

**Scutari, &c., hospitals : return to an address of the Honourable The House of Commons, dated 14 May 1855 ;-- for, "Copy of all official reports of the hospitals at Scutari, Kululee, Abydos, and Smyrna, since February last."**

### **Contributors**

Great Britain. War Office.

London School of Hygiene & Tropical Medicine Library & Archives Service

London School of Hygiene and Tropical Medicine

### **Publication/Creation**

[London?] : [H.M.S.O.?], [1855?]

### **Persistent URL**

<https://wellcomecollection.org/works/ta4gucxn>

### **Provider**

London School of Hygiene and Tropical Medicine

### **License and attribution**

This material has been provided by This material has been provided by London School of Hygiene & Tropical Medicine Library & Archives Service. The original may be consulted at London School of Hygiene & Tropical Medicine Library & Archives Service. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>

b.fol.

SVY

1855



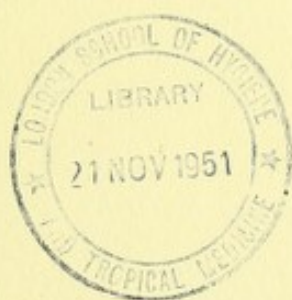
fol. b 514



Presented to the Library  
by

Date 21<sup>st</sup> Nov. 1957

Class Mark <sup>b fol</sup> fol. b 514 Accession No. 37739  
1855







Digitized by the Internet Archive  
in 2015

<https://archive.org/details/b24398780>

10427

SCUTARI, &c., HOSPITALS.

---



RETURN to an Address of the Honourable The House of Commons,  
dated 14 May 1855;—for,

“COPY of all OFFICIAL REPORTS of the HOSPITALS at *Scutari, Kululee,*  
*Abydos, and Smyrna, since February last.*”

---

War Department, }  
31 July 1855. }

FREDERICK PEEL.

(*Mr. Stafford.*)

---

*Ordered, by The House of Commons, to be Printed,*  
*1 August 1855.*

---



Don. 17350

37739

LIBRARY OF THE

LIBRARY OF THE

LIBRARY OF THE

LIBRARY OF THE

LIBRARY OF THE

PRESENTED TO

The New York Academy of Medicine



By Willard Parker, M.D.

of New York May 14<sup>th</sup> 1878.

## TABLE OF CONTENTS.

NAMES.	DATE.	SUBJECT.	PAGE.
	1855:		
Lord William Paulet to Lord Panmure.	26 February -	Site for erecting buildings for accommodation of sick fixed upon, on the Common, clear of the Barracks - -	1
Lord William Paulet to Lord Panmure.	8 March -	States that he has 1,200 beds vacant, and that the Sanitary Commissioners had inspected the Hospitals; also, that another tug steamer would be most useful; supply of timber insufficient for demand - - - -	1
Drs. Sutherland and Gavin, and Mr. Rawlinson, to Lord Panmure.	17 March -	Report their arrival at Constantinople, and their inspection of Hospitals at Scutari and Kulali, and Floating Hospitals in the Golden Horn - - - -	2
Lord William Paulet to Lord Panmure.	19 March -	Reports that more space is allowed to patients than required by Sanitary Commissioners, and that the Riding School at Kulely has been fitted up for 180 sick - - -	11
R. Rawlinson, Esq., to Lord Panmure.	2 April -	Transmits Reports on the state of the building in which Russian prisoners are confined, and the condition of the Naval and Marine Hospital at Therapia - - -	12
Dr. Sutherland to Lord Panmure.	2 April -	Transmits Report on Smyrna Hospital, with suggestions for its sanitary improvement - - - -	14
Drs. Sutherland and Gavin, and Mr. Rawlinson, to Lord Panmure.	16 April -	State work executed and in progress at the Hospital at Scutari, Kulali, and Therapia - - - -	18
Lord William Paulet to Lord Panmure.	25 April -	Reports general progress made in increasing hospital accommodation - - - -	22
R. Lawson, Esq., to Dr. Smith.	2 February	Relative to new Dead-house at the General Hospital - -	23
Dr. Cumming to Lord William Paulet.	6 February	Urges the removal of the women and children from the Hospital - - - -	23
R. Lawson, Esq., to Dr. Cumming.	9 February	Relative to the sewerage of the General Hospital, and the position of the Burial-ground - - - -	24
M. Wreford, Esq., to Dr. A. Smith.	12 February	Reports arrival of "Eagle," and states he knows nothing officially of the subsidiary Washing Establishment - -	24
S. Stuart, Esq., to M. Wreford, Esq.	12 February	Transmits Return of washing done by contractors - -	25
Dr. Cumming to Lord William Paulet.	14 February	Points out the necessity of separating the Dépôt from the Hospital - - - -	25
Dr. Cumming to Lord William Paulet.	18 February	Recommends stopping the pay of patients when in Hospital; also the issue of a ration of tobacco to those who wish it - - - -	25
Dr. Cumming to Dr. Smith	22 February	Reports that the huts erected in the Barrack square are occupied by convalescents - - - -	26
Dr. Cumming to Lord William Paulet.	22 February	Calls attention to the state of the Barrack yard, and its precincts - - - -	26
Dr. Cumming to Dr. Smith	22 February	Relative to the mode in which Corpses are removed to the Dead-house - - - -	27



NAMES.	DATE.	SUBJECT.	PAGE.
	1855:		
J. Forrest, Esq., to Dr. Smith	2 March -	States his objections to the site of the buildings erected in the Barrack square - - - - -	27
Dr. Cumming to Dr. Smith	3 March -	Transmits letter from Dr. Bryce, stating that he is prepared to take the chief medical charge, as physician, of 100 sick Soldiers in a Military Hospital - - - - -	28
M. Wreford, Esq., to Dr. A. Smith.	17 March -	Transmits monthly return, showing daily average of sick in Hospital, and quantity expended of those articles of which there is the greatest demand; also, returns showing average expenditure, and of issues to transports - - -	31
Dr. Cumming to Dr. Smith	25 March -	Reports inspection of the Graveyard by the Sanitary Commissioners - - - - -	37
Dr. Cumming to Dr. Smith	5 April -	Reports the estimated accommodation for Scutari Hospitals, &c. - - - - -	37
Dr. Cumming to Dr. Smith	7 April -	Relative to the site of the Palace Hospital - - - - -	41
Dr. Cumming to Lord William Paulet.	9 April -	Suggests encamping part of the effective men, and sending home all those who are unfit for service - - - - -	41
Dr. Cumming to Dr. Smith	15 April -	Observations on certain points connected with the localities and sanitary condition of the Hospitals at Scutari and its neighbourhood - - - - -	42
Dr. Cumming to Dr. Smith	16 April -	Reports precautions taken to secure adequate ventilation, &c. - - - - -	43
Dr. Cumming to Dr. Smith	28 April -	Monthly report - - - - -	43
Dr. Cumming to Director-general of the Army and Ordnance Medical Department.	30 April -	Forwards a nominal return of medical officers - - - - -	48
Dr. Cumming to Lord William Paulet.	6 May -	Requests information as to what arrangements are to be made to accommodate the sick of the Sardinian Army - - -	51
Weekly report of the state of the sick and wounded in Barrack Hospital, from 13th to 19th May 1855 - - - - -			52
Report on the state of the sick in the General and Palace Hospitals, Scutari, from 13th to 20th May 1855 - - - - -			52
N. O'Connor, Esq., to Dr. Smith.	24 April -	Bedding, &c., supplied to Russian prisoners at Kulalee - - -	53
Weekly report of sick in Hospital at Kulali, from 12th to 18th May 1855 - - - - -			53
J. Meyer, Esq., to the Secretary-at-War.	March -	Report on the Hospital at Smyrna, as regards the building only - - - - -	54
J. Meyer, Esq., to Lord Panmure.	14 April -	Report on the sanitary condition of Smyrna Hospital, and transmits statistical sanitary returns of the town - - -	55
J. Meyer, Esq., to the Right Hon. the Secretary-at-War.	13 April -	Transmits a Plan of Smyrna Hospital - - - - -	57



---

“ COPY of all OFFICIAL REPORTS of the HOSPITALS at *Scutari*, *Kululee*,  
*Abydos*, and *Smyrna*, since February last ”

---

Brigadier-General Lord *William Paulet* to Lord *Panmure*.

My Lord,

Scutari, 26 February 1855.

I HAVE the honour to acknowledge the receipt of your letter of the 12th instant, relative to the accommodation for the sick at this station.

The temporary building inside the barrack square do not in any way affect the ventilation of the permanent buildings, as they are much lower, and at some distance from these barracks, which form a very large quadrangle. I had suggested building, as pointed out by you, on the parade-ground outside the barracks; but as it is facing the Sea of Marmora, and exposed to the southerly gales which prevail here, it was supposed by the engineer officers that no temporary buildings would stand or be advantageous for the occupation of troops.

The principal medical officer also strongly objected to any buildings being erected there, for the occupation of the men forming the *dépôt* fit for duty.

I therefore fixed upon plans and a site on the common, clear of the barracks, for erecting buildings for this purpose.

With regard to the last part of your letter, I beg to inform your Lordship that no ardent spirits, beer, or wine have been permitted to be sold in the barracks, since I have assumed this command, but merely groceries and vegetables. A serjeant is daily on duty at the canteen, to see that this order is rigidly enforced.

I have, &c.,  
(signed) *W. Paulet*, Brigadier-General  
Commanding Troops in the Bosphorus.

---

Brigadier-General Lord *William Paulet* to Lord *Panmure*.

My Lord,

Scutari, 8 March 1855.

I HAVE had the honour to receive your Lordship's despatch, dated 23d ultimo, and numbered as per margin.

I have much pleasure, my Lord, in the first place, that the arrangements which I am making, with a view to the proper accommodation of the sick and wounded, in the hospitals under my jurisdiction, should have met with your approval; and I am happy to say that I have now about 1,200 beds vacant. I also beg to inform your Lordship that Drs. Sutherland and Gavin, of the Sanitary Commission, who have made a cursory inspection of the hospitals, have expressed themselves agreeably surprised at their cleanliness and comfort, and state that there will be very little for them to point out here.

A tug steamer has already been provided, for the landing here of the sick and wounded; and should you furnish me with another, I can only assure you that it would prove most acceptable in expediting their disembarkation, as also the embarking and disembarking of stores, &c.

Although a quantity of timber has been purchased here, for the purpose of constructing suitable accommodation for the invalids, and stables for 2,000 horses expected, its supply is still inadequate to the demand. I shall therefore receive with pleasure the quantity of fir timber and nails which you have directed to be sent to me from Fiume.

I have, &c.,  
(signed) *W. Paulet*,  
Brigadier-General commanding Troops.

---



*Drs. Sutherland and Gavin, and Mr. Rawlinson, to Lord Panmure.*

My Lord,

Constantinople, 17 March 1855.

THE Sanitary Commissioners appointed by Her Majesty's Government to proceed to Constantinople and the Crimea, have the honour to state, for your Lordship's information, that they landed here on Tuesday, the 6th instant, and at once proceeded to carry out their instructions.

Since that time they have completed the preliminary inspection of the hospitals at Scutari and Kulali, and of the floating hospitals in the Golden Horn.

The enclosed copies of their communications to Brigadier-General Lord William Paulet and Admiral the Honourable F. Grey, will show the main evils at present existing in the hospitals, and the remedies the Commissioners advise to be applied.

They have the honour to enclose copies of the answers they have received from Lord William Paulet and Admiral the Honourable F. Grey, and to state that one inspector of nuisances has begun to carry out the cleansing operations recommended for Scutari and Kulali; and that Mr. Newlands, with two other inspectors, sailed for Balaklava on the 15th instant, to begin the inspection of that place.

With the view of more effectually carrying out the objects of their mission, the Commissioners have decided that Dr. Sutherland shall proceed from this place to Smyrna, to examine into the condition of the hospital recently established there; that Dr. Gavin shall go on to Balaklava; and that Mr. Rawlinson shall remain here for a few days, until the engineering works recommended to be executed at Scutari and Kulali have been commenced, after which he also will proceed to Balaklava.

The Commissioners will not fail to make your Lordship acquainted from time to time with their movements, and with the measures they may think it advisable to recommend.

We have, &c.

(signed) *John Sutherland.*  
*Hector Gavin.*  
*Robert Rawlinson.*

---

(Enclosure 1.)

*Drs. Sutherland and Gavin, and Mr. Rawlinson, to Brigadier-General Lord William Paulet.*

Hôtel de l'Angleterre, Constantinople,  
10 March 1855.

My Lord,

THE Sanitary Commissioners appointed by Her Majesty's Government to proceed to Constantinople and the Crimea, having inspected the hospital establishments at Scutari, with special reference to their sanitary condition, as referred to in their instructions, have the honour to state to your Lordship,—

That we are of opinion the Barrack Hospital occupies a naturally healthy situation, but that, at no great distance from its walls, there are accumulations of filth which, no doubt, affect the purity of the surrounding air. The wards of the Barrack Hospital are lofty, and not overcrowded, but the ventilation is defective, and the false floors and box seats in many of the buildings tend to the collection of foul air and other impurities under the wood-work. Had there been time to have prepared the barrack for the purposes of an hospital, this wood-work might have been removed with advantage; but as the building is in use, the defect may in some measure be remedied by scrupulous attention to ventilation and cleanliness. One special reason for the defective state of the former is the want of a thorough draught, the ward windows being all on one side.

From



From the pressure of circumstances, it has been found necessary to make use of the corridors for the reception of the sick. These latter contain much more window-space than the wards, and the windows themselves are also loftier. The ventilation of the corridors therefore, though defective, is better than that of the wards. The most prominent evil connected with these corridors is the condition of the privies, which give out offensive exhalations, in spite of the evident care bestowed on their cleansing. In several of the wards and corridors the walls are not so clean as might be desired; in many of the former the flooring is defective and open, whilst that of the corridors consists mainly of unglazed tile, perhaps one of the worst substances that can be used in a hospital, from its tendency to absorb moisture and retain excretory fluids. At the time of our inspection, most of the corridors contained two rows of beds; considering the state of the ventilation, we are of opinion that not more than one row of beds should be permitted.

The water at present supplied to the Barrack Hospital contains organic matter, most of which could be easily removed by filtration.

At the time of our inspection, a considerable portion of the surface of the barrack square was in so moist a state as to act injuriously on the purity of the air.

Speaking generally, we have great pleasure in expressing our opinion that the Barrack Hospital bears marks of much having been done to improve its sanitary condition; and if the remedies to be hereafter enumerated are applied, everything will have been done that can practically be effected.

*The General Hospital, Scutari.*—This is the best of all the Scutari hospitals, as its structure admits of adequate ventilation, and the greater part of it is scrupulously clean; besides which, there is nothing except the burial-ground (to be afterwards described) likely to affect the purity of the air. Within the court of the hospital, the only point to be noticed is the damp and uneven state of that part of the area used as a thoroughfare.

The most obvious objection to the internal arrangement of the General Hospital is the structure of the privies, from which offensive exhalations proceed. The floor of the kitchen appears to be undrained, for at the time of our inspection a considerable quantity of water, capable of easy removal, lay upon it.

*The Palace Hospital, Scutari.*—This establishment occupies a low undrained site, part of which is a marsh, with water lying on the surface. This hospital consists of several buildings, differing in their respective sanitary conditions. The best portions are the theatre and ball-room, which are large lofty apartments, having but one defect, that of ventilation.

The privies attached to this part of the hospital are placed over a running stream, and so far afford the best instance of an arrangement it is desirable to imitate in the other hospitals when practicable; but at the time of our inspection, offensive exhalations arose from these privies, in consequence of some temporary obstruction.

The remaining portions of the Palace Hospital consist of wards by no means so well suited for their intended purpose. Want of ventilation is here also the main defect, but there is decided overcrowding, and the privy accommodation is extremely bad, the foul exhalations therefrom being sufficient to taint the air for a considerable distance.

*The Stable Hospital, Scutari.*—This hospital consists of four wards over the stables built in the hollow between the Barrack and the General Hospitals. The situation is a bad one, and the relative position of the wards and stables, besides the generally foul condition of the place itself, renders it, in our opinion, quite unfit for the reception of the sick.

*Proposed Remedies.*—To remedy the foregoing defects, we have to request your Lordship to give directions that the following means be at once adopted:—

That adequate space for ventilation be provided where necessary, at or as near to the ceiling of each ward as practicable; that, where possible, staircases be made use of as ventilating shafts (for which purpose the partitions between them and the corridors might be re-arranged, so as to allow of a free current of air): and that in all cases the amount of space for each inmate, exclusive of ventilating shafts and window recesses, be not less than 1,000 cubic feet.



That the upper portions of the windows be in all cases opened, and the current of air modified by the insertion of perforated zinc plates, louver-boardings, or otherwise.

That any of the wards that are not quite clean be at once lime-washed, and that lime-wash be practised at intervals throughout all the wards.

That lavatories for the use of the sick be provided throughout the hospital, easily accessible from the wards, but in all cases completely detached from the privies.

That the excreta of the patients be instantly removed from within the walls of the hospitals.

That the outfall sewer of the Barrack Hospital be extended, and a trap placed over its mouth to prevent the wind acting on its contents and carrying the foul odours into the hospital.

That three openings for ventilation be made in the main sewer between the Barrack Hospital and the outfall, and a wooden tank (to be filled when requisite) placed over the sewer, close to the outer wall of the building, a water-trap being made on the barrack side of the ventilator, and a man-hole for cleansing formed over the trap.

That some special means of ventilation be applied to the sheds now in course of erection in the Barrack Square; that flushing tanks be provided for the new privies, and an improvement made in the inclination of the drain leading from them into the main sewer.

That the portions of the Barrack Square now unpaved be formed and coated with stone or gravel.

That the open ditch running from the Stable Hospital through the low ground to the east of the Barrack Hospital, be covered over as far as its point of outfall.

That the main sewer at the General Hospital be extended, with similar appliances for external ventilation, and for flushing when necessary, as those recommended for the Barrack Hospital.

That an immediate improvement be made in the privies in the wings of the General Hospital, by removing the upper window-sashes, which at present do not open, and by connecting them with the drain running along the west front by means of two short drains, and thus obviating the necessity for the former passing under the hospital at all.

That the surface of the inner court now used as a thoroughfare be formed and coated with stone or gravel.

That the low marshy ground near the Palace Hospital be at once thoroughly drained, and the privy accommodation improved, either by flushing through the drains, or, if that be not practicable in this case, that movable boxes be provided in the privies, and their contents frequently removed.

That the closed gallery between the ball-room and theatre at the Palace Hospital be disused, and no more patients admitted, as it is unfit for their reception.

That the privies, the sewers, and the drains at all the hospital establishments be thoroughly cleansed, and their contents deodorised and removed.

The peat charcoal be freely used as a deodoriser in all the privies, as well as in the removal of all offensive matter.

That the surface of the ground in the vicinity of all the hospital establishments be regularly cleansed at short intervals.

That the water-tanks be examined and cleansed when necessary, and that the water be filtered in future.

That the removal of all offensive matter, and the general cleansing operations at the various establishments, be effected in accordance with the subjoined regulations, which, with a few exceptions, will be found capable of general application.

That with respect to the burial-ground, no interment in future take place within 100 yards of the wall enclosing the general hospital; that no more than one layer of corpses be placed in any grave or trench; that a space of not less than 12 inches be left between each body; that the grave or trench be at least six feet below the ordinary level of the ground; that a layer of peat charcoal be placed over the bodies instead of lime; and that all interments take place during the morning or evening, and not during the heat of the day.

That



That with respect to the ground already occupied, a layer of peat charcoal be at once laid over it, the ground levelled, and then sown with grass seeds.

The details of the above works, as well as of those at Kulali, have been explained to Captain Gordon, R. E., your very able commanding officer of Engineers, who has expressed his willingness to carry them out.

In drawing up the preceding directions as far as they apply to the Barrack Hospital, the Commissioners have dealt with the condition of the wards and corridors as they found them. They cannot, however, abstain from expressing their opinion that the sheds which are being erected in the Barrack Square, occupy space that had better have been left vacant, as the greatest freedom for external ventilation is required.

The Commissioners are further of opinion that not only should the number of sick within the hospital be reduced as soon as practicable, but that the corridors should be put and retained to their true use, viz.: To afford means of access to the several rooms, to give protection from external variations of temperature, and to facilitate full internal ventilation.

In anticipation of the heats of summer, the Commissioners advise the removal from the building of all persons (soldiers) not necessary to the care and comfort of the sick, and that additional accommodation should be provided.

Before concluding, the Commissioners cannot but express their gratification at the zealous co-operation they have received, not only from your Lordship, but from the officers of all the institutions it has been their duty to visit, both at Scutari and at Kulali.

We have, &c.

(signed) *John Sutherland.*  
*Hector Gavin.*  
*Robert Rawlinson.*

---

(Enclosure 2.)

SUGGESTIONS as to the Cleansing Operations at the Barrack Hospital, Scutari.

IN order to give effect to the proposed cleansing operations, it is requisite that the following matters receive immediate attention, viz.:

The surface of the ground on the north, east, and west sides of the Barrack Hospital, should be equalised, and proper channels formed for surface-drainage.

The lines of road used for access to the hospital, the terrace, and the detached buildings, should be paved or macadamised to the width of 12 feet. The paving of the village-street, where water lodges, should be repaired.

For containing and carrying away the refuse from the hospital, covered boxes or baskets of such capacity as to be a load for two men, when filled, should be provided. There should be so many of them, that one may be placed at each outlet from the wards, kitchens, and other places where garbage and refuse are produced. Six wheelbarrows or baskets on wheels, and brooms and shovels, should be provided for the scavengers.

---

(Enclosure 3.)

INSTRUCTIONS to the Inspector of Nuisances.

THE inspector shall start his men at five o'clock each morning to sweep the whole of the ground surrounding the building, paying especial attention to the cleansing of all corners and immediately round the walls.

As soon as the sweeping of the precincts of the hospital is completed, the inspector shall set his men to sweep the streets of the village to the extent pointed out to him. In doing this, he will divide his men into gangs; a wheelbarrow or basket must be made to follow each gang, and the refuse swept up must be put directly into these, and carried off to the proper places of deposit.

When the general sweeping is completed, the inspector will appoint a man to each dirty locality, to sweep into heaps the garbage and refuse thrown down during the day, and shall from time to time send round the wheelbarrows or baskets to have it carried away.

In the immediate neighbourhood of the hospital he shall take care that all



refuse and filth, such as the droppings of cattle, are immediately swept up and removed. He shall also see that all dead animals are immediately buried. The inspector, in regard to these particulars, must be most vigilant.

The refuse must never be allowed to accumulate in the bins or receptacles in the hospital until it emits a bad odour. The inspector must take care to have the bins carried away, their contents discharged at the appointed place, and the bins put back in their proper stations without loss of time.

All accumulations of refuse that cannot be readily removed, must be deodorised with charcoal. The large heap near the landing stage must be immediately operated on; as much of it as possible must be thrown over the slope, and the whole then covered with charcoal and fresh soil.

*Flushing Apparatus.*—The inspector shall see that the flushing apparatus which Captain Gordon is about to erect over the drains, is daily filled with water, and shall himself open the valves for their discharge.

Three times in each day, at the least, the inspector shall discharge the contents of the privy tanks, and fill the tanks again with water. The last discharge and filling should take place before he retires for the night.

Should he discover any defect in the apparatus, he shall immediately give notice of it, in writing, to Captain Gordon.

The inspector shall keep a record of his proceedings, and shall report weekly to Mr. Newlands the detail of his work.

*N.B.*—It must be understood by the inspector that the above regulations, as far as they are capable of general application, are intended for the regulation of the cleansing operations at all the hospitals at Scutari.

---

(Enclosure 4.)

Drs. *Sutherland* and *Gavin*, and Mr. *Rawlinson*, to Brigadier-General  
Lord *William Paulet*.

Hôtel de l'Angleterre, Constantinople,  
10 March 1855.

My Lord,

The Sanitary Commission appointed by Her Majesty's Government to proceed to Constantinople and the Crimea, having inspected the hospital at Kulali, with special reference to its sanitary condition, as referred to in their instructions, have the honour to state to your Lordship,—

1st. We are of opinion that in its present state a portion of the barrack now used for the reception of the sick is unfit for the purpose, and we have reason to believe that a considerable amount of fever and diarrhoea has originated within the building itself; that one of the medical officers is at present suffering from fever brought on in this way; and that the health of the other medical officers is also endangered.

The conditions that have led to the above results appear to the Commission to be chiefly these:

The offensive state of the privies within the buildings and near the wards, especially those in the basement fronting the Bosphorus, the exhalations from which can be distinctly traced at a considerable distance.

The existence of a large stable, at present occupied by Turkish Cavalry horses.

The overcrowded condition of the present wards, and the defective state of their ventilation; and lastly, the generally faulty nature of the structural arrangements in the older portions of a building not originally intended for a hospital.

Besides these, there are other minor evils, such, for example, as the present custom of permitting the men to wash in or close to the privies, the damp state of the surface of the Barrack Square, and of the ground to the south and east of the hospital.

With respect to the water supply, we find that it contains a considerable quantity of vegetable tissue, mixed probably with threads of fungi.



To remedy the foregoing defects, we have to request your Lordship to give directions that the following means be at once adopted :

1. That the erection of eight new privies, at convenient situations, such as the points indicated on the Plan, with provisions for flushing and cleansing them, be forthwith commenced, and that, upon completion, the privies within the buildings, especially those in the basement fronting the Bosphorus, be immediately abandoned, and that in the mean time, to lessen the evil, the existing privies be cleansed and deodorised.

2. The abandonment of the sick wards and officers' quarters over the privies in the basement fronting the Bosphorus, and also of the wards over the Turkish cavalry stables, as soon as ever new wards and quarters can be got ready.

3. That in future the distance from centre to centre of each bed in any ward or corridor be not less than six feet ; and notwithstanding such arrangement, that in no case shall the amount of space for each inmate, exclusive of ventilation shafts and window recesses, be less than 1,000 cubic feet.

4. That adequate space for ventilation be provided at or as near to the ceiling of each ward as practicable ; that wherever conveniently practicable, perfuration be provided through both sides of each ward ; and that, where possible, staircases be made use of as ventilation shafts.

5. That the upper row of panes in each window should in all cases be opened, the current of air being modified by the insertion of perforated zinc plates, lowering or otherwise ; and that the upper half of all windows in partitions between corridors and wards be permanently opened.

6. That in any large wards, having more than two rows of beds in width, bulkhead divisions be introduced wherever practicable, and that adequate ventilation be provided.

7. That the excreta of the patients be instantly removed from within the walls of the hospital buildings.

8. That the old wards, wood-work as well as walls, be at once thoroughly lime-washed, and that all the wards be lime-washed at frequent intervals.

9. That lavatories be provided where necessary, easily accessible from the wards, but in all cases completely detached from the privies.

10. That the portions of the Barrack Square now unpaved, be formed and coated with broken tile, stone, or gravel.

11. That the stream rising to the east of the Barrack Hospital, and flowing past its south side, be diverted, at a sufficient elevation to make it available for flushing and cleansing the drains and privies within the building ; that the spring to the south of the Upper Hospital be carried off by a proper channel, and that all the sewer-mouths be trapped.

12. That the land outside the barracks be drained where necessary ; and that the surface on all sides of the hospital buildings be regularly cleansed at short intervals.

13. That the water-tanks be examined and cleansed when necessary, and the water, in future, filtered.

14. That, as far as practicable, all interments take place either in the morning or afternoon, and not during the heat of the day.

15. That peat charcoal be freely used as a deodoriser in all the privies, as well as in the removal of all offensive matter, the carrying away of which ought, we consider, to be effected in accordance with the subjoined regulations.

We have, &c.

(signed) *John Sutherland.*  
*Hector Gavin.*  
*Robert Rawlinson.*



## APPENDIX.

THE Commission being deeply impressed with the calamity that has recently befallen the French hospital at Pera, beg respectfully to suggest for your Lordship's consideration, although the subject does not come within the limits of their instructions, that the several barrack hospitals may be secured from entire destruction by fire if solid divisional walls are taken from foundation to roof, and not less than four feet above the roof. These walls to be made perfectly fire-proof, and external doors formed on either side such divisional walls.

## (Enclosure 5.)

INSTRUCTIONS to the Inspector of Nuisances in regard to the Cleansing of *Kulali* Hospital.

THE inspector shall every morning cause the surface of the ground all around and between the two hospitals to be thoroughly swept, and the refuse collected and carried away to the places of deposit which Dr. Sutherland will point out.

He shall take care that all dead animals are immediately buried.

He shall cause the bins for containing the garbage and refuse of the hospital to be regularly removed, emptied, and replaced. He shall never allow their contents to accumulate till they become offensive.

He shall personally, not less frequently than three times a day, discharge the contents of the tank privies about to be constructed, and after each discharge refill the tanks with water. The latest discharge and refilling should take place just before he retires for the night.

Every accumulation of offensive matter which cannot be immediately removed shall be deodorised with peat charcoal.

In addition to these specific instructions, the inspector is enjoined to use all diligence in the detection, removal, or deodorising of all nuisances, and generally to use his utmost exertions to keep the hospitals and their precincts in a clean and wholesome condition.

The Commissioners will from time to time give him additional instructions.

He shall keep a minute record of his proceedings, and shall report weekly to Mr. Newlands the detail of his work.

## (Enclosure 6.)

Brigadier-General Lord *William Paulet* to Drs. *Sutherland* and *Gavin*, and Mr. *Rawlinson*.

Gentlemen,

Scutari, 16 March 1855.

I HAVE the honour to acknowledge the receipt of the report made by the officers composing the Sanitary Commission of the Army in the East, and in answer beg to state that all instructions and suggestions therein pointed out will be strictly carried out, as far as I am enabled to do so.

I have, &c.  
(signed) *W. Paulet*.

## (Enclosure 7.)

Drs. *Sutherland* and *Gavin*, and Mr. *Rawlinson*, to Admiral the Hon. *F. W. Grey*.

Hôtel de l'Angleterre, Constantinople,

17 March 1855.

Sir,

THE Sanitary Commission appointed by Her Majesty's Government to proceed to Constantinople and the Crimea having inspected the Turkish man-of-war and the "Bombay," (the two hospital ships lying off the Seraglio Point), with reference to their sanitary condition, as referred to in their special instructions, have the honour to report :

That



That these ships, though originally intended for the reception of none but convalescent soldiers likely to return to duty, have, in some measure been converted into ordinary floating-hospitals, many patients having been sent on board so ill as to require to be placed in bed as soon as they arrived. Besides which, the vessels have also served as store-ships, to the consequent disturbance of the sick.

That after the reception of such sick soldiers, fever, apparently of a low typhoid description, broke out, and prevailed to some extent in the Turkish ship, and to a very great degree in the "Bombay." That in the latter it originated in the orlop deck, where it first attacked the orderlies, then spread to the crew and some of the convalescents, and only declined when the numbers on board were reduced.

That this outbreak of fever appears to the Sanitary Commission to be due chiefly to the following causes :

The state of the bilge-water in the "Bombay" at the time of the fever ; poisonous miasmata, most distinctly observable in the fore-castle, where the men sleep, close to the fore-hatchway, appearing to have proceeded from the bilge-water.

The prolonged confinement to bed of a number of persons in a low-ceiled confined space.

The defective circulation of air, chiefly in the orlop deck of the "Bombay," besides other evils, such as the overcrowding of the healthy in a confined space, and the incompleteness of the lime-washing.

The Sanitary Commission have therefore to recommend that you would be pleased to order that these ships be in future applied to their original purpose, viz., the reception of patients able to move about, and not of sick or wounded persons requiring occasional confinement to bed. The Commissioners find that the medical officers of the hospital ships concur in this opinion.

That the holds of both ships be frequently examined to prevent the bilge-water from remaining till it becomes tainted, and that it and other foul water be deodorised, and frequently pumped out, so that the vessels may be kept as dry as possible, and that the Turkish line-of-battle ship be pumped out forthwith.

That the decks of both ships be kept thoroughly clean, and that where lime-washing has not already or recently been practised, the internal sides and ceilings of the ships be thoroughly lime-washed.

That in no instance shall the convalescents be placed in tiers, and that no more than the following numbers be allowed to sleep on the decks respectively referred to :

Turkish Line-of-battle Ship.

	No. of Patients.
Main Deck - - -	80 or 85
Lower Deck - - -	90 or 95
	<hr/> 170 or 180

"Bombay," 50-gun Ship.

Main Deck - - -	50 or 55
Lower Deck - - -	80 or 85
	<hr/> 130 or 140

That whenever the weather will permit, the ports and scuttles be as much as possible kept open, and no opportunity of using the windsails lost ; and that awnings be provided, so that convalescents may be as much on deck as possible.

That no excreta be allowed to remain on any of the decks, but that the same be immediately discharged.

That, if possible, the crew of the Turkish line-of-battle ship be prevented from coming on board of her for the future, as the same causes annoyance and inconvenience to the sick.

The Sanitary Commission have grave doubts as to the propriety of mooring the floating hospitals in their present positions, and they deem it of importance to remark, that ships are by no means the best places for the reception of convalescents.



convalescents. Of necessity they are deficient in space; ventilation is, under certain conditions, defective or almost impracticable; and convalescence, except under the most favourable circumstances, is therefore liable to be protracted.

A well-arranged convalescent institution in some healthy locality on shore would, in the opinion of the Commissioners, be far preferable to the use of floating hospitals of any kind.

In conclusion, we beg to express our thanks and the obligations we are under both to you and the officers on board the floating hospitals, for the facilities that have been afforded us in gaining the information we required.

We have, &c.

(signed) *John Sutherland.*  
*Hector Gavin.*  
*Robert Rawlinson.*

---

(Enclosure 8.)

Admiral the Hon. *F. W. Grey* to Drs. *Sutherland* and *Gavin*, and  
*Mr. Rawlinson.*

Gentlemen,

"London," Constantinople, 18 March 1855.

I HAVE to thank you for the report on the state of the two convalescent ships, or, as you more properly term them, the floating hospitals, lying off the Seraglio Point, and for your suggestions of the measures that ought to be adopted in them.

I have, from the time of my arrival here, never failed to express my firm conviction that the two ships in question were not calculated for hospital ships. I questioned the medical officer in charge of the Turkish line-of-battle ship on the subject of the fever which I found prevailing, expressing my fear that the state of the ship below, which I believe to be irremediable, must necessarily be attended with exhalations unfavourable to health, and I was uniformly assured that there was nothing in the fever cases on board to lead to the supposition that they originated in or were aggravated by that state.

I have also on several occasions expressed my opinion that the patients who were confined to bed ought to be removed, and this brings me to the consideration of the recommendations of the Commissioners.

1st. They recommend that I will be pleased to order the restoration of these ships to their original purposes.

This is an order which it does not rest with me to give, the number and character of the patients on board being entirely regulated by the military authorities.

2d. That the holds of the ship be frequently examined to prevent the bilge-water from remaining until it becomes tainted.

To prevent this I believe to be impossible. The state of the whole lower part of the Turkish ship is, from old age and long-continued filth, such that no measures would, in my opinion, prevent the water which leaks into her from becoming tainted, and the imperfect way in which her pumps are fitted makes it impossible to keep her dry.

The "Bombay" may, and no doubt ought, to be kept in a better state, but all persons acquainted with ships will know how difficult it is, even in a well-organised man-of-war, to prevent bilge-water from becoming offensive.

The decks on which the patients are placed are cleaned by the orderlies and convalescents, and I have called the particular attention of the military authorities to this point. The other decks are cleaned by the crews of the ships, and the officer in charge of them is directed to report to me any inattention; but the Commissioners will readily believe that the small number of the Maltese crew attached to the line-of-battle ship, will not allow of that degree of attention to this point which is desirable.

Whitewashing is ordered to be used whenever necessary.

The Commissioners recommend that the number of convalescents should not exceed 180 in the line-of-battle ship, nor 140 in the "Bombay." With this I entirely



entirely coincide (if any are to remain on board); but this matter, as I have already stated, does not rest with me.

The opening of the scuttles and ports is at the discretion of the medical authorities.

If it is decided that these ships shall continue to be used as hospitals, awnings or roofs will undoubtedly be necessary.

That no excreta be allowed to remain on the decks. This is the duty of the orderlies, under the direction of the medical military authorities.

The line-of-battle ship has no Turkish crew. The presence of Turkish sailors arose from the Turkish Government requiring the anchor and cables with which the ship is moored, but the men were sent for the purpose of replacing them with others.

The position in which the ships are placed would undoubtedly be objectionable as the summer advanced; but the conclusion at which the Commissioners have arrived, that ships (and I may add that these ships especially) are not the best places for the reception of convalescents, is so entirely in accordance with my long-entertained opinion, that I shall lose no time in communicating with the military authorities, in the hope that the expression of this opinion by the Commissioners will induce them to remove the whole of the patients at once from both ships.

I may add that, on the ground of economy, a temporary convalescent hospital, for the small number these ships are fitted to contain, might be built for less money than the freight of the "Bombay" would, in a very short time, amount to; and the adoption of such a measure would remove the difficulties which necessarily arise from a divided authority.

I have, &c.,  
(signed) *Fred. Wm. Grey.*

Brigadier-General Lord *William Paulet* to Lord *Panmure*.

My Lord,

Scutari, 19 March 1855.

I HAVE had the honour to receive your Lordship's despatch, dated the 5th instant, and numbered as per margin, calling my attention (with reference to the Report made last month by the Commissioners to your predecessor) to the internal condition of the hospitals under my jurisdiction, and above all to the want of space therein; and you accordingly request to be furnished with some further observations upon this important subject.

It will be gratifying to your Lordship to know that since the 9th ultimo, the date of the Report in question, the hospitals have been very much thinned, I may safely assert by fully one-half; the patients having now more cubic feet than pointed out by the Sanitary Commission. The number of deaths shows also a corresponding decrease; while, on the 14th instant, there were only three deaths in the General Hospital, one in Haidar Pasha, and one in this barrack hospital.

My exertions, my Lord, for a further increase of hospital accommodation are nevertheless unceasing. I have had the riding-school at Kulely fitted up, which is capable of containing 180 sick. A detachment has already been cleared from this barrack hospital, and placed at Galata Seraë, in Pera, which will in due time also contain a dépôt of artillery; and I am in daily expectation of having a large building in this district, now occupied by Turks, for the establishment of the General Dépôt, and for the prompt acquisition of which I have solicited the co-operation of Her Majesty's Ambassador.

I trust, my Lord, that these measures will merit your approbation; and you may rest assured that I shall continue to exert myself with a view to the increased comforts of the invalids.

I have, &c.,  
(signed) *W. Paulet*,  
Brigadier-General commanding Troops.



*R. Rawlinson, Esq., to Lord Panmure.*

Hôtel d'Angleterre, Constantinople,  
2 April 1855.

My Lord,

I HAVE the honour to enclose you copies of two reports I have made to Admiral the Honourable F. Grey, one on the state of the building where the Russian prisoners are confined, the other on the condition of the Naval and Marine Hospital at Therapia, and also Admiral Grey's reply to the same.

Dr. Sutherland returned from Smyrna on Saturday, and he and I proceed to Balaklava this day, on board the steam transport "Severn."

I have, &c.  
(signed) *Robert Rawlinson.*

---

(Enclosure 1.)

*R. Rawlinson, Esq., to Rear-Admiral the Hon. F. W. Grey.*

Hôtel d'Angleterre, Constantinople,  
27 March 1855.

Sir,

ON behalf of the Sanitary Commission appointed by Her Majesty's Government to proceed to Constantinople and the Crimea, I have the honour to state that Dr. Gavin (who has since sailed for the Crimea) and myself have examined the Naval and Marine Hospital on shore at Therapia, with respect to its sanitary condition, as referred to in the special instructions of the Commission. Dr. Gavin having handed me the notes of his inspection, I have incorporated them with my own in the following Report, which I have now the honour to lay before you.

The buildings used as the hospital stand on the shore of the Bosphorus; the main hospital, which is of wood, has been originally a Turkish private residence; the ground floors of none of the buildings are more than three feet above the ordinary level of the water of the Bosphorus. It appears from the evidence of the medical officers of the hospital that upwards of two-thirds of the cases of low typhoid fever treated here have originated in the hospital; that such cases began about three weeks after the admission of the patients, and that the fever prevailed generally throughout all the wards and rooms; that, besides the patients, three out of nine female nurses have been affected, and that one nurse and one lady nurse were suffering at the time of the inspection. It would also seem from the evidence of the medical officers, that no particular disposition to fever was observed amongst the dysenteric patients admitted.

The water supply is derived from the springs and streams of the high ground immediately above the hospital, and brought into it through earthenware pipes; the supply is good and abundant, though the water is liable to be turbid after rain.

The arrangements for the interment of the dead are good, as the burying-ground is at some distance from the hospital, and there is only one body placed in a grave.

The chief sanitary defects of the hospital seem to be these:

1st. The insufficient amount of ventilation, and the want of open fire-places and flues, or other equally effective means for ventilating and warming; there are no openings in the roof, and no sufficiently lofty windows, those in the main hospital not being within several feet of the ceilings; besides which some of the upper sashes are not made to open. At the time of the inspection some of the windows were closed up with felt to keep out the cold.

2d. The improper position and faulty construction of the old privies on the Turkish principle, the doors out of some of which open directly into the



the wards and rooms occupied by the sick; wooden seats have in some cases been erected, and chloride of zinc has been used to remedy as much as possible the inherent defects of these privies, but they are still offensive.

3d. The drainage connected with the Bosphorus is defective, the drains being merely trenches filled with water.

4th. The comparative overcrowding, especially in some parts of the hospital; when inspected, the atmosphere of the lower floor of ward No. 5. was very close.

To remedy the foregoing defects I have to request that you will be pleased to direct,—

That efficient ventilation be provided in each ward or room occupied by the sick, by making openings in the walls near the ceilings, and removing the upper panes in the windows, the current of air being modified by the insertion of perforated zinc plates or wooden louvre-boardings, and that, where practicable, the doors of the wards and rooms be removed, and curtains, running on rods, substituted.

That all beds be placed apart at a distance of not less than six feet from centre to centre, and that every patient have at least 1,000 cubic feet of space.

That the privies in the upper and middle floors of the hospital, if retained at all, be converted into proper water-closets, and that they be made to ventilate through the roof of the building, and not into the wards and corridors as at present. That the privies in the basement be deodorised and closed up, and all emanations prevented, and that in lieu of them new places be erected, detached from the hospital. That the drains be thoroughly cleansed, and their contents deodorised and removed.

That all solid refuse, as soon as made, be deposited in covered receptacles conveniently placed for that purpose, and that these be emptied at frequent intervals.

I have much pleasure in stating that Dr. Gavin and myself were satisfied that the past efforts of the officers of the establishment to improve the noisome state of the privies, by using chloride of zinc, and daily employing a force-pump, have had a beneficial effect on its sanitary condition, and that equally good results may be anticipated from the works now in progress, amongst which may be mentioned a reception-room for the sick, provided with baths, new washing and drying rooms, and the increased privy accommodation, detached from the hospital.

With respect to the Sultan's palace at Therapia, which is at present partially used as an hospital for convalescents only, I may observe that the spaciousness and loftiness of the rooms, staircases and landings, the height of the windows, and consequent facilities for the most ample ventilation, together with the open and airy situation of the palace itself, are all powerful arguments in favour of its being more extensively used as a convalescent station than it has hitherto been; but in thus speaking of its advantages in a sanitary point of view, I am of course ignorant what difficulties or obstacles there may be that may render it inexpedient to make use of the building for such a purpose.

Before concluding, I think it right to mention that at the time of the inspection, Dr. Stuart, medical officer in charge, informed Dr. Gavin and myself that Asiatic cholera had made its appearance in the village of Therapia amongst the poor Greeks (who are at present observing their 40 days' fast, during which they live chiefly on shell fish); that five cases had occurred, one of which proved fatal on the 17th instant, and that on the same day there had been a fatal case of cholera in the hospital, the man having been brought in from Her Majesty's ship "Queen" on the 16th instant.

I have, &c.  
(signed) *Robert Rawlinson.*



(Enclosure 2.)

*R. Rawlinson, Esq., to Rear-Admiral the Hon. F. W. Grey.*Hôtel d'Angleterre, Constantinople,  
27 March 1855.

Sir,

ON behalf of the Sanitary Commission appointed by Her Majesty's Government to proceed to Constantinople and the Crimea, I have the honour to lay before you the following report on the state of the buildings where the Russian prisoners are confined, and which I visited in company with you on Thursday, the 22d instant.

The prison, originally erected for a Turkish barrack, occupies a low site, only a few inches above the waters of the harbour; the land surrounding the prison is either undrained or most inefficiently drained, and there are large areas of ground near it foul with liquid and solid refuse, the surface being unpaved, as well as uncleansed.

In the course of my inspection I found the structural arrangements of the privies were very defective; these places, situated in the angles of the square, and forming portions of the main structure, are in the immediate neighbourhood of the wards and corridors, and the smell proceeding from them is most foul. There are some remedial measures that may be immediately applied, such as lime-washing and cleansing, the use of deodorisers (peat charcoal, &c.) in the privies, and the fullest ventilation practicable.

But even these improvements cannot be carried out with the fullest beneficial effect unless extensive works are also erected in the neighbourhood of the prison, and mechanical means used in the place itself to pump and deodorise the prison refuse.

In consequence, however, of the lowness of the site, the sluggish flow of the water close in shore, and the fœtid state of the mud, these works must be on a large scale, and may on that account be in the present instance impracticable; if so, it would then no doubt be the cheapest plan to remove the Russian prisoners to some more healthy locality.

I have, &c.  
(signed) *Robert Rawlinson.*

(Enclosure 3.)

*Rear-Admiral the Hon. F. W. Grey to Robert Rawlinson, Esq., c. e.*Her Majesty's Ship "London,"  
at Constantinople, 29 March 1855.

Sir,

I HAVE to acknowledge the receipt of your letter of the 27th, and to thank you for the reports enclosed in it, on the sanitary condition of the naval hospital and of the barracks occupied by the Russian prisoners.

Your recommendations respecting the former, which you have already made verbally, I hope to have carried into execution without delay, and I trust some measures may soon be adopted for the removal of the Russian prisoners.

I have, &c.  
(signed) *Fred. W. Grey,*  
Rear-Admiral.

*Dr. Sutherland to Lord Panmure.*

My Lord,

Constantinople, 2 April 1855.

I HAVE the honour to report to your Lordship that I have returned from Smyrna, after having inspected the hospital there, and I beg to transmit the enclosed copy of recommendations made by me for improving its sanitary state. Before making these recommendations, I had a meeting with two medical men who have practised in Smyrna for some time, and I took minutes of evidence, which I also beg to enclose. In consequence of observations made



made by myself, I was led to doubt the propriety of using the ground floor of the hospital for patients, and on inquiry it appeared that typhoid fever had occurred to some extent among the patients and orderlies occupying that floor. This led to further inquiries, and the result is that, like all ground floors of houses in these climates, the ground floor of the hospital is malarious, and, with the concurrence of Dr. Meyer, it is to be abandoned. There are a number of cases which can very well be removed to a quarantine station at no great distance, and the space required will in this way be made up. Besides, the accommodation for patients may be extended, if necessary, by the erection of sheds in a vacant space near the hospital, and I have seen several places out of Smyrna in which barracks for convalescents might be erected with advantage. On the general question as to the healthiness or otherwise of the locality, I beg to refer to the evidence enclosed. Notwithstanding its favourable character, I have doubts which could only be removed by experience, and I have requested that every case of fever be carefully traced; for in this way alone can the point in dispute be settled.

I have, &c.

(signed) *John Sutherland.*

---

(Enclosure 1.)

*Dr. Sutherland to Colonel Storks.*

Sir,

Smyrna, 28 March 1855.

IN conformity with the instructions issued by Her Majesty's Government to the Sanitary Commission appointed to proceed to Constantinople and the Crimea, I have inspected the hospital at Smyrna, with special reference to its sanitary condition, and have to state the following points, as appearing to me to require attention.

1st. The streets nearest the hospital should be placed under inspection, and cleansed daily.

2d. The recurrence of all nuisances in and about the square of the hospital, should be carefully prevented.

3d. The neighbouring slaughter-houses should be placed under regulation as to constant cleansing.

4th. All open ditches in the neighbourhood of the hospital should be carefully cleansed, and, when necessary, laid with tiles and carried over.

5th. All water lying on the surface of the ground should be drained away.

6th. The drains passing under or close to the hospital, and through its grounds, should be carefully examined, cleansed, and, where necessary, relaid. They should be cleaned out by flushing. It would be as well also to provide ventilating openings for these drains at a distance from the hospital, so that the sea or wind, when forced up the drains, may not drive the foul air within the building.

7th. Great attention should be paid to the condition of the privies. All such as are disused should be carefully cleansed and disinfected, or otherwise rendered innocuous. The new water-closets will require constant attention to keep them clean and free from odour. The ventilation of all these closets should be distinct and independent of the ventilation of the hospital, and no effluvia from them should ever reach the wards or corridors.

8th. All excreta should be instantly removed from outside the walls of the hospital.

9th. The hospital has considerable facilities for ventilation, which should be freely made use of. It would be well that some person or persons should be charged with the duty of seeing that the ventilation is always good. Special means of ventilating, and ventilating openings, should be provided in all corners



and places where there is any probability of the air becoming stagnant. The ventilation of each flat of the hospital should be complete in itself, as far as practicable.

10th. The wards and corridors on the ground floor of the hospital are unhealthy. I believe that fevers and other zymotic diseases will be found to originate in them; and I would recommend that these wards and corridors cease to be used either for the sick or for convalescents.

11th. All water used for the sick should be filtered.

12th. No sheds should be erected within the hospital square.

13th. If the vacant ground adjoining the hospital be used for hospital sheds, it should be thoroughly drained, and the sheds raised at least three feet from the ground, to allow a free circulation of air under them. The other sanitary precautions in regard to these sheds should be similar to those already stated for the hospital.

14th. Considering the heat of the climate, I am of opinion that it will not be safe to allow less than 1,000 cubic feet of space for each patient, whether in the hospital or in the sheds.

15th. In the event of the Quarantine buildings being used for convalescents, it will be necessary to drain the site of the buildings thoroughly, and to divert from the area of the site the water flowing from the cliffs above. The upper part of the building should be used in preference to the ground floor. The drinking water of the establishment is very bad, and should be carefully filtered.

16th. As a general rule, all the wards and corridors of all buildings used or to be used for hospital purposes, shall be at once thoroughly washed with a solution of quick lime (as you are about to do with the hospital), and the lime-washing should be repeated at short intervals.

17th. No interment should take place during the heat of the day, nor in a grave less than five feet deep.

18th. I would remark that although the evidence derived from medical men, who have practised in Smyrna for many years, agrees as to the site of the hospital, and the building itself being the most healthy spot in Smyrna, and as healthy as any on the coast, there are certain topographical peculiarities which appear to render a careful watching of the sick peculiarly necessary. Every case of fever, or other zymotic disease originating within any of the buildings should be carefully traced to its source. It is in this way alone that the question as to the medical topography of the site can be satisfactorily settled.

In conclusion, I think it right to express my opinion that, considering the short time the hospital has been occupied, a great deal has already been done to improve its sanitary condition.

I shall feel obliged if you will lay this communication before Dr. Meyer

I have, &c.  
(signed) *John Sutherland.*

---

(Enclosure 2.)

#### EVIDENCE in regard to the Hospital at *Smyrna*.

JAMES M'CRAITH, M. D., has practised in Smyrna eight years, but has known the country for the last 18 years.

CHARLES WOOD, M.R.C.S., has practised in Smyrna 18 years; is surgeon to the British Civil Hospital.

The climate of Smyrna during summer is very hot.

The average temperature is about 80° in summer, and about 60° in winter; highest temperature is for three months after May. The summer diseases are chiefly



chiefly fevers of an intermittent character; occasionally there are cases of dysentery. There has been no plague for 18 years. *N.B.*—There were cases of mild cholera last year, and a few deaths. There is no typhus fever; continued fever is common, with local symptoms of an abdominal character. Continued fevers occasionally pass into the remittent and intermittent forms, and intermittents pass more rarely into continued fevers. There is a form of fever in autumn chiefly with yellow skin, and apparently allied to yellow fever. It is a fatal fever; but there are not above 20 or 30 cases altogether during the year. Pulmonary diseases prevail during winter, but not to a greater extent than in other climates. They are very amenable to treatment. During summer there are mild mucous affections of the intestinal canal, coincident with the fruit season, and occasioned sometimes by the immoderate use of fruit. A remittent malarial fever, the cases of which are not numerous, exists during spring and autumn; it is called the "pernicious fever," but is amenable to treatment if early recognised; if it is not, it is fatal. About three years ago there was an epidemic, which extended over the whole country, and into the Archipelago. This disease was intermittent fever. The year was a very wet one. Except in these epidemic seasons, the diseases mentioned above do not prevail to any great extent, and they are chiefly confined to the N. E. extremity of Smyrna, at the opposite point to that of which the hospital is situated. The houses where these diseases prevail are one story high, and built on the ground, which consists of deposit and filth, with watercourses and sewers running through it. Except during epidemics, which only happen at intervals like that mentioned; the remainder of the Frank quarter usually escapes. We consider that the site occupied by the hospital is by far the most healthy in Smyrna. As a general rule, the lower flats of houses are unhealthy. The rule is to sleep as high as you can, and hence the lower wards of the hospital are not healthy. Consider that the hospital has as many sanitary advantages as can be commanded anywhere in this district of the country. 1st. It is situated at a considerable distance from all the parts of the valley that are malarious. 2d. It is directly exposed to the sea-breeze. 3d. The breeze called "imbat" prevails during the whole of the summer. It begins about 9 A.M., and blows directly from the sea to the hospital till about 6 P.M. It imparts a feeling of vigour, and is most conducive to health. 4th. The sea in front of the hospital is perfectly clear, and contains no decaying matter.

*N. B.*—There have been three cholera epidemics during 18 years.

The statement made in the House of Commons as to the unhealthiness of the locality is incorrect. The upper wards of the hospital are so much elevated above ground, that they ought to be healthy.

The dews begin to fall about September: It is dangerous to sleep out when the dew is falling. The sick would have as fair a chance of recovery in the hospital at Smyrna as anywhere in the Mediterranean.

In regard to a convalescent establishment: the villages of Bournabat and Boudjah present facilities in a sanitary point of view. In such purposes they are both healthy; little subject to fevers; and it is the custom to send patients from Smyrna to these villages to convalesce. Patients so sent convalesce rapidly. In a sanitary point of view, we consider that a proper convalescent establishment could be perfectly well and advantageously established at either village.

So far as we know, the higher ground behind Smyrna is healthy, and might suit, in a sanitary point of view, for a convalescent establishment. The town of Dourlack on the main road, about 18 miles from Smyrna, is a very healthy place. We consider that the present hospital establishment might be extended with safety by erecting wooden sheds in the open space adjoining the hospital, and raising the sheds above the ground.

*James McCraith, M. D.*

*Charles Wood,*

Surgeon to British Hospital in Smyrna.



*Drs. Sutherland and Gavin, and Mr. Rawlinson, to Lord Panmure.*

My Lord,

Balaklava, 16 April 1855.

IN reply to your Lordship's letter of the 30th of March (received here on the 12th instant), requiring to be informed how far the measures recommended by the Sanitary Commission at the hospitals at Scutari, Kulali, and Therapia have been carried into execution, we have the honour to state that, up to the 2d of April (on which day Dr. Sutherland and Mr. Rawlinson left Constantinople to join Dr. Gavin at this place), the following works had either been executed, or were in actual progress in the hospitals in question.

With regard to the hospitals at Scutari :

1st. The daily external cleansing of the Barrack and General Hospitals, including the removal and burial of all dead animals and refuse in the precincts of the buildings, was being effected by a body of native scavengers, acting under the orders of Mr. Wilson, one of the inspectors sent out from Liverpool, who commenced his duties on the 17th of March, and whose detailed report to Mr. Newlands we beg to append.

2dly. The cleansing, deodorising, and general improvement of the sewers and drains leading from the Barrack and General Hospitals to the Bosphorus, including arrangements for external ventilation and for flushing, which is practised daily under Mr. Wilson's arrangements.

3dly. The cleansing, whitewashing, and deodorising, by means of peat charcoal, of all the privies at the Barrack, General, and Palace Hospitals; the erection of flushing apparatus at the new privies erected in the Barrack-square; and the improvement of all privies within the hospitals, by the removal of the upper portions of the windows external to the corridors, so as to secure, as far practicable, to the privies, a ventilation separate from, and independent of, that of the corridors.

4thly. The lime-washing of the wards and corridors, the repairing of the floors where necessary, and the removal of some of the old wood-work in the wards of the Barrack Hospital.

5thly. The formation of channels round the outside of the Shed Hospitals in the square of the Barrack Hospital, and the improvement of the ventilation of these sheds, by means of covered turrets constructed on the roofs.

6thly. The cleansing and partial repairing of the inner squares of the Barrack and General Hospitals. Macadamised stone is being broken for their further formation and improvement.

7thly. The water-tank at the Barrack Hospital has been cleansed and roofed over, and additional works of supply will be commenced by Captain Gordon, R. E., as soon as the Turkish authorities have been consulted, and the requisite permission obtained.

8thly. The graves at the burial-ground at Scutari are being covered with peat charcoal. No graves are now made less than six feet deep; the bodies are placed therein as recommended, and peat charcoal is laid over them before the grave is filled. As grass-seeds cannot be procured in Constantinople, the surface of each grave is being covered with sods.

With regard to the hospitals at Kulali :

The drains have been examined and cleansed.

The privies have been lime-washed.

The inner square of the Barrack Hospital has been partially repaired, and stones are being got ready to complete the whole of the surface.

An additional supply of water is being brought down to the hospital by means of earthenware pipes, contouring the hill-side above the hospital; but this work was begun before the Commission arrived at Constantinople.

The suggestions for the removal of the wood-work in the new wards, made to Lord William Paulet by Mr. Rawlinson on the 30th of March, is being complied with.

Scavenging, similar to that at Scutari, was to be begun the day Dr. Sutherland and Mr. Rawlinson left Constantinople, under the directions of Mr. James Wilson, the inspector in charge.

The interment of the dead at Kulali is practised in accordance with our recommendations.

With



With regard to the Naval Hospital at Therapia :

The works recommended for the improvement of this hospital have been commenced by Admiral the Honourable F. Grey, and the same will be completed with all possible despatch.

In the case of the Floating Hospitals in the Bosphorus :

Admiral Grey cleared and closed the ship "Bombay" within a week after receiving our recommendation to that effect; and he was equally prompt in carrying out our suggestions as to the Turkish line-of-battle ship, which is now also closed.

We feel, equally with your Lordship, how essential it is not to rest content with the mere giving of an order; and it was under this conviction that the two letters (copies of which are appended to this report) were written to Lord William Paulet on the 30th of March by Mr. Rawlinson, who was then the only member of the Commission at Constantinople.

Dr. Sutherland returned from Smyrna on the 31st March, and the same afternoon he and Mr. Rawlinson saw Lord William Paulet, who undertook to have the Barrack Hospital thinned still further. The additional beds placed in corridor A, as noticed by Mr. Rawlinson, had been removed when the interview with Lord William Paulet took place.

In justice to the authorities at Scutari, Kulali, and in the Bosphorus, we beg to state that where there has been delay, we have reason to believe it has generally arisen from the want of skilled labour and proper materials.

Captain Gordon, of the Royal Engineers, the commanding officer of Engineers at Scutari and Kulali, would gladly have more Sappers placed at his command to enable him to get the works we have recommended completed with the least possible delay. Native workmen can be obtained in any numbers, but they are of little use unless constantly and narrowly overlooked by English superintendents.

Before concluding, we may state to your Lordship that greater progress might have been made in the works of construction, and the works themselves better laid down, but for the delay in the transmission of the materials ordered by Mr. Rawlinson before quitting England. The vessel on board which they were placed had not arrived when Dr. Sutherland and Mr. Rawlinson left Constantinople, and according to the letter of advice received by the latter from the shippers, she had not sailed from England until three weeks after the time when the materials were promised to be sent off.

We have, &c.

(signed) *John Sutherland.*  
*Hector Gavin.*  
*Robert Rawlinson.*

(Enclosure 1.)

REPORT by Mr. *James Wilson*, Inspector of Nuisances at Scutari Hospitals.

Sir,

Scutari, 27 March 1855.

IN accordance with my instructions, I beg to report that on the 17th March 1855, I commenced operations at the Barrack Hospital with 13 men. During the day the outside of the hospital and one-fourth of the hospital-square were swept, and 13 hand-carts of filth and offensive matter removed; nine dead dogs lying in the vicinity of the hospital were buried. The flushing apparatus for the privies and sewers could not be used, as the workmen had not finished them.

March 19.—Thirteen men employed, who swept the barrack-square, the ground outside the hospital, and the adjacent streets of the village. A large pit was dug in the field near the Turkish burying-ground, and the carcasses of four dogs and two horses placed therein; 19 hand-carts of filth and rubbish were removed from the privies and from the hospital precincts, and 12 large baskets of filth from the adjacent streets.

March 20.—Thirteen men employed, who swept the ground surrounding the hospital, the barrack-square, and the streets adjacent; 20 hand-carts of filth



and rubbish from the privies, and from the places swept, removed to the appointed place of deposit; I made use of peat charcoal before removing the offensive matter from the privies. Fourteen baskets of filth removed from the streets in the village, and two dead dogs buried.

March 21.—Thirteen men employed on the same work as yesterday, and peat charcoal again used. Nineteen hand-carts of filth and rubbish were taken from the privies and the vicinity of the hospital, and 12 large baskets full from the streets near it.

March 22.—Thirteen men similarly employed; 25 hand-carts of filth and rubbish were taken from the privies and the vicinity of the hospital, and eight large baskets full from the streets; peat charcoal was again used before removing the offensive matter from the privies.

March 23.—Thirteen men similarly employed. I had two of the privies which had been lately repaired cleaned out, and deodorised with peat charcoal; 26 hand carts of filth and rubbish were removed from the streets and hospital. The water-closet attached to Lord William Paulet's quarters being in an offensive state, I cleansed it out myself, and applied peat charcoal. This day five men were employed by me for the first time at the general hospital in the removal of about two tons of filth, rubbish, and offensive matter, laid down by the men engaged in cleansing this hospital before I took charge of it. Part of the ground outside the building was also swept, and all the filth and rubbish removed to the appointed place of deposit.

March 24.—Fifteen men employed at the barrack, and five at the general hospital, who swept the barrack-squares and the places adjoining; 24 hand-carts of filth and rubbish were removed from the barrack, and 10 from the general hospital. The flushing apparatus on the west side of the barrack hospital being this day completed, I used them with the best effect; I employed four men to fill the tanks, and emptied them three times during the day.

I beg further to state that as soon as the flushing apparatus for the privies and the remaining sewers are ready, I shall commence work with them. From the distance at which water has to be procured, I find I must employ 12 men for this part of the work. I am obliged to send them to the Bosphorus for it, as Captain Gordon, R. E., is afraid of the hospital supply running short in summer. If I can get men and tools, I shall begin work at Kulali on Monday the 2d, and at the Palace Hospital on Saturday the 7th of April. I find it very difficult to get the men to work.

I beg to append an abstract of the quantity of filth, rubbish, and offensive matter removed during the first week I have been employed here.

March 17	-	-	-	-	13 hand-carts or baskets.
" 19	-	-	-	-	31
" 20	-	-	-	-	34
" 21	-	-	-	-	31
" 22	-	-	-	-	33
" 23	-	-	-	-	26
And two tons of filth from Kulali					
" 24	-	-	-	-	34
TOTAL - - -					202

Animals buried:—

Dogs	-	-	-	-	-	15
Horses	-	-	-	-	-	2
TOTAL - - -						17

I remain, &c.  
(signed) *James Wilson.*



(Enclosure 2.)

Mr. Rawlinson to Brigadier-General Lord William Paulet.

Hôtel d'Angleterre, Constantinople,

30 March 1855.

My Lord,

I BEG to call your Lordship's attention to the following extracts from the report of the Sanitary Commission on the Hospitals at Scutari:—

"At the time of our inspection most of the corridors contained two rows of beds. Considering the state of the ventilation, we are of opinion that not more than one row of beds should be permitted."

And, from the recommendations of the Commission,—

"That in all cases the distance from centre to centre of each bed be not less than six feet, and that the amount of space for each inmate, exclusive of ventilation shaft and window recesses, be not less than 1,000 cubic feet.

"That the number of sick within the hospital be reduced as soon as practicable, and that the corridors should be put and retained to their true use; viz., to afford means of access to the several rooms, to give protection from external variations of temperature, and to facilitate full internal ventilation."

I send your Lordship these extracts, because, in the course of an inspection made by me yesterday afternoon at the Barrack Hospital, I found that some of the corridors at least contained quite as many inmates as before, and that the double row of beds continued as usual; whilst in Corridor A, within the last few days, 12 more beds have been placed, although, at the time the Sanitary Commission made their report, this corridor presented quite as great an example of overcrowding as any of the others, in none of which have the inmates the 1,000 cubic feet of space recommended.

In passing along the east side of the barrack, where part of the dépôt is quartered, I noticed in almost every ward I entered that the receptacles for the bones, dust, and refuse, had not been emptied, and that, in the corridor outside, the orderlies had not in every case removed the urine made during the day.

This last point is perhaps one that, strictly speaking, does not affect the condition of the hospital; but, as a matter of general cleanliness, I consider it my duty to draw your Lordship's attention to the subject, for I feel confident I need only do so to ensure a speedy remedy of the evil.

I have, &c.

(signed) Robert Rawlinson.

(Enclosure 3.)

Mr. Rawlinson to Brigadier-General Lord William Paulet.

Hôtel d'Angleterre, Constantinople,

30 March 1855.

My Lord,

YESTERDAY I made a second inspection of the hospital at Kulali; and in consequence of the state of the old ceilings in the five wards now being fitted up for the reception of patients, and the general condition of the barracks with respect to vermin, I have found it necessary to give Captain Gordon, R. E., verbal instructions to remove the ceilings at once, and to re-case the tiles with new wood, over which plaster is to be placed.

I believe this alteration will have the effect of removing an immense quantity of fleas and other vermin, and of at least diminishing an evil already seriously felt; besides which, it will give the inmates of the wards more cubical space.



Dr. Humphrey, the medical officer in charge of the hospital, fully agrees with me in the importance of the alterations on both the grounds already mentioned.

With respect to the other parts of the hospital, I found that, although some of the instructions in the Sanitary Commissioners' Report were in course of execution, no clearance had been made of the patients on the side of the Barrack Hospital fronting the Bosphorus (the immediate abandonment of which was recommended), and that the sick-ward over the Turkish cavalry stable had quite as many inmates as when the Sanitary Commission inspected it.

In future, I should feel obliged if your Lordship would permit the medical and other officers in charge of the different hospitals to have copies of the recommendations and directions given by the Commission, as I find that in some instances the officers would have been materially assisted in their arrangements had they known what the Sanitary Commission had directed to be done.

I have, &c.  
(signed) *Robert Rawlinson.*

---

Brigadier-General Lord William Paulet to Lord Panmure.

My Lord,

Scutari, 25 April 1855.

I HAVE had the honour to receive your Lordship's despatch, dated the 11th instant, and numbered as per margin, by which I am gratified to learn that you approve of the measures which I am adopting with a view to obtain an increased amount of hospital accommodation.

With reference to the desire expressed by you to be furnished with more detailed information upon this subject, I beg to observe, in the first instance, that as the members composing the Sanitary Commission, and other superior and competent authorities, had signified to me their intention of transmitting to you a minute report upon the condition of these hospitals and their inmates, I abstained from making further comment, under the conviction that the subject would thus have greater weight than if it emanated from myself.

I have much pleasure, my Lord, in reporting that everything under my command is progressing as favourably as I could wish. Sickness has very much diminished, and so has the mortality. In January last the number of deaths was 1,480, in February 1,254, and in March 424, every month showing a steady decrease over the preceding one. The average mortality at present is 5½ per diem.

I have exerted myself, in every way to add to the comfort and requirements of these hospitals, and am enabled to state that every patient has now above 1,200 cubic feet of space; thus exceeding by 200 that recommended by the Sanitary Commission; while six feet is allotted to each bed from centre to centre. There is besides vacant accommodation for 2,000 beds.

In addition to the wooden hospital about to be erected by Dr. Parkes, in conjunction with Mr. Brunton, the engineer, Her Majesty's Ambassador has offered to place at my disposal, if necessary, the house at Therapia belonging to the Russian embassy.

I have made further provision at Kulaly by converting its fine riding-school into a convalescent hospital, which is capable of locating 180 men. It lies contiguous to the Bosphorus, and has proved very healthy. I have, moreover, applied to the same purpose the buildings formerly used as stables which, having now been completed, make spacious and airy wards.

It is gratifying to me to inform you that the temporary wooden sheds constructed within this barrack are in course of occupation, and are reported by the senior medical officers as answering, in an eminent degree, the purposes of convalescence, from the ample space and free ventilation which they afford.

I am constructing a temporary barrack on the common, between this and the General Hospital, for locating the dépôt, and, when completed, it will add materially to the hospital accommodation.

I would also add that the medical officers are deserving the greatest praise for the zealous manner in which they discharge their duties. The orderly attendance is also satisfactory.

I may



I may confidently assert, as regards the general condition of these hospitals, that they surpass in cleanliness and comfort any I have seen in England and elsewhere; and this opinion is corroborated by the various and enlightened individuals, both English and foreign, who have visited them.

I have continual applications from the private practitioners, artificers, ladies, and nurses, for extra expenses, such as field allowance, forage for horses, servants' allowance, &c., all of which, except their rations, I do not consider myself at liberty to sanction; and I beg to suggest that these expenses should be covered by the annual salaries of the individuals, which might be increased in proportion to the merits and abilities of each.

I have used my utmost endeavours to carry out the suggestions made by the Sanitary Commission, most of which are already in course of operation.

As regards this building, every window of which is open to the public thoroughfares, it is the depôt of the army in the Crimea, and contains the stores, prisons, depôt stores of each division, the armoury, the offices, and Miss Nightingale's extensive establishment, all of which require necessarily the admission of a proportionate number of workmen, and all these render it more fit for a barrack than an hospital.

I have caused the Turkish hulk line-of-battle ship to be cleared, which I propose to retain, in the event of a pressure, as a store, it being of no expense to Her Majesty's Government.

The "Bombay" convalescent transport-ship has also been cleared and given over to Rear-Admiral Grey.

I have accommodation for 2,000 horses, to be stabled in buildings partly repaired and partly constructed for the purpose.

I have had constructed stabling and barracks at Galata Saraë, in Pera, near the British embassy, to serve as a depôt for the Royal Artillery.

I need hardly observe, my Lord, that besides this being the depôt for the army in the Crimea, all stores passing and repassing here, and all officers and troops having to report themselves to me, and in most cases to be transhipped, my time is therefore fully occupied.

Hoping these arrangements will meet with your approbation, and that this report is sufficiently in detail,

I have, &c.

(signed) *W. Paulet*,

Brigadier-General commanding Troops.

*R. Lawson, Esq., to Dr. Smith.*

Sir,

P. M. O.'s Office, Scutari, 2 February 1855.

I HAVE the honour to acknowledge the receipt of your letter of the 18th ultimo with reference to a new dead-house at the General Hospital at this station, and in reply beg to inform you that a requisition has been already made on Captain Gordon, of the engineers, to have a wooden building erected for this purpose within the hospital enclosure, but apart from the building, which will be commenced as soon as some additions making in the barrack are completed.

I have, &c.

(signed) *Robt. Lawson*,

Deputy Inspector-General, P. M. O.

*P. S.*—The building at present used as a dead-house was originally occupied as a stable, and is apart from the hospital.

*R. L.*

*Dr. Cumming to Brigadier-General Lord William Paulet.*

Inspector-General of Hospitals Office, Scutari,

6 February 1855.

My Lord,

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 to be 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 speedily as possible.

I have, &c.  
(signed) *A. Cumming*,  
Inspector-General of Hospitals.

*R. Lawson, Esq., to Dr. Cumming.*

Sir,

General Hospital, Scutari, 9 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 shows 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, 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) *Robt. Lawson*,  
Deputy Inspector-General.

*M. Wreford, Esq., to Dr. A. Smith.*

Sir,

Scutari, 12 February 1855.

I HAVE the honour to acknowledge the receipt of your letter of the 26th ult., enclosing a list of washing machines, &c., and to acquaint you that the "Eagle" arrived on the 9th instant, and the stores she brought out are in course of landing.

The enclosed letter and return are the best reply I can give to your P. S., and to add, that I know nothing officially of the subsidiary washing establishment to which you allude, the necessity for which has never been made apparent to me.

I have, &c.  
(signed) *M. Wreford*,  
Purveyor in Chief.



*S. Stuart, Esq., to M. Wreford, Esq.*

Sir,

Barrack Hospital, Scutari, 12 February 1855.

I HAVE the honour to transmit for your information the enclosed return of washing done by the contractors, &c., for this hospital, during November and December 1854, and January 1855.

I may here be allowed to state, that in no instance have I known application made at the clean linen store for a fresh supply, or for an exchange of bedding, in which the same was not instantly complied with.

I have, &c.  
(signed) *Selkirk Stuart*,  
Purveyor to the Forces.

*Dr. A. Cumming to Brigadier-General Lord William Paulet.*

My Lord,

Barrack Hospital, Scutari,  
14 February 1855.

I THINK myself called on to point out to your Lordship, as I have often done verbally, how necessary it is that the dépôt 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 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 number 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, &c., 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 dépôt, and more especially the women and children, are very insufficiently lodged, and their presence here most seriously interfered 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*,  
Inspector-General of Hospitals.

*Dr. A. Cumming to Lord William Paulet, Brigadier-General.*

Sir,

Scutari, 18 February 1855.

WITH reference to the Secretary-at-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 service, so subversive of hospital discipline, and 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), 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-General of Hospitals.

Dr. *A. Cumming* to Dr. *Smith*.

Sir,

Scutari, 22 February 1855.

IN reply to your letter of 31st January, respecting the huts erected in this Barrack-square, I have to acquaint you that they 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 Cruikshank, 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 dépôt, to enable the remaining barrack accommodation to be given up to 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*,  
Inspector-General of Hospitals.

Dr. *A. Cumming* to Brigadier-General Lord *William Paulet*.

My Lord,

Scutari, 22 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 dépôt. 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 dépôt 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-General of Hospitals.



Dr. A. Cumming to Dr. Smith.

Sir,

Scutari, 22 February 1855.

IN acknowledging your letter of the 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 D. I. G. 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 the proper conveyance of the bodies to the graveyard, and that no deleterious effects may arise from the graves being of insufficient depth or duly covered over.

I have, &c.

(signed) A. Cumming,  
Inspector-General of Hospitals.

J. Forrest, Esq., to Dr. Smith.

Sir,

London, 2 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 the 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. Cruickshank 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,  
Deputy Inspector-General of Hospitals.



Dr. A. Cumming to Dr. Smith.

Sir,

Scutari, 3 March 1855.

I HAVE the honour to forward, for your information, the accompanying letter from Dr. Bryce, the author of some remarks on the remittent fever of the Levant, circulated under your authority some time last year.

As far as I understand Dr. Bryce, he wishes to have a hospital for 100 patients, complete in itself as to *personnel* and *materiel*, including a sufficient surgical staff, as he does not practise as a surgeon, and he to have, as physician, entire charge of it, assisted by the occasional advice of the gentlemen he mentions in his letter.

I have, &c.

(signed) A. Cumming,  
Inspector-General of Hospitals.

---

(Enclosure 1.)

Dr. Bryce to Dr. A. Smith.

Sir,

Pera, Constantinople, 26 February 1855.

IN compliance with the invitation of the Inspector-general of Hospitals, Mr. Cumming, to enclose with his despatches for you to-day any statement I have to offer on a measure for temporarily, and for a specific purpose, placing a number of the military sick from the Crimea under the immediate medical charge of certain resident English physicians, I have the honour to submit the following observations, which embrace the chief facts and arguments employed in the interviews the Inspector-general of Hospitals favoured me with, for the purpose of discussing the subject. The duty of submitting this statement is the more incumbent on me, that Mr. Cumming kindly avowed his own report on the measure would be unfavourable to its reception by you.

The well-authenticated accounts of the daily rate of mortality in the hospitals of Scutari were recently deplored, and the causes thereof discussed in certain influential circles here; and the question was mooted in a pure spirit of patriotism and commiseration, whether the medical experience of the English physicians of Pera could not be made useful in any way for the preservation of soldiers' lives. I became consequently the medium of some correspondence, enclosed, with Dr. Laing on the subject. My letter to him states briefly but intelligibly the object of the proposition.

The grounds on which the professional presence and interference of Dr. Millengen, Dr. Zohrab, and myself in a military hospital, can be possibly excused are: First, The fact of the extraordinary mortality from internal disorders alone among the troops, in spite of the earnest labours and scientific knowledge of the medical staff of the army. Second, The equally undoubted fact, that in the treatment of febrile diseases, dysentery, &c., the practice adopted by the gentleman named, and by Dr. M'Guffoy and Dr. M'Carthy also, eminent resident physicians, differs most essentially in principle and detail from that generally pursued at Scutari. Third, That the difference in results of these respective modes of treatment is obvious to the commonest apprehension.

The motives of the gentlemen thus proffering their gratuitous services in the interest of science and humanity are rightly appreciated by those who know them, whose testimony must be accepted by those who have not this advantage. To these it may be told, however, that Dr. Millengen and Dr. Zohrab, occupying



occupying the highest professional estimation and position here, and engaged in a practice of 1,500 *l.* to 1,000 *l.* a year each, are ready to make a pecuniary sacrifice of three or four hours' labour a day, two or three times a week, in consultation with myself, who has little more to sacrifice than he has already done in this very path of duty. I am proud to appeal to yourself, Sir, for evidence of the disinterestedness of my zeal.

The design of the projected undertaking is simply this, that the gentlemen named with myself should have placed under their exclusive medical charge, directly on their arrival from the Crimea, a certain number of sick soldiers; that the supply of these should be continued, say for four or six months, with all fitting appliances, to enable them to illustrate the principles, exemplify the practice, and demonstrate the results of the treatment adopted by every respectable practitioner of Pera, whatever his nation or school, in the febrile diseases of the Levant. This treatment is not one of nostrums or specifics, but is derived from and founded on the collective pathological researches, bedside observations, and progressive experience and modification in practice of very many distinguished European physicians during the last 40 years.

The proper means for the advantageous execution of this philanthropic measure, it has been suggested, ought to consist in the appropriation of a separate building for the purpose. I have had the satisfaction to point out to Mr. Cumming, and to other authorities, a building in every respect most admirably adapted. It is situated close to the water edge, on the European side of the Bosphorus, at a spot where every vessel ascending the stream, even on its passage from Scutari to Kulali, nearly opposite to which it lies, must approach to within 20 yards to escape the force of the mid-current. The building is unoccupied, and might be made ready to receive patients at a very small outlay in ten days after orders were given.

I am deeply grieved to say that Drs. Millengen, Zohrab, and myself must respectfully decline the responsibility of attempting the treatment of the sick in the crowded wards and polluted air of the hospital establishments at Scutari.

There are, unhappily, certain physical conditions that counteract all medicinal agents, and such undoubtedly abound in and encompass this locality.

It is now my painful duty, Sir, to advert to the reasons frankly stated to me by Mr. Cumming, wherefore (1.) he is disinclined to counsel and concert the immediate carrying out the measure described, or (2.) even to recommend its future execution in virtue of your authority. The former he considers to exceed his official powers, and to this objection I have not a word to reply. The second category of objections specified the small relief that the conveyance and treatment of 200 sick and convalescent in the projected hospital at Cooloo-chessmeh would afford to the mass of sickness at Scutari. But I humbly submit that this is not the question; but whether 200 beds afford a sufficiently large scope for the fair and faithful realisation of the issue to be tried at the former locality? Mr. Cumming also doubts his ability to make any abstraction whatever from the medical staff at Scutari, for the purpose of assisting in the successful prosecution of the undertaking contemplated. It is very obvious that the help of at least one military assistant-surgeon, two dispensers, and several orderlies would be required.

I avail myself of this opportunity to express the sense I entertain of the courtesy and frankness of Mr. Cumming in the two interviews he favoured me with to explain this project. And with renewed assurances of my high personal respect for yourself,

I have, &c.

(signed) *Charles Bryce, M. D.*



## (Sub-Enclosure 1.)

Dr. Bryce to P. Laing, Esq.

Sir,

Pera, Constantinople, 19 February 1855.

WITH reference to a conversation of Mr. M'Donald with yourself on Saturday last, just reported to me by Mr. Chenery, I have the honour to state that I am prepared to enter upon the chief medical charge as physician of a number not exceeding 100 sick soldiers in a military hospital, the locality of which can be subsequently agreed upon; and I am authorised to say, that in this undertaking I shall have the active co-operation of Dr. Millingen and Dr. Zohrab as consulting physicians.

My pretensions to this distinction are founded principally on the opportunities I had of observing and treating the prevailing diseases of the Levant in 1827-28-29; on my proffered gratuitous services to the War Department last April, then fearing and foreseeing some of the sickness that has visited the British expeditionary army; and on my presence now in Turkey, actuated by the ambition, and for the purpose of adding something to the value of the memoir on the remittent fevers of the Levant which the Director-general did me the honour to solicit, and to recommend to the special use of the English medical staff serving in Turkey.

As regards the high guarantee for the faithful and enlightened discharge of the self-imposed duties to be entrusted to the experience and humanity of Dr. Millingen and Dr. Zohrab, as my fellow-labourers in this very important work, I respectfully think it is enough for me to offer, and for the authorities to accept, the distinguished position that 25 years' medical practice at Constantinople has raised them to in public and professional opinion.

I have, &amp;c.

(signed) Charles Bryce.

## (Sub-Enclosure 2.)

P. S. Laing, Esq., to Dr. Bryce.

Sir,

Scutari, 20 February 1855.

I HAVE the honour to acknowledge the receipt of a letter from you, referring to a conversation which I had with Mr. M'Donald, as to the possibility of you and some of the private practitioners in Constantinople being placed in medical charge of some of our sick soldiers from the Crimea.

In answer, I beg to inform you that I have communicated the contents to Dr. Cumming, the principal medical officer at Scutari, and who has requested me to convey to you his wish for a personal interview, at any time convenient for yourself.

I have, &amp;c.

(signed) P. Sinclair Laing,  
Staff Surgeon.



*M. Wreford, Esq., to Dr. A. Smith.*

Purveyor-in-Chief's Office, Scutari,  
17 March 1855.

Sir,

IN compliance with your letter to the Principal Medical Officer, dated 22d ultimo, requesting from me a monthly return, showing during that period the daily average of sick in hospital, and the quantities expended of those articles of which there is the greatest demand, I have the honour to enclose the same herewith for the month of February, showing the average expenditure as regards the hospitals at Scutari, Koolalie, and the Hospital Ship (Turkish hulk).

Also a return of issues to transports, and shipments to Balaklava, &c., for that month; and a further similar return for the first 14 days of the present month.

On the receipt of your letter above quoted I called on the purveyor at Balaklava for the necessary information to enable me to include that station also, but up to this time I have not received it. The expenditure there, however, must be considerable.

With regard to sending home requisitions, I beg to state that the circumstances with which we have been surrounded, the uncertainty of demands, added to the hitherto want of strength in the Purveying Department, and the inefficiency, for want of experience, among the few I had, rendered it impossible to attend to more than current pressing duties; to keep up accounts or returns was not practicable. I could therefore do no more in this respect than what I pointed out in my letter of the 11th January last. I hope and trust, however, better things are now approaching, and I have every reason to believe that as soon as I can get at a state of the stores generally—an operation now in progress—to be able to furnish you with requisitions for such things as may appear necessary to keep up the stock, so as to meet ordinary as well as emergent or extraordinary demands.

A considerable diminution of expenditure appears to be taking place in the several hospitals here, while an influx of all sorts of supplies, on speculation by the mercantile community, has enabled the purveyor at Balaklava to supply himself on the spot lately on much better terms than they could be procured here.

I have, &c.,  
(signed) *M. Wreford,*  
Purveyor-in-Chief.

---

(Enclosures.)

LIST of RETURNS forwarded by the Purveyor-in-Chief, *Scutari*, to the Director-General, Army and Ordnance Medical Department, War-Office, 19 March 1855.

1. RETURN of the Average Daily Number of Patients in the Hospitals at Scutari, and the Daily Average Issues of Provisions, Medical Comforts, &c., for the month of February 1855.
2. Ditto ditto, from 1st to 15th March 1855.
3. Ditto of Provisions, Medical Comforts, &c. issued to Ships during the month of February 1855.
4. Ditto ditto to Transports and Out-Stations, for the same period.
5. Ditto ditto ditto ditto, from 1st to 15th March 1855.

*M. Wreford,*  
Purveyor-in-Chief.



No. 1.—RETURN of the Average Daily Number of PATIENTS in the under-mentioned Hospitals at *Scutari*, and the Average Daily Issues of PROVISIONS, MEDICAL COMFORTS, &c., for the month of February 1855.

HOSPITALS.	Average Number of Patients.	Meat.	Bread.	Potatoes.	Vegetables.	Rice.	Barley.	Tea.	Sugar.	Salt.	Oatmeal.	Sago.	Arrowroot.	Milk.	Porter.	Port Wine.	Sherry.	Marsala.	Brandy.	Fowls.	Eggs.	Oranges.	Lemons.	Lime Juice.	Essence of Beef.	Butter.	Fish.	Preserved Meats.	Candles.		Soap.	Preserved Potatoes.	Preserved Soup.	Coffee.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
																													Lbs.	Lbs.					Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.

M. Wreford, Purveyor-in-Chief.

No. 2.—RETURN of the Average Daily Number of PATIENTS in the under-mentioned Hospitals at *Scutari*, and the Average Daily Issues of PROVISIONS, MEDICAL COMFORTS, &c., between the 1st and 15th March 1855.

HOSPITALS.	Average daily Number of Patients.	Meat.	Bread.	Potatoes.	Vegetables.	Rice.	Barley.	Tea.	Sugar.	Salt.	Outmeal.	Sage.	Arrowroot.	Milk.	Porter.	Port Wine.	Sherry.	Marsala.	Brandy.	Eggs.	Oranges.	Lemons.	Lime Juice.	Essence of Beef.	Butter.	Fish.	Preserved Meats.	Candles.	Soap.	Preserved Potatoes.	Preserved Soup.	Coffee.
General Hospital	838	Lbs. 307	Lbs. 781	Lbs. 434	Lbs. 54	Lbs. 17	Lbs. 54	Lbs. 14	Lbs. 114	Lbs. 12	Lbs. 3	Lbs. 10	Lbs. 4	Lbs. 504	Lbs. 338	Lbs. 172	Lbs. 4	Lbs. 12	Lbs. 22	No. 53	No. 474	No. 108	Oz. 204	Tins. 9	Lbs. 9	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1
Barrack Hospital	1,650	Lbs. 745	Lbs. 1,562	Lbs. 811	Lbs. 203	Lbs. 52	Lbs. 120	Lbs. 23	Lbs. 201	Lbs. 24	Lbs. 20	Lbs. 21	Lbs. 172	Lbs. 888	Lbs. 328	Lbs. 155	Lbs. 4	Lbs. 4	Lbs. 18	No. 118	No. 389	No. 27	Oz. 112	Tins. 40	Lbs. 40	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1
Koohie Hospital	678	Lbs. 364	Lbs. 1,121	Lbs. 328	Lbs. 21	Lbs. 21	Lbs. 14	Lbs. 112	Lbs. 14	Lbs. 14	Lbs. 3	Lbs. 3	Lbs. 18	Lbs. 506	Lbs. 367	Lbs. 184	Lbs. 1	Lbs. 1	Lbs. 4	No. 31	No. 730	No. 1	Oz. 12	Tins. 6	Lbs. 4	Lbs. 9	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1
Hyder Pasha Hospital	434	Lbs. 212	Lbs. 451	Lbs. 238	Lbs. 74	Lbs. 25	Lbs. 13	Lbs. 8	Lbs. 58	Lbs. 5	Lbs. 1	Lbs. 1	Lbs. 21	Lbs. 330	Lbs. 228	Lbs. 76	Lbs. 1	Lbs. 1	Lbs. 9	No. 29	No. 470	No. 13	Oz. 40	Tins. 6	Lbs. 4	Lbs. 9	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1
Hospital Ship	312	Lbs. 207	Lbs. 413	Lbs. 71	Lbs. 71	Lbs. 6	Lbs. 31	Lbs. 6	Lbs. 40	Lbs. 9	Lbs. 1	Lbs. 1	Lbs. 6	Lbs. 152	Lbs. 32	Lbs. 5	Lbs. 12	Lbs. 12	Lbs. 1	No. 44	No. 1	No. 83	Oz. 1	Tins. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1
TOTALS	4,102	Lbs. 1,925	Lbs. 4,348	Lbs. 1,811	Lbs. 465	Lbs. 121	Lbs. 250	Lbs. 69	Lbs. 525	Lbs. 64	Lbs. 23	Lbs. 19	Lbs. 49	Lbs. 2,380	Lbs. 1,263	Lbs. 502	Lbs. 4	Lbs. 20	Lbs. 54	No. 291	No. 2,107	No. 149	Oz. 368	Tins. 64	Lbs. 4	Lbs. 9	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1	Lbs. 1

M. Wreford, Purveyor-in-Chief.



No. 3.—RETURN of PROVISIONS, MEDICAL COMFORTS, &amp;c., issued to the under-mentioned Ships during the Month of February 1855.

DATE.	SHIP.	Brandy.	Port Wine.	Sherry.	Sugar.	Arrowroot.	Rice.	Sago.	Potatoes.	Lime Juice.	Tea.	Soap.	Candles.	Preserved Meats.	Essence of Beef.	Preserved Potatoes.	Oatmeal.	Barley.	Preserved Soup.
1855 :		Doz.	Doz.	Galls.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	‡ Pints.	Lbs.	Lbs.	Lbs.	Lbs.
2 February	Golden Fleece	1	1½	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5 "	Sydney	3	4	10	—	28	—	—	—	—	—	—	—	—	—	—	—	—	—
6 "	Gonzela	—	—	—	—	56	56	56	560	—	—	—	—	—	—	—	—	—	—
8 "	Golden Fleece	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—
15 "	Arabia	2	6	—	100	—	—	—	—	48	—	—	—	—	—	—	—	—	—
19 "	Australian	2	12	—	250	224	150	30	—	252	30	50	48	100	250	—	—	—	—
20 "	Cornwall	5	11	—	65	77	—	39	—	140	19½	39	—	126	40	150	130	130	—
22 "	Tynemouth	1	6	—	—	—	112	—	—	—	—	—	—	—	—	—	—	—	—
25 "	Canterbury	7	13	—	84	112	—	50	—	—	25	50	—	160	50	168	184	168	160
27 "	Ditto	—	—	—	—	—	—	—	—	121½	—	—	—	—	—	—	—	—	—
27 "	Severn	—	—	—	—	—	—	—	—	—	—	336	—	—	—	—	—	—	—
27 "	Brandon	—	—	—	—	—	—	—	—	—	—	112	—	—	—	—	—	—	—
	TOTALS	21	53½	10	499	500	318	175	560	561	74½	587	48	386	340	318	314	298	160

M. Wreford, Purveyor-in-Chief.



## No. 4.

RETURN of Articles of MEDICAL COMFORTS issued from the PURVEYOR'S STORES at *Scutari*, during the Month of February 1855, for the under-mentioned Services.

Issued to	Brandy.		Port Wine.		Sherry.		Marsala.		Sugar.	Arrowroot.	Rice.	Sago.	Fresh Potatoes.	Preserved Potatoes.	Dried Potatoes.	Lime Juice.	Tea.	Soap.	Candles.	Preserved Meats and Soups.	Essence of Beef.	Oatmeal.	Pearl Barley.	Concentrated Milk.
	Galls.	Doz.	Galls.	Doz.	Galls.	Doz.	Gls.	Doz.																
Shipping Transports	-	21	-	53 ½	10	-	-	-	499	500	318	175	560	318	-	561 ½	74 ½	587	48	546	340	314	298	-
Abydos	-	-	-	-	20	-	20	-	-	112	-	189	-	-	-	-	-	-	-	-	-	-	-	-
Balaklava	-	279	-	1,500	54	173	-	-	-	1,850	-	674	-	672	4,368	-	-	-	1,080	4,536	5,139	-	2,000	66
Smyrna, (Melita)	-	-	-	230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ditto, (Tynemouth)	-	-	-	230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	279	21	1,960	53 ½	84	173	20	-	499	2,462	318	1,038	560	990	4,368	561 ½	74 ½	587	1,128	5,082	5,479	314	2,298	66

Purveyor-in-Chief's Office, Scutari, 18 March 1855.

M. Wreford, Purveyor-in-Chief.

## No. 5.

RETURN of MEDICAL COMFORTS, &c., issued to Transports, and the under-mentioned Hospitals, from 1st to 15th March 1855.

To	Port Wine.		Sherry.	Marsala.	Brandy.	Soup.	Essence of Beef.	Preserved Meat.	Preserved Soup.	Preserved Potatoes.	Arrowroot.	Sago.	Oatmeal.	Barley.	Sugar.	Tea.	Lime Juice.	Salt.
	Galls.	Doz.																
Transports	-	5	-	1	2 ½	Lbs. 242	Tins. 18	Lbs. 90	Lbs. 110	Lbs. 330	Lbs. 36	Lbs. 18	Lbs. 60	Lbs. 80	Lbs. 30	Lbs. 10	Lbs. 40 ½	Lbs. 50
Abydos	-	57 ½	-	-	-	-	-	-	-	-	-	-	-	-	-	504	-	-
Balaklava *	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smyrna	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	-	57 ½	5	1	2 ½	242	18	90	110	330	36	18	60	80	30	514	40	50

\* Supplies during this month have been obtainable at Balaklava on much better terms, and a greater abundance than at Constantinople.

M. Wreford, Purveyor-in-Chief.



RETURN of MEDICAL COMFORTS issued from the Purveyor's Stores at *Balaklava*,  
between the 1st and 28th February 1855.

Port Wine	-	-	-	-	-	-	-	-	-	-	Dozens	274 $\frac{2}{10}$
Sherry Wine	-	-	-	-	-	-	-	-	-	-	Dozens	96
Rum	-	-	-	-	-	-	-	-	-	-	Bottles	490
Brandy	-	-	-	-	-	-	-	-	-	-	Gallons	8
Brandy	-	-	-	-	-	-	-	-	-	-	Bottles	358
Tea	-	-	-	-	-	-	-	-	-	-	Lbs.	810. 3.
Sugar	-	-	-	-	-	-	-	-	-	-	Lbs.	4,143. 1.
Arrowroot	-	-	-	-	-	-	-	-	-	-	Lbs.	1,886. 7.
Sago	-	-	-	-	-	-	-	-	-	-	Lbs.	893
Rice	-	-	-	-	-	-	-	-	-	-	Lbs.	1,743. 1.
Preserved Meat	-	-	-	-	-	-	-	-	-	-	Lbs.	2,190. 8.
Preserved Soups	-	-	-	-	-	-	-	-	-	-	Lbs.	1,819
Essence of Beef	-	-	-	-	-	-	-	-	-	-	Tins	4,701
Candles, Sperm	-	-	-	-	-	-	-	-	-	-	Lbs.	283
Candles, Tallow	-	-	-	-	-	-	-	-	-	-	Lbs.	730
Oil	-	-	-	-	-	-	-	-	-	-	Qts.	72
Preserved Potatoes	-	-	-	-	-	-	-	-	-	-	Lbs.	5,759 $\frac{1}{2}$
Preserved Milk	-	-	-	-	-	-	-	-	-	-	Tins	1,526 $\frac{1}{2}$
Preserved Cocoa and Milk	-	-	-	-	-	-	-	-	-	-	Tins	526
Concentrated Preserved Milk	-	-	-	-	-	-	-	-	-	-	Tins	735
Oatmeal	-	-	-	-	-	-	-	-	-	-	Lbs.	30
Soap	-	-	-	-	-	-	-	-	-	-	Lbs.	666
Salt	-	-	-	-	-	-	-	-	-	-	Lbs.	185
Limejuice	-	-	-	-	-	-	-	-	-	-	Pts.	6,417
Barley	-	-	-	-	-	-	-	-	-	-	Lbs.	424
Cocoa	-	-	-	-	-	-	-	-	-	-	Lbs.	205. 8.
Chocolate	-	-	-	-	-	-	-	-	-	-	Lbs.	89
Mustard	-	-	-	-	-	-	-	-	-	-	Lbs.	24
Pepper	-	-	-	-	-	-	-	-	-	-	Lbs.	22
Porter	-	-	-	-	-	-	-	-	-	-	Dozens	46
Ale	-	-	-	-	-	-	-	-	-	-	Casks	1
Ale	-	-	-	-	-	-	-	-	-	-	Dozens	10
Macaroni	-	-	-	-	-	-	-	-	-	-	Lbs.	78

*D. FitzGerald,*

Purveyor to the Forces.







Dr. *A. Cumming* to Dr. *Smith*.

Sir,

Scutari, 25 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 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 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 Marmora 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*,  
Inspector-General of Hospitals.

---

Dr. *A. Cumming* to Dr. *Smith*.

Sir,

Scutari, 5 April 1855.

I HAVE the honour herewith to forward to you the estimated accommodation for this and the other hospitals, with the exception of Kulleli, drawn out at my request by Deputy Inspector-general of Hospitals Lawson, and which shows the amount of cubic feet for each patient; with our present number this is, of course, much greater.

When the hospital at Kulleli has been completed, I will endeavour to obtain a similar table, showing its accommodation.

I remain, &c.,

(signed) *A. Cumming*,  
Inspector-General of Hospitals.

---



## ESTIMATED ACCOMMODATION in General Hospital, Scutari, 26 March 1855.

DIVISION, &c.	Number of Beds.	Cubic Feet for each.	DIVISION, &c.	Number of Beds.	Cubic Feet for each.
LOWER DIVISION:			UPPER DIVISION, PART OF:		
Convalescent Corridor, 5 feet	34	795	Convalescent Corridor, 5 feet each half	34	795
Corridor A, 5 feet 4 inches each	50	895	Corridor A, 5 feet 4 inches	50	916
"    Ward 1	20	916	"    Ward 15	20	916
"    "    2	20	920	"    "    16	20	928
"    "    3	20	928	"    "    17	20	911
"    "    4	20	920	"    "    18	20	921
Corridor B, 5 feet 4 inches	68	896	"    "    18 by	10	855
"    Ward 5	28	894	Corridor, end part	5	916
"    "    6	28	879	Corridor B, 5 feet 4 inches	68	896
"    "    7	28	879	"    Ward 19	28	894
"    "    8	28	881	"    "    20	28	878
"    "    9	28	887	"    "    21	28	878
Corridor D, 5 feet 4 inches	50	916	"    "    22	28	874
"    Ward 10	20	920	"    "    23	28	882
"    "    11	20	907	Corridor D, end part	5	927
"    "    12	20	899	"    main part	50	927
"    "    13	20	938	"    Ward 24 by	10	855
TOTAL	502		"    "    24	20	920
			"    "    25	20	907
			"    "    27	20	903
			"    "    28	20	928
			TOTAL	532	

## RECAPITULATION.

DIVISION.	Patients.	Orderlies.	TOTAL BEDS.
Lower	440	62	502
Upper	465	27	532
TOTAL	905	129	1,034

P. S.—One-fifth less for wounded, if possible, or in all, 724.

R. Lawson,  
Deputy Inspector-General of Hospitals.



ESTIMATED ACCOMMODATION at Hyder Pacha's Palace, *Scutari*, 28 March 1855.

BUILDING, WARD, &c.	Number of Beds.	Cubic Feet for each Bed.	BUILDING, WARD, &c.	Number of Beds.	Cubic Feet for each Bed.
<b>Theatre :</b>		<i>cu. ft.</i>			<i>cu. ft.</i>
Ward 1 (Stage) - - - -	28	1,315	Brought forward - - -	58	
" 2 - - - - -	33	1,405	<b>Harem :</b>		
" 3 - - - - -	13	887	Passage B - - - - -	9	950
" 4 - - - - -	84	1,403	Ward 5 - - - - -	4	966
" 5 - - - - -	28	1,428	" 6 - - - - -	6	910
" 6 } - - - - -	8	960	" 12 - - - - -	4	892
" 7 } Small Wards	7	959	Passage C - - - - -	4	782
" 8 } behind No. 4.	7	932	" D - - - - -	12	937
" 9 } - - - - -	8	888	Ward 7 - - - - -	10	900
" 10 } Small Wards ;	4	927	" 8 - - - - -	4	950
" 11 } Entrance	12	873	" 9 - - - - -	26	1,027
" 12 } from back,	6	808	" 10 - - - - -	5	882
" 13 } No. 11,	2	1,023	" 11 - - - - -	4	891
" 14 } over No. 3.	2	932	<b>TOTAL - - -</b>	<b>146</b>	
<b>TOTAL - - -</b>	<b>242</b>				
<b>Half Pavilion, Officers' Quarters :</b>			<b>Small Pavilion, Harem :</b>		
Ward 1, lower floor - - -	3	777	Ward 1 - - - - -	5	775
" 2 " - - - - -	3	916	" 2 - - - - -	3	773
" 3 " - - - - -	3	934	" 3 - - - - -	2	971
" 4, first floor - - - -	8	902	" 4 - - - - -	3	941
" 5 " - - - - -	4	801	" 5 - - - - -	6	871
" 6 " - - - - -	4	922	" 6 - - - - -	3	953
" 7 " - - - - -	4	955	" 7 - - - - -	3	871
<b>TOTAL - - -</b>	<b>29</b>		" 8 - - - - -	6	869
<b>Passage A - - - - -</b>	<b>14</b>	<b>991</b>	<b>TOTAL - - -</b>	<b>31</b>	
Ward 1 - - - - -	9	915	<b>Detached House, Harem :</b>		
" 2 - - - - -	2	854	Ward 1 - - - - -	7	910
" 3 - - - - -	5	799	" 2 - - - - -	8	932
" 4 - - - - -	5	798	<b>TOTAL - - -</b>	<b>15</b>	
" 13 - - - - -	4	920			
" 14 - - - - -	4	903			
" 15 - - - - -	2	788			
" 16 - - - - -	13	872			
<b>Carried forward - - -</b>	<b>58</b>				

## RECAPITULATION.

HOUSE.	Number of Patients.	Number of Attendants.	TOTAL BEDS.
Theatre - - - - -	210	32	242
Officers' Pavilion - - - - -	25	4	29
Harem - - - - -	126	20	146
Small Pavilion in ditto - - - - -	26	5	31
Detached Pavilion - - - - -	13	2	15
<b>TOTAL - - -</b>	<b>400</b>	<b>63</b>	<b>463</b>

\* \* If wounded, one-fifth less, if possible.

R. Lawson,  
Deputy Inspector-General.



## ESTIMATED ACCOMMODATION in Barrack Hospital, Scutari, 14 March 1855.

DIVISION, &c.	Number of Beds.	Cubic Feet for Each.	DIVISION, &c.	Number of Beds.	Cubic Feet for Each.
FIRST DIVISION :			THIRD DIVISION :		
Corridor A (right side) - - -	76	1,082	Corridor C - - - -	162	1,114
" Ward 12 - - -	21	860	" Ward 4 - - - -	21	930
" " 15 - - -	21	854	" " 6 - - - -	21	941
" " 17 - - -	21	916	" " 9 - - - -	21	952
" " 19 - - -	21	918	" " 10 - - - -	21	959
Corridor I, above A - - -	64	1,098	" " 11 - - - -	21	959
" Ward 1 - - -	21	966	" " 15 - - - -	21	1,065
" " 3 - - -	30	1,015	" " 16 - - - -	21	1,040
" " 5 - - -	21	938	" " 17 - - - -	21	1,040
" " 6 - - -	21	950	" " 18 - - - -	21	1,030
Corridor E, below A - - -	36	921	" " 19 - - - -	21	954
" Ward 13 - - -	18	926	" " 21 - - - -	21	951
" " 14 - - -	18	872	Corridor G, below C - - -	75	969
TOTAL 1st Division - - -	389		" Ward 1 - - - -	18	900
			" " 2 - - - -	18	911
			" " 3 - - - -	18	911
			" " 4 - - - -	18	832
			" " 5 - - - -	18	850
			TOTAL 3d Division - - -	558	
SECOND DIVISION :			FOURTH DIVISION :		
Corridor B - - - -	116	1,145	Corridor D - - - -	116	1,134
" Ward 2 - - - -	21	900	" Ward 2 - - - -	21	952
" " 3 - - - -	21	930	" " 3 - - - -	21	952
" " 6 - - - -	21	910	" " 4 - - - -	21	938
" " 7 - - - -	30	983	" " 6 - - - -	21	938
" " 8 - - - -	21	892	" " 7 - - - -	30	1,050
" " 11 - - - -	21	930	" " 10 - - - -	21	983
" " 12 - - - -	21	935	" " 11 - - - -	21	1,013
Corridor F, below B - - -	108	981	" " 12 - - - -	21	1,010
" Ward 6 - - - -	18	922	Corridor A (left half) - - -	48	1,082
" " 7 - - - -	18	918	" Ward 2 - - - -	21	909
" " 8 - - - -	18	900	" " 4 - - - -	21	932
" " 9 - - - -	26	928	Corridor H (right side) - - -	10	1,116
" " 10 - - - -	18	883	" Ward 4 - - - -	21	983
" " 11 - - - -	18	881	" (left side) - - - -	18	1,099
" " 12 - - - -	18	875	" Ward 2 - - - -	30	1,025
TOTAL 2d Division - - -	514		TOTAL 4th Division - - -	462	

## RECAPITULATION.

	Number of Beds.
Accommodation, 1st Division - - - -	389
" 2d " - - - -	514
" 3d " - - - -	558
" 4th " - - - -	462
TOTAL Beds - - - -	1,923
Deduct for Orderlies - - - -	240
TOTAL Accommodation for Sick - - -	1,683

R. Lawson,  
Deputy Inspector-General.



Dr. A. Cumming to Dr. Smith.

Sir,

Scutari, 7 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, including 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 have 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 with equal justice be pronounced unhealthy as the palace. The ground it stands on is a shallow valley, and in rear of the buildings there 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 an 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 think, of the natural dryness of the soil.

I have, &c.

(signed) A. Cumming,  
Inspector-General of Hospitals.

Dr. A. Cumming to Brigadier-General Lord William Paulet.

My Lord,

Barrack Hospital, 9 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 certain wards for the reception of the wounded, with a diminished number of beds; taking into consideration likewise that half of the sheds is appropriated to the dépôt, 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 this 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 benefited by it, and the long-desired separation



ration of the depôt 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 thereby 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, in case of emergency, 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 and elsewhere.

I have, &c.

(signed) *A. Cumming*,  
Inspector-General of Hospitals.

*Dr. A. Cumming to Dr. Smith.*

Sir,

Scutari, 15 April 1855.

I BEG leave to offer the following observations on your letter dated 23d March last, noticing certain points connected with the localities and sanitary condition of the hospitals at Scutari and its neighbourhood.

1st. 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, as I am informed, ever since the hospital has been in our possession.

As soon as a suitable room can be obtained for a Purveyor's office, the present one will be given up.

2d. Anything defective in the drainage at the general hospital is being remedied; some suggestions respecting the drains were made by Drs. Sutherland and Gavin, along with a civil engineer, some time ago.

3d. 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 fairly used to guard against deleterious influences; the use of lime for this purpose is questioned.

4th. 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 beams so general, that it would require many months to remove this cause of complaint.

5th. Previous, probably, to its being repaired.

6th. The huts are now occupied by upwards of 200 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.

7th. See my letter, 7th April.

8th. No ill consequences can be detected as having arisen from this, but as other accommodation has become available at Kululie, the rooms over the stable have been partially dispensed with, and will probably be soon entirely given up.

9th. 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,



so, attributable to the careless dirty habits of the patients themselves; suggestions on this point were made by the civil engineer who accompanied the Sanitary Commissioners.

I have omitted to mention that a new graveyard has been opened to the eastward, and at a greater distance from the hospital. Both were visited by Drs. Gavin and Sutherland.

I have, &c.  
(signed) *A. Cumming*,  
Inspector-General of Hospitals.

Dr. *A. Cumming* to Dr. *Smith*, London.

Sir,

Scutari, 16 April 1855.

IN acknowledging your letter of the 30th instant, respecting the prevalence by fever in these hospitals, I have to acquaint you that every precaution has been taken, against any morbid influences which may be supposed to exist, and due attention has been given to ventilation, lime-washing, and the use of deodorants.

At present the hospitals are by no means crowded; and, as respects this hospital, much less so than the numbers on the states indicate, in consequence of about 200 convalescents being removed from the wards and corridors, and placed for some time previous to final discharge in the sheds in the Barrack-square.

I may remark that although the site of these sheds is objectionable, they have the advantage of being roomy, are well ventilated, and afford sufficient accommodation to enable me to separate the dormitories from the dining rooms. They possess also a large reading or day room, and when we can get rid of the depôt, they will, I think, be found useful during the summer. As to encampment, there is unfortunately no tentage.

Materials for hutting are now being placed on the common near the General Hospital, and I was informed by Captain Macdonald, a few days ago, that they would be ready for occupation in a fortnight.

I have, &c.  
(signed) *A. Cumming*,  
Inspector-General of Hospitals.

MONTHLY REPORT of Dr. *Cumming* to Dr. *Smith*,  
dated 28 April 1855.

THE changes in the number of patients under treatment in these hospitals during the month of March, as compared with those of the previous month, will be seen by the following numerical statement:

		Remained.	Admitted.	Discharged.	Died.	Remaining.
February -	{ Scutari - -	4,165	1,895	2,139	1,027	2,895
	{ Kullili - -	434	795	65	302	861
		4,599	2,690	2,204	1,329	3,756
March - -	{ Scutari - -	2,895	2,385	2,475	421	2,384
	{ Kullili - -	861	450	362	134	815
		3,756	2,835	2,837	555	3,199



Thus the numerical state of the hospitals for March is much more favourable than during the previous month; during February, we had under treatment in hospital 7,289, and during March 5,591; of the former number, 6,533 ceased to appear in the hospital books, of which 1,329 were deaths; whereas, during March, a nearly equal number of men ceased to be inmates of the hospital, viz. 3,392; but of this number only 555 died, a difference in the number of deaths in the two months of 774.

This great improvement is attributable to numerous concurrent causes; in the first place, the condition of the men admitted into hospital from the Crimea has undergone a great improvement in comparison with that of the men who arrived in previous months. The cases admitted from the Crimea during March were either slighter in character than previously, or were men already convalescent from fever.

The admissions into hospital for diseases contracted at the station have not only been fewer in number, but very much less severe in type.

The milder weather which set in early in March was followed by an improvement in the cases under treatment. The mortality at the commencement of the month, although diminished, as compared with that of the previous month, was still high. The beneficial effects of a change from severe to a milder temperature is not apparent (in returns) for some little time after the change had taken place, for obvious reasons, although the influence of the milder temperature begins to be felt by the patients and perceived by the medical men. Yet the effects of the previous severe weather remain for a certain time afterwards. The consequences of the change in the weather are only developed at certain periods subsequent to the time at which the change takes place. The same observation applies to other causes of severe disease which existed during the winter.

The mortality in weekly periods, during March, was as follows:—

From 3 to 9 March	{	Scutari	-	-	120
		Kullili	-	-	58
		TOTAL	-	-	178
From 9 to 16 March	{	Scutari	-	-	100
		Kullili	-	-	21
		TOTAL	-	-	121
From 16 to 23 March	{	Scutari	-	-	77
		Kullili	-	-	28
		TOTAL	-	-	105
From 23 to 30 March	{	Scutari	-	-	52
		Kullili	-	-	15
		TOTAL	-	-	67

Hence, although the more potent causes of severe disease and death, which had been in force during the winter, had already passed away at the commencement of March, yet the mortality remained very considerable to a later date; the



the decrease in the deaths, however, during March, as shown by the above weekly numbers, is very considerable, and a comparison of the mortality in the last week of March with that of the corresponding period in the previous month, viz., 67 to 257, is very remarkable.

The deaths from the 23 to 28 February - - -	Scutari - -	201
	Kullili - -	56
	TOTAL - -	257

The decrease in the mortality above adverted to, cannot be accounted for by a diminution in the number of patients in the hospitals during the periods under consideration. This will be seen by a statement of the number of patients under treatment during the weeks of March, as follows :

		Remained.	Admitted.	TOTAL.
From 3 to 9 March -	{ Scutari - -	3,472	430	3,902
	{ Kullili - -	836	135	971
	TOTAL - -	4,308	565	4,873
From 9 to 16 March -	{ Scutari - -	3,296	212	3,508
	{ Kullili - -	875	64	939
	TOTAL - -	4,171	276	4,447
From 16 to 23 March -	{ Scutari - -	3,092	327	3,419
	{ Kullili - -	867	182	1,049
	TOTAL - -	3,959	509	4,468
From 23 to 30 March -	{ Scutari - -	2,580	608	3,188
	{ Kullili - -	979	16	995
	TOTAL - -	3,559	624	4,183

Hence the diminution of cases under treatment has not been great, and the number of fresh patients—the admissions—which tend to increase the mortality to a much greater degree than the number of cases remaining in hospital, from time to time, have been remarkably uniform during the periods under consideration, except during the second week, when the admissions sank as low as 276. The number of patients admitted during the last week of the month to the 30th inclusive, was greater than any previous week.

The improvement in the sick may, perhaps, be attributed in some degree to the improved condition, sanitary and otherwise, of our hospitals. The milder weather, among its other beneficial influences, permitted more free ventilation.

Diseases of the bowels, including dysentery, were fatal to 226 cases, while in February the number of deaths from the same class of diseases 681. Fever of all



all types was fatal during March in 164 cases. These occurred in the various hospitals as follows:—

Mortality from Fever during March.

In the General Hospital	-	-	-	-	-	-	37
„ Barrack - do.	-	-	-	-	-	-	70
„ Palace - do.	-	-	-	-	-	-	11
„ Stable - do.	-	-	-	-	-	-	6
„ Turkish Hulk	-	-	-	-	-	-	3
„ Bombay Ship	-	-	-	-	-	-	2
Total, Scutari							129
Kullili Hospital	-	-	-	-	-	-	35
TOTAL, Scutari and Kullili							164

The diseases which have come under our notice in the greatest numbers during the month have been: Fevers, continued, remittent, and intermittent, displaying a well-marked tendency to relapse; rheumatic affections, chiefly chronic, and, in a few instances, sub-acute; scurvy, in some cases pure, but in the majority existing as a complication, more or less serious, of other diseases, and frost-bite.

The fevers contracted at this station were frequent during February, both among patients under treatment in hospital, among the hospital attendants and medical officers; but although many cases of fever have arisen at this station during March, the type of this disease, as already mentioned, has been much less severe, and the disease manifested much less tendency to run into the low typhoid form, which was so fatal during the previous month.

The most important and serious class of diseases during February was that of the bowels, dysentery and diarrhoea. These diseases, although attracting much less attention during March, were still very serious and numerous. The dysentery being of a most severe form, complicated in many instances with scurvy, a complication of disease, than which nothing can be more intractable or more fatal in result. In the great majority of *post mortem* examinations, the large intestine presented all the anatomical evidences of old, extensive, and severe dysentery, mingled with scorbutic appearances.

The ulceration, old and rugged, extended from the rectum, through the colon, to a variable extent, in many instances to the locum, and in a few instances passed into the adjacent portion of the small intestine; in numerous cases the entire mucous membrane of the large bowel was involved, and in a few specimens the diseased action had penetrated through the other coats to the peritoneum.

The number of men discharged from hospital has been very considerable, viz., 2,838. Of these, 972 were men who were deemed unfit for further service, at least for some time, in this country, or those who needed a change to the climate of England for a restoration to health. These men left this station in the following manner:—

NAME OF SHIP.	Sick.	Wounded.	TOTAL.
"Adelaide," steamer - -	129	44	173
"Indiana" „ - - -	223	45	268
"Tynemouth" „ - - -	198	15	213
"Chapman," steam transport -	122	12	134
"Julia" - - „ - -	166	18	184
TOTAL - - -	838	134	972

The state of the hospital at the end of the month, in regard of the most important diseases remaining, and which will therefore appear in the following month, was extremely satisfactory.

This



This will be seen by a comparison of the numbers of these diseases remaining under treatment at the end of February and March respectively.

		End of February.	End of March.	Decrease.
Febris CC. - - -	{ Scutari - -	709	652	57
	{ Kullili - -	213	191	22
	TOTAL - - -	922	843	77
Dysentery and Diarrhœa	{ Scutari - -	882	643	239
	{ Kullili - -	262	217	45
	TOTAL - - -	1,144	860	284
Frost-bite - - -	{ Scutari - -	216	164	52
	{ Kullili - -	120	100	20
	TOTAL - - -	336	264	72
Vulnus Sclop. - -	{ Scutari - -	153	64	89
	{ Kullili - -	6	3	3
	TOTAL - - -	159	67	92

In concluding this report, it will perhaps be satisfactory to compare the return with that from Smyrna during the same period.

The hospital there was opened for the reception of sick on the 15th February, and to 31st March 993 cases were under treatment; of these, 371 were discharged, and 127 died.

	Treated.	Died.	Per Cent.
SMYRNA:			
Fevers - - - - -	209	28	13.30
Dysentery and Diarrhœa - - - - -	279	62	22.22
Scorbutus - - - - -	127	12	9.46
Gelatio - - - - -	150	18	12
SCUTARI:			
Fevers - - - - -	1,607	129	7.55
Dysentery and Diarrhœa - - - - -	1,447	160	11.05
Scorbutus - - - - -	165	12	7.27
Gelatio - - - - -	313	45	14.37
KULLILI:			
Fevers - - - - -	351	35	9.97
Dysentery and Diarrhœa - - - - -	388	66	17.01
Scorbutus - - - - -	96	1	1.04
Gelatio - - - - -	144	20	13.88



The return from Smyrna, however, embraces a longer period, by 13 days, than that from Scutari; but, on the other hand, the vessels which took the sick there from the Crimea touched here on the way. I deemed it advisable to disembark and admit into these hospitals a great many of the worst cases, from 40 to 50 having been landed from some of the vessels, so that the comparison is made with every advantage in favour of that establishment; and as regards the hospitals here, it must be added that fresh additions were made to them by frequent arrivals from Balaklava during the period, amongst whom were many in an extreme state of exhaustion, and who died soon after admission.

(signed) *A. Cumming*,  
Inspector-General of Hospitals.

---

Dr. *A. Cumming* to the Director-General of Army and Ordnance Medical Department.

Sir,

Inspector-General of Hospitals Office,  
Scutari, 30 April 1855.

WITH reference to your letter of 13th inst., requiring information as to the probable number of medical officers which will be necessary at Scutari during the summer months, I have the honour to forward a nominal return to this date of our present strength, which I conceive to be fully equal to the duties now required of it.

I am unable, however, to say what the exigencies of the service may demand during the summer, as much will depend on the hospital accommodation available in the Crimea, and the intentions of Dr. Hall with respect to the treatment of the wounded there, as, in communications to me, he does not intend, if possible, sending them to Scutari; an arrangement which I am sure will prove salutary.

In making an estimate of this kind, reference must also be had to the hospital at Smyrna, that at Abydos, and the one about to be erected under the superintendence of Dr. Parkes, for which a suitable site has not yet been obtained.

I have learnt within the last few days that cholera is prevailing to a great extent amongst the French troops encamped in the neighbourhood of Constantinople, and that the disease in an aggravated form has shown itself also in the town.

The apprehension even of such an epidemic breaking out on this side of the Bosphorus will, of course, require a larger medical staff than under ordinary circumstances, and in consequence of this I have availed myself of such medical aid as I could obtain for taking charge of vessels proceeding to England with invalids.

I have, &c.

(signed) *A. Cumming*,  
Inspector-General of Hospitals.

---



RETURN of the HOSPITAL STAFF doing Duty at *Scutari, Kululee, and Abydos*, on 30 April 1855.

RANK.	NAMES.	WHERE EMPLOYED.	REMARKS.
Inspector-General -	Alexander Cumming	Principal Medical Officer.	
Deputy Inspectors-General -	W. C. Humfrey -	Kululee.	
	Robert Lawson -	Scutari.	
	Alexander McGrigor	Barrack Hospital, Scutari.	
Staff Surgeons, 1st Class -	William Cruikshank	—	
	T. R. Jameson -	Abydos.	
	G. G. Robertson -	Barrack Hospital, Scutari.	
	R. J. O'Flaherty -	General Hospital -	- - Sick since 28th April. Feb. C. C.
	T. C. G. Tice -	Kullali.	
	J. D. McIlree -	Palace Hospital, Scutari.	
	A. Gordon -	Barrack Hospital, Scutari.	
	C. C. J. Delmege -	- - ditto - - ditto.	
	G. S. Beatson -	Kullali.	
	G. Taylor -	Barrack Hospital, Scutari.	
	Nicholas O'Connor -	Kululee.	
	J. A. Fraser -	General Hospital, Scutari.	
	John Summers -	Barrack Hospital, Scutari.	
	W. H. Fairbairn -	Depôt duty.	
	W. Rutherford -	Barrack Hospital, Scutari.	
Staff Surgeons, 2d Class -	Thomas Guy -	Kullali.	
	Edward Menzies -	Palace Hospital, Scutari.	
	P. S. Laing -	General Hospital, Scutari	- - Sick since 1st April. Febris.
	William MacIse -	- - ditto - - ditto.	
	G. C. Meikleham -	- - ditto - - ditto.	
	William Barrett -	Palace Hospital, Scutari.	
	W. M. Dowding -	Abydos.	
	Henry Somers -	Turkish Hulks.	
	D. S. E. Bain -	Barrack Hospital, Scutari.	
	Francis Reynolds -	- - ditto - - ditto.	
	P. H. E. Cross -	General Hospital, Scutari.	
	T. G. Fitzgerald -	Assisting P. M. O.	
	J. J. Adrien -	Detachment duty, Pera.	
	P. N. Jackson -	Barrack Hospital, Scutari.	
	L. G. Hooper -	- - ditto - - ditto.	
Staff Assistant Surgeons -	S. J. Bayfield -	- - ditto - - ditto.	
	W. M. Calder -	- - ditto - - ditto.	
	W. H. Price -	- - ditto - - ditto.	
	D. C. Taylor -	- - ditto - - ditto.	
	G. B. Popplewell	General Hospital, Scutari.	
	William Granth	Kullali.	
	J. W. Rutter -	Palace Hospital, Scutari.	
	F. De Chaumont -	- - ditto - - ditto -	- - Sick since 19th March. Feb. Re.
	T. H. Walker -	General Hospital, Scutari.	
	S. S. Skipton -	Abydos.	
	J. A. Eames -	Barrack Hospital, Scutari.	
	Alfred Hooper -	General Hospital, Scutari.	
	Arthur Salter -	Kullali.	
	C. H. Tooley -	Palace Hospital, Scutari.	
	J. L. Erskine -	- - ditto - - ditto.	
Assistant Surgeon, 58th Regiment.	B. Williamson -	Barrack Hospital, Scutari.	
	A. E. T. Longhurst -	- - ditto - - ditto.	
	H. W. Bellew -	Palace Hospital, Scutari	- - Sick since 25th March. Feb. Re.
Assistant Surgeon, 2d Regiment.	G. M. Slaughter -	Barrack Hospital, Scutari.	
Assistant Surgeon, 6th Regiment.	B. Tydd -	General Hospital, Scutari.	
	F. Holton -	Depôt duty, Scutari.	
	A. R. Hudson -	Barrack Hospital, Scutari.	
Acting Assistant Surgeons -	James McCartney -	General Hospital, Scutari.	
	G. C. Clery -	- - ditto - - ditto.	
	John Grant -	Barrack Hospital, Scutari.	
	T. S. Hollingsworth -	- - ditto - - ditto.	
	J. G. Cambell -	- - ditto - - ditto.	
	Walter Leach -	- - ditto - - ditto.	
	W. A. Barr -	- - ditto - - ditto.	
	G. P. Barton -	General Hospital, Scutari.	

(continued)



## RETURN of the HOSPITAL STAFF doing Duty at Scutari, &amp;c.—continued.

RANK.	NAMES.	WHERE EMPLOYED.	REMARKS.
Acting Assistant Surgeons—continued.	O. Barnett - -	Palace Hospital, Scutari.	- - Sick since 30th March. Feb. C. C.
	W. H. Yates - -	General Hospital, Scutari.	
	W. F. Cullen - -	Barrack Hospital, Scutari.	
	J. M'N. Beatty - -	- - ditto - - ditto.	
	R. G. Dickson - -	General Hospital, Scutari.	- - Sick since 25th March. Febris.
	W. H. Corbett - -	Barrack Hospital, Scutari.	
	Charles O'Callaghan	Kullali.	
	William Ramsey - -	Barrack Hospital, Scutari.	
	S. H. Dickerson - -	- - ditto - - ditto.	- - Sick since 3d April. Bronchitis.
	Charles Beaufoy - -	- - ditto - - ditto.	
	G. M. G. Carolan - -	Kullali.	
	P. H. Watson - -	- ditto - - - -	
	H. C. Miles - -	Barrack Hospital, Scutari.	- - Sick since 23d April. Febris.
	J. H. Gilborne - -	- - ditto - - ditto.	
	P. H. Hoey - -	- - ditto - - ditto.	
	D. B. Hine - -	- - ditto - - ditto.	
	H. L. Randall - -	General Hospital, Scutari.	- - Sick since 17th April. Febris.
	H. J. French - -	Kullali.	
	Ed. M'Gill - -	- ditto.	
	John Wood - -	- ditto - - - -	
	Andrew M'Kertcheon	Barrack Hospital, Scutari.	- - Sick since 19th April. Febris.
	A. H. Bakewell - -	General Hospital, Scutari.	
	T. J. Orton - -	Barrack Hospital, Scutari.	
	G. C. Hyde - -	- - ditto - - ditto.	
Medical Clerks	Patrick Kilgour - -	General Hospital, Scutari.	- - "Golden Fleece," to England.
	Ed. Bubb - -	Barrack Hospital, Scutari.	
	Joseph Read - -	Palace Hospital, Scutari.	
	W. H. Muschamp - -	Barrack Hospital, Scutari.	
	A. J. L. Hepworth - -	General Hospital, Scutari.	- - Sick since 4th March. Febris.
	J. Thomson - -	P. M. O. Office, Scutari.	
	J. A. Scott - -	Barrack Hospital, Scutari.	
	Joseph Muskett - -	P. M. O. Office, Scutari.	
	L. W. Watts - -	Barrack Hospital, Scutari.	- - Sick since 15th April. Feb. C. C.
	A. G. Wilkinson - -	- - ditto - - ditto.	
	W. H. Cassels - -	- - ditto - - ditto.	
	R. Kemp - -	- - ditto - - ditto.	
Dressers - - -	J. Atkinson - -	- - ditto - - ditto.	- - Sick since 11th April. Feb. C. C.
	R. Elliott - -	- - ditto - - ditto.	
	J. C. Taylor - -	- - ditto - - ditto.	
	R. Ambler - -	- - ditto - - ditto.	
	Lewis Oppenheim - -	- - ditto - - ditto.	- - Sick since 19th April.
	W. F. Swann - -	- - ditto - - ditto.	
	N. Avent - -	General Hospital, Scutari.	
	W. L. Cheoasse - -	- - ditto - - ditto.	
	E. D. Moore - -	Turkish hulk - - -	- - Sick since 15th April. Feb. C. C.
	E. H. Leeson - -	Palace Hospital, Scutari.	
	J. E. Barnes - -	Kullali.	
	- - John - -	- ditto.	
Medical Storekeeper -	- - Elliott - -	- ditto.	- - Sick since 19th April.
	J. Flewitt - -	Abydos.	
	F. Pavey - -	General Hospital, Scutari.	
	J. J. Joseph - -	In charge of medical stores.	
Apothecary - - -	J. M'Intosh - -	General Hospital, Scutari.	- - Sick since 19th April.
	J. Andrews - -	- - ditto - - ditto.	
	J. M. Darral - -	Barrack Hospital, Scutari.	
	- - Wallis - -	Abydos.	
Dispensers - - -	E. D. Thomson - -	Barrack Hospital, Scutari.	- - Sick since 19th April.
	C. Rowell - -	- - ditto - - ditto.	
	L. Harvey - -	- - ditto - - ditto.	
	W. W. Williams - -	- - ditto - - ditto.	
	H. P. Arthy - -	With general stores - -	- - Sick since 19th April.
	J. Brewer - -	- - ditto.	
	E. Rickards - -	Palace Hospital, Scutari.	
	E. Allenby - -	With general stores.	



## RETURN of the HOSPITAL STAFF doing Duty at Scutari, &amp;c.—continued.

RANK.	NAMES.	WHERE EMPLOYED.	REMARKS.
Dispensers — continued.	M. L. Poad -	Kullali.	
	A. Peachey -	- ditto.	
	J. Beveridge -	With general stores, Scutari.	
	G. H. Smeeton -	General Hospital, Scutari.	
	G. B. Brown -	Palace Hospital, Scutari.	
	J. Tepper -	General Hospital, Scutari.	
	J. Collin -	Barrack Hospital, Scutari.	
	C. Knight -	- - ditto - - ditto.	
	J. W. Pidduck -	General Hospital, Scutari.	
	H. J. Watts -	- - ditto - - ditto.	
	J. H. Whitewell -	With general stores.	
	J. B. Guyer -	- - ditto.	
	T. Blakely -	Barrack Hospital, Scutari.	
	W. H. Dimsford -	- - ditto - - ditto.	
Instrument Maker and Cutler.	— Barber -	Kullali.	
	W. H. Richardson -	With general stores, Scutari.	
Civil Practitioners employed.	H. Griebel -	Employed at Scutari.	
	W. Temple -	Kullali.	
	— Fraser -	Barrack Hospital, Scutari.	
	Hugh Birt -	- - ditto - - ditto.	
	H. M. Ronden -	- - ditto - - ditto.	
	R. Wollaston -	- - ditto - - ditto.	
	R. Mason -	General Hospital, Scutari.	
	G. Domberg -	Kululie.	
	— Beecher -	General Hospital, Scutari	- - Sick since 11th April. Feb. C. C.
	M. W. Hilles -	- - ditto - - ditto.	
	— Bryce -	Kullali.	
	— Pincoff -	—	
	H. B. Holl -	—	
	M. Knight -	—	
	A. B. Brabazon -	—	
	E. Howard -	—	
	T. Nicholas -	—	
	R. D. Lyons -	Pathologist.	

(signed) A. Cumming,  
Inspector General of Hospitals.

Dr. A. Cumming to Brigadier-General Lord William Paulet.

My Lord,

Scutari, 6 May 1855.

WITH reference to General Airey's letter, communicating to you the wish of the Field Marshal commanding, that the sick of the Sardinian Army should be admitted into these Hospitals, it is necessary that I should be informed in what manner this arrangement is likely to be carried out. Are they to be placed under the care of the medical officers of these establishments? or are they to have a distinct building or buildings, and have their own medical staff? or are we to supply them with everything necessary for an hospital, furniture, medicine, materials, and in fact everything required for the proper treatment of the sick? are they to furnish orderlies, or are they to be found by us?

It will also be necessary that we should know the amount of accommodation required.

I remain, &c.

(signed) A. Cumming,  
Inspector-General of Hospitals.



**WEEKLY REPORT of the State of Sick and Wounded in Barrack Hospital,  
from 13th to 19th May 1855.**

THE progressive improvement in the state of the sick in hospitals continue without interruption, and the mortality does not average nine per cent. in the number of sick actually under treatment. The prevalence of any form of active disease does not now exist; a case of febris remit. or feb. c. c., now and then presents itself; but with this exception there is an entire absence of any severe form of disease. Those cases of diarrhoea and dysent. chr. which heretofore resisted all remedial agents, now yield readily to treatment; the use of stimulants, which were given with rather too much liberality in those chronic cases of abdominal disease, has been entirely given up, and dietetics in varied forms resorted to with most beneficial results; the improvement in regard to the free circulation of air in the building, I have no doubt, tends more than almost anything else to the sanitary state of the hospitals.

(signed) *A. M. Gregor*, M. D.,  
Deputy Inspector-General.

**REPORT on State of the Sick in the General and Palace Hospitals, Scutari,  
from 13th to 20th May 1855.**

The fluctuations in these establishments, during the week, have been as under:—

—	Remained.	Admitted.	Discharged.	Died.	Remaining.
General - -	476	1	131	7	339
Palace - -	134	2	53	1	82

The mean temperatures, corrected, during the week, have been as under, viz.:—

EXTERNAL :		INTERNAL :		9 A. M.	
Minimum.	Maximum.	Minimum.	Maximum.	Thermometer.	W. Bulb.
57° 5'	79° 2'	65° 5'	75° 9'	70° 1'	65°
Range - -	21° 7'	- - -	10° 4'	—	—
				Difference, 5° 1	

The lowest temperature was on the 15th, when the thermometer indicated 53° 6', and the highest on the 18th, when it reached 84° 7'. The weather during the week was still and close, and the diurnal range of temperature much greater than the previous week.

The only admission in the General Hospital was a re-admission from rheumatism. At the Palace, one of the admissions was an orderly, with bronchitis, and the other a man off guard, with fever.

The condition of the sick in both hospitals continues favourable. The tendency to bowel complaints at the Palace, noticed in last week's report, does not seem to have continued. In one case, in the General Hospital, there was an accession of vomiting and slight purging, but the case easily yielded, and there has been nothing further of the same character. Creosote injections continue to be employed in chronic bowel complaints; in some cases, with decided diminution in the frequency of the discharges, and improvement in their appearance; in others with a less satisfactory result. How far this improvement may be temporary only, will, of course, require further experience to decide.



Of the discharges, 53 from the General Hospital, and 18 from the Palace, have been to duty; and 78 from the former, and 35 from the latter, embarked on the 18th, in the "Black Prince," for England.

There have been seven deaths in the General Hospital, all old cases. Phthisis had manifested itself in three of these; and another, which was under treatment as fever, proved fatal from intercurrent pleuro-pneumonia, which showed itself within a short time of death, and proceeded very rapidly.

Scutari, 20 May 1855.

(signed) *Robert Lawson*,  
Deputy Inspector-General.

*N. O'Connor, Esq., to Dr. A. Smith.*

Sir,

Kulalee Hospital, 24 April 1855.

IN reply to your letter of the 7th April, requesting to be informed what provision of bedding was, in the first instance, supplied for the use of the Russian prisoners at Kulalee, I have the honour to acquaint you that each man had at first two blankets, a mattress, and a bolster supplied him; some were provided with rugs and sheets; subsequently, the whole of the prisoners were provided, in addition, with rugs, sheets, boards, and tressels.

I have, &c.,

(signed) *N. O'Connor*,  
Staff Surgeon, 2d Class.

WEEKLY REPORT of Sick in Hospital at *Kululi*, from 12th to 18th May 1855.

Remained	-	-	-	-	-	-	-	-	480
Admitted	-	-	-	-	-	-	-	-	98
Discharged	-	-	-	-	-	-	-	-	156
Died	-	-	-	-	-	-	-	-	4
Remaining	-	-	-	-	-	-	-	-	418

THE heat of the weather has increased considerably, and no rain has fallen during the week. The thermometer has ranged between 55° and 81° Fahrenheit; average maximum, 76°; average minimum, 58°; mean temperature, 68°; wind light, S. and S. W., one day N.

Ninety-eight admissions; 85 from the Crimea, seven from the detachment, and six orderlies. Three-fourths of those from the Crimea were cases of fever, with very few exceptions convalescent, though much debilitated. From the same source were admitted 18 rheumatic affections, chiefly muscular, and in some instances exhibiting a scorbutic taint; five cases of chronic pulmonary affections, and the same number of chronic diarrhœa, the latter attended with much debility and emaciation, and not likely to improve without change of climate.

Three of the detachment, and four orderlies, were admitted with fever, none of a severe character. Of those discharged, 129 were sent to England for change of climate; 21 joined the Convalescent Dépôt at Scutari, and six returned to duty here.

Only four men died during the week, two under the head diarrhœa, one fever, and one pleuritis. The two diarrhœa cases arrived from the Crimea on 1st February. In one the disease ran on to ulceration of the colon, in the other, on the abatement of diarrhœa, phthisis supervened, and proved fatal; both lungs were full of tubercles, and there was a large vomica in the apex of the left. The man who died from fever arrived from the Crimea on 7th instant,



in a semi-comatose state, with peculiar nervous symptoms, somewhat resembling catalepsy, which continued until death; on examination of the body, three ounces of serous fluid were found at the base of the brain, and the lungs were firmly adherent to the chest.

The cases remaining under treatment are generally improving, though a large proportion will require change of climate for perfect recovery, and several exhausted by chronic disease of the lungs and bowels cannot be expected to survive long.

Dr. Bryce reports that during the last month he has applied about 500 leeches to patients under his care, affected with fever, diarrhoea, and dysentery, and avoided using stimulants, with satisfactory results. Dr. Dumbory, who has charge of the fever wards, states that good food and wine have hitherto proved the best and only remedies in that disease.

(signed) *W. C. Humfrey,*  
Deputy Inspector-General.

*J. Meyer, Esq., to the Right Honourable the Secretary-at-War.*

My Lord,

British Civil Hospital, Smyrna,  
Superintendent's Office, March 1855.

I HAVE the honour to forward, for your Lordship's information, the following report on this hospital, as regards the building only.

Building.

The Turkish barrack, at present in occupation as a hospital for the reception of the sick and wounded of our army, is a large imposing-looking building, situated at the southern extremity of the town of Smyrna, consisting of a casement and two upper stories, the former story, with walls three feet six inches thick, the latter of wood, lath, and plaster, plastered outside, and coloured dark red; roofed with tiles.

It consists of a main building, with a northern and southern wing; aspect, west-north-west. It faces the bay of Smyrna, being only 200 feet from the shore; it thus receives the full benefit of the imbata, the cool, refreshing north-westerly wind prevalent in this climate during the greater part of the year.

Airing ground.

In front of the hospital is an open space, extending to the sea, forming an excellent airing ground, being 585 feet by 170 feet.

In the rear of the building there is also an open space, 500 feet by 200 feet, so that there is nothing externally to impede the free ventilation of the entire hospital.

Basement story.

In the basement story the wards are low; the flooring only eight inches above the ground. The corridors are paved with rough stones; and both corridors and wards badly ventilated.

I consider them altogether unfit for the occupation of patients; indeed the short experience here has already clearly demonstrated their unfitness, as shown by the frequent occurrence of fever in those wards, and the slow imperfect convalescing of the sick occupying them. In this opinion I am supported by Dr. Sutherland's Report, a copy of which I herewith forward.

I need hardly state to your Lordship, that I am, with all possible haste, making arrangements to remove all patients from this casement floor, which can most conveniently be made available for other purposes; the better wards for attendants, the rest as stores.

Upper stories.

The two upper stories of the building are well suited for hospital purposes. The means of ventilation are above the average, as in most of the wards there are windows looking into the corridors, in addition to the front windows looking towards the sea; those in the corridors looking into the open space at the back of the hospital, a free current of air is thus established. The privies in

Privies.

Turkish



Turkish buildings are invariably unfit for the use of Englishmen; steps had, however, been taken before my arrival to remedy this great evil. Within a week the privies contracted for by Colonel Storks will be in use.

The only cookhouse at present available is a square stone building, well situated, but altogether insufficient for the purpose. Cookhouse.

The "Caroline," store steam-ship, may be expected early next week, when steps will be taken with as little delay as possible to make the kitchen efficient.

The same observations are equally applicable to the laundry as at present existing.

Mr. Brunton, the civil engineer, is preparing a ground plan of the whole hospital, which will enable me to show the exact number of sick and attendants that can be accommodated, and in conjunction with this report will place your Lordship in full possession of all particulars connected with the building.

The plan will be forwarded on the 7th proximo, but I will not delay this report by waiting its completion.

I have omitted to state that the hospital is abundantly supplied with water from two tanks situated in the airing ground, in front of the building. Arrangement is making to filter this water, which will make it unexceptionable. Water.

I have, &c.

(signed) *John Meyer.*

*J. Meyer, Esq., to Lord Panmure.*

British Civil Hospital, Smyrna,  
14 April 1855.

My Lord,

I FEEL that it is not possible for me to add materially to the very able reports already in your Lordship's hands on the subject of the sanitary condition of this town and neighbourhood, and more particularly the suitability of this building for hospital purposes.

Mr. McLeod's report enters most fully into all particulars; the evidence of Drs. McCraith and Wood, taken by Dr. Sutherland, says all that can be said on diseases prevalent here, and on sanitary matters generally. I cannot consider either of these reports altogether favourable. I have now been here three weeks, and feel much the difficulty, with so short an experience, of reporting on this subject in the positive manner I would wish to do.

The large number of fever cases shown in the Returns from this Hospital, since its opening on 15th February, as well as the number still continuing under treatment, has probably attracted your Lordship's attention; but the conclusion I have arrived at, after a careful consideration, is not what might at first sight have been expected. In all about 800 sick have been admitted; of these 79 were at the time of admission suffering from fever (this calculation does not include readmissions), the remainder from frost-bite, scurvy, dysentery, and diarrhoea; add to this, that the wards in the basement floor were occupied by the sick, that the whole hospital must have been overcrowded, and it is impossible to imagine circumstances more calculated to encourage the spreading of fever from bed to bed, and ward to ward. I feel, therefore, that the existence of this fever is fully accounted for, and ought not in any way to be ascribed to the influence of climate or locality.

I have had no opportunity of comparing this site with others in the Mediterranean, the Sea of Marmora, and the Black Sea, which have been from time to time mentioned as fit sites for hospitals; but I have no hesitation in stating my belief, that this hospital may be conducted with good average statistical results for the Mediterranean.



The heat of the climate, and the ordinary condition of the men when admitted into hospital, render it highly probable that fever will, more or less, prevail in this or any other hospital in the East: it can only be kept in check by extreme cleanliness, attention to drainage, careful ventilation, and allowing ample space to each patient.

There are at present in this hospital 96 cases classed under the head of fever; of these 63 are convalescent, and those under treatment are, with very few exceptions, progressing favourably. The fever, generally, is of decidedly asthenic character, with cerebral and pulmonary complications. Some well-marked cases of typhus have occurred, with abundant rash; the disease is upon the whole amenable to the re-organised principles of treatment.

This species of fever is said to be scarcely known in Smyrna, and never to have prevailed as an epidemic; it closely resembles the form of fever known to occur in Ireland after a time of scarcity and famine.

Intermittents have occurred in men who had suffered from ague in Varna or elsewhere, and have been readily cured. The remittents have been, with one exception, of the mildest description. The fever is in a high degree infectious, but its virulence appears to have undergone considerable mitigation; this is, perhaps, partly owing to natural subsidence, but may also be fairly attributed to sanitary arrangements.

The other cases remaining in hospital are progressing most favourably with a large proportion of convalescents, who might make room for more urgent cases if an establishment for convalescents existed; at present there is no medium between the soldier in hospital and the soldier fit for duty. I regret to state that Miss Aplin, one of the ladies, is dangerously ill with fever, six of the paid nurses are also suffering from fever, one of the number seriously. Unless again forced by circumstances to overcrowd the wards, I do not for the future anticipate anything like the amount of fever that has prevailed in this hospital since its opening.

The advantages of Smyrna are in many respects obvious:—

1. A good building, far superior to any wooden structure, capable of containing with safety 520 patients, as well as a large number of attendants, besides store-rooms, offices, kitchens, washhouse, and privies, erected expressly for the use of Europeans.
2. Quarters in the immediate vicinity of the hospital for the whole medical staff.
3. An abundant market, affording peculiar facilities for the treatment of scurvy, dysentery, diarrhœa, and the generality of medical cases.

In writing this despatch I have availed myself of reports received from the medical officers of this hospital.

I have, &c.  
(signed) *John Meyer.*

I enclose Returns received from the Turkish authorities, through the British Consul, giving the number of inhabitants in Smyrna, and the number of deaths as registered.

---

(1.)

La ville de Smyrne compte vingt mille familles, logies dans les maisons et les khans, et en calculant six personnes par famille, cela fait cent vingt mille personnes (120,000). A ces habitants fixes, il faut ajouter les étrangers, qui n'ayant qu'une résidence transitoire, tels que les porte-faix, domestiques mâles et femelles, voyageurs, et qui l'on calcule au nombre de vingt-deux mille, ce qui fait en tout une population de cent quarante-deux mille personnes (142,000).

---



(2.)

Décès à Smyrne.

Depuis le 1er Janvier 1854 jusqu'au 1er Janvier 1855, morts 993.

Depuis le 1er Janvier 1855 jusqu'au 12 Avril 1855, morts 203.

---

*J. Meyer, Esq., to the Right Honourable the Secretary-at-War.*

British Civil Hospital, Smyrna,  
13 April 1855.

My Lord,

I HAVE the honour to enclose your Lordship a traced plan of this hospital, giving the cubic feet in each ward and corridor, and the consequent number of sick that can be safely accommodated in it.

I trust that the different reports by this time in your hands will enable your Lordship to judge of the eligibility of Smyrna as a site for a hospital, and to determine whether this establishment is to be increased to 1,200 beds, the number for which the medical staff was originally calculated. The great objection to Smyrna must always be its distance from the seat of war; should this objection, in addition to any others raised and not satisfactorily refuted, determine Her Majesty's Government not to increase the hospital accommodation here, I would express to your Lordship my own earnest desire, as well as that of the medical officers of my staff (I am authorised by them to do so), to proceed at any time, and to any place, nearer the seat of war, that may be determined upon by your Lordship as a convenient and suitable site for a civil hospital.

I have, &amp;c.,

(signed) *John Meyer.*



**SCUTARI, &c. HOSPITALS.**

**COPY of all OFFICIAL REPORTS of the HOSPI-  
TALS at Scutari, Kululee, Abydos, and Smyrna,  
since February last.**

(*Mr. Stafford.*)

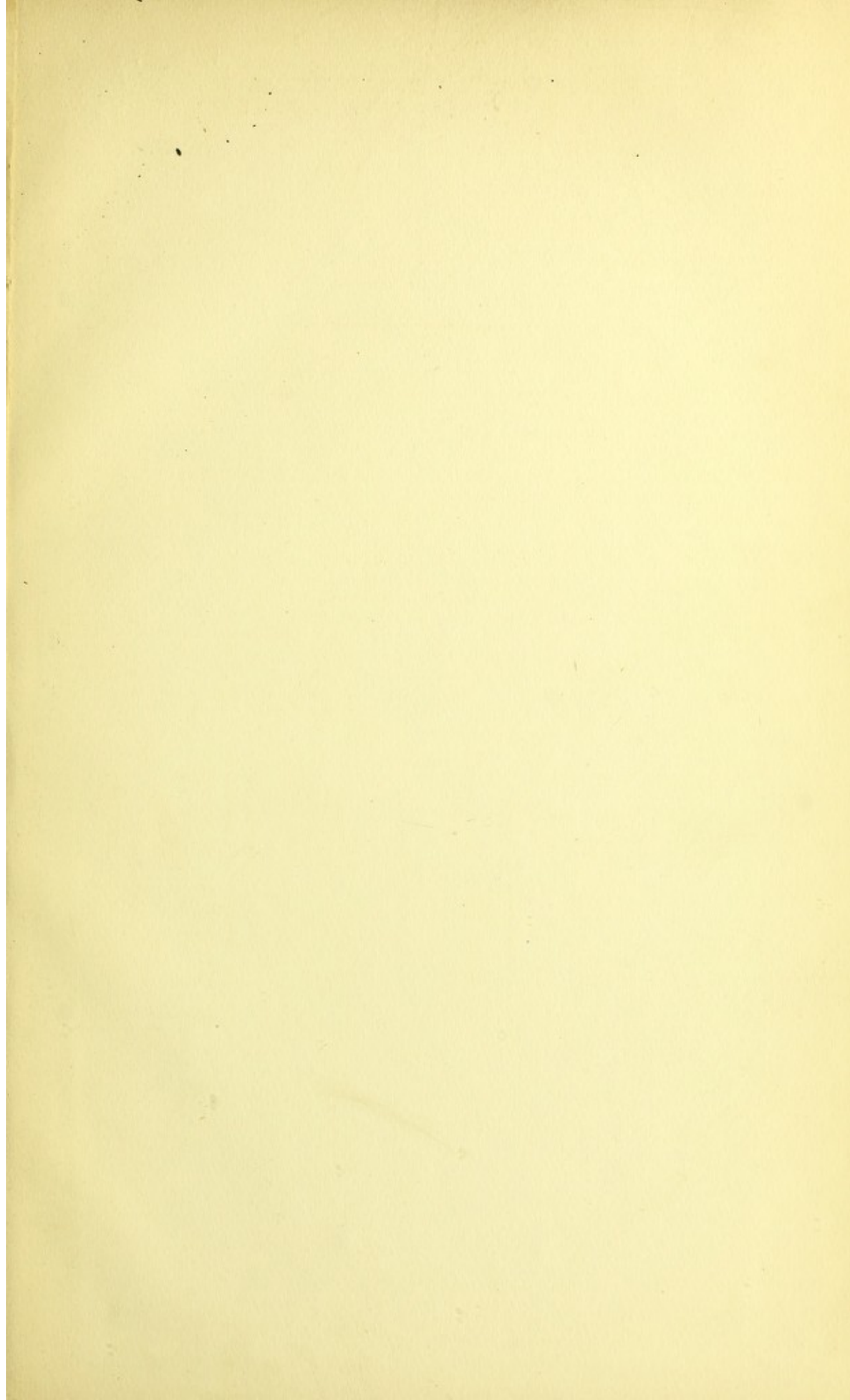
*Ordered, by The House of Commons, to be Printed,  
1 August 1855.*

[*Price 8d.*]

449.

*Under 12 oz.*







fol. bSVY  
1855

