 795.

To Captain Blacklin.

SIR, General Hospital, Abydos,
9th April 1855.

1. WITH regard to communications previously addressed to Captain Harrison when Commandant (No. and date as below*), I have now the honour to submit herewith a memorandum detailing sundry intended alterations in this hospital, a copy of which will be forwarded to Captain Waagemann, Engineer, by the evening post.

2. Except the proposal to fix ventilators in the roof of each ward, and additional windows in the small rooms, all these alterations and suggestions have been sanctioned by Brigadier-General Lord William Paulet.

3. As a store and officer's quarter are now in course of erection for the Commissariat Department, I trust you will pardon me for pointing out that additional quarters are also required for the hospital staff, and if, as suggested in my letter of the 25th January, No. 158, buildings were erected for the various stores connected with the purveying department, &c., &c., the two rooms now used as such would revert to their original destination, and be rendered available for the accommodation of 48 additional patients.

I have, &c.

Captain Blacklin,
Commandant, Abydos.

P.S. The erection of a cook-house for extras, provided there were also a qualified cook (such as I hear some of the lately arrived female nurses are), would be an improvement. It would, however, be requisite to build a quarter for this cook, as there is none available at present.

In the French hospital there is a shed, with some forms, on which I observed some convalescents sitting. This indulgence, although not absolutely essential, would be a very great comfort to this class of patients.

No. 796.

To Captain Waagemann.

SIR, General Hospital, Abydos,
12th April 1855.

I HAVE the honour to enclose herewith a memorandum, giving the details of the intended additions and alterations specified in our conversation of the 5th instant.

I have, &c.

Captain Waagemann,
&c. &c.

No. 797.

To Captain Blacklin.

SIR, General Hospital, Abydos,
23d April 1855.

WITH reference to several previous communications, I hope you will not think me too importunate if I venture again to call your attention to our projected sanitary improvements.

These have been generally sanctioned, but are not even commenced, for, being a departmental officer, I cannot of course execute them myself.

I would, therefore, most urgently submit to your better judgment, the propriety of applying for an officer of engineers, who can at once, if on the spot, make the necessary contracts, &c. &c.

The Commissariat adopted this plan, and their store is nearly complete, I may add, *every day's delay* is much to be regretted. The rainy season is just commencing, and the hot weather will follow directly after.

I have, &c.

Captain Blacklin,
Commandant, Abydos.

Memorandum showing sundry alterations, additions, and improvements, from time to time, proposed in reference to these buildings.

1. The construction of building to be used as officers' quarters and purveyor's stores.

2. The construction of a privy over sea, covered platform, 60 feet from beach to seats, and railed.

3. The conversion of present privy into wash-house.

4. Railing to be carried from back of present dead-house directly to beach, or to buildings No. 1, as the case may be.

5. Demolition of western wall.

6. The lowering of the outer walls to the height of four feet. The eastern wall to be surmounted by stockade, and the ground outside to be lowered, if possible, four feet.

7. Windows to be open in the back part of the small rooms, except those used at present respectively as quarters by principal medical officer, as apothecary store and as surgery.

8. Funnel, &c. in roof of kitchen, and drain altered.

9. Tank to be repaired.

10. Shed for patients, with benches.

11. Ventilators in roof of wards, with alteration in ceiling.

12. Alteration in floor of ablution room.

13. Erection of an extra kitchen, with quarters for a female cook. This item is merely recommended as conducive to the comfort of a certain class of patients.

14. Doorway in southern wall, near Principal Medical Officer's office.

15. Sundry repairs.

16. A stool, as per pattern, for each bed.

Principal Medical
Officer's office,
Abydos, 30th April 1855.

No. 798.

To Captain Blacklin.

SIR, General Hospital,
Abydos, 5th May 1855.

1. WITH reference to our conversation this morning, I crave your permission, in the very strongest manner to urge, on sanitary grounds, that the distance between the nearest seat in the proposed privy over the sea and the beach be not less than 60 feet.

2. I have formed the opinion on which I ground the above recommendation, after carefully observing the eddies in that direction since last December, and am convinced that if a less distance be adopted the end for which I recommended the construction of said privy will not be obtained.

3. I have learned that Mr. Brunton, Civil Engineer, coincides in the above opinion.

4. As upon me rests the undivided responsibility of securing certain sanitary results from the proposed alterations in this establishment, I hope, if you still object to carrying out my proposal, you will have no objection to submitting this letter to the consideration of Brigadier General Lord Wm. Paulet, by whom, as

* No. 58, 25th January 1855; No. 214, 22d March 1855.

I understand, at least, my suggestions have been approved.

I have, &c.

Captain Blacklin,
Commandant, Abydos.
&c. &c.

No. 799.

To Captain Blacklin.

SIR,
General Hospital,
Abydos, 7th May 1855.

EVER since the opening of this establishment, on the 8th December last, considerable difficulty has been experienced in maintaining the discipline which is so indispensable to sanitary efficiency.

2. One of the leading obstacles has been the facility of intercourse (afforded by circumstance) between the patients here and the natives of the country, who are always on the alert to supply the former with liquor and other contraband articles.

3. Last December, on more occasions than one, boats were detected by me in the act of landing spirits here, and selling the same to different individuals.

4. To remedy this most intolerable nuisance, it has hitherto been a standing order that no boats should land their crews within the hospital boundaries, under any possible pretext, except when under command of an officer who could be held responsible for their behaviour; also, that, with the exception of H.B.M. Consul and family, the contractor, and persons known to be in his employment, no one should enter the gate except passed therein by an officer of the dépôt.

5. The strict observance of these two orders hitherto has proved very beneficial.

6. In two instances only have they been violated.

7. One has been under existing circumstances unavoidable. I allude to the occasional shipment from the wharves of horses and cattle for the use of the Anglo-French army in the Crimea.

These shipments, however, usually occupy a very short space of time, and the patients are then confined within the central gateway.

8. The other exception is the reason I now take the liberty of addressing you.

Permission was granted to the master of a foreign vessel to execute some repairs about his ship which required the presence of the crew within these boundaries all day and for many days in succession. The result, as you know, was the introduction of contraband articles in the wards of the hospital.

9. It becomes, therefore, my duty, most respectfully, yet most earnestly, to suggest to you the propriety of withholding your permission in all future instances. Assuredly the presence of civilians of the lower class among the sick will, by the inevitable disorder it occasions, entirely defeat the order of the Commander-in-Chief in establishing in this locality a sanitary post, for where the discipline of an hospital is defective its sanitary condition is invariably unsatisfactory.

I have, &c.

(Signed)

Captain Blacklin,
Commandant, Abydos.

No. 800.

To Captain Gordon.

SIR,
General Hospital, Abydos,
12th July 1855.

I HAVE the honour to acknowledge hereby your letter of the 27th ultimo, and beg leave to state that

I shall do my best to obtain the information required by Colonel Lloyd.

I have, &c.

Captain Gordon, R.E.,
Scutari.

No. 801.

To Captain Gordon, R.E.

SIR,
General Hospital, Abydos,
26th July 1855.

WITH reference to your communication of the 27th ultimo, I have the honour to report to you, I am informed by the contractor for this hospital that masons, carpenters, glaziers, plasterers, and laborers can be procured, when required, at the Dardanelles, and nearly at the same rates as at Constantinople. Glass can be procured at so much per pane.

Flagging has been ordered, and may shortly be expected. 1,400 lbs. of lime have already been landed here; also 4,134 bricks.

I have, &c.

Captain Gordon, R.E.

No. 802.

To Captain Gordon, R.E.

SIR,
General Hospital, Abydos,
14th August 1855.

WITH reference to previous letters, as below,* I am anxious to learn how the various articles, in the latter communication alluded to, are to be paid for, as the person by whom they were supplied has been making repeated inquiries on the subject of the acting purveyor of this establishment.

I have, &c.

Captain Gordon, R.E.

No. 803.

To Captain Gordon, R.E.

SIR,
General Hospital, Abydos,
30th August 1855.

1. I HAVE the honour to acknowledge the receipt of your letter of the 22d instant.

2. I beg to enclose herewith the tradesmen's account for the articles purchased by your order, and now in charge of purveyor.

3. Before proceeding to endeavour to complete the works authorized, I may mention that I learn, on what appears on unquestionable authority, these buildings are shortly to be handed over to the French army.

4. If it still be thought necessary to carry out the said works, I shall require a list giving the necessary details, to prevent mistakes on my part.

5. The frame works of the windows for ward-master's rooms, &c. were to be constructed at Scutari. Am I to wait for their arrival?

6. I apprehend some difficulty in executing these works by contract, as you direct, owing to the great delay which has hitherto attended the payment of the contractors for those already performed, and which, I may add, were carried out, not by me, as you suppose, but by the various commandants here respectively.

The Consul informs me these men borrow money at a very high rate of interest to enable them to pay their laborers regularly. This gentleman has himself advanced money to one contractor some time ago; a circumstance I only learned long after it occurred, for, as just stated, these matters were all arranged by the various commandants.

7. I therefore wait for your further instructions, and when these arrive they shall be carried out to the best of my ability.

I have, &c.

Captain Gordon, R.E.

* No. 369, 12th July 1855.
No. 385, 26th July 1855.

No. 804.

To Dr. Hall.

General Hospital,
Near St. George's Monastery,
Crimea, 10th December 1855.

SIR, I HAVE the honour to report that a canteen has been opened near St. George's Monastery by the authority of the Commandant.

I beg to submit to your better judgment that such an establishment is here unnecessary, and, being so close to this hospital, is greatly calculated to cause and to promote intemperance.

The Commandant has indeed informed me that no spirituous liquor is allowed to be sold therein, but, as far as my experience goes, such a prohibitory enactment can never practically be enforced.

I have, &c.

Dr. Hall,
&c. &c.

No. 805.

To Dr. Hall.

General Hospital,
Near St. George's Monastery,
Crimea, 31st January 1856.

SIR, WITH reference to my letter, No. and date as below,* on the subject of the expediency of establishing a canteen in the immediate neighbourhood of a general hospital, more especially when that hospital is unprotected by a single sentry, I have now the honour to submit, I am credibly informed that, contrary to the original intention, spirituous liquors are there constantly sold; indeed, only this morning an orderly of the Medical Staff Corps, confined at the night visit by the staff surgeon for drunkenness, alleged to me on his defence he "only drank two glasses of cognac he had purchased at the canteen at the Monastery."

I have, &c.

Dr. Hall,
&c. &c.

No. 806.

To Dr. Hall.

General Hospital,
Near St. George's Monastery,
Crimea, 13th March 1856.

SIR, WITH reference to previous communications as below,† on the expediency of having a canteen in the immediate neighbourhood of this establishment, I beg now to report, agreeably to evidence just received by me, one of the Medical Staff Corps orderlies was taken out of the canteen near the Monastery at an early hour this morning, where he had purchased, inter alia, a bottle of gin. He was found disputing with the canteen-keeper, and was then, as he still is, "very drunk."

I have, &c.

Dr. Hall,
&c. &c.

* No. 491, 10th December 1855.

† *Ibid.*

No. 531, 31st January 1856.

No. 807.

To Dr. Hall.

General Hospital,
Near St. George's Monastery,
Crimea, 22d March 1856.

SIR,

1.
2.
3.

In fine, I submit that a perusal of the statements drawn up by all parties concerned (the canteen man excepted), bears me out in re-asserting, although this man may possibly have taken "his morning glass," he went to his work sober, and, unluckily straying to the canteen, was brought back therefrom "very drunk."

4. Am I not, therefore, justified in repeating my recommendation to close this canteen? Major Whitmore established it on the condition that no spirits were to be sold there, but it would appear his efforts to enforce this condition have failed.

Even were it possible to check the vending of forbidden liquors, if a person of this description gain a footing on a post, he can, by strolling emissaries, easily effect his purpose of clandestine sale. Elsewhere I myself have known this done, and, from a remark in the evidence of Assistant Wardmaster Morris, I suspect some such scheme is in contemplation here.

Every facility is afforded by these buildings, sufficiently extensive to accommodate 220 patients, yet unprotected by an enclosure; nay, actually unprotected by a single sentry, night or day.

5. Is there not a French canteen described to me as under a mile off? and do not strolling French soldiers occasionally smuggle spirits into the hospital? Too true! But the existence of one evil I can only deplore and struggle against without effectually removing is no reason why I should not bear my humble testimony against another evil we ourselves have created, and can in a moment destroy.

6. It is said the canteen is a convenience to about 60 French and English. Very possibly. This matter being beyond my province, can be by me neither admitted nor gainsaid. I view the question simply as it affects the discipline of the hospital committed to my care. Evidence has been adduced to show that for some months past the sale of spirits has been going on at the said canteen, and that, in particular cases, the drunkenness of attendants is to be ascribed to its existence. This establishment has thereby very considerably enhanced the difficulties experienced in maintaining discipline in the hospital, and whatever is prejudicial to discipline must eventually be prejudicial to health also.

7. I have, &c.

Dr. Hall,
&c. &c.

No. 808.

To the Commandant.

General Hospital,
Near St. George's Monastery,
Crimea, 17th May 1856.

SIR,

WITH reference to former conversations, I beg to submit the very urgent necessity that exists for the establishment of at least a corporal's guard over this hospital. French soldiers crowd about the buildings all day, and I do not consider the public property safe in our present defenceless condition.

I have, &c.

The Commandant,
&c. &c.

LETTERS of DR. BEATSON, Staff Surgeon, 1st Class, Principal Medical Officer,
Balaklava General Hospital.

No. 809.

To Lieutenant-Colonel Harding.

SIR,
Senior Medical Officer's Office,
Balaklava, 27th January 1856.
A SANITARY inspector came here this morning with a party of about 20 Croats, and directed my servant, as well as others, to remove a heap of rubbish which has been allowed to accumulate for probably the last 12 months, here and there, over the space between the hospital and medical officer's quarters, as well as behind the latter; and at the same time he refused to allow the Croats who were with him to assist. Considering that most of the medical officers now here have been only a few months, some only a few weeks, I really cannot see why their servants should be required to do more than remove the daily refuse of the stables; not the heaps that have been allowed hitherto to accumulate, and which it is clear ought never to have been allowed to do so, if the sanitary inspectors had attended to their duties, especially as I am informed by the Sanitary Commissioners, that there are two inspectors and a large staff of Croats paid for the purpose of keeping the whole of Balaklava free from filth and nuisance.

In such circumstances, I hope you will be pleased to give orders for the removal of the nuisance alluded to, and as to what steps are to be taken to prevent its re-accumulation, as it cannot but prove, especially as the hot weather is fast approaching, prejudicial to the health of the neighbourhood.

Allow me to suggest that if officers' servants are to

remove the refuse of stables, that wheelbarrows should be allowed for that purpose.

I have, &c.

(Signed) G. S. BEATSON, M.D.,
Staff Surgeon, 1st Class,
Senior Medical Officer.

Lieut.-Colonel Harding,

&c. &c.

Commandant.

P.S. I also beg leave to inform you that it has been pointed out to me that several bodies have lately been buried on the face of the hill above the centre of Balaklava; a practice which, if continued, must prove prejudicial, as from the nature of the soil the graves are probably very near the surface.

G. S. B.

No. 810.

REPLYING to a letter from Mr. Mouat, Deputy Inspector-General of Hospitals in Turkey, and then Principal Medical Officer of Balaklava, on the subject of peat charcoal being used for the Hospital latrines.

SIR,

IN acknowledging the receipt of your communication of to-day's date,

I have the honour to inform you that I have submitted it to the Commandant.

I have, &c.

(Signed) G. S. BEATSON, M.D.,
Staff Surgeon, 1st Class.

J. Mouat, Esq., C.B.,
Principal Medical Officer,

&c. &c.
Balaklava.

LETTERS of DR. TICE, Staff Surgeon, 1st Class.

No. 811.

Mr. Alexander to Dr. Tice.

SIR,
Camp, Monastera, 19th August 1854.
COLONEL Shirley, commanding the 88th Regiment, having written a letter to the general commanding the division, dated 17th instant, in which he complains of the want of comforts for his sick, and goes so far as to state, "I have reason to believe that some of the recent deaths were solely occasioned by the want of those hospital comforts and change of diet," I have the honour to request that you would be pleased to call upon the medical officers of that corps for an explanation of the same, and also for a copy of any report they may have made to their commanding officer on the subject, as, should the above statement of the colonel be correct, they are entirely to blame for allowing their men to be in want of anything that could be purchased, if not to be obtained from the purveyor's store here.

I have, &c.

(Signed) T. ALEXANDER,
Staff Surgeon 1st Class.

Dr. Tice,
Staff Surgeon, 1st Class,
Charge of 2nd Brigade.

No. 812.

Dr. Tice to Mr. Moore.

SIR,
Camp, Monastera, 19th August 1854.
IN submitting the accompanying letter from Dr. Alexander, I have to request you will favour me,

with as little delay as possible, with the information called for.

I have, &c.

(Signed) J. C. G. TICE, M.D.,
Surgeon Moore, Staff Surgeon, 1st Class,
88th Regiment. Charge of 2nd Brigade.

No. 813.

Mr. Moore to Dr. Tice.

SIR,
Camp, Monastera, 19th August 1854.
IN reply to your letter received this evening, and its enclosure, I have the honour to state that I did not write any report to Colonel Shirley relative to comforts for the sick, and therefore cannot send a copy. I further beg to state, that I did not make any report to him on the subject, further than in answer to a question from him, viz. Why I did not give lots of fowls and eggs to the sick, as surgeons of other corps did? I replied that I was not authorized to purchase anything I might choose, and that I had to keep an exact account of every article each man had. I said the men got beef tea, arrowroot and sago, wine and brandy, as much as I chose to order. I further have to state, that, had I deemed the purchase of fowls and eggs necessary, I should have applied to the principal medical officer for permission to do so; and I moreover state, that I can confidently state that no man ever lost his life while under my charge for want of nourishment, when he could either eat or drink;

and also that I think that Colonel Shirley's statement, "that he had reason to believe that some of the recent deaths were solely occasioned by the want of those hospital comforts and change of diet," is a very unfair charge to bring against me, as, if I allow men to lose their lives for want of nourishment, I am certainly unfit to be in charge of the sick.

(Signed) G. T. MOORE,
Surgeon, 88th Regiment.

To Staff Surgeon, 1st Class,
Dr. Tice.

No. 814.

Dr. Tice to Dr. Alexander.

SIR, Camp, Monastera, 20th October 1854.

I HAVE the honour to forward the accompanying explanatory letter from Surgeon Moore, 88th Regiment, by which you will perceive that he administered to his patients the quantity of food in his judgment the most appropriate, and hence the best suited to meet the various ailments under his charge. I have on more than one occasion told Assistant-Surgeon Shogog, 88th Regiment, of the unbounded latitude I yielded him in the exhibition of whatever he thought likely to prove beneficial to the sick during the prevailing epidemic, observing, that if he even thought the pouring of gold down the throats of the unfortunate sufferers could do good he had my permission to use the precious metal ad libitum. I cannot, therefore, but regret that the liberal spirit extended, and in particular to the 88th Regiment, should have called down the serious stricture of Colonel Shirley on Mr. Moore, reflecting on that officer not merely the want of discrimination but of humanity.

I have, &c.

(Signed) J. C. G. TICE, M.D.,
Staff Surgeon, 1st Class,
Charge of 2nd Brigade.

Dr. Alexander,
Principal Medical Officer,
Light Division.

No. 815.

Dr. Tice to Captain Christie.

SIR, Balaklava, November 1854.

I HAVE the honour to request you will be so good as to inform me what preparations will be made for

the reception of the sick and wounded at this station, should the Russians effect a successful invasion.

I have, &c.

(Signed) J. C. G. TICE,
Capt. Christie, R.N., Principal Medical Officer,
Agent of Transports.

No answer received.—J. C. G. TICE.

No. 816.

Dr. Tice to Dr. Hall.

SIR, Balaklava, 17th November 1854.

I HAVE the honour to inform you that the hospital is crowded, and from the position of the ships, and the damage they have sustained, it is impossible at present to make use of them for the sick. The "Victoria" steamer has already on board about 150 marines, and it is likely to fill with men of that branch of the service.

With the view of more accommodation for the sick, I represented verbally to General Estcourt that I feared the house Lord Raglan had occupied would be required; and yesterday, on inspecting it, I was told His Royal Highness the Duke of Cambridge intended to remove into it. I am therefore obliged to request you will not allow another sick soldier to be removed till I can report the ships ready for their reception.

I have, &c.

(Signed) J. C. G. TICE,
Dr. Hall, Principal Medical Officer,
Inspector-General.

Attended to.—J. C. G. TICE.

No. 817.

To Captain Christie.

SIR, Balaklava, 16th November 1854.

I HAVE the honour to request you will be good enough to place at my disposal a ship, for the accommodation of the sick and wounded, the hospital being crowded. I have to urge the necessity of your immediate attention.

I have, &c.

(Signed) J. C. G. TICE,
Captain Christie, R.N., Principal Medical Officer,
Agent of Transports.

Attended to.—J. C. G. TICE.

LETTERS of MR. ROBERTS, Staff Surgeon, 1st Class, Principal Medical Officer
4th Division.

No. 818.

To the Assistant Adjutant General, 4th Division.

SIR, Camp, 4th Division, before Sebastopol,
3rd February 1855.

At the request of Major-General Sir J. Campbell, I have the honour to report that the dirty state of the vicinity of the regimental hospitals, and the absence of proper latrines, was brought by Dr. Hall and Dr. Humphry, and further urged by myself, to the notice of the regimental surgeons, for correction, by applying for regimental fatigue parties, without the effect of having the nuisances remedied, and that a brigade (1st) fatigue party was applied for subsequently to bury the heaps of filth and dead animals about the hospitals of the 1st Brigade, and which party, from paucity of hands, effected little.

At the present time there appears to be no method of constructing latrines, or of maintaining cleanliness in camp, otherwise than by the desultory action of a commanding officer of a regiment, a surgeon, or

quarter master, stimulated occasionally by a military or medical staff officer, as chance dictates.

In order to keep a standing camp, without its sewers, water, and scavengers, clean, there should be latrines properly constructed in convenient positions near the companies' tents, hospital marquees and huts, with a permanent personal staff to keep them in order; and, furthermore, to correct the indiscriminate and universal commission of nuisances, as is observed every hour out of the twenty-four in the day in every point of the camp, there ought to be enrolled a small but able body of men to preserve the sanitary police of the camp, in conjunction with the above referred to staff of pioneers, and who should have the power of bringing to conviction with their own evidence any offender against the sanitary laws of the camp, and summarily to punish him by forfeiture of one day's grog or some such punishment.

Latrines, it should be observed, cannot be preserved in a deodorized state without daily covering of the soil with either a layer of lime or earth; and even this process will fail to preserve them without odour

after a few weeks, and thereby compelling the formation of others.

In addition to keeping the surface of our camp field free from heaps of ordure, with their unwholesome emanations, and the regimental and hospital latrines innocuous, by the proposed organization of a sanitary camp police and pioneer corps, there would be afforded hopes of averting the early to be expected products of the poisonous effluvia from the graves of the dead men and animals and offal pits of the Commissariat around our camp almost; for as certain as the frost ceases to affect the surface of the ground the earth begins to crack and sink into the vaults, the yet partially undecomposed crowded carcasses of the recently buried (to say nothing of those we must daily wait for from deaths by general disease, and perhaps others in hasty large numbers from collision with the enemy) commence to emit the mephitic gas, and the warm wind of the south to waft it over from the graveyard to the recesses of our tents, so sure will it ever attack, not only the exhausted and coarsely-fed private soldier, but even the strong in mind and body of every rank who may be exposed to the poison. These graves even now require to be freshly heaped over with earth, as the mounds are fast sinking over the superficially buried corpses.

Any assistance I can offer the major-general in selecting sites for latrines and in organizing a proper sanitary police and pioneer corps, which would ultimately far more than compensate for the abstraction of the men to compose it from their regiments, and putting a little more work on others, shall at all times be rendered.

I have, &c.
(Signed) FREDERIC ROBERTS,
Staff Surgeon, 1st Class.

The Assistant Adjutant-General,
4th Division.

No. 819.

Assistant Adjutant-General's Reply.

SIR, Camp, 4th Division, 3rd February 1855.
IN reply to your letter, addressed to me this day, I have the honor to inform you, that the major-general commanding conceives the remarks therein contained as perfectly just and true. The measures you adduce for the cleanliness of the camp are most able and efficient, but the major-general regrets, from the present weak state of the division, his utter inability to carry them out. In some future day he trusts they may be carried into effect.

I have, &c.
(Signed) HUGH SMITH,
Acting Assistant Adjutant-General.
Staff Surgeon Roberts,
4th Division.

A copy was also sent to Sir J. Hall, who thanked me for it, and he again visited the division upon the subject. Copy also introduced into special report called upon by director-general.

No. 820.

To the Assistant Adjutant-General.

SIR, Camp, 4th Division,
17th February 1855.
ON recent inspection of the cemetery, I find that the graves made during the frosty weather have gaped, and the mounds sunk in many several inches, since the recent thaws. Now that the corpses are fast decomposing since the change of weather, I beg to suggest that means should be immediately taken to have them covered over with more earth, to prevent a source of development of disease by their poisonous

emanations, or the aggravation of any epidemic that may arise.

I have, &c.
(Signed) FREDERIC ROBERTS,
Staff Surgeon, 1st Class.

Assistant Adjutant-General,
4th Division.

No written, but a verbal answer of acquiescence, returned by assistant adjutant-general.—F. R.

No. 821.

To the Assistant Adjutant-General.

Camp, 4th Division,
24th March 1855.

SIR, I HAVE the honour to call attention to the defective state of the latrine of the 68th Light Infantry. In rear of the ditch is a large cesspool, which should be immediately drained or otherwise removed, and not allowed again to accumulate, and become a source of poisonous emanations. Two medical officers attached to the 68th Regiment have been attacked with fever,—one in February and the other in the present month,—which may be engendered by living in the neighbourhood of cesspools. I therefore suggest the propriety of lime being thickly thrown over the site of the pool when its contents have been removed.

I have, &c.
(Signed) FREDERIC ROBERTS,
Staff Surgeon, 1st Class,
Principal Medical Officer, 4th Division.
Assistant Adjutant-General,
4th Division.

No answer received.—F. R.

No. 822.

To the Assistant Adjutant-General.

SIR, Camp, 4th Division,
7th March 1855.
TO maintain proper ventilation in the tents of the regiments in camp, I have the honour to suggest to the consideration of the major-general commanding the propriety of having the curtains of the tents, when the weather permits, raised inwardly, the contents of them removed to the centre or outside, to obviate obstruction of fresh air, and the floors to be swept with brooms.

I think this measure more practicable in all weathers, and would be attended with less labour, than thoroughly "striking" the tent, and if often done might greatly assist in keeping away the fever now prevailing.

I have, &c.
(Signed) FREDERIC ROBERTS,
Staff Surgeon, 1st Class.
Assistant Adjutant-General,
4th Division.

No answer received.—F. R.

Copied into special report called for by director-general.

No. 823.

To the Assistant Adjutant-General.

Camp, 4th Division,
28th March 1855.

SIR, THE emanations of poisonous gases being still perceptible from the old graveyard, and a commanding officer of a regiment having yesterday referred the same to me, I have the honour to suggest that, as soon as lime is procurable, the graves of the men recently buried be sprinkled over with it first.

I beg to call attention to the uneven state the regimental tents are tenanted, as will be seen from the accompanying return procured from regimental surgeons. Some better *daily* means of ventilation

should be enacted in the tents than at present exists. I went round yesterday, with Dr. Paynter, the tents of every regiment, and found the curtains of the tents in each unraised.

The tents are excessively close, even when not tenanted; and some rigid, but as little troublesome as possible, practice should be adopted to ventilate them, to endeavour to check the fever that prevails.

I have, &c.
(Signed) FREDERIC ROBERTS,
Staff Surgeon, 1st Class.

Assistant Adjutant-General,
4th Division.

Assistant Adjutant-General's Reply to the above.

Camp, 4th Division,
26th March 1855.

SIR, I AM directed by the major-general commanding, before whom I laid your letter of yesterday's date, to inform you that as soon as lime can be procured your suggestions shall be carried out. Orders have this day been issued to the brigadiers, calling their attention to the proper ventilation of the men's tents.

As regards the tents being crowded, nothing can be done till a further supply of huts arrive in camp; and the best way of remedying this evil would be, Dr. Hall recommending more huts to be brought up. His recommendation will be attended to soonest.

I have, &c.
(Signed) HUGH SMITH, Major,
Assistant Adjutant-General.

Dr. Roberts,
Principal Medical Officer,
4th Division.

No. 824.

PARAGRAPH No. 3 of letter addressed to Dr. Hall, on 29th March 1855, on this subject, by me.

"No. 3. On the 27th instant I called the attention of the authorities towards the close, crowded, and ill-ventilated state of the tents in the regiments in the division, which has been repeated to the brigadiers. The Assistant Adjutant-General says, in his reply to my suggestions, that, 'as regards the tents being crowded, nothing can be done till a further supply of tents arrive in camp; and the best way of remedying this evil would be, Dr. Hall recommending more huts to be brought up; his recommendation will be attended to soonest.'"

No. 825.

Dr. Hall to Brigadier-General Airey.

Before Sebastopol,
27th March 1855.

SIR, I HAVE the honour to bring to your notice a representation that has been made to me by Staff Surgeon Roberts, Principal Medical Officer of the 4th Division.

On the 7th instant a recommendation was made to the military authorities of the division, to exercise better ventilation in the companies' tents; but I regret to say that I have never seen it practised, although I am in camp daily. Some better means of cleanliness and ventilation should be enacted than at present exists, as the tents are unevenly tenanted, according to the returns I have procured, some being occupied by from 15, 14, 13, 12, to 3 and 2. The average throughout the division would be nine in each tent, were they equally tenanted.

The Surgeon of the 38th also remarks:—"I beg particularly to call attention to the crowded state of the tents occupied by the men in camp. On an average, there are no less than 12 or 14 in each tent, by far too many, considering the want of facility for

personal cleanliness. 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 the 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 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.

I have, &c.
(Signed) J. HALL,
Inspector-General of Hospitals.

Brigadier-General Airey,
Quartermaster-General,
Head Quarters.

GENERAL SIMPSON.

"There should be a General Order issued on this subject." "Commanding officers of regiments should cause their men to strip, and be inspected [*word here not legible*] twice a week, to certify that their persons are clean."

(Signed) R. AIREY,
Quartermaster-General.

When this order was written on Dr. Hall's letter, health inspections had been in practice since February, by order of Sir J. Hall.

No. 826.

Major-General Sir J. Campbell to Major-General Estcourt.

Camp before Sebastopol,

SIR, I HAVE the honour to acquaint you, that I have perused Dr. Hall's letter to Major-General Airey of the 27th ult., in which I observe an inaccuracy as to the date of Dr. Roberts' communication to me. Dr. Roberts wrote to me, not on the 7th but the 27th, and then recommended to have done what had already been performed; in fact it appears to me that he had taken the hint as to these sanitary measures from what he had seen done by the whole division as soon as ever the weather permitted.

I have, &c.
(Signed) JOHN CAMPBELL,
Major-General, Commanding
Major-General Estcourt, 4th Division,
Adjutant-General
of the Army.

It will be observed that this letter is contradictory to the Assistant Adjutant-General's letter of the 28th March, wherein he states that "*orders have this day been issued to the brigadiers calling attention to the proper ventilation of the men's tents.*"

No. 827.

To Dr. Hall.

Camp, 4th Division,

SIR, I HAVE the honour to acknowledge the receipt of your note of yesterday's date, with a copy of your letter of the 27th March to Brigadier-General Airey, and another from Major-General Sir John Campbell to Major-General Estcourt, wherein he states that I did not write to him (*i.e.* Deputy Assistant Adjutant-General), on the 7th March. I beg to state again that I did do so, and a copy of my letter is in my letter book. I noted in my weekly sanitary report

ending 24th March my having done so, and the crowded state of the tents. The letter was even copied for the information of Dr. Smith, in answer to his "*queries*." I wrote again to the Assistant Adjutant-General of the Division on the 27th March, in consequence of my suggestions of the 7th March not appearing by *practice* to have been attended to.

The language Sir J. Campbell makes use of towards me, I regret to say, I do not understand. A copy of this letter shall be introduced into my next weekly sanitary report.

I have, &c.,
(Signed) FREDERIC ROBERTS,
Staff Surgeon, 1st Class,
P.M.O., 4th Division.

J. Hall, Esq., M.D.
Insp.-Gen. Hospitals,
Crimea.

It may be well to observe that during the month of March 1855, when I urged the subject of ventilation of tents, 41 deaths occurred from fever in the division, and there were buried in the graveyard of the division 446 bodies, and those superficially, about 2½ feet deep, in quarter ending 31st March.

No. 828.

WEEKLY SANITARY REPORT of the Principal Medical Officer, 4th Division, ending 7th April 1855.

The division appears to improve in health, there remaining 543 cases of sickness to-day, in opposition to 554 last week. There is no increase in scurvy, although there is slightly in fever, which continues to maintain its irregular slightly remittent character. In order to check this disease, which carries away a great number (five this week), representations—the absoluteness and spirit of which do not appear to have been understood, from a recent correspondence on the subject, entered in my letter book, by the divisional authorities—have been made, and with a view more especially to correct what I consider a crowded and defective state of ventilation of the tents in camp. To purify a tent (which permits for a large number of men, say 10, but confined cubic space,) of the poison (carbon) exhaled by the lungs of those ten men during a night, and a mixture of which they re-inhale in the course of sleep, *every* article should be shifted daily, and the floor and canvass swept, to say the very least, and, if possible, purifying substances used as well. Out of the camps of four regiments I passed through on the 6th inst., according to my notes, in that of one only did I see an approach to a proper mode of purification; in the others the walls of several tents were not raised, and many of their numerous contents remained in them, and did not appear to have been moved that morning. In one regiment, in which no less than six cases of itch are reported in the weekly state to have been detected at health inspection, the Surgeon, at my suggestion, represented, on the 26th ult., to the Commanding Officer, the very dirty state of the tents.

I have, &c.
(Signed) FREDERIC ROBERTS,
Staff Surgeon, 1st Class,
P.M.O., 4th Division.

No. 829.

To the Assistant Adjutant-General, 4th Division.

Camp, 4th Division,
6th March 1855.

SIR,
ONE of the chief elements required to maintain life being water, and there being a difficulty in procuring proper quantities for use, without taxing the bodily energies of the troops by sending them repeatedly to the streams at certain distances from the camp, and now especially, as large tubs are provided to the companies for different purposes, and the demand for water necessarily increased, I have the honour to suggest to the consideration of the Major-

General Commanding, the propriety of sinking for water at different points of the camp; for I have accidentally succeeded in making, in my little camp, a well which continues to supply constantly wholesome water.

I have already reported the same to the Inspector-General of Hospitals, with a view of such measure being made useful to the army in this field generally. I was encouraged to do so by the circumstance of having had to dig only four feet to get water; and if the same success should attend experiments elsewhere in the camp, the labour will not prove to have been in vain.

I have, &c.
(Signed) FREDERIC ROBERTS,
Staff Surgeon, 1st Class,
P.M.O., 4th Division.

Assist. Adj. Gen.,
4th Division.

No answer received. Sir J. Campbell passed my tent one day, and referred to this subject.—F.R.

No. 830.

In my Weekly Sanitary Report, dated 17th March 1855, is the following paragraph, viz. :—

"What would appear to be the most necessary, is the husbanding more time for the men to enable them to pay more attention to personal hygiene. Fatigue, after coming from the trenches, deprives them of opportunities to attend to this physical exigency. Water has to be carried, wood obtained from certain distances, besides a variety of minor camp duties observed. Wells should have been sunk in camp, where water is to be found, to economise labour to be directed to other wants."

No. 831.

To the Assistant Adjutant-General, 4th Division.

Camp, 4th Division,
22d April 1855.

SIR,
REFERRING to my letter of the 6th March to you, suggesting the propriety of sinking wells in the camp to facilitate the acquisition of water, I have the honour now to suggest that, as the 48th Regiment, 800 strong, and now in good health, has encamped to the right of the 46th Regiment, the neighbouring spring of water may be husbanded by the erection of a tank, which would be the means of keeping the water clean. The men of the 48th Regiment are this morning washing themselves in the spring and little stream, where the water is thickened with mud.

To preserve personal cleanliness by ablution, a body of 800 men will require a large quantity of water. In fact, the approaching warm weather, and the prevalence of fever in the camp, demand that every facility should be afforded to wash the body thoroughly.

I have, &c.
(Signed) FREDERIC ROBERTS,
Staff Surgeon, 1st Class,
P.M.O., 4th Division.

Assist. Adj. Gen.,
4th Division.

I find no answer to the above in my letter book. Some time afterwards,—it may have been weeks or months,—there was sunk a well in the neighbourhood.

No. 832.

In my Weekly Sanitary Report of the 24th March 1855 is the following, viz. :—

"As facilitating culinary proceedings and ablution, to say nothing of diminution of labour, it may be mentioned that another well of water has been accidentally discovered, and is nurtured by private exertions, in the neighbourhood of the hospital huts of the 17th regiment."

No. 833.

In my Weekly Sanitary Report of the 31st March 1855 is the following paragraph:—

“A well has been sunk by the Surgeon of the 20th Regiment, near the hospital, to facilitate the supply of water, and obviate waste of labour.”

No assistance was received from the Assistant Quartermaster-General of the Division to sink these wells.

To show the necessity of want of water for personal cleanliness in men who were obliged to sleep in their clothes, I introduce the following return, the result of a health inspection.

Result of Health Inspection on the 14th February 1855, made by Surgeons of Regiments, by Order.

Regiment.	No. of Men Inspected.	DISEASES DETECTED.	
		Scurvy.	Cutaneous Eruptions.
17	773	3	9
20	450	34	26
21	180	21	6
46	108	10	40
57	350	8	159
68	240	28	23
R.B.	389	34	”
P. Battery	146	”	”
	2596	138	263

No. 834.

In my Quarterly Report ending 31st March 1855 is the following paragraph:—

“The chief deficiency in camp is water. I have seen its scarcity all along, and view its want still more in the distance. Was the body used to water, the skin would acquire a firmer tone, the capillary circulation become more active, so that blood would be less likely to exude and deposit itself under the cutis, in the form of purpura, no less than 22 cases of which appeared in the division during the last fortnight only of the quarter, and after the men had been supplied with tolerable quantities of fresh meat, vegetables, and lime juice for weeks past. In fact, I believe dirt has a close connection with scurvy,—on land at least.”

It will be remembered that the men's persons were covered with vermin in the winter of 1854-5. There being no river near for the men to wash in, they were indifferent to cleanliness. Besides, it required a good deal for all purposes for some 4,000 men. In June the strength was between 7 and 8,000, including an additional brigade I had to look after.

The following are notes taken *on the spot* at the time of visiting tents of regiments, with one or two officers of the respective regiments, or serjeants, or both. The names of the officers and numbers of the regiments are here omitted.

“22nd January (1855). Visited by Major . . . permission some tents of every company of the battalion, and observed meat uncooked in several tents, meat not steeped, and very little beef eaten, water being difficult to be got, from want of time to go for it, the men say.”

“24th January (1855). ——— Regiment. G. Company. Corporal Flynn says he does not take cooked meat into the trenches with him more than once a fortnight, because he has no appetite for it, but likes coffee and tea.”

“L. C. Three days' rations in one tent uncooked from want of fuel. No men to get it, as stated by one man.” “The same in several tents, both fresh and salt. Men do not eat *beef* from want of sufficiency of water to take out the brine. Major . . .

and another gentlemen accompanied me through the tents.” M. Lawrence, No. 8, says, “could eat all his rations could they be cooked. Fatigues interfere with it.”

Another Regiment. “27th January (1855). Private Gallaher, No. 1, has not eaten salt meat for a month. Has done his duty, except for the last eight days.”

“No. 5 Company. Three days' rations uncooked; meat not steeped, and the cook, Rutherford, states, the men do not care for salt meat.” “Lieut-Colonel . . . went round the tents and cook-houses with me, and promised to speak to . . . upon the above shortcomings.” “No. 4 Company. Three days rations uncooked for want of want of water, one man says.” Templin went to the trenches yesterday without cooked meat, as there was none cooked.

“10th February (1855). Visited with . . . companies' tent of ——— Regiment, and found them clean and dry, and no meat uncooked. In one tent only did the men say that ‘they buried meat they did not cook,’ and told orderly officer to report it to the colonel.” Dr. Simpson, the Surgeon of the 17th Regiment, superintended the steeping of the salt meat daily in the regimental tents, and had the men punished for neglecting to do so.

No. 835.

In my Weekly Sanitary Report of the 3rd March 1855 is the following:—“The absence of *fundamental* organization of the transport equipage in proportion to its means, and of the organization of our means in proportion to their limits, have been sources of general trammel, and prevented contracted resources being turned to the best advantage, both for the use of the sick and well.”

No. 836.

To Dr. Hall.

Camp, 4th Division,
3rd March 1855.

SIR,
From the total insufficiency of the men of the ambulance corps here, the dispenser of medicines is incapable of keeping up his supply of medicines in his store. This morning early two of the ambulance men were warned to prepare the car and two mules to go to Balaklava. After several hours' delay, by saying they were getting their breakfasts, &c., I visited their tent, and inquired into the cause of the delay, when the only healthy man present (two being sick, and attended by Mr. Creasy,) said he was no “driver,” and did not know how to harness the mules, and “*knew nothing at all* about the car or waggon.”

The other man came to my tent with a circular, given him yesterday at 4 p.m., to take to the surgeons of regiments, in a state of intoxication, witnessed by Mr. Beeching and myself.

The pack-horse in my camp has been to Balaklava for medicines twice this week, and to head quarters to be shod, and to bring goods for distribution to sick, as often. This horse has been reported useless [condemned].

If the dispenser of medicines is not supported in means of transport of medicines and comforts to the division, his post will become useless here. I have the honour to request you will be pleased to apply to have the present ambulance men removed from here, and efficient men sent in their place. There are none of them “drivers.”

I have, &c.

(Signed) FREDERIC ROBERTS,
J. Hall, Esq., M.D., Staff Surgeon, 1st. Class.
Inspector General of Hospitals.

The result of Dr. Hall's representation was, that the ambulance institution was taken away from the division, “to be reorganized.”

No. 837.

To Dr. Hall.

Camp, 4th Division,
24th April 1855.

SIR,

I HAVE the honour to forward to you two requisitions made out by the dispenser of medicines in this division, agreeably to the form promulgated in General Orders of the 14th April, which have been returned unexecuted, and with gratuitous and irrelevant remarks written on them. If the Assistant Quartermaster-General is to judge of what I want in the store for the use of the sick and wounded, I think we shall soon descend into a state of confusion.

You will observe, Sir, that there is no mention whatever made in the requisitions about horses or mules. The requisition is simply made out for the conveyance of certain things up to the division; by what means one would suppose the Land Transport Department would be able to judge. Non-compliance with these requisitions will involve insufficiency of supplies in the division, for which I am not responsible, after having made the requisitions, which are strictly formal, as you will see by referring to the General Order of the 14th April.

I have, &c.

(Signed) FREDERIC ROBERTS,
Staff Surgeon, 1st Class.J. Hall, Esq., M.D.,
Inspector-General of Hospitals.

Dr. Hall represented this to the proper authorities. There was a delay of several days, of course, in bringing up supplies.

No. 838.

In a letter to Dr. Hall, dated 26th April 1855, is the following:—

“ Mr. Beeching says there is neither wine, milk, potatoes, sugar, nor castor oil in the divisional store, all having been lately issued out of a good stock.”
“ Says that he went twice to Balaklava, which were his usual periods of going, last week, and he has been there three times this week; and, had he had the means of transport for his stores, he says he would not have been required to have gone more than once.”
“ This obstruction in transport has materially interfered with the effectiveness of his general duties, with supplying the divisional store, and especially the 48th Regiment [newly arrived], and added considerable trouble and anxiety to myself.”

The duties of the soldiers in the winter of 1854–5 were unavoidably hard, and no suggestion could with propriety be made, from the weak numerical strength of the army. However, in my Weekly Sanitary Report of the 5th May 1855, when the division had reached a strength of 4,803, I made the following remarks:—

“ It would appear from a return I called for from regimental surgeons, who procured their information from their respective orderly rooms, that for the last 14 days, ending 4th May, on the average each man has been six nights out of bed, an amount of watching far out of proportion to what the men of the Naval Brigade are exposed to. They have two consecutive nights in bed, and 12, in place of 24, hours in the trenches, either day or night. On the 3d of this month the brigade had 20 sick out of 1,300 men. Nearly one-half of the disease the division suffers from at present is fever, which, of course, attacks more frequently the man most prepared by bodily exhaustion, and consequent mental depression. There-

fore it is presumable that if the present amount of duties of the soldier in the trenches is to be continued as the standard, fever will continue, and with it mortality.”

Such are only a few extracts out of my reports when Principal Medical Officer of a division in the Crimea. I have confined the extracts to the few months of *difficulties* I was in charge, and have not included the whole period to December 1855. The reader of these pages will see that there was no sanitary discipline observed in our army in the Crimea at the time referred to; nor had the duties of departments suffered a reduction into anything approaching to science. The sanitary administration of hospitals as well as camps might, of course, have been better with another organization, which I very respectfully offer for consideration. I mean by a “ *Council of Health*” to assist the Inspector-General. *A body* of men have more weight than *one individual*, and are capable of taking more extensive cognizance of matters. It was not so much the want of means we suffered from as the want of arrangement. Every regimental surgeon had to work on his own account, from building huts to curing frost bites. Some men did more than others, and got more. Some divisions more, according to means of transport, &c. “ A Council of Health” could have administered uniformly the medical and surgical wants, the purveyor’s supplies, commissariat and military affairs, ambulance, engineers’ concerns, and medical and surgical science, which *no one* man could do properly by acting independently. *Individual* correspondence from *individuals of all ranks to individuals of every department* would have been curtailed, if not have become altogether unnecessary, by a Council of Health undertaking all *administration*, and leaving the surgeon to the practical duties of his profession. The Council could have called for certain reports every morning from each inspector of a division, and administer accordingly. The Council should consist of so many medical members, who should have had the power to communicate with *one* particular engineer officer respecting building huts, making drains, &c., &c., with *one* particular officer of Transport Department respecting conveyance of supplies, with *one* particular military officer respecting sanitary discipline of the army, &c., &c., and so on with other departments. In the armies of several countries that I have visited lately—Prussian, Austrian, Bavarian, &c.—there are established, for sanitary purposes, in each garrison, commissions, consisting of three *co-ordinate* members (who meet every three months); one medical, for professional purposes; one economic, for supplies for the household; and one military, for discipline of medical staff corps and patients, which works well with *their* system.

With the Council, with functions I have here hinted at we could have a bird’s-eye view, we may say, of every hospital, at any place, at any time, and know its requirements, personal as well as material, with accuracy. In fact, such an institution is considered by some of the first medico-military authorities I am acquainted with on the continent as highly essential for *scientific* purposes at head-quarters with the Director-General, even in time of peace.

I have, &c.

(Signed) FREDERIC ROBERTS,
Staff Surgeon, 1st Class, H. P.,
Principal Medical Officer,
4th Division, from February
to December 1855.

Brussels, July 1857.

LETTERS OF DR. TAYLOR, Staff Surgeon, 1st Class, Principal Medical Officer of the Land Transport Corps.

No. 839.

D. S. E. Bain, Staff Surgeon, 2nd Class, to Dr. Taylor.

Right Wing, Land Transport Corps,
27th August 1855.

SIR,

I HAVE the honor to bring under your notice, the great delay which has occurred in the pitching of three hospital marquees belonging to this wing. The reason assigned for this delay is, I understand, the want of tent pegs. Requisition for a quantity of these have been sent in (more than once) without being complied with. I have, therefore, to request you will be pleased to take the necessary steps for an immediate supply of tent pegs, as the present accommodation for the sick is very limited and imperfect.

I have, &c.
(Signed) D. S. E. BAIN,
Staff Surgeon, 2nd Class.

Dr. Taylor,
Staff Surgeon.

No. 840.

G. Taylor, M.D., to Officer commanding Land Transport Corps.

Camp, Land Transport,
27th August 1855.

SIR,

IN forwarding the accompanying letter from the officer in medical charge of the right wing, I have the honour to request you will be pleased to take immediate steps so as to afford the sick the advantage of marquee accommodation.

I have, &c.
(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

The Officer commanding
Land Transport Corps.
&c. &c.

No. 841.

W. H. Hauley to Dr. Taylor.

Head Quarters, Right Wing,
27th August 1855.

SIR,

IN reply to your letter just received, also enclosing one from the Medical Officer in charge of right wing, Major Evans desires me to say that your request to have more marquee accommodation will receive immediate attention.

I have, &c.
(Signed) W. H. HAULEY,
Captain attached to
Land Transport Corps.

To Dr. Taylor,
Staff Surgeon, 1st Class.

No. 842.

G. Taylor, M.D., to Officer commanding Left Wing, Land Transport Corps.

Hospital, Left Wing,
Land Transport Corps,
30th August 1855.

SIR,

I HAVE the honour to report that five bottles and three gills port wine were stolen from the serjeant's tent since last night, although under charge of the sentry.

One of the hospital guard (G. Clark, Light Division) appears to me now drunk.

The guard tells me that they are kept often four hours on sentry at one time, and that they are neither posted nor relieved under a non-commissioned officer.

I have, &c.
(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

Officer commanding Left Wing,
Land Transport Corps.

No. 843.

G. Taylor, M.D., to Officer commanding Land Transport Corps.

Head Quarters, Land Transport Corps,
8th October 1855.

SIR,

I HAVE the honour to recommend that immediate advantage be taken of the present fine weather for preparing the sites, making roads, building cook-houses and latrines, &c. for the winter hospitals of the right and left wings.

I shall be happy at any time to point out the sites I consider most eligible for your approval; and so soon as I receive information required from the orderly room this day I shall be able to send you an estimate of the hutting necessary for hospital accommodation.

I have, &c.
(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

The Officer commanding
Land Transport Corps.

No. 844.

(Reply.)

SITES for hospital fixed.

(Signed) W. E. EVANS,
15th October 1855.

EXTRACT from Land Transport Corps General Orders, 16th October 1855.

"OFFICERS commanding wings will have the goodness to place themselves in immediate communication with the Principal Medical Officer, with a view to preparing sites for the hospital huts now daily expected. The Principal Medical Officer will point out the localities."

(Signed) W. E. EVANS,
Lieutenant-Colonel.

The following letters and memoranda will show how the above recommendations were carried out. None of the sick were in huts* till the middle of January 1856.

G. TAYLOR, M.D.,
Staff Surgeon.

* Unless the temporary occupation of the Gloster Huts in the right wing may be considered as such when the hospital marquees were blown down.—G.T.

No. 845.

Dr. Taylor to the Officer commanding Land Transport Corps.

(Memorandum.)

Head Quarters, Land Transport Corps,
21st October 1855.

RECOMMENDED that instructions be given to officers commanding detachments, Land Transport Corps, to get cook houses and latrines built and roads made without delay, for the hospital huts daily expected.

I have, &c.

(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

The Officer commanding
Land Transport Corps.

(Reply.)

23rd October 1855.

SEE Land Transport Corps General Orders of this day.

I have, &c.

(Signed) W. E. EVANS,
A. D. G.

No. 846.

Dr. Taylor to the Officer commanding Land Transport Corps.

(Memorandum.)

Head Quarters, Land Transport Corps,
1st November 1855.

As the Land Transport Corps is now perhaps the hardest worked branch of the service, and from the nature of their duties exposed to all kinds of weather, it is respectfully recommended:—

1. That every man may be completed with a coatee, two flannels, two pair of drawers, three pair of socks, and waterproof clothing.

2. That the hair may be kept sufficiently short. Personal cleanliness, so essential to health, appears much neglected.

3. That the necessary steps be taken to ensure a clean shirt, flannel, and two pairs of socks weekly.

4. That the greatest attention and care be paid, not only that the men have a good substantial breakfast provided, but also that sufficient time be given them to partake of it before leaving the camp every morning.

5. That the rations' rum may not be issued in the morning, but at or immediately after dinner, when one-half the allowance ought to be taken, and the remainder at bed-time.

6. That as the majority of the latrines are defective in construction, and very badly kept, the necessary steps may be taken, not only to render such places in every division more comfortable and attractive for the winter, but also to enforce their use.

7. That as the tent pitching is generally very faulty, a model tent be erected in each division, and that the others be in strict conformity thereto.

As, however, the best pitched tent is but very indifferent shelter in the winter months, it is hoped that huts may be procured; and I beg most respectfully to submit that, for the reasons assigned in the preamble to these recommendations, the Land Transport Corps ought to be the first huted.

As present appearances, however, do not warrant the supposition that this is the general opinion, I beg to suggest that the Land Transport Corps, in the meantime, may be supplied with double tents, which could readily be supplied by the more fortunate regiments.

I have, &c.

(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

The Officer commanding
Land Transport Corps.

These recommendations were very indifferently complied with. G. T.

No. 847.

Dr. Taylor to the Officer commanding Land Transport Corps.

(Memorandum.)

Head Quarters, Land Transport Corps,
7th November 1855.

THE stones for the hospital kitchen, left wing, ought to be collected during this fine weather, and also the kitchen put under way.

A. Light Division. No site for hospital hut cleared out.

L. 1st Division. Not a stone collected for kitchen, or site for hospital hut prepared.

D. 2nd Division. Same as 1st Division.

B. 3rd do. Kitchen almost ready.

F. Kitchen. Kitchen almost ready for use.

H. Head of rail do.

I have, &c.

(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

The Officer commanding
Land Transport Corps.

No. 848.

Dr. Taylor to the Assistant Director-General, Land Transport Corps.

(Memorandum.)

Head Quarters, Land Transport Corps,
16th November 1855.

I THINK there must be some mistake about salt meat being issued to the men at head quarters, Land Transport Corps, yesterday, as Deputy Assistant Commissary-General Woodley, who supplies the Transport Corps, told me yesterday that he had commenced two days ago to issue fresh meat to the corps daily for a short time.

It is of the first importance to the health of the corps, that they get fresh meat as often as circumstances will permit.

I have, &c.

(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

The Assistant Director-General,
Land Transport Corps.

No. 849.

Dr. Taylor to the Assistant Director-General, Land Transport Corps.

(Memorandum.)

Head Quarters, Land Transport Corps,
25th November 1855.

L Division, Land Transport Corps, 1st Division of Army.

1. The Glo'ster hut, appropriated for the hospital, lies in the artificers' yard at regimental head quarters.

2. No site for the hospital hut cleared out.

3. Not a stone collected for connecting the hospital hut with cook-house, latrine, and men's huts. Stones are scarce, and their collection will be double the labour in wet weather.

A Division in front.

1. Hut is on the ground, but the sill not only not cleared, but covered over with a large quantity of old timber. It is most earnestly recommended that effective measures be immediately adopted to clothe the natives suitably for the winter.

In their present state the majority will be useless for the public service, and no hospital accommodation at our command would meet the requirements which may be reasonably anticipated.

On questioning the men of the corps lately from Bristol, they say that there are no weekly medical inspections, that there are no medical inspections before embarkation, and that many men are embarked with venereal affections.

Certainly a large proportion of them require treatment for such affections on their arrival here.

It is most respectfully recommended that officers commanding divisions be called upon to report when their men are completed with warm under clothing, according to late orders.

I have, &c.
(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

The Assistant Director-General,
Land Transport Corps.

No. 850.

*Dr. Taylor to the Assistant Director-General,
Land Transport Corps.*

(Memorandum.)

Head Quarters, Land Transport Corps,
25th November 1855.

1. 2d Class Staff Surgeon Black will be pleased to get from the officer commanding the left wing Land Transport Corps the greatest number of men (English) in any one bell tent, also the average number in each bell tent.

2. There is reason to think that the porter issued to the men is not of sound quality.

Should the quality of this beverage be in any degree calculated to injure the health of the corps, he is requested to report his opinion immediately to the officer commanding the wing.

I have, &c.
(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

A copy of the same sent to the right wing.
The issue of the porter was stopped.—G. T.

No. 851.

*Dr. Taylor to the Assistant Director-General,
Land Transport Corps.*

(Memorandum.)

Head Quarters, Land Transport Corps,
28th November 1855.

As some of the bell tents are over-crowded, and as fever in the wings is on the increase, a more equal distribution of men is recommended.

I have, &c.
(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

The Assistant Director-General,
Land Transport Corps.

Complied with.—G. T.

No. 852.

*Dr. Taylor to the Assistant Director-General,
Land Transport Corps.*

Head Quarters, Land Transport Corps,
Crimea, 1st Dec. 1855.

Sir,
In reporting the downfall of five hospital marquees in right wing, and three in the left, by the gale of this morning, I have the honour to represent, in the strongest manner, the necessity of huts being furnished without delay, not only for the hospitals but also for the corps generally, before another hut is given to the rest of the army.

New sites for huts, roads, kitchens, and latrines for winter were recommended to be prepared on 8th October, and an estimate for hutting, &c., according to orders, was forwarded to the Quartermaster-General. None have been received.

I may also state, as a further reason, that the sick, on account of want of transport to Scutari, and an increase of sickness in the corps, chiefly fever of a low typhoid type, now amount in one wing to 155, and in the other to 103. It is evident, that such an amount of sickness, far exceeding any other corps in the Crimea, cannot be so successfully treated as in huts.

If there is any lack of hospital huts, there appears to be plenty of the new double huts for the men, which would be quite serviceable and very acceptable. The sites prepared are 60 x 20 feet.

In my memorandum of 1st November I strongly recommended that, for reasons then given, the men of the transport corps should be first hutted, and to those I can now add, as was then anticipated, a progressive increase of sickness.

If the spirit of the above recommendations of the 1st November are fairly carried out, then it is evident that more is required to stay the amount of sickness; and the only other recommendation I can suggest, but on which I place great faith, is, that the corps may not be so incessantly worked.

I may here remark, that the sickness of the brigades of the Land Transport Corps attached to divisions of the army is only proportionate to that of other corps.

In forwarding these recommendations, I take the opportunity of acknowledging your ready co-operation on all occasions in every suggestion for the comfort of the sick.

I have, &c.
(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

The Assistant Director-General,
Land Transport Corps.

No. 853.

*Dr. Taylor to the Assistant Director-General,
Land Transport Corps.*

(Memorandum.)

Head Quarters, Land Transport Corps,
1st December 1855.

THE notice of the Assistant Director-General is once more, and for the last time, requested to the very slow and unsatisfactory progress of the hospital sites, roads, cooking-houses, and latrines in the two wings in the brigade of L attached to 1st division of the army, and in brigade of A, light division. Even when the huts and other buildings are complete, the ground will be a quagmire in such thoroughfares, without paved or gravelled crossings, and there is no attempt, or stone collected, for such purpose, unless a beginning in the left wing, where, however, the cook-house is extremely backward and stationary.

As the majority of the Glo'ster huts, lately erected, are too much dug out in the foundation, and apt to lodge water, the two erected in left brigade of B, 3rd division of the army, are worthy of inspection, as models for the corps.

I have, &c.
(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

The Assistant Director-General,
Land Transport Corps.

No. 854.

(Reply.)

December 1st 1855.

THE very serious attention of commanding officers of wings has been drawn to the subject.

(Signed) W. E. EVANS.

No. 855.

Dr. Taylor to Dr. Hall.

Head Quarters, Land Transport Corps,

SIR, 2d December 1855.

I HAVE the honour to inform you of the downfall of five hospital marquees in the right wing, and three in the left, by the gale of yesterday morning.

The precautionary measure of having six Gloucester huts erected adjacent to the right wing hospital has turned out most useful, yet no precaution can make up for the want of hospital huts

on the sites proposed for them at great labour and expense.

I have again in the strongest manner represented the necessity of huts being furnished, not only to the hospital, but also to the corps generally, before another hut is given out to the rest of the army.

I consider that the amount of sick from the want of transport to Scutari, and the increase of sickness in the corps, chiefly of fever, imperatively demand huts, when there are so many issued to men much less exposed and less worked than this corps.

I have, &c.

(Signed) G. TAYLOR, M.D.,

Dr. Hall, Staff Surgeon, 1st Class.
Inspector-General of Hospitals,
Head Quarters.

No. 856.

Dr. Hall to Dr. Taylor.

Head Quarters, Camp Crimea,

SIR, Sunday Night, 2d December 1855.

IN reply to your communication of this date, I have the honour to inform you that I will see the chief of the staff in the morning about your huts. I shall be down about one o'clock, to look at the wagons I am ordered to report on, and I will take that opportunity of looking at your hospitals.

I have, &c.

(Signed) J. HALL,

Inspector-General of Hospitals.

No. 857.

Dr. Taylor to Dr. Hall.

Head Quarters, Land Transport Corps,

SIR, 4th December 1855.

IN acknowledging your letter of 2d December, received only yesterday evening at six o'clock, I have the honour to inform you that 10 large sized double huts were placed at the disposal of the Director-General of Land Transport Corps last night. They will be erected and used as hospitals for the two wings without delay.

I have, &c.

(Signed) G. TAYLOR, M.D.,

Dr. Hall, Staff Surgeon, 1st Class.
Inspector General of Hospitals,
Head Quarters.

No. 858.

*Dr. Taylor to the Assistant Director-General,
Land Transport Corps.*

(Memorandum.)

Head Quarters, Land Transport Corps,

3d December 1855.

REFERRING to the memorandum of 1st December, attention is again requested to the very faulty erection of the Glo'ster huts. The foundation ought to be rather raised above the surrounding level, and filled in with broken stones; whereas at present the usual way is to dig out the foundation, and to erect the hut on a lower level. A little care in this matter will materially improve the health and comfort of the men.

As already stated in the memorandum above referred to, the huts in left brigade of B are worthy of inspection as models for the corps.

I have, &c.

(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

The Assistant Director-General,
Land Transport Corps.

No. 859.

(Reply.)

6th December 1855.

Dr. Taylor. Memorandum has been circulated.

(Signed) W. E. EVANS.

*Dr. Taylor to Officer commanding Land Transport
Corps.*

(Memorandum.)

Head Quarters, Land Transport Corps,

29th January 1856.

THE hospital of Land Transport Corps, 1st Division, continues in an extremely unsatisfactory state. The kitchen walls not ready for the roof. All cooking is done in the open air or in the hospital. Latrine in an unfinished state.

Joints on the roof of hut not felted, for want of proper nails, but covered temporarily with sheep skins. I recommend a partition in the Glo'ster hut so as to form a store; also the centre of the floor to be boarded, as well as boards for the floors of the marquees.

I have, &c.

(Signed) G. TAYLOR, M.D.,

Staff Surgeon, 1st Class.

Officer commanding
Land Transport Corps.

No. 860.

*Dr. Taylor to Officer commanding Land Transport
Corps.*

(Memorandum.)

Head Quarters, Land Transport Corps,

19th February 1856.

IN visiting the different huts of the corps, it is a common thing to see clothes from the wash hung up to dry in them. This is very detrimental to health, and ought on no account to be permitted, especially at night.

It is also a common practice to fold up the blankets, clothing, &c. during the day, and cover them all over with waterproofs, whereby all the noxious exhalations from the body are retained.

The waterproof is recommended to be folded, and placed on the floor and under the folded blankets.

Ventilation of the huts is extremely ill attended to, and in some huts light is also obscured by hanging up packs, boots, &c. over the windows.

The necessity of some uniform system of washing the men's shirts, flannels, drawers, and socks is urgently demanded. In some divisions and battalions the washing is well arranged; but this is not the case in all.

The medical officers complain that almost every man admitted into hospital requires to have his hair cut. This entails work on the orderlies which ought to be done in camp, and what is worse the blankets get soiled and often covered with vermin.

I would strongly recommend a medical inspection every Sunday, either at 9 a.m. or after dinner, if it is not practicable on a week-day.

I have, &c.

(Signed) G. TAYLOR, M.D.,

Staff Surgeon, 1st Class.

Officer commanding
Land Transport Corps.

No. 861.

Dr. Taylor to Dr. Hall.

Head Quarters, Land Transport Corps,
9th March 1856.

SIR,

As there is a large amount of sickness in the corps, and of a nature requiring nourishment, carefully prepared, and administered with discretion, as well as great attention to personal cleanliness and comfort of the sick, and as these ends are not obtained by the class of hospital orderlies sent from the corps.

I have the honour to request you will be pleased to recommend six nurses to be supplied for the General Detachment Hospital and six for the General Reserve Hospital.

I may here say that could a book competent to prepare extras be also supplied for each of these hospitals it would be another important step in the same direction.

I have, &c.
(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

Sir John Hall, K.C.B.,
Inspector-General of Hospitals.

No. 862.

Dr. Taylor to Dr. Doherty.

(Memorandum.)

Head Quarters, Land Transport Corps,
15th March 1856.

You will be pleased to take the necessary steps with the officers commanding battalions and detachments so that a medical inspection of all the men off duty may be made to-morrow. Should an inspection from any cause not be practicable, you will be so good as to report so on Monday.

Send me also, on Monday, a memorandum from each medical officer making such inspection, the number of men inspected, the number without flannels or drawers, and the general state of the under-clothing as to cleanliness; also the general state of their hair in regard to length.

I have, &c.
(Signed) G. TAYLOR,
Staff Surgeon.

Dr. Doherty,
General Detachment Hospital,
Land Transport Corps.

P.S.—Advantage should be taken of such visits to the camp to inspect the latrines, huts, tents, kitchens, &c., and to report anything affecting prejudicially the sanitary state of the men.

I have, &c.
(Signed) G. TAYLOR,
Staff Surgeon.

No. 863.

Dr. Taylor to Assistant Director-General, Land Transport Corps.

(Memorandum.)

Head Quarters, Land Transport Corps,
25th March 1856.

I HAVE just read Captain McNeil's explanation of the delay in sending an hospital orderly to the Detachment Hospital, Land Transport Corps, in cavalry camp, and I respectfully submit that it is by no means satisfactory. An orderly to attend on the sick is required, in the usual way, on Friday, and not sent till Sunday.

This is no unusual case, however; but the medical officers in charge of hospitals of Land Transport Corps are entitled to more ready co-operation on the part of their respective commanding officers.

I have, &c.
(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

Lieut.-Colonel Evans,
Assistant Director-General,
Land Transport Corps.

No. 864.

Dr. Taylor to Assistant Director-General, Land Transport Corps.

Head Quarters, Land Transport Corps,
28th March 1856.

SIR,

I HAVE the honour to request your notice to the accompanying letter from the medical officer in charge of the General Reserve Hospital of the corps, and to state that I can do more than confirm his description of the number of dead animals unburied in the vicinity of the camp.

Numerous as the dead animals are in the valley referred to, I think that the ditch below the stationary engine, towards the watering place, will bear comparison with it in this respect.

Nor is there less death and disease to be dreaded from many of the carcasses already so superficially buried. I am inclined to think that there is more danger from such masses of putridity exhaling a pestiferous air through the thin layer of earth than if the carcass was allowed to remain on the surface entirely, because in the former case the moisture essential to the process of decomposition is thereby retained about it.

I feel confident I need not say one word as to the necessity of more effective measures being taken to obviate so dangerous a nuisance, and shall only request they may be adopted without further delay.

I have, &c.
(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

Lieut.-Colonel Evans,
Assistant Director-General,
Land Transport Corps.

No. 865.

EXTRACT of a letter from Dr. Hall to me on 14th April 1856:—

"I think it would be advisable to draw some peat charcoal, and strew it over the graves of the dead horses in the valley between your hospitals, as the smell when I passed it to-day was very offensive."

This extract of 14th April shows how the recommendations in my letter of 28th March were carried out, as both refer to the same locality. G. T.

No. 866.

Dr. Taylor to Assistant Director-General, Land Transport Corps.

(Memorandum.)

Head Quarters, 8th April 1856.

It is strongly recommended that the salt meat for the corps may be issued on the day previous to that on which it is used, so that it may be well soaked during the night.

I have, &c.
(Signed) G. TAYLOR, M.D.,
Staff Surgeon, 1st Class.

Lieut.-Col. Evans,
Assistant Director-General,
Land Transport Corps.

No. 867.

(Reply.)

8th April 1856.

A MEMORANDUM has been issued accordingly.
I have, &c.
(Signed) W. E. EVANS.

GENERALLY complied with. G. T.

No. 868.

Dr. Taylor to Assistant Director-General, Land Transport Corps.

(Memorandum.)

Head Quarters, Land Transport Corps,
31st May 1856.

DURING the hot season now set in, it is strongly recommended that the men of the Land Transport Corps may not be required to get out of bed till 5 o'clock a.m.; that they may not be drilled on foot in

the sun between the hours of 10 a.m. and 3 p.m.; and that they may not be called on for duty for two hours after the dinner bugle is sounded. If the requirements of the service would allow these recommendations to be carried out generally, great benefit to the health of the men might be anticipated.

I have, &c.

(Signed) G. TAYLOR, M.D.,

Lieut.-Col. Evans, Staff Surgeon, 1st Class.
Assistant Director-General,
Land Transport Corps.

LETTERS of MR. TEMPLETON, Staff Surgeon, 1st Class.

Mr. Templeton to Brigadier-General Warren.

No. 869.

SIR,

Balaklava, 23rd March 1856.

I HAVE the honour to forward Staff Surgeon King's report on the sanitary state of the cantonments around Balaklava and the adjoining localities, in which he points out a few spots requiring attention. As I have not seen the brigade order, I do not know whether it be directed that these reports shall be continued, but it appears to me highly desirable that they should, and that the surgeon of the week should be instructed to send them in at the conclusion of his week's duty. It may be expected that medical officers will make more minute inspection of their own immediate vicinity than elsewhere, and nuisances may thus be brought to light which might readily be overlooked by an ordinary observer.

In visiting some of the camps, I have observed large quantities of refuse forage and manure heaped up close in front of the stables. This may have been of advantage during the prevalence of the cold winds, but at present it appears more likely to interfere with the health of the animals than anything else. It is, moreover, very unsightly, and may become offensive, under the influences of moisture and heat. I beg, therefore, to suggest that when the men are not otherwise employed, fatigue parties may be told off to remove it to a convenient distance, and burn, bury, or otherwise dispose of it.

I have, &c.

(Signed) ROBT. TEMPLETON,

Staff Surgeon,
Principal Medical Officer,
Independent Brigade.Brigadier
General C. Warren, C.B.,
Commanding.

LETTERS of MR. MATTHEW, Staff Surgeon, Second Class.

No. 870.

To the Principal Medical Officer, Varna.

(Subject:—Hospital Attendants.)

General Hospital, Varna,
19th June 1854.

SIR,

I HAVE the honour to request that you will be pleased to represent to the General Commanding the present state of the General Hospital, more especially with respect to attendants, &c., and move him earnestly that most immediate steps be taken to supply a remedy; and I beg that you will have the goodness to point out to him that unless this be done without delay the service is likely to suffer severely in addition to the miseries sustained by the individual soldier.

1. Only one non-commissioned officer has been allowed for the entire hospital, and he is totally incapable, partly from defective memory, partly from sickness, which now requires his being admitted as a patient of the establishment.

2. Only one orderly has been yet allowed. This man has been sitting up for the last seven nights with patients dangerously ill for the greater part of each night, while in the daytime he is obliged to be employed as messenger, and receiver of supplies for the hospital. I need hardly point out that he cannot efficiently perform the duties which have necessarily been entrusted to him.

This man, with the serjeant mentioned above, constitute the whole of the servants yet allowed, with the exception of a cook. Our number of sick is now 78, and is daily increasing, so that even on the plan of a *regimental* hospital we are entitled to eight orderlies.

Want of Ventilation. Want of Drainage, &c.

3. The general state of dilapidation, want of ventilation, and of drainage, want of all conveniences in the surgery, and for cooking, &c., &c., I need scarcely allude to, as you are so well aware of them yourself, and it is to be hoped they will be remedied in due course as far as possible.

I have, &c.

(Signed) T. O. MATTHEW,
Staff Surgeon, 2d Class.

The result of the foregoing letter was that orderlies in sufficient numbers were obtained; but the state of the building was never efficiently rectified, either as to drainage or ventilation, although some slight attempts at improvements were made.

No. 871.

To the Principal Medical Officer, Balaklava.

(Overcrowding of Hospital.)

General Hospital, Balaklava,
5th April 1855.

SIR,

I HAVE the honour to report, for the information of the principal medical officer of the army, that ten men of the Royal Artillery were sent down this day for embarkation on shipboard. No ship being ready to receive them, I have admitted them into the General Hospital as a temporary measure, as they would otherwise be adrift in the streets. I beg to point out the great inconvenience and subversion of discipline thus occasioned, as the hospital

being already full, on their arrival they had to be laid on the floor in wards already, in my opinion, too crowded.

I have, &c.

Result.—Ship accommodation found for these men.

No. 872.

To the Principal Medical Officer, Balaklava.
(Poor Condition of Meat supplied.)

General Hospital, Balaklava,
30th March 1855.

SIR, I HAVE the honour to represent that the quality of the meat furnished by the Commissariat Department for the use of the hospital is so poor, and contains so large a proportion of bone (though not otherwise objectionable), as not to furnish the amount of nutriment contemplated in the regulations for the management of army hospitals.

Under these circumstances I have the honour to request you will obtain from the principal medical officer of the army the necessary authority for me to put on full diet all men who may seem to require it.

I have, &c.

Result.—The necessary authority obtained by return of post.

No. 873.

To the Principal Medical Officer at Balaklava.
(Hospital Attendants.)

General Hospital, Balaklava,
30th April 1855.

SIR, ALL the orderlies attached to this hospital belonging to the 71st Highlanders, having been warned this day for parade, I have the honour to acquaint you that I have taken upon myself the responsibility of retaining them at their duty of attending on the sick.

I need hardly point out that the duties of a general hospital cannot be carried on if such interference on the part of regimental officers is to be accepted as the rule, and that from the nature of a large majority of our cases (fever) the absence of an attendant for even an hour or two may, possibly, be attended with fatal consequences.

I beg you will lay this matter before the Inspector General of Hospitals, for the consideration of his Excellency the Commander-in-Chief.

I have, &c.

Result.—No answer.

No. 874.

To the Principal Medical Officer at Balaklava.
(Hospital Attendants.)

General Hospital, Balaklava,
1st May 1855.

SIR, I HAVE the honour to submit, for the consideration of his Excellency the Commander-in-Chief of the Army, the great difficulty experienced in this hospital on the subject of attendants on the sick.

Colonel Harding, the Commandant of Balaklava, contends that one orderly only is allowed for every ten patients, and refuses to sanction the employment of a greater number. We have in all eighteen wards, in most of which there are one or two cases at least requiring constant attendance. The time of one man is so much occupied during the day in cleaning the ward and utensils, drawing and serving diets, procuring and distributing water and other drinks, and attending on the patients, that it would be a hopeless matter to expect him to remain up at night also, and were I to attempt to enforce this, I feel assured that

either his health must succumb under the constant labour and want of rest, or that the patients must be neglected.

We have hitherto been allowed, and have employed, two orderlies for each ward, so that on alternate nights they have rest, and this arrangement has answered well. Colonel Harding has now given orders that our orderlies shall be reduced to what he affirms to be the number allowed by regulation, and has in consequence withdrawn several, and contemplates a further reduction.

Against this I beg most respectfully, but at the same time most earnestly, to protest, for the following reasons:—

1st. It is certain that the patients will in many instances be neglected.

2d. In the case of a conscientious soldier who attempts to do what must necessarily be required of him, it is more than probable his own health will be sacrificed. And I will also beg to point out that the regulation upon which Colonel Harding lays so much stress, is one for the management of *regimental* hospitals, where men on fatigue can be, and constantly are, obtained for the purpose of sitting up with patients requiring this attention.

Trusting that his Excellency the Commander of the Army may take this view of the matter both in justice to the sick, as well as to the man faithfully discharging his duty.

I have, &c.

Forwarded by the Principal Medical Officer.

Result.—No answer.

No. 875.

To the Principal Medical Officer, Balaklava.
(Hospital Attendants.)

General Hospital, Balaklava,
6th May 1855.

SIR, I HAVE again most urgently to press upon your notice, and that of the Principal Medical Officer of the Army, the subject of attendance upon the sick in this hospital.

Colonel Harding, the Commandant, this morning visited the hospital, and without any reference to me as senior medical officer, ordered out of the wards seven orderlies, leaving two wards without any attendant whatever, and I now feel myself utterly powerless except most solemnly to record my conviction that the patients will be neglected, and deaths occur in consequence, and that a much heavier amount of sickness than has already unfortunately occurred among the attendants will also follow: were I not to do this I should feel that the responsibility and blame which must sooner or later fall somewhere, rested upon me.

I have, &c.

Forwarded by P.M.O.

Result.—No answer.

No. 876.

To the Principal Medical Officer, Balaklava.
(Hospital Attendants.)

General Hospital, Balaklava,
16th May 1855.

SIR, THE outbreak of epidemic cholera must be my excuse for again troubling you and the authorities on the subject of orderlies at this hospital, and for reminding you and them that I have not yet received an answer to either of my former letters on this subject, the first dated as far back as the 1st instant.

As I had ventured to predict, the mortality has seriously increased since the number of orderlies was so unceremoniously curtailed.

Although I cannot altogether attribute this to negligence and want of attention, that it is not so is rather to be referred to the unwearied assiduity and valuable assistance of the nurses than to that of the overtaxed orderlies; and I fear this will not be found adequate to meet the pressure of an epidemic, or to last for a lengthened period under ordinary circumstances.

I have constantly applications from the orderly men to be allowed to return to their duty, and I cannot help observing that many of them, and these the best and most trustworthy, are worn out by the labour they have had to undergo since the order curtailing their number was issued.

I have, &c.

Result—No answer.

No. 877.

To the Principal Medical Officer, Balaklava.
(*Overcrowding of Hospital.*)

General Hospital, Balaklava,
24th May 1855.

SIR,

I HAVE the honour to state, for the information of the Principal Medical Officer of the Army, that 21 Sardinian soldiers have been admitted into this hospital within the last four days. The pressure on the hospital is already so great that, notwithstanding 22 men were discharged yesterday to Scutari, not a single bed now remains empty, and any future admissions will have to be placed on the floor. One of the Sardinians is an officer, and I regret for the credit of the country that we have no separate accommodation for him.

May I request to know what steps are to be taken on the application of more Sardinian soldiers for admission?

I have, &c.

Results.—Instructions from Principal Medical Officer to accommodate all the Sardinians as far as possible.

No. 878.

To the Principal Medical Officer, Balaklava.
(*Latrines.*)

General Hospital, Balaklava,
24th May 1855.

SIR,

I HAVE the honour to represent that all the latrines attached to this establishment are becoming filled up, and that the formation of fresh ones is urgently demanded.

I would beg to state that the principle upon which the present latrines are constructed was condemned by the Sanitary Commission, who suggested the use of boxes which could be emptied daily. In the absence, however, of any efficient scavenging department this cannot be effected, and I would beg to suggest the filling in of the present latrines after they have received a thick coating of quick-lime, and the further covering of the filled in surface with concrete.

With respect to the new latrines which will in this case have to be formed, I would beg to suggest that they be deeper and not so broad as those at present in use.

I have, &c.

Result.—Suggestions carried out after some delay, except as regards concrete.

No. 879.

To the Principal Medical Officer, Balaklava.
(*Overcrowding of Hospital.*)

General Hospital, Balaklava,
26th May 1855.

SIR,

I HAVE the honour to state, for your information, and that of the Principal Medical Officer of the Army, that no less than 56 extra patients have been admitted during the past week, and that as a consequence only 66 regular patients could be received, to the inconvenience of the service, as many cases of British soldiers, in whose cases hospital treatment was advisable, have necessarily been sent elsewhere.

This large influx of irregular patients arises in great measure from the reception of Sardinian soldiers and of sailors belonging to the Transport service; the number of the former has been so great within the last two days that I have been compelled on my own responsibility to acquaint the Sardinian medical authorities that we have not accommodation for more, and with respect to the latter I would beg to remind you that the Royal Marines are in possession of large hospital accommodation with (I have been given to understand) very few patients, and to suggest that the treatment of sick sailors attaches to that branch of the service with at least as great propriety as to the General Military Hospital.

I have, &c.

Result.—An order to send some patients to Scutari.

No. 880.

To Commissary General Filder.
(*Rations supplied to Commissariat Labourers.*)

General Hospital, Balaklava,
2d June 1855.

SIR,

I HAVE the honour to point out to you the great number of cases of cholera occurring among the labourers in the Commissariat employ, no less than 18 cases of that disease having been received into this hospital during the last four days.

The men state that fresh meat is scarcely ever issued to them, generally saying, "I have had fresh meat only once or twice since I came out here," and that they live chiefly on salt pork.

With the view of obviating the tendency to this dreadful scourge, I would strongly urge upon your notice the absolute necessity of an inquiry into the truth of these statements, and should they turn out to be the fact, the propriety of giving these men a diet somewhat approaching to that of the soldier in the ranks.

I have, &c.

Result.—No answer; but I believe the suggestions were acted on.

No. 881.

To the Commandant, Balaklava.
(*Hospital Attendants.*)

General Hospital, Balaklava,
5th June 1855.

SIR,

I HAVE the honour to inform you that eight orderlies are required urgently at this hospital to replace men taken sick in the performance of that duty.

I have, &c.

Result.—Orderlies lent.

No. 882.

To the Sanitary Commissioners.
(Dead Carcasses.)

Castle Hospital, Balaklava,
30th October 1855.

GENTLEMEN,

I BEG to take the liberty of calling your attention to the fact that the bullocks and other carcasses towed out of the harbour do not sink, and in consequence of not being taken far enough away numbers of them

collect in the small bay below this hospital whenever the wind is from the south. The consequences of this are obvious, and I trust the magnitude of the interests at stake will be sufficient excuse for my asking your interference in the matter.

I have, &c.

No result, until after a verbal communication to the Admiral, made by myself, when the nuisance was in great measure rectified.

LETTERS of MR. HANBURY, Staff Surgeon Second Class, Principal Medical Officer,
General Hospital, Balaklava.

No. 883.

To the Director General, Army and Ordnance
Medical Department.

General Hospital, Balaklava,
17th December 1854.

SIR,

THE facts and opinions expressed in this communication having been placed before Dr. Hall, Inspector General of Hospitals, verbally towards the end of last month, and officially on the 11th instant, you will perhaps excuse me for now bringing them under your notice in this direct manner, when I assure you that I believe them in the present crisis to possess no less than national importance.

On the 18th of last month I was honoured by Dr. Hall with the medical charge of the General Hospital in the Crimea, containing variably from 150 to 230 patients.

A few days' observation sufficed to arrest my attention, not only to the prevalence of diarrhoea and rheumatism, but convinced me of the intractable nature of these complaints. Experience has since led me to some conclusions with reference to their character and treatment, which I now proceed to report for your information.

On inquiry into the nature of this diarrhoea, it was found to affect equally both officers and men, and that those of the former who were provided with a comfortable house in Balaklava were just as obnoxious to the disease as were their brethren exposed to the cold and hardship of a life under canvas. Further investigation, however, detected the peculiarity that the dejections were composed simply of the food unchanged, or were otherwise a watery fluid, alternating with discharges of pure bile. The function of assimilation was thus shown to be arrested. And a review of the articles constituting the diet of the soldier pointed to the absence of an acid in the cereal products composing the vegetable portion of it as the physiological cause of this want of assimilation, in accordance with the doctrine which affirms that an acid in the stomach is necessary to stimulate the secretion of gastric juice, and concurrently the flow of bile from the liver during the process of digestion.

The following inferences were derived from these considerations, and they obtained support both from the train of symptoms and the result of the treatment which they suggested; the inferences were these:— That the diarrhoea having its origin chiefly in the want of assimilation of the food, the discharges from the bowels were simply the vehicle adopted by nature to cast off irritant and useless matters; that in consequence conjointly of mal-nutrition and exhaustion, there resulted at length a state of inanition, emaciation, and debility, illustrating a physiological experiment, and terminating like it in ulceration of the large intestine and death; that the rheumatic affection noticed in connection with so many cases of protracted diarrhoea was simply a remote effect of the same causes, true scorbutic rheumatism, marked by loss of power in the lower extremities, coldness,

numbness, and a sensation of tingling in the feet, in fine, by a turgid, soft, swollen, and sometimes bleeding condition of the gums.

On the 24th of last month, in accordance with the views now developed, the use of lime juice, &c. was resorted to in the treatment of both the affections under consideration, to the exclusion in general of other remedies, and with marked advantage in every instance, except those which were evidently complicated with intestinal ulceration.

An ounce of lime juice was given twice a day, made up with sugar and a portion of water into an agreeable drink, and the obvious effects were, a rapid change in the appearance of the dejections, which, though they continued for a long time to preserve a liquid consistence, yet from the first they became feculent, homogeneous, and laden with bile; an increase of appetite followed, with improvement in the appearance of the patient, and gradual progress towards convalescence.

In conclusion, I have only to add, that since the above views were first advanced, and the foregoing practice adopted by me, the presence of scurvy has been recognized in the camp, and the necessity of lime juice, vinegar, but above all fresh meat, leavened bread, and succulent vegetables, as means of averting the disorganization of this disease through disease, is beginning to be appreciated and acknowledged in a manner which the momentous nature of the interests concerned demand.

I have, &c.

(Signed) WILLIAM HANBURY,
Staff Surgeon, 2d Class.

Acknowledged by the Director General, with an expression of his thanks.

No. 884.

To Dr. Hall, Inspector General of Hospitals.

General Hospital, Balaklava,
9th February 1855.

SIR,

ON the 11th of December last,* I had the honour of addressing you on the influence of diet as a cause of the diseases affecting the British army in the Crimea, and upon that occasion I dwelt upon the absence of an acid in the cereal products composing the vegetable portion of the soldiers' food, and endeavoured to show that this deficiency was productive of diarrhoea through undue assimilation, and that more remotely it would result in dysentery and ulceration of the large intestines and scorbutic disease through defective alimentation or mal-nutrition.

I have the honour now to report, for your information that a very large experience in this hospital during the last two months has only proved too forcibly the correctness of these views; and I feel myself

* The letter of the 11th December, above alluded to, I am unable to transmit, as the book in which it was copied is missing.

compelled by a grave sense of public duty, to record my opinion that the artificial diet which has been in use in this army is utterly inadequate (abundant though it is in quantity) to yield those elements which are necessary to sustain the system in a state of health for any length of time, and that I trace the terrible effects which we have witnessed, both from exposure and hardship, to the low and feeble state of vitality consequent upon the continued use for months of a diet thus defective.

I would, therefore, respectfully suggest the propriety of your bringing the subject of this letter immediately under the notice of his Lordship the Commander-in-Chief to determine how far it is possible to adopt a scale of diet more in accordance with the resources of the age, and the peculiar exigencies of our position, while the army continues to be employed on this expedition,—one in which lime juice, preserved potatoes, and other vegetables, preserved milk, bread, fresh and preserved meat, &c., might find a place.

I have, &c.

(Signed) WILLIAM HANBURY,
Staff Surgeon 2d Class.

Result.—A committee, consisting of a general officer as president, an officer commanding a regiment, and a medical officer of a division or a brigade, as members, with a commissariat officer in attendance, was (I understood) appointed to take into consideration the subject of this letter, but I am not aware at what conclusions it arrived. I may mention, however, that Lord Raglan honoured me directly after with more than one conversation regarding the diet of the soldier, and that I took occasion to express my apprehension that some difference obtained in regiments with respect to the attention given to the dieting of the troops, and to recommend that quartermasters of corps should be instructed to forward weekly a return to head quarters, showing the nature of the articles and quantity of each issued to the men.

W. H.

No. 885.

To Dr. Hall, Inspector General of Hospitals.

General Hospital, Balaklava,
15th January 1855.

SIR, SOLDIERS who come down to Balaklava on fatigue duty are frequently admitted into this hospital, and when afterwards discharged as convalescents, are of course unprovided with blankets and warm clothing. I would, therefore, respectfully suggest, that the officers in charge of these fatigue parties should report to their commanding officers the names of the men they have handed over to the general hospital, in order that their clothing and blankets may be sent to them.

I have, &c.

(Signed) WILLIAM HANBURY,
Staff Surgeon, 2d Class.

Result.—A general order, in accordance with the suggestion contained in this letter, was issued, but it only partially removed the inconvenience reported, inasmuch as it was only partially obeyed.

W. H.

No. 886.

General Hospital, Balaklava,
9th February 1855.

SIR, SOME inconvenience being experienced from the want of latrines in connexion with the wooden huts, which form part of this hospital, I have the honour to request you will be good enough, without delay, to make the necessary application for their construction.

I have, &c.

(Signed) WILLIAM HANBURY,
Staff Surgeon, 2d Class.

Dr. Hall,
&c. &c.

No. 887.

To Dr. Anderson, Principal Medical Officer,
Balaklava.

General Hospital, Balaklava,
17th February 1855.

SIR, I HAVE the honour to inform you, that salt meat was issued yesterday to the sick under my charge, and the purveyor has now reported that he will be unable to procure fresh meat from the Commissariat for this day's use. I beg respectfully to protest against such want of provision for the necessities of the sick in this hospital, and trust you will be good enough to bring it under the notice of the authorities.

I have, &c.

(Signed) WILLIAM HANBURY,
Staff Surgeon, 2d Class.

Dr. Anderson,
&c. &c.

No. 888.

To Dr. Anderson.

General Hospital, Balaklava,
6th March 1855.

SIR, THE temperature of the huts which form part of this hospital is considerably increased, under exposure to the sun, by the absorbing power of the black felt with which they are covered; and, as the hot season is now approaching, I would suggest, as a means of obviating this effect, that a whitewash capable of resisting rain should be applied to the felt.

I have, &c.

(Signed) WILLIAM HANBURY,
Staff Surgeon, 2d Class.

Dr. Anderson,
&c. &c.

No. 889.

To Major Hall.

Balaklava, 31st January 1855.

SIR, I AM directed by Dr. Hall to acquaint you that he suggests the necessity of getting a plank taken out of the ceiling in each ward of the upper division of the hospital, in order to establish a free ventilation through the opening in the roof.

I have, &c.

(Signed) WILLIAM HANBURY,
Staff Surgeon, 2d Class.

Major Hall,
&c. &c.

No. 890.

To Dr. Hall.

Balaklava, 11th February 1855.

SIR, THE prevalence of fever in this hospital during the last fortnight renders it extremely desirable that your suggestion regarding the ventilation of the wards, which I communicated to Major Hall on the 31st ultimo, should be carried into effect as soon as possible. I have therefore to request you will be good enough to bring the matter again to Major Hall's notice.

I have, &c.

(Signed) WILLIAM HANBURY,
Staff Surgeon, 2d Class.

Dr. Hall,
&c. &c.

No. 891.

To Captain Brown.

General Hospital, Balaklava,
20th February 1855.

SIR, I AM desired by Dr. Hall, the Inspector General of Hospitals, to inform you that he does not consider the holes bored in the ceiling of the upper division of the hospital buildings afford sufficient ventilation, and

that he thinks it necessary that two rows of such holes should be bored on each side, or that a plank should be raised in order to establish a free ventilation.

I have, &c.
(Signed) WILLIAM HANBURY,
Staff Surgeon, 2d Class.
Captain Brown,
&c. &c.

No. 892.

To Captain Brown.

General Hospital, Balaklava,
9th March 1855.

SIR, I AM directed by Dr. Hall, Inspector General of Hospitals, to request you will be good enough to complete the ventilation of the hospital buildings according to the manner adopted in the upper division of them, and which he very much approves of.

I have, &c.
(Signed) WILLIAM HANBURY,
Staff Surgeon, 2d Class.
Captain Brown,
&c. &c.

Result.—The first of these letters was written under the instructions of Dr. Hall, and I was directed to write the remainder (at least Nos. 3 and 4), in consequence of the slow progress which was being made in carrying out the suggestion. Independent of these letters, I made many personal applications, perhaps not less than six or eight, to the engineer's office, urging him to complete the work. There appeared every disposition to carry out my wishes on these occasions, but the resources of the engineer department, like every other, were at this time inadequate, and the command of labour was totally incommensurate with the numerous urgent appeals for it.—W. H.

No. 893.

To Dr. Anderson.

General Hospital, Balaklava,
13th March 1855.

SIR, I HAVE the honour to report for your information that the unusual pressure yesterday on the accommodation of this hospital has completely deranged that order which I have been for some time at pains to establish in it. No less than 56 men were admitted since yesterday morning, and while I have been obliged to accommodate so large a number, I have not found it possible to transfer more than ten men to the convalescent hospital. The result, of course, is crowding, confusion, and disorder, totally at variance with the proper sanitary condition of any hospital.

I have, &c.
(Signed) WILLIAM HANBURY,
Staff Surgeon, 2d Class.
Dr. Anderson,
&c. &c.

Result.—No answer.

No. 894.

Mr. Archer to Dr. Hanbury.

General Hospital, Balaklava,
16th March 1855.

SIR, I BEG respectfully to direct your attention to one or two subjects connected with the hospital, which appear to me to require immediate change.

Considering the very grave task now most prevalent here, especially fever, I think the number of patients admitted into the huts, and into numbers one, two, three, and four wards respectively, should not exceed 12; that each bed should be separated from those adjacent, and, if necessary, that huts or tents be erected on the hill overlooking the hospital. I would also suggest the expediency of having two apertures, one over each end, through the roof of every hut, for the purpose of better ventilation.

As a precautionary measure, the bedding of such as have lately died of fever should not, I submit, be used without thorough cleansing, and exposure to the air or some better disfecting process. You will doubtless have observed the frequency with which the orderlies of the several wards contract fever, especially those who have performed their duties in the best and most conscientious manner; for example in Ward No. 3, both orderlies were recently seized with fever, of whom one, after many relapses, died, the other was sent to Scutari in a feeble state; their immediate successors were both taken with fever, of whom again one died; the other, after frequent relapses, was sent to the convalescent hospital on the heights; of their successors, one yesterday fainted during my morning visit, and is now confined to bed with the same terrible disease. It occasionally happens that orderlies are required to be in constant attendance on the sick for several consecutive days and nights; they are unprovided with bedsteads, and are consequently obliged to lie on the floor, and they are not allowed either porter or extra diet. May I therefore venture to intercede on behalf of these poor fellows who (I speak it specially from personal observation in my own wards, numbered three, four, eleven, and twelve,) show the greatest possible zeal and energy in their attention to the sick, and they seem to vie with each other in the exemplary discharge of their onerous duties.

I respectfully submit, that every private employed about the hospital as orderly should be furnished with a mattress, boards, and tressels, and huts and tents be erected on a considerable higher level than that of the hospital, in which every orderly during his night off duty may occupy a bed reserved for his own special use, and that facilities for washing be afforded, with a change of clothing; that the men be not required to sit up more frequently than every third night, and in case of extra hospital orderlies being required at night from illness or other cause, that men having been on duty during the preceding night or day be excused from such extra duty; that each man be allowed a pint of porter daily, and in lieu of salt provisions, half a pound of preserved meat with vegetables; that each orderly be allowed one hour's leave of absence daily. Hoping you will excuse me troubling you with these suggestions,

I have, &c.
(Signed) EDWARD ARCHER,
Surgeon.
Dr. Hanbury,
&c. &c.

No. 895.

Mr. Hanbury to Dr. Hall.

General Hospital, Balaklava,
17th March 1855.

SIR, I HAVE the honour to recommend to your particular attention the accompanying letter from Surgeon C. Archer, as I consider it extremely desirable the valuable suggestion it contains should be carried out as far as possible. The pressure upon the accommodation has been considerably relieved, as you are aware, by the opening of the convalescent hospital, yet the prevalence of fever renders it necessary that a still greater space should be allotted to each patient, and that the admissions into hospital should be under some control to prevent undue crowding.

With regard to the orderlies it is obvious that a provision such as that indicated by Mr. Archer is essential to their protection, for they have suffered much of late from the effects of exposure and their laborious duties.

I have, &c.
(Signed) WILLIAM HANBURY,
Staff Surgeon, 2d Class.
Dr. Hall,
&c. &c.

Result.—Dr. Matthew, who succeeded me in medical charge of the hospital, authorizes me to state that these letters elicited no answer.—W. H.

LETTERS of DR. MAPLETON, 15th Hussars.

No. 896.

COPY OF A COMMUNICATION forwarded by me to the War Office, 5th February 1855, relating to the Sanitary Condition of the Army in the East, and called for by the Letter of the Director-General, dated 22nd June 1857.

The Communication was marked "private." A copy of a portion of it was afterwards sent to the Director-General of the Army Medical Department. I received the thanks of Mr. Peel for it.

5th February 1855.

THE state of the army in Turkey may reasonably lead us to fear a large increase of sick, and in the event of a general action that increase will be greater.

The barracks and hospitals for the accommodation of sick will not admit of expansion.

The Turkish buildings in their neighbourhood are very badly adapted for the use of soldiers, being built of wood, and roofed with tiles, consequently very hot in summer, and cold in winter; for, except in one apartment, to which the Turk in winter confines himself, there are no chimnies or stoves. The water has to be brought from the public tank, perhaps at a great distance. The drains and privies are very defective in arrangement. In addition to this, the floors, and places under them, the roofs and wooden ceilings, are saturated (if I may use the expression) with fleas, bugs, and all kinds of vermin, and which I know, from experience, it is impossible to dislodge.

These objections oblige you to depend entirely upon the public barracks and hospitals for your sick.

These buildings are of the form of a square, in the centre of which is a drill yard. They are of three stories in height, with a covered corridor on the sides facing the yard. In the corridors on each story are the men's privies, cookhouses, water cisterns, &c., and also door places leading into the men's rooms and officers' quarters. These again face the outside of the barrack, with their windows opening in that direction. Thus it will be observed that when the wind blows from the exterior the foul air of the rooms will pass into the corridor, and vice versa, proving that it is not only not safe, but in the highest degree dangerous, to occupy the corridors with sick, or even to crowd the rooms. Hospital gangrene in the wounded, plague or typhus fever, &c., is sure, sooner or later, to destroy the inmates; and the number of deaths now reported as caused by "diarrhoea" is too sure a sign that the fatal work is threatening. What it will be when the heat begins I fear to contemplate.

The medical officer there has no alternative at present; he must crowd; and it is only to be feared that in a very short time we shall hear he has no place to put the fresh arrivals in.

There are two remedies for this state of things; one, to open fresh hospitals at Smyrna, Abydos, Malta, &c.; the other, to bring the sick to England.

Now the objections to the first are, in my opinion, insuperable, if the second can at any expense or difficulty whatever be carried out. These objections are as follows:—

First, a man who has had a serious illness in Turkey hardly ever perfectly recovers there, on account of the enervating effects of the climate. (In the summer the heat in Malta, Smyrna, &c., is very great indeed.) This is proved by the many officers who were able to command the luxuries of hotels at those places, but who were obliged to return to England after all. A man may become convalescent; thought fit to return to his duty. He does so; gets a relapse, and most probably dies.

Secondly, before occupying any building, barrack, or hospital in Turkey, such as Smyrna, Abydos, &c., you must go to the expence of sending out an engineer who understands this branch, with his staff of workmen, with stink traps, metal tubing, &c., to put the drains and privies into a condition that will render the occupation of these buildings by sick soldiers safe. Having done this, you must then send out every single article and man that you require in a hospital in England; for Turkey is an impracticable country, and from the Turks you will get no assistance. To prove the necessity of the privies being altered before occupation, I may mention that these in a Turkish (building) barrack are in the immediate vicinity of men's and officers' quarters (sleeping rooms). They are merely separate apartments with holes in the floor. The hole is the top of an earthenware tube, perhaps 15 inches in circumference. This tube passes through each story down to the bottom into the sewer; this again empties itself into the sea at Smyrna, and into the Bosphorus at Scutari. Now, when the Turk goes to the privy he uses water, and this tube is strong enough; but the Englishman uses paper, hay, old cloth, anything. The tube gets blocked up, perhaps half-way down, and from the accumulation on the stoppage bursts, and the walls, &c., become saturated; hence a fearful and insupportable nuisance, and cause for generating deadly disease in the hot season. And I have no hesitation in giving my opinion that this very state of things (unless it has been altered since I left) will next summer, if not before, be the cause of some such disease at Scutari. I did all in my power, in expressing my opinion to the then authorities, in May last, on this subject, in the strongest terms.

Lastly, it is well known that Smyrna, Abydos, &c. are very hot indeed in the six summer months, and consequently likely to prove fatal to a man badly wounded or diseased. Tell a man in this state that he is to be sent to either of these places for a change of air, he will probably not bear up, but give way and die. (Had I been so told when ill—and many saw how ill I was—I think it would have had a fatal effect.) But put that man on board a ship, and tell him he is to go home, he will, in a majority of cases, become convalescent before he reaches England. This was proved lately, for the ship "Libertas" brought from the East many invalids, yet very few on arrival were taken into hospital.

The other remedy is, to bring all men likely to be long ill to England.

The objections to this are, expence, and difficulty in getting transport. The number of lives likely to be saved to the country by this plan will, I am quite certain, far, far exceed the cost of transport.

Let a sufficient number of large ships, screw steamers, if possible, say of 2,000 tons, be fitted up for 500 sick men with berths, cots, &c. Let the medical staff be complete, orderlies, cooks, washermen, &c., with medical stores and comforts of every kind and description be complete, and on board, and within itself. Let no man or article belonging to these ships be interfered with, as to removal, by any authority whatever in Turkey or abroad; but let them be considered as permanently employed on this duty, by which means they become accustomed to the sea, and you will be able, if necessary, with four such ships, to bring every six weeks between 2,000 and 3,000 men to England. You by this plan get rid of the enormous expence of the proposed establishments at Smyrna, Abydos, &c.; you save an immense amount of individual suffering, and also valuable lives to their friends and country; and you will be able to husband a good amount of medical staff, as it is not likely that the wear and tear of these will be so great as their brethren on shore.

I think these advantages far, far exceed the cost and difficulty likely to be encountered in getting transports.

I have, &c.
(Signed) HENRY MAPLETON, M.D.,

Late Staff Surgeon attached to Lord Raglan.

P.S. I calculate that, except the men permanently disabled by wounds or otherwise, 2,000 lives out of the 3,000 would be saved, and fit for duty in six or eight months after leaving Turkey, that would have been lost altogether by remaining.

5th February 1855.

Food, Clothing, Duties, &c., &c.

In approaching this subject, I may mention, that a campaign in Turkey during the summer season is the same, and requires the same precautionary measures in every way, that an Indian one does. This is very difficult to make a campaigner who has not served in India understand; and I found a great wish on the part of some officers in the East to treat suggestions, and even Lord Raglan's general orders, cavalierly; one told me (a general officer) that the white covers to the caps (used as a protection to the sun) was damn'd claptrap. Another I heard say that he thought it necessary to drill the men in the sun to acclimatize them.

Knowing, from my Indian experience, that if the system of long drills in the heat of the day, bathing, &c. was allowed to go on, a fearful amount of sickness must follow, I made many sanitary suggestions to Lord Raglan, which his Lordship instantly took into consideration. Many were put into general orders.—(A copy of these is enclosed.)

As the above difference of opinion, in the event of Lord Raglan not being in command of the army, may tend to operate to the disadvantage of the soldier, I think that a body of memoranda should be issued by authority, and in all cases, where practicable, be considered as general order, should there be another summer campaign.

The tents served out to the army must by this time be worn out, and therefore immediate attention should be paid to this subject, and a different kind altogether constructed. Those now in use are neither protection from the heat in summer nor from the cold in winter; and I am quite certain that the men can hardly exist in them. A great increase of sick will be caused by non-attention to this next summer. A tent for a hot climate should have double roofs and sides, not bell-shaped, but high at the sides, like those used in India, and two feet at least between the walls. All articles of soldiers clothing should be larger than at home; boots especially. These are best made of fisherman's leather, waterproof only as far as grease can make them so. Strictly waterproof material is likely to prove injurious, as the insensible perspiration of the feet becomes condensed, wets the socks and lining of the boot itself, and which last then is most difficult to dry.

The trousers should be of cloth, winter and summer. The chaco is a bad head dress, for when a man is sick it is cumbersome to carry, and no better protection from the sun than a good forage cap-peak and white cover. Of course woollen socks, flannels, and draws are necessary.

The knapsack could, I think, be most advantageously superseded by some sort of long bag, say 6 feet by 2½, waterproof at the bottom; at one end a partition for necessaries, which would form a sort of pillow; and the rest might be stuffed, when practicable, with the ration forage. This, when the man is under arms, shaken out; and the bed folded like a knapsack when in camp, it would be invaluable, as no man is likely to stand the bare ground for his only bed in such a climate without injury to his constitution.

I think the weight of this can be brought down to a few pounds.

The bread in Turkey is another serious cause of mischief. In my opinion, as a rule, it was very unfit for issue; but you could get no better at Varna or even Scutari (it was said) [for the troops is meant.—H.M.], because there is no yeast, and therefore always more or less sour. The flour is always also mixed with rye, even the best. The contract system was in full operation here. In May 1854 I brought this subject to Lord Raglan's especial notice, and he immediately entered into it, but the Commissary-General differed from me as to its quality; but it was so sour that I and a number of officers bought the article from an American baker in Constantinople, who baked a small supply for the English residents; and at Lord Raglan's own table I have seen the French ration bread used when his Lordship's private baker was ill, our own was so nauseous to stomachs unaccustomed to it.

By examining the contract prices paid for bread in Turkey, it will be seen that 40,000 rations cost about 350*l.* a day. I understand, from a respectable baker here, that such a supply daily could be furnished if you sent out 20 bakers, flour, ovens, fuel, yeast, &c., for about 300*l.* a day, and this to include the pay of the people and cost of every article. I consider this subject of such paramount importance to every other, for the health of the army, that I earnestly entreat immediate attention to it.

Sour bread, sour wine, and the constant use of one meat, such as goat or mutton, is sure to bring on bowel complaints.

The meat is generally bad in Turkey; and if the animals are not given over alive to the soldiers, goats are imposed for sheep by the contractors, and therefore strict orders should be issued on this head. Vegetables should form a portion of the ration, when practicable.

Tea in the summer is better than coffee, as the latter often in hot climates produces diarrhoea, but in winter I think the soldiers prefer coffee.

[Here follow observations not relating to sanitary measures.]

I have also to call attention to the fact, that fires are constantly happening all over Turkey, and therefore large depôts of stores should not be put into the Turkish buildings, but iron houses should be sent out, and a supply of fire engines.

I have, &c.

(Signed) HENRY MAPLETON, M.D.

RESULT OF SUGGESTIONS.

IN May 1854, soon after landing, I brought this subject verbally to Lord Raglan's notice. He desired me to write officially, as he considered it of great consequence. He sent instantly for the Commissary-General, and tasted the bread in my presence. His lordship made many inquiries subsequently as to the quality of this article; indeed I may say that during the few months I was with his lordship that this subject was one of constant anxiety to him.

Many officers thought the bread pretty good. Still every exertion was made by Lord Raglan, in May, June, July, and August 1854, to make the Commissary-General improve the bread. The Quartermaster-General of the Army, Lord De Ros, ordered one officer of his department to report upon the mode the French adopted. This officer sat up all night to watch the process, made his report, and sent it, with sketches, to Lord Raglan, who ordered it to be sent to the Commissary-General, as a guidance; but the answer was, I believe, there were no bricks or other such materials available for the purpose.

LETTERS of DR. WOOD, Surgeon, 42d Regiment.

No. 897.

Dr. Wood to Dr. Linton.

SIR, 42d Hospital, 19th December 1854.
I BEG to bring before your notice the very great difficulty now experienced from the total destruction of the timber in this neighbourhood in procuring the necessary means of cooking the diets of the patients in hospital, or of heating water or furnishing other warming appliances for the sick. I have the honour, therefore, to request that fuel be furnished to my hospital as soon as possible, and that an application for the same, through the proper channels, may meet with your approval.

I have, &c.

Dr. Linton, (Signed) JOHN D. WOOD, M.D.
&c. &c. Surgeon, 42d Reg. Hosp.

No. 898.

Dr. Wood to Dr. Linton.

SIR, 42d Hospital, Kadokoi,
10th January 1855.
THE following remarks about a system of ambulance for the sick are all that suggest themselves to me at present. Our ambulance waggons have, in my opinion, proved a decided failure. Unwieldy and heavy, they require too many horses or mules to drag them along, and from their width between the wheels, I think about five feet ten inches, are by no means adapted for the roads of the country, as was particularly remarked in Bulgaria, and are liable to be upset.

The French system of mules, with chairs and cots, I look upon as exceedingly useful, for these animals can go over almost any ground; and I am strongly of opinion a similar system should be adopted in our army, with any improvements that might suggest themselves. But, in addition to these, we should have light four-wheeled spring waggons, somewhat like those vehicles you

doubtless knew well in Canada, resembling a sort of "box upon wheels," and most useful and comfortable they were, and fit for any road. The dimensions I do not recollect; but let the box part, the sides and bottom, covered with some soft material, be about four feet three inches wide, not high, and sufficiently long to contain two persons lying abreast, with their packs for pillows, to be drawn by one mule, and, if necessary, furnished with a light cover. The wheels not to be too high, and not over five feet in width from wheel to wheel. Such a vehicle, I think, would suit very well for men very ill from sickness and wounds; for with the mules alone there must be, in a more or less degree, a disagreeable jolting motion from the animals' gait. Let a certain number of such vehicles, and of mules in the French style, along with a proper proportion of staff-corps to look after them, be attached to each regiment, under the immediate orders of the surgeon or medical officer in charge, to be used solely for the hospital. A reserve force of the same should be attached to each division. In each such ambulance a small medicine chest, fitted up with a few necessary articles, might form a driver's seat, if such was considered necessary. Ten bearers I should still recommend for each regiment, as very useful to be carried by the band, which should, on service, be placed entirely under the control of the medical officer for fatigue or other duties, on account of the sick or hospital. Each bearer requires at least four men to carry one sick, each two relieving the other two, and, as the band are liable to sickness and death, and in Highland regiments the pipers may be otherwise employed, some provision should be made for a sufficient number of men for the purpose, and not left to the option of commanding officers. The band, too, should not be encumbered with their instruments, nor, if possible, with their packs.

I have, &c.

Dr. Linton, (Signed) JOHN G. WOOD, M.D.
&c. &c. Surgeon Reg. Hosp.

REPRESENTATIONS REGARDING THE SANITARY STATE OF THE ARMY IN THE EAST, copied from Letter Books received from the Crimea and Scutari, from 19th May 1854 to 17th December 1855.

No. 899.

Dr. Forrest to the Assistant Quartermaster-General.

SIR, Principal Medical Officer's Office,
Gallipoli, 19th May 1854.

FROM the very crowded state of the hospital marquees in the camp at Bunlihar and Gallipoli, I have the honour to represent, for the favourable consideration of the Major-General commanding, that a circular bell tent may be issued to each regiment in the field until proper accommodation shall be provided for the sick in Gallipoli or at the Dardanelles.

The houses given over to me as hospitals at Gallipoli are so far apart from each other, that I experience the greatest difficulty in regulating and conducting them in a satisfactory manner. I am therefore of opinion that, with the exception of serious cases of fever, inflammatory complaints, and diseases of the eye, diseases of minor importance should be treated by the regimental medical officers on the spot.

Under this impression, I beg to urge upon the Major-General commanding to sanction, as a tem-

porary arrangement, an additional tent to each regiment in the field.

I have, &c.

(Signed) J. FORREST, M.D.,
Dep. Insp.-General.

The Assistant Quartermaster-General,
&c. &c.

No. 900.

Dr. Forrest to the Assistant Adjutant-General.

SIR, Principal Medical Officer's Office,
Gallipoli, 2d June 1854.

THE surgeon of the 28th Regiment having reported to me that he attributes the increase of sickness to the employment of the men in the public works at Bunlihar during the heat of the day, I have the honour to suggest, for the Major-General's consideration, that the working hours may be as follows, viz.: from 5 to 8 and from 9 to 11 a.m. and from 3 to 6 p.m.

Dr. Young adds, that imprudence and excess on the part of the men have had their influence.

I have, &c.

(Signed) J. FORREST, M.D.,
Dep. Insp. General, P. M. O.

The Assistant Adjutant-General,
&c. &c.

No. 901.

Dr. Forrest to the Assistant Adjutant-General.

Principal Medical Officer's Office,
Gallipoli, 2d June 1854.

SIR,

As sickness is on the increase in the camps, and as I attribute it to drunkenness and exposure to the rays of the sun, and not to climate, I have the honour to recommend the immediate suppression of all drinking booths in the neighbourhood of camps, that the soldiers be not permitted to get wine from their respective canteens until after dinner, and then only in a limited quantity, that the sale of spirits be entirely prohibited, and that no sutler be permitted to locate himself in the vicinity of the camps who sells wine or spirits.

I have, &c.

(Signed) J. FORREST, M.D.
Depy.-Ins. General.

The Asst Adjt.-General,
&c. &c.

No. 902.

SIR, Aladyne, 8th July 1854.

I HAVE the honour to report for your information that on the 6th instant, in passing thro' the village of Zambessie, which is the small village beyond the ford, I observed a case of variola at the door of one of the houses.

I have, &c.

(Signed) J. G. SCOTT, M.D.,
Surgeon 79th Regiment.

Dr. Linton,
&c. &c.

SIR, 8th July 1854.

I HAVE the honour to enclose a report that a case of small pox had been seen in the neighbouring village of Zambessie beyond the ford, and I would therefore suggest the necessity of the men being warned against entering that village.

No. 903.

Dr. Linton to Colonel Cunninghame.

SIR, Camp, Aladyne, 18th July 1854.

It having been reported to me that bad and unwholesome wine is now selling in the canteen of the 42d Regiment, and as at this time every precaution should be taken to prevent bad or doubtful wine being used, I have to request you will cause inquiry to be made into the same.

I have, &c.

(Signed) W. LINTON,
Inspector-Gen. of Hospitals.

Colonel Cunninghame,
&c. &c.

No. 904.

Dr. Forrest to Major the Honourable F. Colborne.

3d Division, Camp, near
Varna, 21st July 1854.

SIR,

In consequence of the prevalence of diarrhoea, I beg to recommend, for the favourable consideration of the Major General commanding, that the main guard and guard tents be supplied with rush mats, to protect the men from the cold and damp ground during the nights.

I have, &c.

(Signed) J. FORREST, M.D.,
Depy. Ins.-General.

Major the Hon. F. Colborne,
&c. &c.

No. 905.

Staff Surgeon Menzies to Major Sillery.

Principal Medical Officer's Office,
Military General Hospital,
Scutara, 23d July 1854.

SIR,

FINDING that mutton has been issued to the troops for some time passed as part of their rations, and that beef of good quality is not procurable, I would beg to recommend that salt beef and pork should be supplied from the Commissariat stores two days in the week, in lieu of mutton, considering that a change of food is always conducive to the health of the troops, and particularly at the present time, when there is so much disposition to bowel complaints.

I have, &c.

(Signed) D. MENZIES,
Staff Surgeon 1st Class.

Major Sillery,
&c. &c.

No. 906.

(Memorandum.)

Camp, Alladyne, 24th July 1854.

As much bathing in the lake is considered unhealthy at this season of the year, it is recommended that there should be only one bathing parade in the week, for the sake of cleanliness; that they take place early in the morning or cool of the evening, at a part of the lake where it is free from weeds, and with a sound bottom; that the operation of bathing or washing should not exceed a period of five minutes; and that the men should not be allowed to loiter on the banks of the lake or its vicinity before or afterwards.

It is also recommended that the latrines in the camp continue to be covered with a depth of two inches of earth, morning and evening; that the manure from the horses, &c. be carefully swept into the pits, and also covered daily.

Further, that the introduction of all fruit into the camp should be prohibited.

I have, &c.

(Signed) W. LINTON,
Dep. Inspector-Gen. of Hospitals.

No. 907.

Staff Surgeon Anderson to Staff Surgeon Menzies.

General Hospital, Scutari,
4th August 1854.

SIR,

I HAVE the honour to report, for your information, that the privies in the south-western angle of the barracks are in such a state of disrepair as by contamination of the atmosphere in that part of the building to endanger the health of the troops. The extreme compartments of the privy on the ground-floor, especially that at the western end, is in a most filthy and offensive condition, from the bursting of the soil tubes leading from the upper stories.

There is from the openings in the tubes a constant flow or dropping. The floors are covered with excrements, and the stench is sickening.

The main sewer leading from the privies at this angle is empty and dry, proving an obstruction at or near its commencement.

In the Commissariat vault, situated in this part of the building, there is a hydro-sulphurated exhalation, which doubtless arises from the obstruction above adverted to.

In connection with this obstruction, and the bursting of the tubes, I have to remark, that the barrack privies are evidently not only made to fulfil their legitimate end, but are also used as lay-stalls for the reception of every species of refuse, and it is therefore not surprising that the tubes should become choked, and at last give way.

The deleterious consequences to health by these exhalations, and the urgent call for an effectual repair of that part of the barracks which I have specified,

it is unnecessary that I should dilate upon in a communication addressed to you.

I have, &c.
(Signed) D. ANDERSON, M.D.,
Staff Surgeon, 2nd Class,
Sanitary Superintendent.

Staff Surgeon Menzies,
&c. &c.

I made the necessary representation of the state of the privies to Major Sillery, and steps were taken by the engineer to remedy, in some measure, the evil complained of.

(Signed) D. MENZIES,
Staff Surgeon, 1st Class.

No. 908.

Staff Surgeon Menzies to Major Sillery.

General Hospital, Scutari,
11th August 1854.

SIR,
It occurs to me that, considering the very bad quality of the provisions that have been of late supplied to the troops here by the contractor, both as regards the bread and meat (fresh), and also the difficulty at times of procuring proper vegetables, that an issue of rice daily, with lime juice twice a week, would be very desirable for preserving the health of the troops at the present unhealthy season, and more especially as I am inclined to consider some of the bowel complaints that have come under treatment as of a scorbutic character, and to have arisen from diet deficient in variety and nutritive properties, favoured, no doubt, also, by other atmospheric causes highly debilitating to the constitution.

The rice, from its astringent properties, would greatly tend, if well cooked, to check the prevailing epidemic, looseness of the bowels; and the lime juice, given with a little sugar with the ration spirits after dinner, would prove an excellent antiscorbutic.

I have, &c.
(Signed) DUNCAN MENZIES,
Staff Surgeon.

Major Sillery,
&c. &c.

No. 909.

Staff Surgeon Menzies to Major Sillery.

General Hospital,
Scutari, 21st Aug. 1854.

SIR,
HAVING received instructions from the Inspector General of Hospitals to prepare additional accommodation in barracks for any sick or wounded men that may be sent from the army in the field, and having arranged to occupy that portion of the building facing Constantinople, and half of the range towards the Sea of Marmora, may I request you will be pleased to give directions to have the rooms in each of these ranges (both stories) properly purified for the reception of the sick, by having the rooms well washed out, and the walls and passages whitewashed, with as little delay as possible.

I have, &c.
(Signed) D. MENZIES,
Staff Surgeon.

Major Sillery,
&c. &c.

No. 910.

Staff Surgeon Menzies to His Excellency Lord Stratford de Redcliffe, G.C.B.

Principal Medical Officer's Office,
Scutari, 26th Oct. 1854.

MY LORD,
WITH reference to the communications I had the honour to make to your Lordship yesterday, I now beg to state, that, having consulted with the officers at the head of the apothecary's and purveying departments, as to what farther supplies of medicines and stores may be required for the comfort and susten-

ance of the sick and wounded, I have to observe, that I find, as far as our present wants extend, we are satisfactorily supplied, and more expected daily from England and Varna.

In so far as the resources of the neighbourhood are concerned, it does not appear that there has been of late any deficiency, and that the quality of the hospital supplies has improved. There are, however, a few matters in which the Turkish Government might probably afford assistance, viz., in a further loan of Turkish bedding and utensils, such as tables, chairs, &c.; and it is stated to me by the purveyor that the Seraskeir, who formerly furnished some bedding, &c., was pleased to promise every assistance in his power, in the event of necessity.

The erection of stoves in the barracks and hospital at Scutari, for the comfort of the sick and wounded, is also a matter of considerable importance, and will require speedy attention, to be prepared for the winter season.

I feel extremely obliged for the interest your Lordship has kindly taken in assisting us on this important occasion; and as the Government appears desirous of every information, I beg to observe, that the sick and wounded in this hospital, up to the present time, have wanted for no surgical appliances, and they have received every care and attention which their situation so imperatively demanded.

I have, &c.
(Signed) DUNCAN MENZIES,
His Excellency D. Ins.-Gen. of Hospitals,
Lord Stratford de Redcliffe, G.C.B.
&c. &c.

No. 911.

Surgeon Mouat to Lieutenant Colonel White.

Camp, near Head Quarters,
2d November 1854.

SIR,
WITH reference to the morning state of sick in the 6th Dragoons not shewing the actual sanitary condition of the regiment, for the information of higher authority, medical and military, I am fully aware such is the case, but as a large number of men attend the hospital every morning who are suffering from mere relaxation of the bowels, without any derangement of their general health (unfitting them for duty), such men cannot be taken into hospital, without injuriously crowding our limited hospital accommodation, nor can they appear on morning parade whilst under the influence of medicine. As the cause of these trifling bowel affections is in a great measure dependent on exposure, and the nature of the duties performed at this inclement season of the year, as well as the want of proper clothing, I would beg respectfully to suggest, for the consideration of authority, whether such parades on wet mornings, in our present position, within an entrenched camp, as well as the night picket, might not be advantageously dispensed with, as it is impossible the men can dry their clothes or sustain that amount of animal temperature which is absolutely necessary, not to say for their health, but in the instances of delicate men, for their lives I deem this matter of so urgent and important a nature as to desire to press it upon the serious consideration of authority, that no time may be lost in remedying, as far as circumstances will permit, the sad condition of our men, two of whom are at this moment dying, apparently from cold and want of proper means of sustaining animal heat. I would likewise wish to bring to your notice the difficulty of obtaining fuel, even to cook the men's rations in hospital, to say nothing of the impossibility of affording them warm drinks, &c.

I have, &c.
(Signed) J. MOUAT,
Surgeon, 6th Iniskillen Dragoons.
Lieut.-Col. White,
Commanding 6th Dragoons.

This letter was duly forwarded by the Commanding Officer to the General Commanding, but elicited no further notice than a formal hint from the Major of Brigade that the duties alluded to were a purely military matter, and I was rather outstepping my province.

(Signed) J. M.

No. 912.

Staff Surgeon Menzies to Rear-Admiral Boxer.

General Hospital, Scutari,
5th November 1854.

SIR,

HAVING this afternoon received a most peremptory order to provide without delay for the arrival of a large number of sick and wounded that may be hourly expected from the Crimea, I have particularly and most earnestly to request you will be pleased to order a steamer to be despatched, if not already gone, to Varna, to bring down all the bedding and other stores left there, and which we now here stand so much in need of. I will thank you to let me have your immediate reply to this. If you can in the meantime give us a supply of boards and trestles, I should feel greatly obliged.

I have, &c.
(Signed) D. MENZIES,
1st Class Staff Surgeon.

Rear-Admiral Boxer,
&c. &c.

No. 913.

Surgeon Mouat to Lt.-Colonel White.

Camp, Kutor, Kin-a-Katch, near
Head Quarters, 10th November 1854.

SIR,

WITH reference to my communication to you of the 21st instant, on the health of the corps,

I beg again earnestly to bring to your notice, and that of the military authorities, the necessity of supplying the men with sufficient warm clothing; and, above all, the urgent necessity of providing, if possible, some more efficient shelter and protection for the sick than the thin canvas regulation tent, which is a most inadequate cover from such weather as we have lately experienced, and from which, if continued, I anticipate the most deplorable results. It is only necessary to visit a hospital tent after rain to witness the wretched, cold, and comfortless condition of the sick; for instance, yesterday, and it is not the first time, it was impossible to keep a fire lighted, or to supply the sick with those comforts they so much need, as warm tea, arrowroot, &c. The duties of a dragoon are necessarily very severe, entailing much exposure, and the men in the lines so constantly wet, and their feet so swollen, as to be obliged to seek refuge in hospital, to remove their boots and dry their clothes, which sometimes they are unable to effect. I am aware that many of the hardships and privations to which soldiers in the field are subjected are unavoidable; but surely some kind of efficient permanent accommodation might be at once provided for the hospital of the Brigade, and cook-houses erected in which warm water, tea, &c. could at any time be provided, irrespective of the weather. As senior officer of the Brigade, I deem it my duty to bring the miserable condition of the sick prominently to the notice of the authorities, medical and military, that some steps may be taken before the weather again changes to improve their condition. In the above sentiments all the regimental medical staff, of the Brigade concur; and I trust I shall have your sanction and support, as well as that of the senior officer of the department, in the above suggestion.

I have, &c.
(Signed) J. MOUAT,
Surgeon, 6th Inniskillen Dragoons.

Lt.-Colonel White,
&c. &c.

This letter was forwarded by Colonel White, thro' the Brigade Major, to the General commanding, but elicited no reply or notice from the military authorities.

On the 12th November I received several Turkish mats and tarpaulins through the principal medical officer.

(Signed) J. M.

No. 914.

Mr. Anderson to Major Wood.

Camp before Sebastopol,
7th December 1854.

SIR,

I HAVE the honour to state, for the information of the Lieutenant-General Commanding, and by desire of Deputy Inspector General, who is at present, from sickness, unable to write, that the Deputy Inspector General does not consider the ground on which the 9th Regiment is encamped, more unhealthy than that occupied by the other regiments. He considers that the sickness and mortality are attributable entirely to the exposure and damp following the depressing effects of the climate of Malta. 2nd, the tents were supplied by the Quartermaster Generals, and not by the medical department, and that Dr. Hall requested a party might be sent for new cots, in order that the comfort of the men might be increased, and that the Deputy Inspector General will send to the Lieutenant-General Commanding, a copy of the letter, when he is able to write.

I have, &c.
(Signed) A. ANDERSON,
1st Class Staff-Surgeon.

Major Wood,
&c. &c.

No. 915.

Dr. Hall to Brigadier General Airey.

Camp before Sebastopol,
19th December 1854.

SIR,

THE "Australian" steamer, which was named for the reception of sick, having been suddenly diverted to other service by the Agent of Transports, when her equipment was nearly completed, and the "Lady McNaghten," capable of conveying about 90 sick, substituted in her place, I request that further accommodation may be applied for at once, because what has been assigned by the Agent of Transports is totally inadequate to meet the present exigencies of our heavy and rapidly increasing list; larger steamers must be set apart for the conveyance of sick than the two named by Captain Christie, or we shall never be able to keep the sick-list within bounds.

I hope too that something will soon be done to put the new building at the General Hospital at Balaklava in a habitable state, as nothing has as yet been done to it, and the pressure there for want of accommodation is very great.

Our share of the "Pride of the Ocean" receiving ship, and the "Ottawa" steamer, are both full at present.

I have, &c.
(Signed) J. HALL,
Brig. General Airey, Inspector Gen. of Hospitals.
&c. &c.

No. 916.

Mr. Anderson to Dr. Hall.

SIR,

Balaklava, 25th December 1854.
I HAVE to call your attention to the delapidated state of the wing of the hospital, which I have this day inspected, and beg to state my conviction that the purveyor (while this building remains in its present state,) cannot in justice be held responsible for either the safety of the arms and accoutrements

of the men in hospital, or for the prevention of nuisances within its bounds.

I am, &c.
(Signed) A. ANDERSON,
Staff-Surgeon, &c.
Dr. Hall,
&c. &c.

No. 917.

Dr. Anderson to Lieut. Colonel Haines.

Army Medical Department,
29th December 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 these spaces should be kept clear of malaria, either human or animal.

I have, &c.
(Signed) A. ANDERSON, M.D.
Staff-Surgeon,
&c. &c.
Lieut. Colonel Haines,
&c. &c.

No. 918.

Dr. Anderson to Lieut.-Col. Haines.

Balaklava,
30th December, 1854.
SIR,
I BEG leave 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 unfortunates 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 will be swept off wholesale.

Another very crying nuisance is the existence of that sea of fetid 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 Lieut. Goose, R.N., and S. A. S. Tarrant, who, in the exercise of their duties, have to remain there many hours each day.

I have, &c.,
(Signed) A. ANDERSON, M.D.
Lieut.-Col. Haines,
&c. &c.

No. 919.

Dr. Anderson to Capt. Christie, R.N.

Balaklava,
5th January 1855.
SIR,
THE stove not having been supplied to the officers on board the "Medway," and constant complaints being daily made to me, through the medical officer who attends the sick on board, I beg respectfully to request that you will either order the captain of the vessel to supply the necessary means of warmth, or that you will authorise the removal of the sick officers to another ship better appointed.

I have, &c.
(Signed) A. ANDERSON, M.D.
Captain Christie, R.N.
&c. &c.

No. 920.

Dr. Pine to Lieut.-Gen. Sir R. England, K.C.B.

Camp before Sebastopol,
5th January 1855.
SIR,

I HAVE the honor to bring to your notice the following facts connected with the Division. I am in the daily receipt of memoranda from the Inspector-General of Hospitals, urging me to press on the notice of medical officers in charge of regiments the propriety of getting various necessaries from Balaklava—necessaries of vital importance—for instance, blankets, stoves, medicine chests, and wooden huts. The medical officers are totally without means of carriage, and the Commissariat department and the Quartermaster General's department render no assistance. Much of the time of the surgeons is taken up in drawing out requisitions, which are entirely unattended to. Yet there is an appearance of arrangement which is appearance only. I believe that Lord Raglan is in ignorance of our utter powerlessness, and I take the liberty of suggesting that you should bring it to his notice. The health of the troops is failing rapidly; and unless they are better housed, better fed, better clad, and less worked, the division will be annihilated speedily.

I have, &c.
(Signed) C. PINE,
Prin. Med. Officer, &c.
Lieut.-Gen. Sir R. England, K.C.B.,
&c. &c.

No. 921.

Dr. Pine to Lieut.-Colonel Colborne.

Camp before Sebastopol,
10th January 1855.
SIR,

I HAVE the honour to make the following statement for the information of the Lieut.-General Commanding the Division, in reply to your note of this morning.

Enclosed is a return of the deficiencies in the issue of provisions, &c. to the 3rd Division from the 19th December 1854 to the 8th January 1855, with the exception of two days, for which there are no references; but on one of those days, Christmas Day, I am informed there was no meat issued at all. The return is made up from morning statements sent to me by order of Sir Richard. It fully bears me out in all that I stated to the Commander in Chief, but it does not show the whole of the mischief, for frequently the issue has been made at so late an hour that the men have been unable to cook their food before going into the trenches, and those coming from the trenches could receive coffee only, because the cooking utensils will not admit of the preparation of meat and coffee at the same time. I am assured that the men have eaten their rations raw.

Sir Richard must have observed that I laid much less stress on the amount of provisions issued than upon the difficulty which the men have in procuring wood and in finding time to cook their meats.

I spoke of the little aid which the division receives from the Commissariat department and from the Quartermaster General's department in the way of transport. This want of transport is our great difficulty. I believe that there is abundance at Balaklava, if we could but avail ourselves of it. Had we transport, our sick might be removed more frequently, and the marquees become again what they were intended to be originally—receiving places only. This want of transport is so notorious that it will be utter waste of time my trying to prove that it does exist; the want can be better known to no one than Sir Richard England himself.

Sir Richard asks, do I recommend that the ration should be increased? Most certainly I do recommend that it be made more suitable and nutritious by the substitution of roasted for green coffee, the addition of more rice, by vegetables, and by fresh meat. Each man should have an oz. of lime juice with his

rum daily. The meals should be three in number, biscuit and hot coffee night and morning, and a meat dinner with rice and vegetables. I do not know that I can go further usefully into the subject. I had no wish to be the communicator of unpleasant truths to his lordship, but I thought it my duty to speak as I did.

I have, &c.
(Signed) C. PINE,
1st Class Staff Surgeon,
Lt.-Col. Colborne, &c. &c. &c. &c.

No. 922.

Dr. Anderson to Lieut.-Col. Haines.

SIR, Balaklava, 12th January 1855.
I HAVE the honor to report to you that I this day went on board the "Golden Fleece," that I consider her much too crowded, and would recommend (strongly) that the drafts of regiments should either be landed from her or transferred to another vessel. Cholera in a mild form (angl) is on board, but is likely to be very aggravated should the 39th and drafts of other corps, upwards of 1100 remain together.

I have, &c.
(Signed) A. ANDERSON,
Staff Surgeon,
Lieut.-Colonel Haines, &c. &c. &c. &c.

No. 923.

Dr. Anderson to Dr. Hall.

SIR, Balaklava, 15th January 1855.
I BEG leave, through you, again 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 among the Turkish soldiery here has increased to such an extent as imperatively to call for an enquiry, and I would also suggest that their burial ground should be brought under observation, as I have been assured by the Rev. J. Hayward and Captain Ross, the D. A. Quarter 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 mean time in the way of removing the above-mentioned febrile sources of disease, and in cleaning that portion of Balaklava now occupied by the Turks, I am confident that we shall have plague in its worst form.

I have, &c.
(Signed) A. ANDERSON,
Staff Surgeon,
Dr. Hall, &c. &c. &c. &c.

No. 924.

Dr. Anderson to Lieut.-Col. Harding.

SIR, Balaklava, 23d January 1855.
I WOULD, through you, press most urgently on the authorities the necessity of affording a little more comfort to the sick who now come down in such numbers from camp. This is the more required while they are as at present brought down in such large numbers on the sides of mules, from which they are very hurriedly dismounted, the consequence of which is, that the poor creatures are left sitting either in the mud or on any convenient plank.

The tent on the other side of the road is much too far off to be of use, and I would therefore suggest the immediate erection of one or two wooden huts, close to the wharf, to be provided with benches, stove, &c.

so that the more exhausted might have shelter, till they could be conveyed on board ship.

I have, &c.
(Signed) A. ANDERSON,
Staff Surgeon,
Lieut.-Col. Harding, &c. &c. &c. &c.

No. 925.

Mr. T. D. Hume to Dr. Hall.

Camp before Sebastopol,
23d January 1855.

SIR, In the vicinity of the hospital huts and marquees of the division are four tents occupied by Turks in charge of ammunition ponies. These men are under the orders of Serjeant Murphy, R.A., who says that he can get them to do nothing, yet they are driving a thriving trade by selling oranges and figs, and, I feel confident, liquor, since drunken men are to be seen leaving the neighbourhood, which is always in a most filthy state. I may observe, that the ponies appear to be entirely neglected. My object in writing is in the hope of having the entire establishment removed to some more fitting locality; and I request that you will bring the matter under the notice of the proper authorities.

I have, &c.
(Signed) T. D. HUME,
Staff Surgeon, 1st class,
Dr. Hall, &c. &c.
Inspector Gen. of Hospitals, &c. &c.

No. 926.

Dr. A. Anderson to Lieut.-Colonel Harding.

SIR, Balaklava, 24th January 1855.
I BEG leave to call your attention to the crowd of pedlars who sell their wares close to the remains of the walls enclosing the vineyard in front of the hospital, and would suggest their removal, as they interfere sadly with proper discipline.

I would also recommend that a sentry should be posted at the bottom of the vineyard, next the road, to prevent the Turks and others committing nuisances therein.

I remain, &c.
(Signed) A. ANDERSON,
Staff Surgeon, &c.
Lieut. Colonel Harding, &c. &c.

No. 927.

Dr. A. Anderson to Dr. Hall.

SIR, Balaklava, 24th January 1855.
WHEN the sick reached Balaklava yesterday, I observed that many of those labouring under frost-bite had neither stockings, shoes, nor even a flannel bandage to protect their feet from the cold. Two men, Campbell, 30th Regiment, and Marlow, 95th, suffered very much from having their feet quite bare.

I have, &c.
(Signed) A. ANDERSON,
Staff Surgeon, &c.
Dr. Hall, &c. &c.

No. 928.

Dr. A. Anderson to Lieut.-Colonel Haines.

SIR, Balaklava, 25th January 1855.
I BEG respectfully to call your attention to the fact of nine medical officers being cooped up in one quarter in the hospital, and would suggest that Staff Surgeon Hanbury, the superintending surgeon, should be allowed a separate quarter in the vicinity of the

hospital. Within the last six weeks there were fewer occupants. I have had to invalid four medical officers who were prostrated by fever; and I do not think that the salubrity of the apartment will be improved by overcrowding, as at present.

I have, &c.

(Signed) A. ANDERSON,
Lieut. Colonel Haines, Staff Surgeon, &c.
&c. &c.

No. 929.

Dr. Anderson to Dr. Hall.

SIR, Balaklava,
25th January 1855.

I BEG leave to state that a large number of sick came down to day, without any previous warning, after intimation had been given to the Adjutant General that there was no accommodation. They appear to have come down independently, in many instances, of the principal medical officers of divisions.

Our hospital is so crowded that it will not admit another patient, so we had to put up a marquee, and fill a hut at the wharf. I regret to have to mention that the drafts from two ships come ashore to-morrow leaving in one 55, in the other 60 sick.

As the "Golden Fleece" is to be emptied, I am in hopes we may have her told off, as she will hold 550 or 600.

I remain, &c.

(Signed) A. ANDERSON, M.D.
Dr. Hall,
&c. &c.

No. 930.

Dr. Hume to Dr. Hall.

SIR, Camp, 3d Division,
26th January 1855.

I HAVE the honour to report to you that both sick and well of the division are upon salt rations, and that the divisional commissariat officer cannot say when he will be able to supply fresh meat again.

I am ignorant of the measures which have been taken to provide fresh meat and lime juice, but it is my duty to report to you that those are the articles of which the troops generally stand in immediate need.

I have, &c.

(Signed) T. D. HUME,
Prin. Med. Officer 3rd Division.
Dr. Hall,
&c. &c.

No. 931.

Dr. Anderson to Dr. Hall.

SIR, Balaklava,
28th January 1855.

I REGRET to have to report to you that there are two cases of small pox amongst the sick of the drafts on board the "Adelaide," and on case in the 14th Regiment. As the "Adelaide" is empty, I have thought it best to leave them on board, and the case of the 14th on board the "Emeu" has been separated, and disinfecting fluids employed.

I have, &c.

(Signed) A. ANDERSON, M.D.
Staff Surgeon, 1st Class.
Dr. Hall,
&c. &c.

No. 932.

Dr. Lawson to Dr. Cumming.

SIR, General Hospital, Scutari,
9th February 1855.

I HAVE the honour to acknowledge the receipt of a letter from the Director General of the 18th January last, calling for information regarding the sewerage

of the general hospital here, together with the condition and position of the burial ground, &c.

The annexed sketch gives the position of the hospital with reference to the sea and to the burial ground, and shews the course of the sewers. The surface slopes from some distance in front of the hospital to the top of the cliff over the sea, and no water lodges anywhere near it.

The cliff is from 30 to 50 feet high.

The sewers require constant attention, and, as well as the pipes of the privies leading to them, are frequently obstructed by the soldiers throwing soiled articles of clothing and other matters into them which cannot be removed by water. The condition of the privies had been the subject of consideration previous to the receipt of the Director General's letter, and they are now undergoing a process of cleaning, which will be continued throughout the whole course of the sewers.

The position of the burial ground is given in the annexed sketch. The bodies are mostly placed in considerable numbers in large graves, and in some instances they must have been in two tiers at least. The graves, I have learned from the Catholic clergyman, have, owing to the shallowness of the soil, occasionally been not more than four feet deep, though generally the depth is from six to seven feet, and latterly only one tier of bodies is placed in each. The soil in which the graves are dug is a sandy clay, which, when moist, forms a tenacious mass, but which becomes friable on drying.

The bodies are brought to the burial ground at present on stretchers carried by natives.

An attempt was made to bring them on a bullock cart, but the arrangements were faulty, and the plan failed.

I can see no difficulty in having a proper conveyance prepared for the purpose on the spot, using bullocks for traction.

I have, &c.

(Signed) R. LAWSON,
Dr. Cumming, Dep. Inspector General.
&c. &c.

No. 933.

Dr. Hume to Lieut.-Colonel Wood, 3d Division.

SIR, Camp, 3d Division,
9th February 1855.

I HAVE the honour to report to you, for the information of the Lieutenant General Commanding, that both sick and well of the division are upon salt rations, and that the divisional Commissariat officer cannot say when he will be able to supply fresh meat again.

I am ignorant of the means which have been taken to provide fresh meat and lime juice, but it is my duty to report to you that those are the articles of which the troops generally stand in immediate need.

I have, &c.

(Signed) T. D. HUME,
Lieut.-Colonel Wood, Staff Surgeon, 1st Class.
&c. &c.

No. 934.

Dr. Hume to Lieut.-Colonel the Hon. F. Colborne.

SIR, The Camp,
10th February 1855.

My especial attention having been called by the Surgeon of the 28th Regiment to the state of some of the tents occupied by the men of that corps, I beg to inform you, for the information of the Lieutenant General Commanding, that many of them are quite worn out, full of holes, cannot be closed for want of proper fastenings, and are quite pervious to water. About 100 sick men are disposed of in some of these tents.

I am clearly of opinion that these habitations are not calculated for the reception of healthy men, and I would suggest that the most urgent energetic endeavours should be made to remedy the evil with as little delay as possible.

I have, &c.
(Signed) T. D. HUME,
Lieut.-Colonel Staff Surgeon, 1st Class.
the Hon. F. Colborne.

No. 935.

Dr. Hume to Lieut.-Colonel the Hon. F. Colborne.

SIR, The Camp, 3d Division,
12th February 1855.

WITH reference to your letter of yesterday's date, stating that the commanding officer of the 28th Regiment had been directed to accommodate the sick men in the best tents, and that no new ones are to be had at present, I have the honour to inform you, for the information of the Lieutenant General Commanding, that I feel it my duty to call upon the Quartermaster General's department to take more effectual steps to remedy the evil alluded to in my letter with regard to the worn-out tents. Not only in the 28th Regiment, but in at least four other corps, will be found tents requiring immediate exchange; for it is my firm opinion that many valuable lives depend upon the adoption of decided measures without delay.

The arrangement referred to in your letter is only calculated to increase the numbers of the sick by placing the healthiest in the worst habitations. So convinced am I of the urgency of the case, and the importance of providing adequate shelter for the men, that I would suggest that a steamer should at once be despatched to Constantinople or elsewhere to bring new tents, with carts or animals to convey them from the landing place to the camp. If something is not done, and speedily, the efficiency of the whole division will be at stake.

I have, &c.
(Signed) T. D. HUME, M.D.
Lieut.-Colonel Principal Medical Officer.
the Hon. F. Colborne,
&c. &c.

No. 936.

SIR, 3d Division,
12th February 1855.

THE only answer to my letter to General England, relative to sick being on salt rations, was a note on my own letter, written by Commissariat General Filder, stating the attention of the Commissariat officer had been directed to the conveyance of the supply of lime juice, according to the quantity required by the medical officer of the division. Live cattle are daily expected by steamers despatched for their conveyance.

I have, &c.
(Signed) J. D. HUME,
Staff Surgeon, 1st Class.

No. 937.

Mr. Hume to Dr. Hall.

SIR, The Camp, 3d Division,
12th February 1855.

I HAVE the honour to inform you that this is the fifth day the sick of the 3d Division (amounting to 1,503) are on salt provisions, and there is not up to the present moment (one o'clock) any fresh meat on the ground for to-morrow, and but 11 bottles of lime juice. I trust therefore you will not lose a moment in laying the matter before the Commander-in-Chief.

I have, &c.
(Signed) T. D. HUME,
Dr. Hall, Staff Surgeon, 1st Class.
&c. &c.

No. 938.

Mr. Cumming to Lord W. Paulet.

MY LORD, Barrack Hospital, Scutari,
14th February 1857.

I THINK myself called on to point out to your Lordship, as I have often done verbally, how necessary it is that the depôt should be separated from this hospital, for without this it is in vain to look for any improvement. Its strength is daily increasing, and as all have ready communication with the different corridors, every attempt to prevent this has been unsuccessful. It is consequently the cause of a great deal of irregularity, and from the barrack having become almost a public thoroughfare, and the patients able to purchase at the canteen, and to have brought into them from the village all kinds of improper articles of diet, their treatment is not only interfered with, but much injury is no doubt produced.

Our embarrassments will, I apprehend, be added to instead of lessened as soon as the huts are occupied. Our numbers will be increased far beyond what the sanitary condition of the accommodation admits of, irregularities will be augmented, and with more difficulty checked, and should an epidemic make its appearance amongst us, the consequences may be still more serious.

Until the whole of this building is given up exclusively to hospital purposes, and we have the power of controlling its police, preventing the introduction of forbidden articles of diet, and all persons unconnected with the establishment prevented from freely communicating with the patients, as they now do, the medical officers cannot be held responsible for the proper performance of their duties.

I beg leave to add, that the men composing the depôt, and more especially the women and children, are very insufficiently lodged, and their presence here most seriously interferes with, or rather prevents, the sanitary arrangements every day becoming more necessary as the warm weather approaches. We are, I fear, not merely inviting epidemics, but tending to create them.

I have, &c.
(Signed) A. CUMMING,
Lord W. Paulet, Inspector Gen. of Hospitals.
&c. &c.

No. 939.

Dr. Anderson to Lieut.-Colonel Harding.

SIR, Balaklava, 16th February 1855.

I HAVE the honour to inform you that there are now floating in the harbour, opposite my window, the carcasses 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, nearer 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.

I have, &c.
(Signed) A. ANDERSON, M.D.
Staff Surgeon, 1st Class.

Lieut.-Colonel Harding,
&c. &c.

No. 940.

Dr. Cumming to Brigadier General Lord William Paulet.

MY LORD, Scutari, 18th February 1855.
WITH reference to the Secretary for War's letter of the 11th January, which you showed me to-day, I have the honour to submit to your Lordship, that patients receiving pay when in hospital is so contrary

to the usages of the services, subversive of hospital discipline, and so injurious to the men themselves, that I hope your Lordship will take upon yourself to suspend it until the opinion of higher authority is obtained.

This arrangement, as it enables the patients to obtain whatever articles of diet or intoxicating drinks they may fancy, has been the cause of much irregularity, and great embarrassment to the medical officers in the discharge of their duties, and imperatively requires that it be put a stop to without delay.

As the use of tobacco is a habit so inveterate that it can hardly be expected they will abandon it, even in hospital, notwithstanding every restriction (although contrary to hospital regulations), that I would propose a ration of it should be issued to those who wish for it, or some other convenient way adopted.

I have, &c.

(Signed) A. CUMMING,
Inspector Gen. of Hospitals.

Lord William Paulet,
&c. &c.

No. 941.

Dr. Anderson to Dr. Hall.

SIR, Balaklava, 19th February 1855.

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.

I have, &c.

(Signed) A. ANDERSON,
Staff Surgeon, 1st Class.

Dr. Hall,
&c. &c.

No. 942.

Dr. Cumming to Brigadier General Lord William Paulet.

MY LORD, Scutari, 22d February 1855.

I BEG leave to bring to your Lordship's notice the state of the barrack yard and its precincts, more especially betwixt the new kitchen, &c. and the part of the building occupied by the depôt. Heaps of rubbish of an offensive and objectionable kind are there piled up, and urgently require removal.

It also appears to me most desirable that all the wet and miry ground on both sides of the square should be filled up, and all decaying and decayed matter, wherever found, daily and carefully removed.

With so many sick, and the strength of the depôt so great, the most unremitting attention will be required to every point connected with the sanitary condition of the establishment.

I have, &c.

(Signed) A. CUMMING,
Inspector Gen. of Hospitals.

Lord William Paulet,
&c. &c.

No. 943.

Dr. Anderson to Lieut.-Colonel Hardinge.

SIR, Balaklava, 23d February 1855.

I HAVE the honour to represent to you the exceedingly crowded state of the "Timandra." The captain informed me that the vessel had at night 780 Croats on board, 400 of which had gone on shore on

fatigue duty when I inspected the ship, and I consider that even with this decrease, she was crowded to excess. There are four cases of fever now on board, and should the disease spread, the mortality would be very great.

I would therefore suggest that the number on board this vessel should be reduced to 250, and the remainder should be distributed amongst other ships.

I have, &c.

(Signed) A. ANDERSON,
Lieut.-Colonel Hardinge,
&c. &c. Staff Surgeon 1st Class.

No. 944.

Dr. Hume to Lieut.-Colonel the Hon. F. Colborne.

SIR, Camp, 3d Division,
24th February 1855.

I HAVE the honour to request you will have the goodness to appoint a daily police, under the Quartermaster of the week, to collect, and either burn or bury the filth and rags which have accumulated around the hospital establishment, particularly around the marquees of the 50th and 18th Regiments.

I have, &c.

(Signed) T. D. HUME,
Lieut.-Colonel the Hon. F. Colborne,
&c. &c. Principal Medical Officer,
3d Division.

No. 945. (Duplicate.)

No. 946.

Dr. Anderson to Lieut.-Colonel Hardinge.

SIR, Balaklava,
27th February 1855.

I BEG, through you, to again call the attention of the authorities to the subject of my letter of the 23d, viz., the crowded state of the "Timandra." 580 are on board a vessel which in my opinion ought only to have 250, and I have had landed to-day from this ship 11 cases of fever.

I have, &c.

(Signed) A. ANDERSON,
Lieut. Colonel Hardinge,
&c. &c. Staff Surgeon.

No. 947.

Dr. Anderson to Lieut. Colonel Hardinge.

SIR, Balaklava,
7th March 1855.

I BEG leave to call your attention to the fact of the guard at the convalescent station at the Heights, now occupying one of the hospital huts, and would recommend that they should have a tent, as formerly, as the hut is required for the accommodation of the sick.

I would also represent to you, that it would be highly important if the sentry were stationed a little nearer to the hospital there, so as to prevent patients committing nuisances, &c. One of the medical officers, on requesting the sentry to do so this morning, was informed by him that he could take no orders from him.

I have, &c.

(Signed) A. ANDERSON,
Lieut.-Colonel Hardinge,
&c. &c. Staff Surgeon.

No. 948.

Dr. Anderson to Dr. Hall.

SIR, Balaklava, 10th March 1855.
I WOULD respectfully suggest to you the necessity of recommending to the authorities that the roofs of the huts should have a coating of whitewash, or some other composition of a white colour that rain would not wash off, as I consider that in summer they will, unless the colour of the roof be changed, be quite uninhabitable. Even now their temperature when the sun is at its height is very great, notwithstanding both the end windows being opened.

I have, &c.
(Signed) A. ANDERSON,
Staff Surgeon.

Dr. Hall,
&c. &c.

No. 949.

Dr. Anderson to Captain Christie, R.N.

SIR, Balaklava, 11th March 1855.
I BEG leave to represent to you that I consider it highly advisable that the "Severn" steam ship should be at once cleared out.

Another case of smallpox has been landed, and the medical officer reports to me that till the ship be emptied, the necessary processes of fumigation, cleansing, and ventilation cannot go on.

I have, &c.
(Signed) A. ANDERSON,
Staff Surgeon.

Captain Christie, R.N.
&c. &c.

No. 950.

Dr. Anderson to Dr. Hall.

SIR, Balaklava, 13th March 1855.
I BEG leave to call your attention to the crowded state of the general hospital. A larger number of sick was sent down yesterday than the authorities had advised us of; and until conveyance can be procured for the sick from the hospital to the convalescent station on the Heights, I am much afraid neither Mr. Hanbury nor I will ever be able to get the hospital in that state that we so much wish it to be.

I have, &c.
(Signed) A. ANDERSON,
Staff Surgeon.

Dr. Hall,
&c. &c.

No. 951.

Dr. Anderson to Lieut.-Colonel Harding.

SIR, Balaklava, 13th March 1855.
I BEG leave to call your attention to the filthy state of the beach, and of 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 would be of the highest importance to the health of both those afloat and on shore.

I have, &c.
(Signed) A. ANDERSON,
Staff Surgeon, 1st Class.

Lieut.-Col. Harding,
&c. &c.

No. 952.

Dr. Anderson to Lieut.-Colonel Harding.

SIR, Balaklava, 17th March 1855.
I WOULD respectfully and urgently call your attention to the fact of patients straying from the

General Hospital. A man of the Scots Fusilier Guards was found in his camp who was at the time supposed to be under treatment in the hospital; and I myself met two men in the street in their hospital dresses, and another man delirious from fever. The latter was so weak that I had to send him back on horseback. The huts are so scattered that the proper surveillance cannot be maintained without one or two sentries being placed in front of the huts, in addition to the one posted before the stone buildings. I am sure you will agree with me that this evil demands a speedy remedy.

I have, &c.
(Signed) A. ANDERSON,
Staff Surgeon, 1st Class.

Lieut.-Col. Harding
&c. &c.

No. 953.

Dr. Anderson to Lieut.-Colonel Harding.

SIR, Balaklava, 28th March 1855.
AS I cannot get the carcass 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.

I have, &c.
(Signed) A. ANDERSON,
Staff Surgeon, 1st Class.

Lieut.-Col. Harding,
&c. &c.

No. 954.

Dr. Anderson to Lieutenant Colonel-Harding.

SIR, Balaklava, 14th April 1855.
I HAVE the honour to inform you that yesterday one of the small pox patients was found in a neighbouring hut, and this dangerous irregularity is very likely to be repeated unless means be taken to prevent it. May I therefore request that a sentry be placed over the huts where men labouring under this disease are treated.

I have, &c.
(Signed) A. ANDERSON,
Staff Surgeon.

Lieut.-Colonel Harding,
&c. &c.

No. 955.

Dr. Anderson to Dr. Hall.

SIR, Balaklava, 28th April 1855.
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, &c.
(Signed) A. ANDERSON,
Staff Surgeon, 1st Class.

Dr. Hall,
&c. &c.

No. 956.

SIR, Balaklava, 30th April 1855.
I BEG to call your attention to the state of the huts occupied by the sick of the Croats, and those used as hospitals 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 putrifying urine is pestiferous.

Of the state of the interior of the hospital 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 by, 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) two 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 will be raised to the employment of soldiers in attending sick Turks; but I would respectfully suggest that keeping those infidels in health, and giving the poor creatures when sick the same advantages as Christians enjoy, will be wise measures, inasmuch as they will tend to the preservation of the health of the community. 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 improper one.

I have, &c.
(Signed) A. ANDERSON,
Staff Surgeon, 1st Class.

No. 957.

Staff Surgeon Anderson to Dr. Hall

SIR,
Balaklava,
4th May 1855.
I HAVE the honour, in answer to your letter of the 30th April, to state that my experience of wearing flannel clothing next the skin makes me certain that it is even more useful in summer than in winter, as it prevents sudden chills after severe perspiration; but I think the substitution of light merino in summer for the heavy woollen shirts worn in winter would be a great comfort, and would be more readily adopted by the men.

The 71st Regiment, that left my district, was fully equipped with cholera belts, and Surgeon Young has been directed by me to indent for the number requisite to complete the equipment of the 63d Regiment.

I have, &c.
(Signed) A. ANDERSON,
Staff Surgeon, 1st Class.
Dr. Hall,
&c. &c.

No. 958.

Dr. Taylor to Dr. Hall.

SIR,
Camp, 3d Division,
5th May 1855.
IN reply to your letter respecting woollen clothing for the troops, I have the honour to inform you that the surgeons of the 3d Division are, without exception, of opinion that it is very advisable the soldier should wear flannel next his skin in all seasons of the year. In this opinion I concur. It seems to me, however, advisable that the woollen texture for summer wear should be considerably lighter than for winter.

With shirt and drawers of such a texture it is hardly expedient to enforce a cholera belt in addition. It is to be observed that cholera has not decreased in India since the introduction of the use of the flannel cholera belt. On the contrary, sickness and mortality by cholera has everywhere increased of late years.

Nearly all the soldiers in the 3d Division are furnished with these belts, and steps are taking to

procure belts for the men who are not now in possession of them.

I have, &c.
(Signed) J. R. TAYLOR,
Dep. Inspector General,
&c. &c.
3d Division.

No. 959. (Duplicate.)

No. 960.

Dr. Taylor to Sir Richard England.

SIR,
Camp, 3d Division,
15th May 1855.
UNDER existing circumstances, threatening an outbreak of epidemic cholera, segregated order of regiments on a camp ground is most essential, and I cannot but regard the encampment now in progress of two additional regiments within the camp ground of the 3d Division, and on its prevailing windward side, as a measure calculated to be seriously prejudicial to the health of the division, such a consequence is the more to be anticipated, as these regiments have cholera prevalent in them.

I have, &c.
(Signed) J. R. TAYLOR,
Dep. Inspector General,
Lt.-Gen. Sir Richard England,
&c. &c.
3d Division.

No. 961.

Dr. Taylor to Dr. Hall.

SIR,
Camp, 3d Division,
15th May 1855.
THOUGH but few cases of cholera have as yet appeared amongst the men of the 3d Division, there is, I fear, good reason to anticipate an epidemic prevalence of the disease. Under such circumstances I beg to submit for your opinion the expediency of separate huts for the admission of all cases of this disease that may occur in the division. This arrangement, though not, perhaps, the most beneficial for the persons attacked, would, I think, be undoubtedly the best for the sick generally of the division. For this reason I would recommend it; should, however, you consent to its being carried out, I conceive it would be necessary to bring up and erect two extra huts for the purpose.

I have, &c.
(Signed) J. R. TAYLOR,
Dep.-Inspector General, 3d Division.
Dr. Hall,
&c. &c.

No. 962.

Dr. Anderson to Lieut.-Colonel Harding.

SIR,
Balaklava, 18th May 1855.
As the only effectual mode of removing nuisances is calling your attention to their existence, I beg to enumerate two; and, first, the filthy and crowded state of the black hut, occupied by the Commissariat drivers, in rear of the General Hospital, and of the nuisances round about it. I would recommend that the hut should be at once thoroughly cleansed, and whitewashed inside and out, and the rubbish burned. When I mention that seven cases of cholera have been admitted from this hut within the week, you will agree with me that the sooner sanitary measures are adopted the better.

The next nuisance is in the centre of the town, in a house in Railway Street, occupied by four unfortunate Commissariat Clerks, who tell me they have repeatedly mentioned the state of their dwelling to the superior of their own department. I myself wrote to Mr. Filder, recommending their removal, but no notice has been taken of my letter.

As a foul privy exists on the premises, you will not be surprised to hear that of four clerks who sleep in one small room, and breathe the intolerable atmosphere, one is dangerously ill of low fever, and requires immediate removal. I would suggest that this house should be as speedily as possible pulled down, as it will not only cause disease to its inhabitants, but to those in the vicinity.

I have, &c.
(Signed) A. ANDERSON,
Lieut.-Colonel Harding, Staff Surgeon.
&c. &c.

No. 963.

Dr. Anderson to Dr. Hall.

SIR, Balaklava, 18th May 1855.
I WOULD most respectfully urge upon you the necessity of bringing before Field Marshal Lord Raglan the quality of the bread served out as the rations to the orderlies in the hospital here. It is not only exceedingly sour, but is streaked throughout with blue and yellow mould, and I consider it my duty to take care that the overworked hospital orderlies are not supplied with this very fertile source of cholera.

I held a Board on some of the same quality two days ago (for I regret to say that the bread has been lately very bad), and I had the proceedings sent back with remarks in the margin, which leave me no alternative except on all future occasions bringing to the immediate notice of the head of my department every cause which may, with regard to the supply of provisions, tend to the deterioration of the health of the men.

I have, &c.
(Signed) A. ANDERSON,
Dr. Hall, Staff Surgeon, 1st Class.
&c. &c.

P.S.—The men in the cholera hut, the surgeon assures me, in very many instances attribute their disease to the use of this bread.

No. 964.

EXTRACTS from the Weekly Medical Report of Deputy Inspector General J. R. Taylor, Principal Medical Officer, 3d Division, dated "Camp, 3d Division, 19th May 1855.

"CHOLERA made its appearance in the division on the 13th. I of course looked upon all arrangements calculated to increase the violence and virulence of the miasma as highly objectionable; I therefore, on the 15th instant, strongly remonstrated against the introduction of two additional regiments on to the camp ground of the 3d Division. These regiments being newly arrived in the Crimea, and having cholera already prevalent in them, rendered their introduction still more objectionable, for though I am not convinced of the infectious nature of that disease, I look upon it as prudent to act upon the supposition of such a quality in it; and I have observed, that in localities and communities where cholera may be considered as ready to spring into existence, the introduction of a case from without is apt to start those dormant conditions into action. It is now too late to obviate the influence here noticed, and some of the mischief of close encampments; but it appears to me that it would be still very expedient to segregate considerably the four regiments and artillery now closed round the general hospital for wounded, on rear of camp ground of this division."

No. 965.

Dr. Anderson to Major McKenzie.

SIR, Balaklava, 4th June 1855.
In consequence of a private communication I had from you this morning, I went off at once to

inspect the "Chester." I found her dirty to a degree, full of charcoal dust, the number of the crew reduced by a late attack of Asiatic cholera, the provisions on board and the ventilation bad. I strongly protest against any man, well or ill, European or Asiatic, being sent on board; on the contrary, I would recommend that this ship ought to be sent to sea for the benefit of the health of the crew, several of whom are suffering from diarrhoea.

I would respectfully suggest that the public service might be benefited were the Principal Medical Officer here informed officially by the naval authorities in such cases, as he is supposed to be answerable for the health and comfort of every man going on board.

I have, &c.
(Signed) A. ANDERSON.
Major McKenzie,
&c. &c.

No. 966.

Staff Surgeon Hadley to Dr. Hall.

SIR, Balaklava, 11th June 1855.
I BEG leave to call your attention to the state of the huts used for the purpose of an hospital for the sick Europeans and Turks belonging to the Land Transport Corps.

The filth collected around this place from the total want of latrines, and from the numbers of horses and mules in the vicinity of the huts, render the locality perfectly pestiferous.

There are at present in this hospital 25 Europeans and 68 Croats, and for this number there are only three orderlies and one hospital serjeant, who is sick. Dr. Bain, in charge of the hospital, has been several times at this office to complain of his utter inability to carry on the duty, and the patients themselves have the greatest objection to enter the hospital in its present state.

I, therefore, beg leave to recommend that an additional seven orderlies, and a serjeant to replace the sick man, be applied for, and a fatigue party to clean thoroughly the precincts of the hospital, or that the sick of the hospital be removed to another locality and put into tents.

I have, &c.
(Signed) H. HADLEY,
Dr. Hall, Staff Surgeon.
&c. &c.

No. 967.

Staff Surgeon Hadley to Major McKenzie.

SIR, Balaklava, 27th June 1855.
I HAVE the honour to report to you that cholera has broken out on board the "Lancashire Witch," and other sickness to a great extent; and that the ship is overcrowded with horses, by the report of Lieutenant Bird, of the 10th Hussars, who has come on shore to report the state of the ship. I beg to recommend that this ship be brought into harbour with as little delay as possible, in order that the men may be landed.

I have, &c.
(Signed) HENRY HADLEY,
Major McKenzie, Staff Surgeon.
&c. &c.

No. 968.

Staff Surgeon Hadley to Dr. Sutherland.

SIR, Balaklava, 19th August 1855.
I HAVE the honour to report to you that there is a most offensive latrine close to the Commissary General's house, and in the midst of a thickly inhabited part of Balaklava, which is not only exceedingly disagreeable to the neighbourhood, but, I should

imagine, very injurious to health; I beg, therefore, you will be kind enough to take the necessary steps to have it removed to a more appropriate spot.

I have, &c.

(Signed) H. HADLEY,
Staff Surgeon.
Dr. Sutherland,
&c. &c.

No. 969.

(Memorandum.)

Camp, 1st Division,
23d November 1855.

MEDICAL officers of the staff and regimental medical officers in charge of regiments, are requested to give their opinion respecting the proposed change of serving out porter three days in the week, instead of the present ration of rum, as required by the accompanying letter (see Lord Arthur Hay's letter, 22nd November), which is to be returned.

(Signed) J. E. WILLIAMS,
Deputy Inspector General.

Dr. Sall, 1st Class Staff Surgeon, recommends old rum, and not porter.

Dr. Skelton, Coldstream Guards, recommends porter, if of good quality, which it has not recently been.

G. E. Blenkins, Battalion Surgeon, Grenadier Guards, old rum during the winter season.

Wm. Thornton, Surgeon, 9th Regiment, rum as rations; a limited portion of porter to be sold to the troops.

Dr. Barry, Surgeon, 13th Regiment, decidedly in favour of rum.

T. J. Atkinson, Assistant Surgeon, in charge of 31st Regiment, good old rum much preferable in cold weather to some porter.

W. Deeble, Surgeon, 56th Regiment, good old rum during the winter months.

No. 970.

Dr. Williams to Dr. Hall.

Camp, 1st Division,
20th December 1855.

SIR, I HAVE the honour to state that this morning I called on Lieut.-Gen. Lord Rokeby, and, in consequence of the severity of the weather, recommended that the men of this division should be supplied with an extra ration of rum, to be given at night, and that each man should have an extra blanket. He approved of the suggestion, and recommended my forwarding the application to you, as he had not the power of ordering it. I beg therefore to bring it under your notice. I feel sure that the men would be benefited by the issue of rum at night being granted. They now go and purchase bad spirits, and, from seeing it, are too often induced to repeat the dram, when, had they it good, and supplied at home, the majority would be content with their allowance.

I have, &c.

(Signed) J. E. WILLIAMS,
Dep. Inspector General.
Dr. Hall,
&c. &c.

Received 20th December 1855, and submitted to the Chief of the staff. The blanket I think good, but the rum a questionable measure.

(Signed) J. HALL.

The Commander of the Forces thinks the troops have rum enough, and hopes the weather will not continue so severe as to make more blankets necessary.
By Order.

No. 971.

W. Cruickshank, Esq., to Dr. Linton.

SIR, Scutari, 4th January, 1856.

I BEG to report that in compliance with your instructions, I this day visited the small-pox tents of the 2d Light Infantry Regiment of the German Legion at Kululie. I have to premise that the surgeon of the regiment informed me that small-pox broke out in it in England about the 20th December last, since which date cases have occurred in it from time to time; that the whole of the regiment has been carefully inspected, and all the men vaccinated who did not bear satisfactory marks either of vaccination or small-pox.

In a marquee set apart for the purpose, there were eight cases of modified variola, one confluent, and four in a bell tent convalescent from that disease, and two just reported, making a total of 15. Between these tents and the camp, I learned there is more or less communication, although there is a sentry posted over the former.

These hospital tents are frequently blown down at night, and the Germans do not seem to possess much aptitude or experience in tent-pitching; and for this reason, as well as to ensure a more perfect segregation of variolous cases from the healthy, and therefore the sooner to eradicate variola from the corps, I would recommend that application be immediately made for the marquee standing on the water's edge, near the barrack, to be appropriated for the accommodation of all small-pox cases.

I was informed that there is no difficulty anticipated in obtaining this building, or if there should be, that a house might be hired in the vicinity of the barracks.

I would suggest that a medical officer of that corps should be put in charge of the small-pox hospital, with a proper number of orderlies selected from men who have had small-pox, and that he and they should be prohibited from having any intercourse with the healthy; and that they should live either in the hospital, or in the immediate vicinity. These measures, if fully carried out, I submit are likely to eradicate the disease from the corps, which it is so very desirable to effect.

I have, &c.

(Signed) W. CRUICKSHANK,
Dep. Inspector General.

Dr. Linton,
&c. &c.

No. 972.

W. Cruickshank, Esq., to Dr. Linton.

Barrack Hospital, Scutari,
21st January 1856.

SIR, IN reply to your inquiry as to whether complaints have been made by the sick in the hospital of the insufficiency of the quantity of meat in the full and half diets, I beg to report that they have frequently been made, and in my opinion not without reason, considering the inferior quality of the meat in this country as compared with that of England.

I therefore am of opinion that the full diets should be increased to 16 ounces, the half to 12, and the low to 6.

I have, &c.

(Signed) W. CRUICKSHANK,
Dep. Inspector General.
Dr. Linton,
&c. &c.

No. 973.

W. Cruickshank, Esq., to Dr. Linton.

Barrack Hospital, Scutari,
28th January 1856.

SIR, I HAVE the honour to report, for your information, that a room in K corridor is occupied by 30 or 40

poor dirty-looking foreigners, apparently Croats. I beg leave to submit that I consider it highly objectionable to introduce persons of this description into a military hospital, as being not unlikely to bring with them, or generate, disease, perhaps of a contagious nature, and irregularities; for instance, when I was in the room this afternoon I saw burning wood on its floor, and from a bed in the corridor above this, to which there is free access by the staircase, sheets were abstracted last night.

I respectfully have to add that my responsibility, and that of the officers and servants under me, must necessarily be very much limited, if such persons are granted quarters in the hospital without any reference to me.

I have, &c.
(Signed) W. CRUICKSHANK,
Deputy Inspector General.

Dr. Linton,
&c. &c.

No. 974.

J. Mouat, Esq., to Dr. Beatson.

Principal Medical Office,
29th May 1856.

SIR,

THE purveyor and medical officer in charge of the regimental hospitals at Balaklava have brought to my notice the objectionable practice recently adopted of emptying the latrine tubs into holes dug in the immediate vicinity of the hospital, in consequence of the boat usually employed for that purpose having been sunk or destroyed, I have to request you will be pleased to bring the circumstance to the notice of the Commandant of Balaklava, with a view to the boat being replaced or the practice be discontinued without delay.

I have, &c.
(Signed) J. MOUAT,
Dep. Inspector General.

Dr. Beatson,
&c. &c.

No. 975.

J. Mouat, Esq., to Colonel Waddy.

Principal Medical Office, Balaklava.

3d July 1856.

SIR,

I HAVE the honour to acknowledge the receipt of your letter of this day's date, with the enclosure from Lieut.-Colonel Waddy, Commanding 56th Regiment, herewith returned.

Having referred to the Commissary General on the subject of quality of ration meat, which is good, and has not been complained of, and as there has been no marked increase in the amount of illness which could be attributed to deficient meat, I do not feel justified on medical grounds in recommending so large an increase to the ration of meat as half a pound, nor do I think the great majority of men in hot weather could consume it.

As there can be no doubt the fatigue duties at present required are trying, to some exhausting; but I think, bearing in mind the ample nature of the soldiers' rations, the addition of a quarter of a pound of meat to improve the soup might be issued with benefit.

I have, &c.
(Signed) J. MOUAT,
Dep. Inspector General.

Colonel Waddy,
&c. &c.

No. 976.

(Extract.)

"Camp before Sebastopol,
17th December 1855.

SIR,

I HAVE the honour to state that the two steamers, the 'Sydney' and the 'Candia,' which have been appropriated for the conveyance of sick and wounded men from Balaklava to Scutari, will not, I fear, in the present state of the army, be sufficient to keep the hospitals free from overcrowding, as each steamer is only calculated for the conveyance of 150 sick."

Brigadier General Airey,
&c. &c.

ADDENDUM.

From Page 507 of the Third Report of Sebastopol Committee.

No. 977.

Dr. Burrell to Dr. Smith.

Principal Medical Officer's Office,
Military Hospital, Scutari,
8th May 1854.

SIR,

I HAVE the honour to inform you that I arrived here on the 30th ult. in the "Eneu" steamer, and assumed the charge of the Department.

I wrote you a hurried letter from Gallipoli, giving a very imperfect sketch of medical matters at that station. As regards this, there are now assembled 10,420 troops, consisting of artillery and infantry. The former are stationed about three miles distant from this, together with two companies of the 77th Regiment.

The whole force, with the exception of three regiments, are under canvas. The ground occupied by the encampments is high, dry, and otherwise unexceptionable.

The health of the troops up to this date has been satisfactory, viz., from 2½ to 3 per cent., only four deaths having occurred. These, though from ordinary disease, were marked by an unusually rapid

course. As yet there appears to be no decided tendency to the prevalence of any particular disease. The cases now in hospital are of little severity. Two cases of small-pox have been reported in the 95th Regiment of a modified character. As relates to hospital accommodation, the upper floor of a splendid and most commodious hospital in the vicinity of the barracks and encampment has hitherto been appropriated.

This accommodates about 180 patients; good bedding is provided by the Turks; but many conveniences are yet wanting. The first floor and basement are occupied by about 200 sick Turkish soldiers; we are in consequence obliged to have about 100 slight cases in camp and barracks. The hospital authorities, however, seem well disposed to afford further accommodation; and as I have suggested to Lord Raglan the eventual necessity of having the whole, it is not impossible we shall soon obtain exclusive possession. At present the hospital has been conducted on the regimental system, but the purveyors and part of the stores having arrived by the "Melita," the general hospital plan will be established as soon as possible.

I herewith enclose the distribution of Medical Staff Officers to the several divisions and brigades. This, of course, will be subject to constant fluctuations both in numbers and individuals, according to the exigencies of the service. You will, however, be able to estimate the extent of medical aid necessary for the force in the event of its being much separated. At present there is more than enough, but more surgeons, first and second, will probably be required eventually for hospital work. In any event a large staff will be required to be left here, which is likely to become a central hospital for straggling sick of all descriptions, both on account of its relative position and its ample accommodation and salubrity.

The convenience for any deliberate or systematic work is still deficient, the office of the Principal Medical Officer being scarcely in operation. This will, I hope, account for any irregularity in the due transmission of returns and other matters relating to the force. All is in fair training, but amidst rather novel difficulties time is necessary to arrange and organize.

The health of the troops at Gallipoli (who are reduced by the removal to head quarters of the 93rd Regiment and Rifle Brigade just arrived, to about 5000) is satisfactory.

Drs. Forrest, Anderson, and Carr are at that station with a due proportion of junior officers. All the other officers are here, and have duties assigned to them, except a few of the assistant surgeons, whom it is desirable to keep disposable for unforeseen exigencies. Dr. O'Flaherty, 1st class, and Dr. Forteath arrived yesterday evening in the "City of London."

No movement of the force from this is spoken of as imminent. Few of the Artillery have as yet arrived, and none of the Cavalry.

The weather for the last fortnight has been changeable, with occasional heavy showers. The temperature is moderate but variable, a hot day being frequently followed by chilly, or even cold nights. The barracks are spacious and well ventilated, but much nuisance and other defects abound, and will become matters for our interference should the force remain here in the hot months.

I have, &c.

(Signed) W. H. BURRELL, M.D.,
Dep. Insp.-General of Hospitals,
Principal Medical Officer.

Dr. A. Smith,
&c. &c.

