

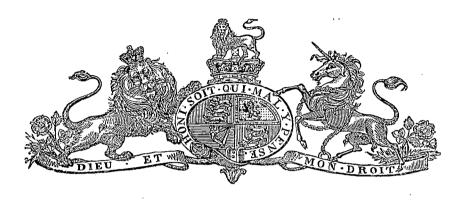
1858.

TASMANIA.

MILITARY SANATARIUM.

REPORT OF THE BOARD OF COMMISSIONERS.

Laid upon the Table by Mr. Attorney-General, and ordered by the House to be printed, 7 September, 1858.



COMMISSIONERS

Appointed on the 1st July, 1858.

President:

LIEUTENANT-COLONEL HAMILTON, R.E., Commanding the Troops.

Members:

LIEUTENANT-COLONEL HUNGERFORD, Bengal Artillery.

MAJOR HUTCHINS, 12th Regiment.

DOCTOR ATKINSON, Principal Medical Officer.

ASSISTANT-COMMISSARY-GENERAL OWEN.

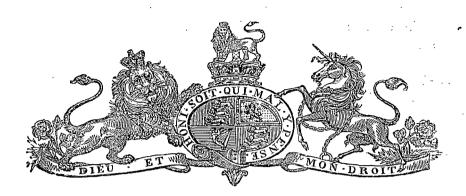
MR. DOUGLAS, Deputy Military Storeheeper.

LIEUTENANT CORNES, R.E.

THE HONOURABLE MR. NAIRN, Sheriff.

THE HONOURABLE DR. BEDFORD, M.L.C.

ROBERT PITCAIRN, Esquire.



The Board of Commissioners appointed by His Excellency Sir Henry Young, on the 1st July, 1858, to consider the probable benefits which would result from the establishment in Tasmania of a Military Medical Sanatarium, and Post for Convalescents,—after due consideration, beg to report as follows:—

First.—The salubrity of the Climate is equal, if not superior, to that of the healthiest part of Europe; and, for the restoration to health of those who suffer from the Diseases incidental to exposure to a Tropical Climate, better than that of any other in the World.

Second.—The Voyage from Calcutta or Bombay to Hobart Town, in the Steam Vessels which carry Her Majesty's Mails, would be performed in less than a month: the Steamers return from Suez nearly empty: there would be good accommodation for the sick men in those vessels; an immediate change to a better Climate; and a short voyage of about three weeks, instead of the long voyage of three and a half months they endure when sent to Europe.

Third.—A Sanatarium in Hobart Town, if established, would be more easily and quickly reached than the Hill Sanataria in the Himmalayas; there would be more certainty, in the generality of cases sent to it, of speedy restoration to health; and the sick and wounded men would be better housed and accommodated at Hobart Town than in the buildings set apart for them in the Hill Sanataria.

Fourth.—The above remarks have reference to the advantages the Men would gain from the establishment of a Sanatarium in Tasmania: the advantages to Government would also be great.

Fifth.—From the large number of Troops now employed, and likely to be employed for some time to come in India, it may be expected that the casualties will be proportionably large, and there will be difficulty in filling up the vacancies in Regiments as quickly as may be requisite: to perfect a Soldier in drill and discipline occupies from one to four years: many young Soldiers will probably be temporarily incapacitated for further active service from wounds or disease during their first Campaign in India: these disabled Soldiers cannot be replaced by Recruits from England under four months, and some delay must occur after the arrival of the Recruit before he can become efficient for service in the field:—it is a question deserving consideration, therefore, whether, at an additional cost even, it would not be advisable to allow the disabled Soldier the advantages of the Climate of Tasmania; as, giving him four months in this Colony for the recovery of his health, he could be returned to Calcutta or Bombay in six months after quitting either of those Ports, in all probability quite efficient for duty.

Sixth.—The establishment of a Sanatarium in Tasmania for 2000 men would be attended with comparatively small expense to Government, as there are already buildings either belonging to it that could be used for the accommodation of Troops, or which might be hired; and building materials are easily procurable in the Colony; and most advantageous sites exist in the vicinity of Hobart Town for buildings for Sanatory purposes, should the Government desire to send a larger number of men.

Seventh.—The Board deem that the expense of Transit to and from India to Hobart Town will be very moderate, as the voyage is short, and the Steamers come down from India nearly empty.

For more detailed information upon the following four important points connected with the subject, —

1st. The Salubrity of the Climate;

2nd. Barrack accommodation;

3rd. The expense of Transit;

4th. Expense of Rations,—the Commissioners would refer His Excellency to the annexed Minute of the Commission, and the Evidence therein referred to.

In submitting the result of their enquiries to His Excellency, the Commissioners desire to express their hope that His Excellency's suggestion may meet with the approval of the Home and Indian Governments, as, in the present demand for Troops in India, it is one which will tend, in the opinion of the Commissioners, to save many valuable lives,—be the means of restoring to health and efficiency Soldiers whose services would otherwise be lost to the State,—and thus be attended with results beneficial alike to the Troops and the Government.

R. G. HAMILTON, Lieut.-Colonel Royal Engineers, President.
T. HUNGERFORD, Lieut.-Colonel.
W. J. HUTCHINS, Major, 12th Regiment.
R. DOUGLAS, D. M. Storekeeper.
STEPHEN OWEN, A. C. G.
J. E. CORNES, Lieut. R. E.
W. NAIRN.
E. S. P. BEDFORD.
ROBERT PITCAIRN.

Hobart Town, Tasmania, 2nd August, 1858.

MINUTE.

I.—THE SALUBRITY OF THE CLIMATE OF TASMANIA.

From the information afforded to the Commissioners, and which is annexed, it appears that the temperature of the Climate is mild; not marked by extremes of heat or cold; a Winter mean temperature of Pau, and a Summer temperature of Bushy Heath, near London. It is free from marsh miasma: neither intermittent nor remittent Fevers occur here. Its annual fall of rain is moderate, and very generally distributed through the year.

The rate of mortality of the Troops during 15 years has here been not quite 8 per 1000 strength; whilst the mortality in England is 33,—in India not less than 50,—in China 103. The rate of mortality among the Troops in this command is less than the mortality of the Civil Population of England and Wales.

It is shown that the Troops are not injured by residence; and that the diseases most fatal to Soldiers in the East Indies—those of the Stomach and Bowels—are those least fatal to them in this Colony, and less than in the other Australian Colonies.

With these advantages there is this other important circumstance, that while an immediate return to a cold climate is likely to be injurious to persons who have resided in India and suffered from disease produced by the effects of the climate, removal to such a climate as is possessed by this Colony is a course more advisable; and this is supported by the opinions of Dr. Copland and Sir James Clark.

It also further appears, in very many instances known to the Medical Gentlemen who gave information to the Commissioners, that the Climate of Tasmania has exercised a very beneficial effect upon Invalids from India.

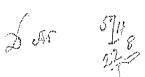
II.—THE MEANS AT THE DISPOSAL OF THE GOVERNMENT FOR PRO-VIDING BARRACK ACCOMMODATION FOR THE SICK AND INVALID SOLDIERS.

With respect to the means available or procurable for the Housing of Invalids, the Commission deemed it advisable to call upon the Barrack Master, Captain Mackay, and the Clerks of Works in the Royal Engineers Department, Messrs. Baker and Lander, for information and opinion on those heads; and beg to append the Reports of these Officers.

The Commission would remark generally with reference thereto, first, as to the opinion advanced by Captain Mackay, "that accommodation might be obtained without incurring much expense in certain Convict Buildings in Hobart Town for 1000 men, and in Launceston for 800 men," it has been ascertained that these Convict Buildings are, for the most part, in the possession of the Colonial Government; and even if they could be made available (which they could not), the expense of converting them to Hospital purposes would be so great as to preclude the idea of their adoption.

Secondly, with reference to the hiring of private merchants' stores, which were formerly occupied by Troops: their use would appear to be objectionable, owing to the very inefficient means of warming and ventilating the various stories, the adequate height of the rooms, and their deficient supply of light; in addition to these defects, they are badly situated, have no exercise grounds, and great expense, which could be more advantageously employed elsewhere to this end, would necessarily have to be incurred in the erection of Latrines, Bath-rooms, &c. They might certainly, on an emergency, be again resorted to for the temporary use of Troops.

Next, with regard to the opinions expressed by the Clerks of Works.—It is unnecessary to refer to Port Arthur, as the evidence of the Medical Officers condemns its adaptability for Sanatory purposes from climatic causes. At the other Stations on Tasman's Peninsula, viz., Cascades, Impression Bay, and Salt Water River, accommodation could be provided for about 600 inmates: their distances are respectively 11, 13, and 16 miles from Port Arthur, the Head Quarters of the Penal Settlements on the Peninsula; and they are very difficult of access except by water. The buildings generally are of a temporary character, and are not in very



good repair, having been unoccupied for some time,—consequently considerable expenditure would be necessary to render them complete. They possess, however, the advantage of containing numerous detached quarters and cottages, formerly occupied by Convict Discipline Officers.

Impression Bay and Cascades have been used by the Colonial Government as Quarantine Stations.

Next, with regard to the Convict buildings in Hobart Town specified by Mr. Baker, the Female House of Correction, and the Comptroller-General's Office, would afford immediate accommodation for 400 Invalids, at a probable cost of £320. This amount of accommodation could be increased by 150, by converting the separate apartments at the former Establishment into wards, making a total of 550 Men, at a cost of about £920.

Next, the Military Barracks at Hobart Town are admirably situated for Sanatory purposes, on an area of $22\frac{1}{2}$ acres: they were constructed for 15 Officers and 400 Men, and would be available for the same number of Convalescents, supposing that accommodation could be provided elsewhere for the Military force already occupying them, and which force consists of five Officers and two Companies of H. M. 12th Regiment.

The Military Barracks at Launceston are vacant, and would accommodate 100 Men.

There is a large building at Launceston formerly used as a Commissariat Store; but nearly the same objections attend its use as are attached to the Merchants' Stores at Hobart Town, particularly as regards its site.

The Military Stores at Hobart Town, could they be spared, are very well adapted for conversion to Invalid purposes; and, with the necessary alterations and additions to make them perfect as a Hospital, would accommodate 300 Men at a cost of about £1000.

The Commission, having fully considered the subject of accommodation in its several bearings, offer the following remarks and suggestions on the subject :—

The Establishments in Hobart Town and its vicinity are the most suitable which offer for occupation as Invalid Depôts.

Those on Tasman's Peninsula would appear objectionable from their limited accommodation, difficulty of approach, distance from Settlements, and increased cost of maintenance as compared with Hobart Town.

The available Buildings at Launceston also offer too limited an amount of accommodation; and their sites are objectionable on Sanatory grounds for appropriation as Invalid Depôts, being near the banks of a Tidal River, which at low water leaves exposed mud-banks of extensive area, and being contiguous also to marshy land.

The Establishments in Hobart Town which might be made available are under two heads; viz., Convict and Military.

Of the former, it appears that the Female House of Correction can, with trifling alteration, be made suitable for the reception and treatment of 450 Invalids. Though situated in an apparently not very desirable position, yet the evidence of Dr. Benson, who has had Medical charge of the Establishment for the last five years, and who has had every opportunity of arriving at a correct opinion, is conclusive as to its superior healthiness to that of Hobart Town generally.

The Establishment consists of large blocks of substantial buildings, enclosed by high walls, which impede the general ventilation, and detract from the cheerfulness of the place. This could be easily remedied by removing the exterior wall, and various unnecessary buildings in the interior.

There is a large extent of ground in rear of the Buildings which could be made available for exercise; and the whole Establishment can be spared by the Convict Department, and rendered a very efficient Depôt.

The Comptroller-General's Office was formerly built as an Invalid Establishment for Female Convicts. It affords good accommodation for about 100 Patients Its site is opposite the General Hospital, and is unobjectionable. It has a large yard attached suitable for exercise. The only expense to be incurred in its conversion would be for Latrine and Bath apparatus. In the event of its being thus appropriated, accommodation for Offices for the Comptroller-General's Department would have to be found elsewhere.

Of the Military Buildings, the Barracks afford accommodation for 15 Officers and 400 Men, and, with moderate expenditure, could be made unobjectionable for that number; and as the Invalids become convalescent from the other buildings, they might be drafted into Barracks for duty, prior to their return to India.

The large area on which the Barracks are situated—viz. $22\frac{1}{3}$ acres—affords ample room for extension of the Buildings, or for encamping a large number of men, should such a proceeding be considered advisable; there being already camp equipage for 3000 men in charge of the Deputy Military Storekeeper. The Barracks are at present partially occupied by a detachment of two Companies of H. M. 12th Regiment.

The Military Stores.—These Stores consist of two substantial rectangular twin buildings, built of stone, with slated roofs. Each Store is about 110 feet long by 44 feet in breadth. They are built upon the New Wharf, near the water's edge. The first and second floors are well adapted for Hospital purposes, and could be very easily converted into wards for 300 men: the total expense of converting them into a Hospital with every accommodation would be about £1000. The basement is not recommended for wards, but would be available for diningrooms, offices, attendants' quarters, &c.

These Stores offer peculiar advantages, as, from their contiguity to the water, they present every facility for embarkation and disembarkation. Their site is unobjectionable on Sanatory grounds; and they are situated on an allotment of $8\frac{3}{4}$ acres of ground, which could be made available for extension of buildings and for exercise ground.

In the event of these Stores being so appropriated, accommodation would have to be provided for the stores they now contain, or for a portion of them, should the remainder be otherwise disposed of as surplus or unnecessary. It appears that this accommodation might be obtained to the extent of 57,000 cubic feet in the vacant Commissariat Store: should this not be sufficient for the stores which may remain after the disposition above mentioned, suitable accommodation could be readily procured for the remainder.

It appears, then, that the following is the number of Invalids who can be readily accommodated at Hobart Town:—

and the second of the second o	Invalids.	Total Cost.
Female House of Correction	450	$\pounds 900$
Comptroller-General's Office	100	320
Military Stores	300	1000
	850	£2200

Military Barracks, 400 Convalescents in addition to the above.

These numbers are based on the assumption that the accommodation is required for *Hospital patients*, for each of whom about 1000 cubic feet of air is allowed in the wards; but, owing to the nature of the climate and buildings, and considering the convalescent condition in which the greater number of the men would in all probability arrive, it is presumed that the above accommodation would be sufficient for 50 per cent. more Invalids than estimated.

The Commission are also of opinion that it is most desirable that the men, or rather the Depôts, should be concentrated as much as possible, with a view to economy, efficient supervision, and treatment: they therefore recommend Hobart Town and its vicinity as being most advantageous as a general Depôt.

Should it, however, be thought unadvisable to appropriate any of the buildings or establishments above enumerated, as recommended, it is thought that perfect Hut accommodation, similar in character to that furnished by the Chester Huts in England, could be provided at a cost of £23 per man.

There is at present an Establishment called the Queen's Orphan Schools, belonging to the Imperial Government, distant about three miles from Hobart Town, and contiguous to the high road. It is situated on a large extent of land well adapted for Sanatory buildings, capable of accommodating in its present state 400 Men, and of being extended to almost any amount, without interfering with present capabilities. It is, however, occupied by 400 Orphan Children, and their necessary attendants,—for whom suitable accommodation would have to be provided elsewhere in the event of the Establishment being appropriated for Invalids.

III.—THE EXPENSE AND TIME OCCUPIED IN TRANSIT TO AND FROM INDIA AND TASMANIA.

The first question seems to be, whether sailing ships or steamers are—taking all circum-

stances into account—best adapted for this service; and, in deciding upon their comparative merits, it may be considered that a sailing ship is less expensive, and that the additional time spent at sea is not likely to be prejudicial to the Invalids, while a steamer is much more rapid and more regular in making her voyages.

With respect to the conveyance of the men by Sailing ships, the Commission have been favored with the evidence of seven of the principal Merchants in the Colony (whose statements are annexed); and from these it appears,—first, that taking the mean of the estimates of the mercantile gentlemen, the expense of conveying a Soldier from Calcutta to Hobart Town would be £15, and of an Officer £44, if the ship were permanently employed, as it would be if the Sanatarium were established; these charges, however, being subject to fluctuation as the general rates of freight fluctuate.

2nd. That there would be no difficulty in obtaining good Sailing ships for the purpose.

3rd. That the length of the voyage from Calcutta to Hobart Town would be about 47 days during the North-east Monsoon, and 69 days during the South-west Monsoon; and the return voyage about the same (reversing the seasons).

As to the expense by Steam-vessels, the only available Australian Steam Lines at present are the Mail Ships from Point de Galle to Melbourne, and the Colonial Steamers from Melbourne to the Colony. It appears undesirable to tranship the Troops at Melbourne, both because it would occasion some trouble and annoyance to the Invalids, and because it would cause the additional expense of having two vessels fitted up for Troops instead of one. If any arrangement should be made with the present Mail Company, we think the suggestion made by the mercantile gentlemen may be useful,—namely, that the Mail Steamer shall, after landing her Melbourne Mail, proceed to Hobart Town direct with the Soldiers, forwarding her Sydney Mail and Passengers by a separate steamer, which at present we believe there would be little difficulty in effecting.

Application has been made to the Agent of the Mail Company, and also to the Agent of the Peninsular and Oriental Company at Sydney, for information respecting the expense of conveying the Invalid Troops by their respective Steamers: no reply has yet been received from the former, and the Commission are unwilling to delay their report until it may arrive.

From the acting Agent of the Peninsular and Oriental Company the annexed letter has been received, which, although it gives no precise information upon the point of expense to which enquiry was directed, is so far satisfactory as it indicates the opinion of the Agent that the Peninsular and Oriental Company would not be unwilling to undertake the service.

Upon the point of the conveyance of the Troops, the Commission do not know that there are any sources of information in the Colony other than those of which they have availed themselves, and the results of which they have thus stated.

IV.—THE MEANS OF RATIONING THE TROOPS, AND THE PROBABLE EXPENSE.

With reference to this point, the Commissioners beg to append the Report of the Senior Officer in charge of the Commissariat Department in Tasmania, from which it will be seen that the existing Contracts provide for any quantities of Provisions that may from time to time be required; and that the present expense of a Hospital Full Diet Ration is only eleven pence and $\frac{2}{10}$ ths of a penny per diem, while the Contract prices of Fuel and Light, and Hospital comforts, are reasonable.

R. G. HAMILTON, Lieut.-Colonel Royal Engineers, President.
T. HUNGERFORD, Lieut.-Colonel.
W. J. HUTCHINS, Major, 12th Regiment.
R. DOUGLAS, D. M. Storekeeper.
STEPHEN OWEN, A. C. G.
J. E. CORNES, Lieut. R. E.
W. NAIRN.
E. S. P. BEDFORD.
ROBERT PITCAIRN.

Hobart Town, Tasmania, 2nd August, 1858.

SCHEDULE of Enclosures to the Minute of the Commissioners.

APPENDIX A.

No. I.—Dr. Bedford's Remarks	PAGI
No. II.—Dr. Benson's Evidence	28
No. III.—Dr. Atkinson's Letter	29
APPENDIX B.	
Lithographs Nos. I and II.—Relative Mortality among Troops	31
APPENDIX C.	
No. I.—Barrack Master's Evidence	35
No. II.—Mr. Lander, Clerk of Works, Report	36
No. III.—Mr. Baker, Clerk of Works, Report	37
No. IV.—Mr. Douglas's Evidence	38
	•
APPENDIX D.	
No. I.—Letters from the Seven principal Merchants	38
No. II.—Letter from Agent of Peninsular and Oriental Company	41
APPENDIX E.	
Assistant-Commissary-General Owen's Report	42

APPENDIX A.

No. I.

REMARKS by Dr. Bedford on the Salubrity of the Climate of Tasmania.

To enable the Commission at almost a glance to become possessed of information upon the facts of greatest importance relating to the Climate of the Colony, Tables are annexed, (Nos. 1. to 5.) compiled by Commander Kay, and published by him in the Transactions of the Royal Society of the Colony.

The hourly observations from which these Tables were compiled were made by Naval Officers selected for that duty, and supplied with well-tested instruments of the best construction.

The details of these observations, and results deduced from them, have been published by Colonel Sabine, under the authority of Government, and are available here, or in England, if further information is needed on this subject.

The Annual mean temperature is 53.48°, which is near the mean annual temperature of Pau.

The mean Spring temperature is 53.55°, nearly equal to the Spring temperature of Montpelier.

The mean Summer heat is 61.54°, and resembles the Summer heat of Bushy Heath, near London.

The mean temperature of the Autumn is 53.80°, and resembles Sidmouth or Penzance.

The Winter mean is 45.03°, the same as that of Marseilles.

The heat of Summer is never relaxing from the coolness of the nights; and the cold of Winter is so slight, that ice and snow are rarely seen on the ground in Hobart Town.

Table Nos. 2. and 3. show the Variation of the temperature: but it is right to notice the sometimes sudden changes of temperature in one day,—due in the warmer months, when they are most frequent, to a southerly wind setting in on a hot day.

The months of November and July are those in which the largest quantity of rain falls: in November it is more than 3 inches: the annual mean is above 20 inches; but there is in each month a fall of rain equal to half of that in July, and in some to half of that in November. (Table No. 5.)

Vegetation has not had any prejudicial effect upon health, nor has the recent tillage of land induced disease. Remittent fevers are unknown; and, from the absence of marsh malaria, the Colonists are not affected with Fever in its intermittent form.

The climate, not marked by extremes of heat or cold, though often exhibiting a great daily variation, presents, perhaps, a larger number of days of bright, calm, clear weather suitable for exercise than almost any other climate.

By referring to Returns, No. 6, the yearly rate of mortality among the Troops in this Island, during 15 years, is seen to be rather under 8 in 1000 of mean strength; whilst the mortality in England is among soldiers 33, and among the civil population in the most healthy districts 7.7, and among the civil population in all England and Wales 9.2,—showing that in this Colony the mortality is not one-fourth among the Troops what it is in England, and that it is nearly equal to the civil population in the most healthy parts of England.

Tables Nos. 8. and 9. will show that residence in this Colony does not injure health, or increase the rate of mortality; the proportion of admissions into Hospital not being larger, or the deaths more numerous

There is annexed a Table, No. 10, showing the cases treated in the Convict and Colonial Hospitals during eleven years:—Out of 2250 deaths, 306 were from diseases of the stomach and bowels, 38 from diseases of the liver, and 770 from diseases of the lungs.

On referring to Table No. 11, it will be seen that during nineteen years the mortality among the Troops at the Cape was 13.7 per 1000; and by the next Table it appears that a residence at the Cape induces disease, and the deaths are more numerous than on first arrival. In other respects the Cape approaches to the Tasmanian Tables—the diseases of the lungs producing in both Colonies the greater number of deaths. In this Colony, among the Troops, out of 121 deaths 71 were from diseases of the lungs, chiefly consumption; 2 from diseases of the liver; and 8 from diseases of the stomach and bowels. At the Cape, out of 311 deaths 89 were from diseases of the lungs, 25 from diseases of the liver, and 70 from diseases of the stomach and bowels.

Table No. 14 shows the mortality at the Mauritius, during 19 years, to have been 27.4 per 1000. Out of 835 deaths 132 were from diseases of the liver, 323 from diseases of the stomach and bowels, and 172 from diseases of the chest; and a residence in that Colony increased the liability to disease, and the rate of mortality.

Table No. 18 shows the annual rate of mortality of Troops in the Burmese Empire for two years to have been 446 per 1000. The total number of deaths 1340: of these 691 were from diseases of the stomach and bowels, 48 from cholera, 17 from diseases of the liver, and 8 from diseases of the lungs.

Table No. 20 shows that the yearly mortality of the Troops in China is 103 per 1000: of the 190 deaths, 88 were from diseases of the stomach and bowels, 4 from diseases of the liver, 15 from diseases of the lungs.

The Tables of the Diseases in the Troops in other parts of India show the great prevalence of diseases of the stomach, bowels, and liver, as compared with this Colony. Table No. 22, showing the deaths in Her Majesty's 2nd Foot during ten years' service in Iudia,—the Table following, of admissions and deaths from dysentery at Bombay during four years, and those of Madras,—clearly show this.

The information with reference to India had to be gathered from some few Official Returns, and from Reports in the Bombay Medical Transactions.

The general average of deaths appear to be upwards of 50 per 1000 strength in India.

The Tables of the diseases in China have been introduced; for, although the duties of the Commission is with reference to Troops in India, Troops serving in China are under similar circumstances from the effects of climate, and the men are nearer Ports of embarkation than in most posts of service in India.

Having submitted facts for the consideration of the Commission, I may be permitted to express my opinion upon the effects the climate of this Colony is likely to have upon the diseases under which Soldiers labour who have resided in warmer climates. Judging from my experience of the good effects this climate has produced in very many instances that have fallen under my notice of persons coming on sick leave to this Colony from India, I do not think a more desirable climate could be found; and its speedy and cheap access is not a matter to be overlooked.

The mild character of the climate; its cool nights; its equal fall of rain during the year; its freedom from malaria; its bright and clear atmosphere; its scenery, and the general English aspect of its Towns, buildings, and cultivation, all have great influence upon persons seeking health after a residence in a warm climate.

The fact that the diseases most prevalent and fatal in India are not so here, is another important element in the curative effect of a temporary residence in this Colony.

It is a more bracing climate than Sydney.—I make the following extract from one of Dr. Dawson's Annual Reports, dated April, 1849:—"There is a freshness of countenance, an appearance of robustness, and an elasticity of movement that is indicative of good health; and I can see considerable improvement in these respects in the men of the 99th Regiment lately arrived from New South Wales." The Returns referring to New South Wales and Victoria show that, in those Colonies, the proportion of Diseases of the Stomach and Bowels and Liver is larger than in Tasmania. (Tables Nos. 26 and 27.)

There is one other important consideration also:—Diseases of the Liver and Bowels, particularly if accompanied with changes of structure, do not well bear change to a cold climate at once; disease checked is again brought out actively by such removal; and if the disease itself is not increased, others take their rise from the too sudden attempt to live in a severely cold climate.

I attach extracts from Sir James Clark and Dr. Copland on this subject.

The only drawbacks in the effect of this Climate on Invalids are, the sudden changes occurring: but as these changes are generally in the hot months, and mostly after eleven o'clock in the day, and the preceding hours are the pleasantest and calmest of the whole day, attention to the hours in which exercise is taken, and to dress, will obviate all danger; and, as an Invalid has only to take core of himself, need not affect his health in the least.

Looking at all these circumstances, and the shortness of the voyage, particularly by Steam, I have no doubt that this Colony is a most favorable station for Invalids from India and China.

E. S. P. BEDFORD.

July, 1858.

No. 1.

MEAN TEMPERATURE of the Climate of Hobert Town for every Month in the Year, derived from Hourly Observations for Eight Years,—1841 to 1848.

1841	YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December,
Temperature 62.11 61.37 58.90 53.18 49.30 43.34 43.73 40.03 49.93 53.12 67.60 61.14 Mean Annual Temperature from the result of Eight Years' hourly Observations,—1841 to 1848	1842	62·25 61·90 60·61 63·04 61·78 61·76	63·05 63·10 62·77 60·44 58·88 60·85	59·09 60·02 56·25 59·13 57·87 57·94	52·61 52·51 49·89 54·16 53·33 53·27	50·45 51·40 50·01 48·39 48·15 47·60	45·10 47·75 44·10 45·05 45·63 43·09	45·09 44·16 43·04 45·47 42·79 43·94	46·14 47·17 44·33 46·43 44·30 47·88	52·09 49·10 48·10 51·90 49·49 51·22	50·32 53·92 52·75 54·63 53·74 52·45	58.08 59.85 54.47 58.15 58.82 54.80	58.77 61.06 60.85 61.66 62.81 62.80
$\begin{cases} Spring & \begin{cases} September & 53.55 \\ November & \\ Summer & \\ January & 61.54 \end{cases} \\ \text{Mean Quarterly Temperature} & \begin{cases} March & 53.80 \\ May & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & $		62·11	61.37	58.90	53·18	49.30	45.34	43.73	46.03	49.93	53.12	67.60	61.14
(August)	•			$ \begin{cases} Spr \\ Sun \\ Aut \end{cases}$	ing nmer		September October November Decembe January February March April June	r }	••••••		• • • • • • • • • • • • • • • • • • • •	6	3·55 1·54 3·80

No. 2.

MEAN ANNUAL VARIATION of the Meteorological Phenomena at Hobart Town, derived from Hourly Observations for Eight Years.

MONTH.	Temperature of the Air.	Elastic Force of Vapour.	Humidity of the Air.	Barometer.	Gaseous Pressure.
January February March April May June July August September October November December	+ 5·49 0·30 4·18 8·14 9·75 7·45 3·55 0·36	** 050 + 070 + 070 + 040 + 004 - 020 - 046 - 055 - 048 - 032 - 017 + 018 + 036	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	in ·032 +- ·037 +- ·049 +- ·033 +- ·032 +- ·034 +- ·033 +- ·002 ·025 ·016 ·112 ·034	in '085 '032 +- '010 +- '030 +- '053 +- '081 +- '089 +- '049 +- '010 +- '002 '129 '069

No. 3.

MEAN DIURNAL VARIATION of the Meteorological Phenomena at Hobart Town, derived from Eight Years' Hourly Observations.

HOUR.	Temperature of the Air.	Elastic Force of Vapor.	Humidity of the Air.	Barometer.	Gaseous Pressure.
Noon. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	** 6·10 + 6·98 + 7·17 + 6·70 + 5·66 + 3·87 + 1·76 + 0·09 - 1·11 - 1·89 - 2·55 - 3·08 - 3·59 - 4·03 - 4·41 - 5·09 - 5·24 - 4·80 - 3·62 - 1·80 + 0·49 + 2·66 + 4·55	in. + ·017 + ·018 + ·017 + ·018 + ·017 + ·016 + ·012 + ·007 + ·003 - ·002 - ·001 - ·004 - ·006 - ·008 - ·011 - ·018 - ·018 - ·016 - ·018 - ·016 - ·018 - ·010 - ·008 + ·008 + ·008 + ·013	- 11 - 13 - 13 - 13 - 13 - 11 - 8 - 4 + 1 + 2 + 5 + 6 + 7 + 8 + 8 + 8 + 8 + 7 + 1 - 5 - 8	in	in ·024 ·040 ·045 ·049 ·039 ·028 ·012 +- ·003 +- ·016 +- ·013 +- ·014 +- ·014 +- ·014 +- ·012 +- ·005 +- ·010 +- ·014 +- ·014 +- ·018 +- ·019 ·009

No. 4.

MEAN HEIGHT of the Barometer at Hobart Town for every Month in the Year, derived from Hourly Observations for Eight Years, 1841 to 1848.

Corrected to 32° FAHRENHEIT.

YEAR.	January.	February.	March.	Aprıl.	May.	June.	July.	August.	September.	October.	November.	December.
1841	in. 29·725 29·714 29·832 29·876 29·759 29·632 29·691 29·730	in. 29.801 29.950 29.869 29.828 29.758 29.561 29.870 29.951	in. 29.988 29.951 29.651 29.651 28.891 29.796 29.772 29.743	in. 29·738 29·762 29·917 29·764 29·980 29·741 29·818 29·789	in. 29.924 29.668 29.954 29.880 29.817 29.688 29.834 29.739	in. 29.918 29.660 29.813 29.790 29.799 29.953 29.644 29.949	in. 30.005 29.696 29.680 29.857 29.866 29.884 29.490 30.030	in. 29.882 29.839 29.804 29.691 29.542 30.000 29.769 29.724	in. 29·795 29·616 29·509 29·748 29·903 29·971 29·898 29·626	in. 29.835 29.526 29.614 29.776 29.924 29.831 29.852	in. 29·627 29·550 29·671 29·726 29·622 29·852 29·632	in. 29·739 29·812 29·740 29·835 29·664 29·709 29·728
Mean Monthly Pressure	29.745	29.818	29:830	29:814	29.813	29:815	29.814	29 781	29.758	29.765	29:669	29.747

Mean Annual Pressure 29 781 in., the Cistern of the Barometer being 105 feet above the level of the Sea at Mean Tide.

No. 5.

MEAN FALL of Rain at Hobert Town for every Month in the Year, derived from Twelve Years' Observations with the Self-registering Rain Gauge.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	Novemher.	December.	Annual Total.
1841	in. 0.03 1.83 0.55 2.01 0.58 1.38 0.73 1.04 0.74	in. 3·10 1·05 0·11 0·34 1·91 2·64 0·07 0·79 1·02	in. 0.33 0.07 0.02 3.22 1.55 2.15 2.67 1.18 2.37	in. 1·11 0·89 1·96 0·92 0·24 2·68 1·74 0·51 1·44	in. 0.53 2.09 0.10 2.24 0.72 0.65 1.49 4.38 3.82	in. 1·23 4·41 1·91 2·74 4·27 2·29 0·56 1·12 2·25	in. 1.01 3.46 2.97 2.12 0.72 2.20 1.73 2.43 5.98	in. 1 32 0 99 1 09 1 16 0 63 1 53 0 60 2 66 2 75	in. 0.82 1.08 0.99 7.14 0.73 0.82 0.39 1.84 1.91	in. 2:41 1:78 1:47 2:57 1:19 1:61 1:74 1:27 1:42	in. 1.75 5.84 1.70 1.56 3.75 2.87 2.41 4.04 8.92	in. 0.31 0.11 0.50 0.23 0.39 1.14 0.53 2.36 0.90	in. 13·95 23·60 13·43 26·25 16·68 21·96 14·46 23·62 33·52
1850	1·20 2·33 1·46	1·10 0·58 0·19	0·29 0·73 0·31 1·24	2·19 0·18 4·99	0·57 0·74 1·46 1·57	0·70 2·35 0·22 2·00	0·30 1·17 3·14 2·27	1·31 1·10 3·47	1.67 2.16 3.19	0·26 0·79 1·77	4·31 4·19 1·41 3·55	0·61 1·66 2·01	14·51 17·98 23·62 20·30

Average Annual Fall of Rain..... 20:30 in.

No. 6.

RETURN showing the Average Annual Strength of Troops in the Tasmanian Command, with the Total Number of Admissions into Hospital, together with the Total Number of Deaths, from 1st April, 1843, to 31st March, 1858.

<u></u>		YEAR.		Annual Average Strength.	Total Number of Admissions.	Total Number of Deaths.
From 1st Apr	ril, 1843, 1 1844,	to 31st March	, 1844	1344 1622	850 ~ 901	16 7
"	1845,	"	1846	1497	1211	7
"	1846,	"	1847	1653	906	14
"	1847,	"	1848	1780	1070	14
"	1848, 1849,	"	1849	1361 861	1231 776	10 8
"	1850,	"	1851	7 68	770 784	9
"	1851,	" "	1852	703 701	736	$\overset{\mathtt{o}}{2}$
"	1852,	"	1853	704	804	
"	1853,	"	1854	593	690	4 5 5
,,	1854,	"	1855	609	660	5
22	1855,	22	1856	684	580	8
"	1856,	"	1857	508	383	8
"	1857,	"	1858	450	298	4
		TOTAL		15,135	11,880	121
•		AVERAGE.		1009	792	. 8

1

No. 7.

RETURN showing the Number of Cases treated in the Military Hospitals at Tasmania, from all Classes of Disease, during the period from 1st April, 1843, to 31st March, 1858; with the Number of Deaths in each Class.

	1843	3-4.	1844	l-5.	184	5–6.	1840	3–7.	1847	7–8.	1848	3–9.	1849	9-50	185)–1.	1851	-2.	1852	2–3.	1853	3–4.	1854	1-5.	185	5–6.	1850	3 –7 .	185	7–8.	Total No	umber of rion and
CLASS OF DISEASES.	ADMITTED.		ADMITTED.		ADMITTED.		ADMITTED.		ADMITTED.		TTED.		ADMITTED.		TTED.		ADMITTED.		ADMITTED.	ا:	ITTED.	 	ADMITTED.		ADMITTED.		ADMITTED.		ADMITTED.		Deaths the 15	during
	ADM	DIED.	ADM	DIED.	ADM	DIED.	ADM	DIED.	ADM	DIED.	ADMI	DIED.	ADM:	DIED.	ADM	DIED.	ADM	DIED.	ADM	DIED	ADM	DIED.	ADM	DIED.	ADM	DIED.	ADM	DIED.	ADM	DIED.	ADMIT-	DIED.
Fevers	108	1	65	••	67		29		73	1	70	6	44	1	35	1	30		39		31	••	16	1	17	1	15		10		649	12
Eruptive Fevers	4			i ,					1	·			1	• •] 1						7		••						'	•••	14	
Disease of the Lungs	102	10	156	4	177	4	142	7	188	7	230	1	161	4	128	6	131	2	186	4	218	4	149	3	110	7	65	6	42	2	2185	71
Disease of the Liver	8		13	. 1			15	••	13	1	12		4	••	2	••	2		2		3		3	• •	3		3			٠.	83	2
Disease of the Stomach & Bowels.	50	1	44	••	112	1	93	2	110	1	106	1	65	• • •	96	••	72	••	92	• • •	99		57	• •	49		30	1	32	1	1107	8
Disease of the Brain	14	1	16	. ••	12		18	1	21	2	-10		13		3	1	12		11	••	12	••	6	••	`11		7	1	10	1	176	7
Dropsies	2		1	٠.	2		4	1					1	1	1	1					1		2	••	1						15	3
Rheumatic Affections	61		59		97		86		62	••	113		58		37		31		35		43		36		32		33		22		805	
Venereal Affections	77		128	••	242		118		138		116	••	63		69		74		64		27		40		94	••	66		53		1369	
Abscesses and Ulcers	117		131	2	190	1	141	1	153	••	168	1	169	1	143		72		74		45		84		87	••	36	٠,	35		1645	6
Wounds and Injuries	120	2	142	••	165		135		132	1	157		81	• •	85	••	86		115		87		86	••	83		47		41		1562	3
Punished	2		5	٠.	9		9		5		15		5					••									2		1		53	
Disease of the Eyes	32		15		38		33		79		130		70	•••	157	••	198		144		74		148	••	51		14	••	16	••	1199	
Disease of the Skin	41	1	35		21		9		15		13		••		1		3		1	••	1				2		12		1		155	1
All other Diseases	112	••	91	••	79	1	74	2	80	1	91	1	41	1	26	••	25		41	••	42	1	33	1	40	••	53	•••	35	••	863	8
Total	850	16	901	7	 1211	7	906	 14	1070	14	1231	10	776	8	784	9	736	2	804	4	690	5	660	5	580	8	383	8	298	4	11,880	121

No. 8.

RETURN showing the Influence of the Seasons in producing Sickness and Mortality amongst the Troops stationed in Tasmania, from 1st April, 1843, to 31st March, 1858; embracing a Period of Fifteen Years.

	184	3–4.	184	 5.	184	5–6.	185	6-7.	184	7–8.	184	8–9.	1849	<u>–</u> 50.	185	0–1.	185	1–2.	185	2–3.	185	3–4.	1854	4–5.	185	5–6.	1850	 6- 7 .	185	7–8.		Admissions ths during
BEANINE	р. П		ė	_	Ð.		D.		D.		.d2		GD.		D.		Ġ.		ED.		ED.		ED.		ED.		ED.		ED.		the Fift	een Years.
MONTHS.	ADMITTED.	DIED.	ADMITTED.	DIED.	ADMITTED.	DIED.	ADMITTED.	DIED.	ADMITTED.	died.	ADMITTED.	DIED.	ADMITTED.	DIED.	ADMITTED.	DIED.	ADMITTED.	DIED.	ADMITTED.	DIED.	ADMITTED.	DIED.	ADMITTED.	DIED.	ADMITTED.	DIED.	ADMITTED.	DIED.	ADMITTED.	DIED.	ADMIT- TED.	DIED.
April	54		114		50		69		108	2	76	1	5 7		77	2	66	••	62	1	102		65	1	57	1	23	1	23		1003	9
May	55		65		80		83		95		64		55		73		61		65		72		45		5 8	••	26		28		925	5
June	37		84		81		80	1	108	1	72	1	45	1	65		44		48		55	1	60		47	1	28		28	• •	882	6
July	42	1	73	1	71	1	61	1	91	1	114	1	40	1	53		48		57		64		77		40	1	36	1	25		892	9
August	36	1	56	1	68	••	48		77		109	2	57	1	66	2	54		55		84	1	56	••	36	1	42		22		866	9
September	41	 	72	1	81		67		89	1	134	1	60	1	56		54		53		46	1	61	2	30	1	46	1	16		906	9
October	50		92	1	75		84		96	3	106	1	61	1	76	2	71	••	73		20		67	••	40	1	34	3	28		973	14
November	99	3	97	1	123	2	61	1	7 9		87	1	63	1	59	1	55	1	89	••	31	••	60	••	60	•••	28	••	26	1	1017	12
December	118	1	77		197	2	84	3	96	2	151	 ,	104	1	70	1	82	. •	71	2	29	1	32	1	64	••	30	••	25		1230	14
January	80		58		144		105		85	2	138	2	86		7 5	••	76	I	75		55	••	27	••	94	2	24	1	31	••	1153	8
February	113	5	66	1	122	1	86	1	70	1	99	• • •	80		55	••	74	••	7 6	1	65	••	28	••	31		40	••	26	-	1031	10
March	125	4	47	1	119		7 8	4	76	1	81		68	1	59	1	51	• •	80	·••	67	1	82	1	23		26	1	20	1	1002	16
Total	850	16	901	7	1211	7	906	14	1070	14	 1231	10	776	8	784	9	736	2	804	4	 690	5	660	5	580	8	383	8	298	4	11,880	121

No. 9.

RETURN showing the Composition of the whole Force, classed according to the Periods they have been stationed in the Colony of Tasmania, as well as the relative Number of Admissions and Deaths in each Class, from 1st April, 1843, to 31st March, 1858, for the Purpose of determining whether their Liability to Sickness and Mortality is lessened by Length of Service.

PERIOD	184	&3-1	2.	184	14-5	5. 2	184	Ł5 −(5.	184	\6 -7	. 18	847	7-8.	184	48- 9	9. 1	849	-50	18!	50-5	51.	185	1-2.	18	52-	3.	185	3-4. 	185	54-5	. 13	55-6	5. 1	250	5-7.	18!	57-8		TOTAL.		Aver per 1 on Stre	1000
OF RESIDENCE.	Strength.	Admitted.	Died.	Strength.	Admitted.	Dred.	Strength.	Admitted.	Died.	Strength.	Admitted.	Strength.	Admitted	Admitted. Died.	Strength.	Admitted.	Dred.	Strength.	Admitted.	Strength.	Admitted.	Died.	Strength.	Admitted.	Strength.	Admitted.	Died.	Strength.	Admitted. Died.	Strength.	Admitted.	Strength.	Admitted.	Died.	Strength.	Died.	Strength.	Admitted.	Strength.	Admitted.	Died.	Admitted.	Died.
Under 1 year	257	315	6	43	6	1 :	317	343	4	423	121	4 8	90	41	90	160	3 1	19	158	47	95	2	48]	100	. 70	114		47	45	18	29	. 1	1 1		63	69	20	25	. 165	1622	20	981.24	12.09
From 1 to 2 years.	58	29		220	287	1	64	56		437	258	4 9	i 3	73 1	. 93	157		54	43 .	100	100	1	37	30	. 4	1 47	1	52	73	45	37	. 80	79	1	44 1	37 3	56	41.	. 156	1447	11	922-19	7.01
From 2 to 3 years.	279	257	4	236	54	1 2	231	155		270	55 .	. 98	36 5	77 7	517	189	1	44	38 .	45	40		74	72	. 3	7 44		37	35	51	60	. 49	37	1	46 1	03 B	160	97	3119	1813	18	582-58	5.78
From 3 to 4 years.	307	105	4	393	279	2 9	208	163	1	164	88	3 10	08	83 1	108	43	1	73	39	l 2 6	20		36	25	. 70	61		13	34	21	30	. 48	33	1	2		107	80	2 1688	1033	16	642.72	9.49
From 4 to 5 years.	176	23	1	454	160	1 5	279	165		96	56	3 19	91	61 1	191	77	1	80	68	. 60	62	2	29	26	. 3:	2 50		58	65	43	35	. 37	58	1	7	10 1	9		. 1748	916	11	524.0	6.29
From 5 to 6 years.	186	69	1	187	67	:	169	146	1	56	134	. (37	42 1	61	304	2 1	12	31	38	48		18	12	. 2	7 25	1	26	38	43	67	2 25	28	1	1	1	2	4.	. 1024	1016	10	992-18	9.76
From 6 to 7 years.	70	50		76	44	:	136	95	1	112	155	. 15	29 2	202 1	129	202	1 2	20.	244	5 116	148	1	40	40	. 1:	3 15	1	15	26	44	44	. 37	59		11	3	12	6.	. 1160	1247	11	1075.0	9.48
Above 7 years	11	2		13	4	1	93	88		95	39	. 16	66	99 1	166	99	1 1	59	155	330	271	3	419	31 5	40	448	1	345	374 5	344	358	412	285	5 1	34	60 1	90	45	3188	2736	·24	859.02	7.84
TOTAL	1344	850	16	1622	901	7 1	497	1211	7 1	653	906 1	4 178	30 10	70 14	1361	1231	10 8	61	776	768	784	9	701	36 2	70-	804	4	593 6		609	660 8	684	580	8 5	08 38	83 8	450	298	15.135	{11·880	121	784.86	7.99

No. 10.

RETURN showing the Number of Diseases and Deaths in Her Majesty's Colonial Hospitals, Tasmania, from 1844 to 1854; a Period of II Years.

CLASS OF DISEASES.	TOTAL ADMITTED.	TOTAL DIED
Fevers	1599	82
Disease of the Lungs	5313	· · 770
Disease of the Liver	222	38
Disease of the Stomach and Bowels	3377	306
Disease of the Brain	2874	372
Dropsies	258	101
Rheumatic Affections	3776	54
Venereal Affections	1937	33
Abscesses and Ulcers	3802.	57
Wounds and Injuries	33 30	87
Disease of the Eyes	5266	4
Disease of the Skin	490	$ar{f 2}$
All other Diseases	4762	344
Total	36,306	2250

No. 11.

RETURN showing the Admissions into Hospital, and Deaths, among the White Troops serving at the Cape of Good Hope,—embracing a Period of 19 Years.

YEARS.	YEARS. STRENGTH. ADMISSION. DEATHS.		DEATHS.	RATIO PER 1000 OF MEAN STRENGTH.		
1818	1291 1206 1220 1569 1385 1347 1318 1346 1327 1423 1154 1171 1174 1154	892 995 1081 1169 1405 1230 1419 1829 1340 1200 1131 1166 1468 1218 1163 1157	14 13 13 16 24 17 15 35 15 19 15 7 11 15 19	Admitted. 691 825 886 745 1014 913 1077 1359 1010 843 980 991 1250 1055 1044	Died. 11 11 10 17 13 11 26 11 13 13 6 10 13 17	
1833	1096 1085 586 748	1021 831 791	22 15 10	1056 941 1418 1057	15 20 52 13	
Total Average	22,714	$\frac{22,506}{1184}$	311	991	13.7	

No. 12.

RETURN showing the Influence of Length of Residence on Corps serving in the Cape of Good Hope, embracing a Period of Six Years.

	72nd Foot arrived in 1828.	75th Foot arrived in 1831.	98th Foot arrived in 1825.	TOTAL.
Died in 1831 Ditto 1832 Ditto 1833 Ditto 1834 Ditto 1835 Ditto 1836	8 13 12 16 13 8	8 9 6 2 10 13	10 4 10 10 11 12	26 26 28 28 34 33
Total	70	48	57	175

No. 13.

RETURN showing the Total Number of Admissions, and Deaths, from all Classes of Diseases, among the White Troops serving at the Cape of Good Hope, embracing a Period of Nineteen Years.

1	ADI	MISSIONS.	D	EATHS.
CLASS OF DISEASES.	Total.	Annual Ratio per 100 of Mean Strength.	Total.	Annual Ratioper 1000 of Mean Strength.
Fevers Eruptive Fevers Disease of the Lungs Disease of the Liver Disease of the Stomach and Bowels Disease of the Brain Dropsies Rheumatic Affections Venereal Affections Wounds and Ulcers Wounds and Injuries Punished Disease of the Eyes Disease of the Skin All other Diseases	1994 9 2218 496 2859 221 48 1463 4777 2673 2861 796 720 317 1054	\$ 88 \$ 98 22 126 10 2 64 210 118 126 35 32 14 46	44 1 89 25 70 31 13 1 8 5 6 	1.9 1.1 3.9 1.1 3.1 1.3 6
TOTAL	22,506	991	311	13.7

No. 14.

RETURN showing the Total Admissions, and Deaths, from all Classes of Diseases, among the White Troops serving in the Mauritius, embracing a Period of Nineteen Years.

YEAR.	STRENGTH.	ADMISSIONS.	DEATHS.	RATIO PER 10 STREN	
			<u>, </u>	Admitted.	Died.
1818	1776	1714	48	965	27
1819	1650	1584	$\widetilde{65}$	960	39
1820	1395	1434	57	1028	41
1821	1298	1302	36	1003	$\tilde{28}$
1822	1346	1509	27	1121	$\tilde{20}$
1823	1248	1138	34	912	27
1824	1190	1250	$2\overline{2}$	1050	19
1825	1131	1391	21	1230	19
1826	1338	2214	21	1655	16
1827	1692	2040	25	1206	15
1828	1639	2281	59	1392	36
1829	1650	2111	47	1280	29
1830	1606	2162	29	1346	18
1831	1777	2653	56	1493′	32
1832	1861	2859	52	1536	28
1833	2228	3317	56	1489	25
1834	2201	3051	68	1386	31
1835	1934	2451	63	1267	33
1836	1555	1647	49	1059	31
Total	30,515	38,108	835		• •
Average	1606	2006	44	1249	27.4

No. 15.

RETURN showing the Influence of the Length of Residence on Corps serving in the Mauritius, embracing a Period of Eleven Years.

	29th Foot, arrived, September, 1826.	99th Foot, arrived, February, 1826.	87th Foot, arrived, July, 1831.
	DIED.	DIED.	DIED.
1st Year's Residence	13	7	13
2nd ditto	25	6	-18
3rd ditto		10	12
4th ditto	13	14	15
5th ditto	17	15	18
6th ditto	34	22	18
7th ditto	17	13	
8th ditto	18	12	
9th ditto	18	18	
10th ditto	16	25	
11th ditto	5	20	••
TOTAL	195	162	94
AVERAGE	18	15	15½

No. 16.

RETURN showing the Total Number of Admissions, and Deaths, from all Classes of Diseases, among the White Troops serving at the Mauritius, embracing a Period of Nineteen Years.

	AD	MISSIONS.	:	DEATHS.
CLASS OF DISEASES.	Total.	Annual Ratio per 1000 of Mean Strength.	Total.	Annu l Ratio per 1000 of Mean Strength
Fevers Eruptive Fevers Disease of the Lungs Disease of the Liver Disease of the Stomach and Bowels Epidemic Cholera Disease of the Brain Dropsies Rheumatic Affections Venereal Affections Abscesses and Ulcers Wounds and Injuries Punished Disease of the Eyes Disease of the Skin	4709 6 2550 2508 8394 268 1236 69 1396 3519 5842 4103 943 958 433	154· ·2 84· 82· 275· 9· 41· 2·3 46· 115· 191· 134· 31· 32· 14·	53 172 122 323 32 83 9 1 1 9 14	1.7 5.6 4. 10.6 1.1 2.7 .3
All other Diseases Total	38,108	38.5	15 835	27:4

No. 17.

RETURN showing the Extent of Sickness among Her Majesty's Troops serving in the Burmese Empire in 1824 and 1826.

	Mean Strength.	Admission into Hospital.	Average Number constantly in Hospital.
13th Foot	608 820 Returns not 706 522 348	2749 2457 available. 2686 1739 1015	218 176 145 92 122
Total	3004	10,646	150

No. 18.

RETURN showing the Number of Disease and Deaths from all Classes of Diseases among Her Majesty's Troops serving in the Burmese Empire for Two Years.

	Adm	issions.	DEATHS.	
CLASS OF DISEASES.	Total.	Annual Ratio per 1000 of Mean Strength.	Total.	Annual Ratio per 1000 of Mean Strength,
Fevers	3188	1061	162	53.9
Disease of the Lungs	114	38	8	2.7
Disease of the Liver	100	33	17	5.7
Disease of the Stomach and Bowels	4668	1554	691	230
Epidemic Cholera	87	29	48	16.
Disease of the Brain	21	7	1	-3
Dropsies	240	80	71	23.6
Rheumatic Affections	174	58	2	•7
Venereal Affections	7 8	26	1	•3
Abscesses and Ulcers	496	165	6	2.
Wounds and Injuries	57 5	191	3 8	12.6
Punished	174	58	• •	
Disease of the Eyes	218	73	• •	••
Disease of the Skin	20	7	• •	• • •
All other Diseases	493	164	47	15.6
Killed in Action	••	••	58	19.3
Causes of Death not known	• •		190	63.3
TOTAL	10,646	3540	1340	446•

No. 19.

RETURN showing the Number of Admissions, and Deaths, among Her Majesty's and the Honorable East India Company's European Troops serving in China from 1st April, 1845, to 31st March, 1846:—

		ADMISSIONS.		DEATHS.	
CORPS.	STRENGTH.	Total.	Ratio per 1000 of Annl. Strength.	Total.	Ratio per 1000 of Annual Strength.
Royal Artillery	77 900 814 -63	123 2618 2000 117	1597 290 2463 1857	4 147 37 2	51 163 38 32
Total	1854	4858	2620	184	98

No. 20.

RETURN showing the Number of Admissions, and Deaths, from all Classes of Diseases, of White Troops serving in China, from 1st April, 1845, to the 31st March, 1846:—

	ADI	MISSIONS.	DIED.	
CLASS OF DISEASES.	Total.	Ratio per 1000 of Mean Strength.	Total.	Ratio per 1000 of Mean Strength.
Fevers	2070	1116	68	36•
Disease of the Lungs Disease of the Liver	268	144	15	8.
Disease of the Liver	33	17	4	2.
Disease of the Stomach and Bowels	1023	551	88	47.
Disease of the Brain	34	18	7	4.
Dropsies	21	11	$\frac{3}{1}$	1.
Rheumatic Affections	157	84	1 .	0.539
Venereal Affections	358	193		
Abscesses and Ulcers	333	193	$\frac{2}{1}$	1.
Wounds and Injuries	161	85	. 1	0.539
Punished	14	6		
Disease of the Eyes	248	142		
Disease of the Eyes	40	21	1	0.539
All other Diseases	104	55		
TOTAL	4858	2620	190	103•

No. 21.

RETURN showing the Number of Diseases, and Deaths, of One Troop of Horse, stationed at Sholapoor, Poona, and on Field Service in Scinde, for the Years 1838, 1839, and 1840.

329 Mean Strength.

-,		y Mean Su			
	:	ADI	MITTED.	D	IED.
CLASS OF DISE	ASES.	Total.	Ratio per 100 on Mean Strength.	Total.	Ratio per 1000 on Mean Strength.
Fevers Eruptive Fevers Disease of the Lungs Disease of the Liver Disease of the Stomach and Bowels Cholera Disease of the Brain Dropsies Rheumatic Affections Venereal Affections Venereal Affections Wounds and Injuries Disease of the Eyes Disease of the Skin All other Diseases		95 70 205 6 50 22 37 227 69 81 8	553 6 288 212 620 18 152 67 112 689 209 246 24 21 114	1 1 2 4 1	3·04 3·04 6·08 12·16 3·04 3·04
101AL	···········	1099	3340	11 Dr	ATHS.
Year.	STRENGTH.	Total.	Average per 1000 on Annual Strength.	Total.	Ratio per 1000 of Annual Strength.
1838	106 103 120	353 375 371	3330 3640 3091	3 2 6	28 19 50
TOTAL	329	1099	3343	11	33
	109	366	8358	32	_

No. 22.

RETURN showing the Number of Deaths in Her Majesty's 2nd Foot, during
Ten Years' Service in India.

Aggregate Strength—6775. DISEASES.	DIED.	Ratio per 1000 of Mean Strength.
Pleuritis	1	0.1
Consumption	18	2.8
Pulmonary Apoplexy	5	0.7
Rupture of Heart	2	0.2
Cardiac Disease	12	1.8
Thoracic Aneurism	5	0.7
Fevers	34	5.0
Hepatic	25	3.7
Stomach and Bowels	47	6.8
Brain	18	2.8
Cholera	39	5.7
Other Diseases	16	2.4
TOTAL	222	32.7

No. 23.

RETURN showing the Admissions and Deaths from Dysentery in the European General Hospital at Bombay, for the Five Years from July, 1838, to July, 1843; with per Centage of Deaths on Admissions, of Admissions on Total Hospital Admissions, and of Deaths on Total Hospital Deaths, for the same Period.

	1838.		18	39.	18	± 0.	18	41.	18	42.	18	43.	TO:	ral.		HLY AVERA	
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Deaths per Cent. on Admis- sions.	man Cont	
January February March April May June July August September October November December	762336		12 8 8 1 8 7 3 2 8 25 25	2 1 1 1 1 2 6	12 5 8 5 7 5 12 7 3 5 14 16	4 1 2 1 2 1 5	19 3 2 9 10 10 12 16 10 17 8 10	4 2 1 5 1 4 3 1 2 2	13 8 13 5 15 19 11 16 14 23 28	2 4 3 3 3 4 8	22 11 12 10 11 11 	54 1 2 1 2	78 29 34 37 34 49 57 43 33 47 73 93	17 12 5 8 9 9 8 7 11 3 6 18	21.8 41.6 21.6 26.4 18.3 14. 16.2 33.3 6.2 8.2 19.3	14·2 7· 8 3 6·3 4· 6·2 7·9 7· 6· 6·5 10·6 15·1	39·5 37·5 15·1 19·5 11·2 17·6 21·6 20· 21·1 11·1 12·7 27·2
Total	27	5	109	14	99	20	134	26	170	33	77	15	616	113	18:3	8.1	20.7
Year .									1838.		1839.		1840.		1841.	1842.	1843.
Per Centage of Deaths on Annual Admissions					18	•5	12.8		21.2		19·1	19.4	19.4				
Per Centage of Admissions from Dysentery on Total Hospital Admissions				otal	5:3		8.2		7.3		9·1	8.2	8.3				
Per Centage of Deaths from Dysentery on Total Annual Hospital Admissions					17	.5	15.2		18.8		23.4	21.2	30.				

No. 24.

RETURN showing the Ratio of Mortality by the principal Classes of Diseases in the Madras Command generally, compared with that of 57th Regiment; and of two other Periods, compared with last Year at the Station, Fort Saint George, Madras.

	MADRAS	COMMAND.	Fort Saint George, Madras.				
DISEASES.	Total	57th Regt.	1832 & 3.	1841-2 & 3.	1843.		
	Aggregate Strength 103,431	Aggregate Strength 8306	Aggregate Strength 1217	Aggregate Strength 2713	Aggregate Strength 1030		
Thoracic Diseases Fevers Hepatic Gastro-enteric Cholera Cerebral Other Diseases	3· 4·8 5·3 14·9 7·4 1·8 8·2	*3· 2·4 4·3 15·4 4·9 2·4 2·4	2·4 1·6 3·3 12·3 17·2 4·9 1·6	5·3 •6 3·6 12·5 3· 1·8	·9 2·9 1·9 8·8 3·9 ·9		
TOTAL	45.4	35.2	43.3	27.4	19:3		

^{*} Consumption and Disease of the Heart and Aorta. No deaths by Pueumonia or Pleurisy.

N.B.—During the first period the 57th Regiment consisted of men of middle age chiefly; during the last, two-thirds or more of young men.

No. 25.

57TH REGIMENT.

RETURN showing the Admissions into Hospital, and Deaths, by the principal Classes of Diseases, with the Ratio per 1000 of Strength, from 1st April, 1843, to 31st March, 1844. Station—Madras, India. Average Strength—1030.

	TOT	AL.	RATIO PER 1000.		
DISEASES.	Admitted.	Died.	Admitted.	Died.	
Pulmonary Diseases	171	1	166	<u>-</u> -9	
Cardiac and Aortic	6		6		
Fevers	284	3	276	2.9	
Hepatic	74	2	72	1.9	
Gastric	473	9	459	8.8	
Cholera	7	4	7	3.9	
Cerebral	9	1	9	.9	
Venereal	1 199 1		118		
Wounds and Injuries	136		132		
Wounds and Injuries All other Diseases	404	• •	392		
Тотац	1686	20	1637	19:3	

No. 26.

RETURN showing the Number of Deaths registered for the Country Districts of New South Wales, embracing a Period of Ten Months, from 1st March to 31st December, 1856,—under the several Classes of Disease.

Class of Diseases.	Total Number of Deaths in each Class.
Fevers.	98
Eruptive Fevers	32
Disease of the Lungs	691
Disease of the Liver	75
Disease of the Stomach and Bowels	491
Disease of the Brain	509
Dropsies	71
Rheumatic Affections	28
Venereal Affections	24
Abscesses and Ulcers	31
Wounds and Injuries	
Disease of the Eyes Disease of the Skin	
All other Diseases	1455
Total	3534

No. 27.

RETURN showing the Number of Deaths registered at Melbourne and Suburbs, Victoria, from 1st July to 30th September, 1853, under the several Classes of Diseases.

CLASS OF DISEASE.	Total Number of Deaths in each Class.
Fevers Eruptive Fevers Disease of the Lungs Disease of the Liver Disease of the Stomach and Bowels Disease of the Brain Dropsies Rheumatic Affections Venereal Affections Wounds and Ulcers Wounds and Injuries Disease of the Eyes Disease of the Skin All other Diseases	30 163 10 108 93 25 2 4 29 41

EXTRACT from Dr. J. Copland's Dictionary of Practical Medicine.

Ir may be of importance to know the most suitable period of the year to arrive in this country (England), after the frame has become assimilated, by a long residence, to a warm climate. If an invalid return in Winter, the sudden transition from a warm to a cold country may be detrimental; if early in the Spring, he is liable to feel the effects of a variable season for some time. The least objectionable period extends from May to September; and if the cold of the winter months be found too severe in the more easterly counties, or in the metropolis, the climate of Devonshire or Bath may be tried with as great advantage as that of most of the southern parts of Continental Europe. Old residents in a warm climate will experience much advantage from residing some time in the more southerly parts of Europe before passing to England or other countries of the North, more particularly if they use a course of mineral warm waters of Vichi, Carlsbad, or Ems, in their way. (Art. Climate.)

EXTRACT from SIR J. CLARK'S Treatise on Climate.

There is still another class of persons to whom a residence of one or more winters in the South of Europe would be of great service, in habituating their constitutions to bear a colder climate, before they established themselves finally in this country. I allude to those persons who have resided for a considerable time in a tropical climate, as in the East or West Indies. By passing the first winter in Italy, after their arrival in Europe, their systems would become more gradually habituated to the change in the relative state of the circulation and secretion of the skin and internal organs, which takes place on removal from a hot to a cold climate. When such persons have suffered from disease of the liver, or from dysentery, this circumstance will afford a stronger reason for recommending such a measure, as severe and protracted inflammation of the liver and bowels are rarely completely effaced, and a renewal of these diseases is not an unfrequent circumstance of a change from a hot to a cold climate. Even when there is no formal disease present, the coldness and humidity of the climate of this country during the winter are fraught with danger to those who have been long resident in the torrid zone. The circulating fluids are thereby forced from the surface and extremities upon the internal organs; and thus disease of the liver and bowels is renewed, or chronic affections of those organs are not unfrequently converted into acute ones: nor is disease of the lungs an unfrequent occurrence in such cases.

No. II.

EVIDENCE of Dr. Benson before the Sanatory Commission.

I AM in charge of the Convict Medical Department in Tasmania, and have been an Officer of that Department for more than 23 years. I am also acting as Medical Officer to the Staff in Garrison. My duties have called me to visit and reside in nearly all parts of the Colony; and I am therefore in a position to give an opinion as to its Climate and salubrity, both of which I consider superior to any other British Territory. It is true that in the Summer months rapid alterations of temperature occur; but, at the worst, those only lead to Rheumatic or Catarrhal affections, not to diseases of a dangerous character; and even the danger of these affections occurring can be guarded against by ordinary precaution. Indigenous Intermittent Fever is scarcely known in the Colony; and the cases of Dysentery and Affections of the Liver are to be attributed, not to climate, but to indiscretion.

CONVICT BUILDINGS.

The Cascade Factory is a large substantial building, well drained, and abundantly supplied with water, pipes having been laid on to every division of the Establishment: the sickness and mortality among the adult inmates has been small, much less than the average in the Colony, notwithstanding it being enclosed with high walls, which prevents a free access of both air and light.

The Brickfields Nursery is healthily situated, but unfortunately badly supplied with water.

On Tasman's Peninsula there are two Stations unoccupied, Cascades and Impression Bay, both of which could be made available at little expense; the climate is healthy, but moist.

I have been in India, and know the diseases incidental to that Country; those diseases are not only infrequent in this Colony, but also of a mild nature when they do occur.

I look upon this Climate as one well adapted for restoring health to Invalids from a warm climate, and have frequently noticed its beneficial effect in cases of sick Officers from India.

W. BENSON.

No. III.

Melbourne, 6th July, 1858.

In reply to your letter of the 30th ultimo, conveying the Colonel Commanding's wishes that I would favour him with my opinion as to the adaptability of the Climate of Tasmania as au Invalid Depôt for the Sick of our Forces serving in India, I have the honor to state, for the information of Colonel Hamilton, that I consider the Climate of Hobart Town well adapted for the recovery of Invalids from any Tropical Climate, but do not consider the present buildings vacated, or about to be so, by the Convict Department in any way suitable for such a purpose without a very great alteration, so as to form them into cheerful and commodious Hospitals.

I also consider Launceston still better adapted to the recovery of Sick from a Tropical Climate, as being milder and more equable in its temperature.

Port Arthur, I am of opinion, would not be suitable for this purpose, from the moistness of the atmosphere in that low situation.

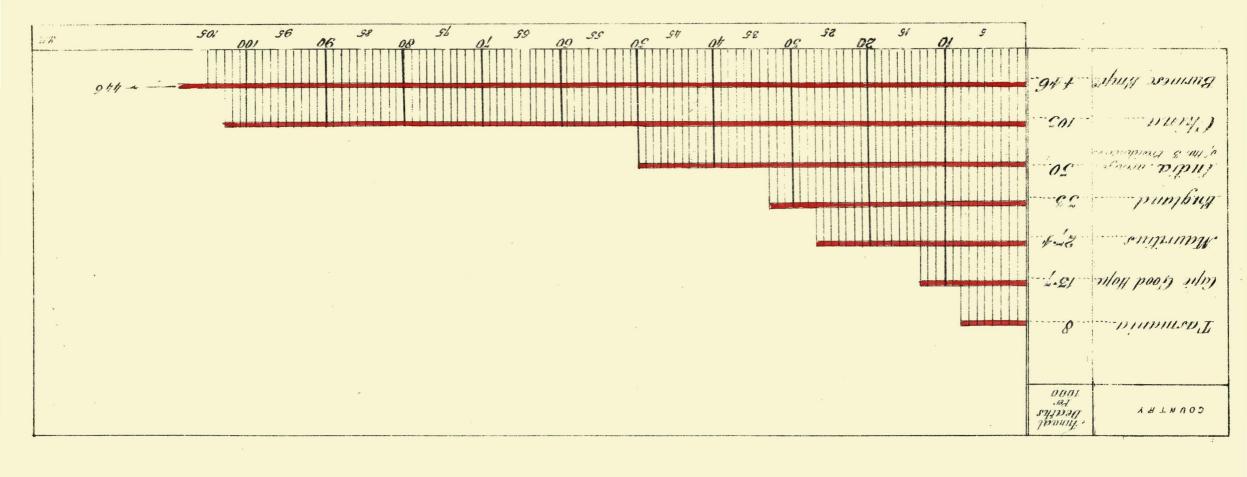
I have the honor to be,

Your obedient Servant,

THOS. ATKINSON, M.D., Deputy Inspector General of Hospitals, en route to Ceylon.

The Assistant Adjutant-General, Hobart Town.

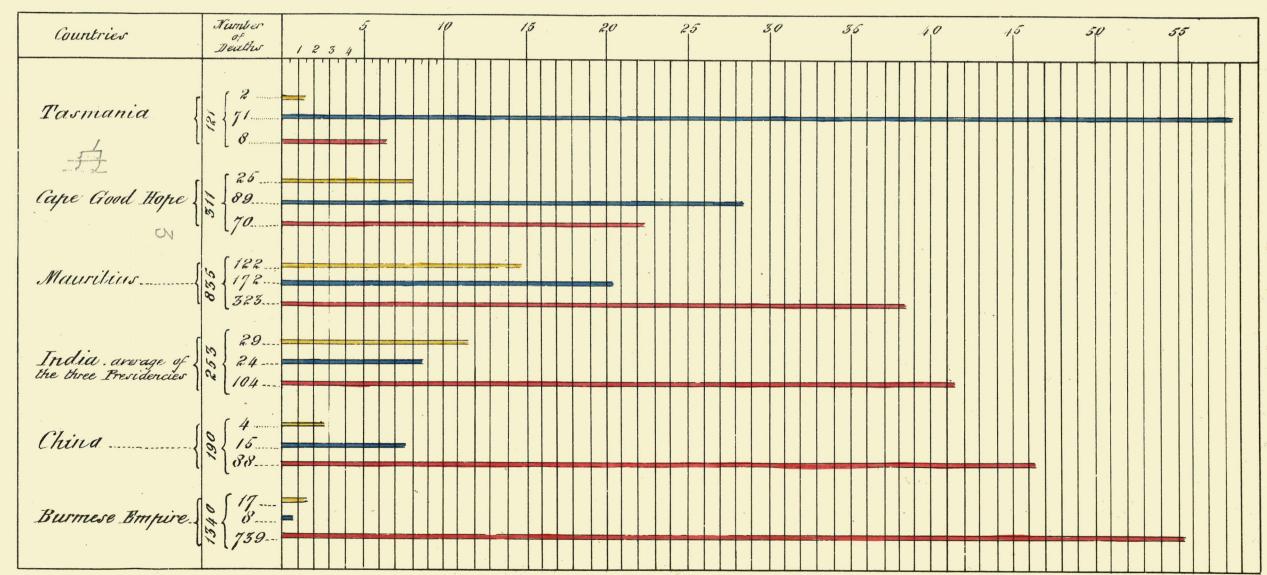
Representing the Relative Mortality of Soldiers in Hasmania, at the Cape of Good Hope, in the Munitius, in Bingland, India, China, and in the Burmese Limpine.



Liver Disease
Lungs . do
Stomach & Borels

TABLE

Shewing the Per-Centage of Deaths among the Troops from Diseases of the Liver, Lungs, and Stomach and Borrels



APPENDIX

No. I.

MEETING of Commission, July 16, 1858.

CAPTAIN MACKAY, Barrack-master, called in and examined.

By Mr. Nairn.—1. How many years have you been Barrack-master? I have been 18 years in the Colony, and 15 years Barrack-master.

- 2. What is the largest number of Troops that accommodation has been provided for in the Colony? 2341 Soldiers, 59 Officers, 464 Women, 499 Children: total, 3333.
- 3. How many of these were accommodated in Hobart Town? On the 5th January, 1846, Barrack accommodation was provided for 1178 in Hobart Town.
 - 4. What description of accommodation?
 - 1. Military Barracks, 252 men, 1 field officer, 15 officers.

2. Spilsby House, 80 men.

- Spinsby House, 80 men.
 Australian Stores, 180 men, 2 officers.
 Solomon's Store, No. 1, 215 men.
 Solomon's Store, No. 2, 100 men.
 Clues' Store, 33 men.
 Knight's Store, No. 1, 70 men.
 Knight's Store, No. 2, 178 men.
 Rees's Store, 70 men.

Hired Barracks. ₹

1 Field Officer, 17 Officers, 1178 Men.

Barrack accommodation for 134 men has been since added to the Military Barracks.

- 5. How many men are accommodated in the present Military Barracks? 386.
- 6. Is the Military Hospital included? No; nor the room used as a Pensioners' Store, which will accommodate 36 men, and the Hospital 44.
 - 7. This makes a total of 1258? Yes.
- 8. For how many men could Barrack accommodation be easily obtained in Hobart Town? 1000 and upwards, in stone Stores, fully equal to Barracks both in ventilation and other respects.
- 9. At what expense? £1 per annum per man. General Victor, formerly Commanding Royal Engineer, considered it an advantageous arrangement for the Government.
 - 10. Could these Stores be obtained now at the same rate, in your opinion? I think they could.
- By Dr. Bedford.—11. Do you know what amount of accommodation each man had in those hired Stores? Each man had a foot from the wall, and a foot at his bedside; but I do not know how many superficial feet each man had.
- By the President.—12. In your opinion, if 1000 Invalids were sent from India, could they now be accommodated properly if a month's notice were given before their arrival? I think they could, by hiring Stores, which are the best sort of Buildings for Troops.
- 13. Looking to the probable extent of the Garrison, could any Invalids be housed in the Military acks? There is room for 209 men now; but if another Company, which is expected, arrives, Barracks? this could not be made available.
 - 14. How many men could be accommodated at Launceston? 100 men.
- 15. Should the Home Government decide on this being an Invalid Establishment, what would be the best arrangements to be made, so as to provide permanent accommodation for 1000 men or more, regarding the principal objects attendant on a Military Establishment of a Sanatarium? I will afford an answer to this in writing.

16. Could Barrack Stores be readily supplied to this number of men? The Ordnance Store-keeper will answer this question better than I can. I draw stores from him. I will consult with him, and embody our opinion in my Report.

The Barrack-master withdrew.

Will the Barrack-master afford the Commission his opinion as to what would be the best arrangement to be made, so as to provide permanent accommodation for 1000 or more men, regarding the principal objects attendant on a Military establishment of a Sanatarium?

R. G. HAMILTON, Lieutenant-Colonel Royal Engineers.

Committee Room, 16th July, 1858.

In answer to the foregoing query, the Barrack-master is of opinion that it would not be difficult to procure good accommodation in Hobart Town for 1000 men, without incurring much expense to the Imperial or Indian Governments. Considering the great reduction that has recently been made in the Convict Establishment; it may be presumed that the prison called the "Tench" might be made available for the accommodation of Invalids from the Indian Army, by the transfer of the few male Convicts therein to some other locality, such as Maria Island, where there are ample buildings; or to some of the Convict Stations on Tasman's Peninsula, where they could be confined in equal security.

Should this proposal, however, not obtain the consent of the Governor and Comptroller-General, the plan long in operation in this Colony for the accommodation of the Troops might again be resorted to for the Invalids, viz., the hiring of Merchants' Store Houses, strongly built and well ventilated, and which it is believed might now be obtained, as formerly, at the rate of One Pound per man per annum.

It is understood that, in addition to the vacant Military Barracks at Launceston for 100 men, good accommodation for at least 800 men could be obtained in the vacant Convict Barracks at that Station, provided with furniture, utensils, and all appliances.

It is presumed that the first shipment of Invalids from India cannot be expected to arrive in Tasmania before the end of October: but if they should happen to arrive before the necessary arrangements for their reception can be completed, the Military presently stationed in the Barracks at Hobart Town could, without inconvenience or expense, be encamped on the Barrack grounds, there being Camp Equipage in the Military Storekeeper's charge here for 3000 men, thus rendering the Military Barracks temporarily available for the reception of Invalids on the shortest notice.

It is believed that, including Military and Convict Stores in the Military Storekeeper's and Barrack-master's charge, ample provision may be found available in Bedding, Furniture, and Utensils for 2000 Invalids, in the City of Hobart and Town of Launceston.

Should extensive Hospital accommodation be required, the opinion of Medical Gentlemen must be resorted to, as the Barrack-master does not feel competent to offer an opinion upon that point.

JAS. DUFF MACKAY, Barrach-master.

19th July, 1858.

No. II.

Royal Engineers' Office, Port Arthur, 15th July, 1858.

Sir

I received your official on the subject of Military Invalids only on last night, though it is marked "vid Carlton" 8th July, 1858; but the Senior Medical Officer showed me a letter he received vid Carlton on Saturday night, in which it was stated that instructions had been sent to me to communicate with him; and I did so, as far as examining the Plans of the Buildings for size of places, &c. would go. The result of our meeting is, that we consider Port Arthur would accommodate about 400 Invalids, without using the old wooden structures.

Cascades Station, after about six months' work in repairing and bettering the place, by the labour available at Port Arthur, would accommodate 80 to 90.

Impression Bay, when similarly restored, 220 to 230: and Salt Water River, after like operations have been performed thereat, 100 to 110. These numbers are for Privates, and independent of Officers' accommodation, for which there would be sufficient room for the proportionate numbers, in the Superintendent's and other first-class quarters at each place.

The Senior Medical Officer and myself intend visiting these places on as early a day as possible, after which I will be more full in particularizing the buildings, and numbers each would contain.

I have the honor to be, Your most obedient Servant,

JOHN LANDER, Clerk of Works.

The Commanding Royal Engineer.

No. III.

MEM

Information for the Commission appointed by His Excellency the Governor to report on the adaptability of the existing Buildings, the property of the Imperial Government in Tasmania, for the reception of Military Invalids from India:—

- 1. The principal buildings suitable for the purpose are those situated at Port Arthur, Cascades, Impression Bay, on Tasman's Peninsula; Hobart Town, and Launceston.
- 2. At the first-named place accommodation for 1000 men could be at once obtained, at a cost of about £1000, to be spent in improving the drainage, latrine accommodation, and supply of water; also the ventilation.
- 3. The Buildings at Cascades and Impression Bay, which places are 11 and 13 miles distant respectively from Port Arthur, are not so substantially built, but would afford accommodation for 500 men; but the expense to repair the Buildings, supply them with water, and properly drain them, would be not less than £2000.
- 4. The Buildings suitable for the reception of Invalids at Hobart Town are, the Military Barracks, Stores of War Department, the Comptroller-General's Office, (formerly the Infirmary,) and the Female House of Correction.
- (1.) The buildings comprising the Military Barracks are fit for immediate occupation, and would accommodate about 400 men: but the ventilation, latrines, drainage, ablution conveniences, would require to be greatly improved,—the estimated cost of improved drainage alone amounting to more than £1000; and it is considered that £3000 would be required to render the buildings unexceptionable as quarters for Invalids.
- (2.) The Stores of the War Department are in excellent repair. Accommodation could be obtained on the 1st and 2nd floors of these buildings for 240 men, at an expense of about £1000, which would have to be incurred for a low partition to be put up down the centre of each floor, staircases, baths, and latrines, improving the ventilation, warming the apartments, drainage, and supply of water. The ground floor of these Stores are flagged, and is also damp; the lighting is also deficient; besides which the heights of the rooms are not sufficient to allow them to be occupied as quarters. The expense of putting the ground floor in order would not be less than £1500, when they would accommodate 40 men each. The upper floor, or that portion in the roof of the Stores, would accommodate 60 men; but the lighting of it would have to be obtained by skylights in the roof, which, together with the expense of staircase, latrines, ventilation, would not be less than £500. The heat of Summer would, it is apprehended, render this portion of the Stores unfit for occupation.
- (3.) Accommodation for about 100 men could be obtained at the Comptroller-General's Office. An expenditure of about £20 would be required to improve the ventilation, limewhiting the buildings, &c. The drainage of these buildings would require to be improved; and additional latrines, baths, wash-house, might be considered necessary, the expense of which would be about £300.
- (4.) The Female House of Correction would afford immediate accommodation for 300 men, to obtain which an expense of £300 would be required. 150 more men could be quartered in the separate apartments by additions to those buildings, the cost of which would not exceed £600. The drainage, ventilation, and latrine accommodation would require to be improved; and this could be effectually done at a further cost of about £500.
- 5. Launceston.—The Military Barracks at Launceston would accommodate 100 men. Additional latrines would be required, the drainage improved, and baths provided; the expense of effecting these improvements would be £450. The Swamp in front of this establishment would, it is considered, render it ineligible for the purposes of a Sanatarium.

The only other Building in Launceston is the Commissariat Stores. The height between the floors of this building is not sufficient to allow it to be occupied as quarters; the expense also of putting it in repair would be very great.

- 6. With reference to an eligible site for a Sanatarium, it is suggested that a portion of the Domain beyond the New Government House would be best adapted for that purpose. The expense of the labour for constructing a suitable Wooden Hut to accommodate 12 men would be £40; and it is considered that the latrine accommodation, water supply, drainage, cook-houses and baths, could be provided at a cost of £20 per man.
- 7. No reference has been made to the Orphan School as an Establishment suitable for the reception of Invalids, in consequence of the difficulty which it is considered would be attended in providing quarters for the children; but should that be considered possible, this Establishment would accommodate about 300 men. The latrine accommodation would require to be extended; provision made for warming the present bed-rooms; the flagged floor in one of the rooms would require to be replaced by a boarded one,—the whole of which and other minor requisites could be effected at a cost of £300.
- 8. The Brickfield Establishment has not been referred to, as it is supposed this establishment will be required for the women if removed from the House of Correction. But it is apprehended that this Establishment would not be so well adapted as a House of Correction as it might be desired, owing to the absence of suitable buildings to be used as separate apartments. The employment of the women would also require that water to be used for washing should be laid on to the building; and this would cause a great expense, owing to the distance of the establishment from the water-pipes. Wash-house, &c. would require to be erected, and tanksfor storing water.

ROBERT BAKER, Clerk of Works, R. E. Dept.

26th July, 1858.

With reference to the private Buildings in Town suitable for the accommodation of Invalids, there does not appear to be any which offers any advantages either as regards site or accommodation except Dynnyrne House, and that is exceedingly difficult to supply with water.

ROBERT BAKER.

No. IV.

MEETING of Commission, July 16, 1858.

MR. DOUGLAS, Deputy Military Storekeeper, examined by the President.

- 1. In the event of its being found desirable to recommend the appropriation of the Ordnance Stores as a Sanatarium for Hospital purposes, could any arrangements be made to enable this appropriation to be carried out?—Can you spare the buildings? I cannot make any arrangement.
- 2. What amount of unnecessary stores have you? The surplus or obsolete stores for Treasury Convict Service do not take up one-eighth of the store-room: the two buildings are as full as they can hold, and storeage would have to be found for the Military and Treasury Stores if the buildings were given up: numerous valuable articles are now requiring store-room.
- 3. If the large Commissariat Store and half the yard were appropriated to this purpose, could it be done? If it would afford room for the other seven-eighths of the stores, and properly fitted up with the necessary office accommodation, it could be done; but it is not desirable, for the following reasons:

 —The inconvenience of its being detached from the wharf and ships; consequently causing expense of horse cartage and labour in removal of stores, and very considerable detriment to the public service. The removal would cause a cessation of the current duties of the Department.

APPENDIX D.

No. I.

MR. M'PHERSON'S Answers to Queries from Military Commission.

I believe that ships could be readily procured at Calcutta to convey Soldiers to Hobart Town at £20 each, and £50 (each) for Officers, including provisions, &c.; and if engaged for "to and from," would take one-fourth less than these rates each way. The length of voyage either way is six to eight weeks; but, if out of season (against the Monsoons), two weeks additional.

Ships could be had here and at Melbourne lately arrived with Emigrants, having fittings and water casks on board, that would be glad to take £10, or half the above rates of a vessel engaged at Calcutta, particularly for the return Soldiers to India, as so many proceed to Indian ports from these Colonies in ballast "seeking" freight, and could also retain their surplus Emigrant stores. "To and from Madras" would be found much cheaper for the above services, as Calcutta is a longer voyage, and most expensive port. I have a Charterparty between the East India Company and a Colonial ship (of last year) for about twenty-seven discharged Soldiers and their families from Madras, at 200 rupees to Melbourne; she had 250 rupees for a similar number (each) from Calcutta, including provisions, &c., for both, same voyage. The Hobart Town Harbour and Pilotage dues are 1s. 3d. per registered ton; but if a Harbour Master and outward Pilot be taken (the latter optional), 7d. to 8d. per ton additional—above including Light Dues.

DUNCAN M'PHERSON.

Hobart Town, 19th July, 1858.

Мемо.

Hobart Town, 16th July, 1858.

In reply to the enquiries respecting the Conveyance of Invalid Officers and Troops from Calcutta to Hobart Town, I have to state as follows:—

1st. That I cannot suppose there will be any difficulty in obtaining first-class ships at all times, on reasonable terms, for the performance of this service, as it is well known that the finest ships in the world are constantly trading to Calcutta, many of them in the conveyance of Troops from the United Kingdom; and they will generally be glad of further employment in the Government Transport service, at about the same rates per month as the Government pay for the voyage out from the United Kingdom.

2nd. The voyage to and from Calcutta to Hobart Town would depend on the time of the year. Vessels leaving Calcutta during the north-east monsoon, from October to April, would probably make the voyage in six weeks or thereabouts; while the voyage might occupy ten or twelve weeks when leaving Calcutta during the south-west monsoon, from May to September.

3rd. The rate of conveyance by Sailing ships would, I think, range from £10 to £12 per man, if the vessel was discharged in Hobart Town; but if the vessel was engaged to convey Invalids from Calcutta to Hobart Town, and to return from Hobart Town to Calcutta with Convalescents, the rate would be lower, and would not, I think, exceed £8 or £10 per man each way.

Should the Government enter into the scheme, I should think they would employ two or three vessels regularly in this service, in the same way that the East India Company formerly chartered the large ships for the trade they carried on between India and China,—and finding their own staff of Officers they would reduce their expenditure considerably: by this plan the fittings up of the vessels would be of a permanent character, and the saving would be considerable.

The advantage of a sea voyage, of six or eight weeks in a large first-class ship, would, I think, prove more beneficial to the Invalid Soldier than a voyage by Steamer, and on the whole, I should think, much more economical; but, should the Government decide on sending the men by steamer, I should think a very good arrangement might be made with the Mail Steam Contractors to bring the men on to Hobart Town in their vessels, as the Mail Steamers might call in at Hobart Town (after landing the Mails in Melberge) and then proceed to Sydney. Mails in Melbourne), and then proceed to Syduey.

The Mail Contractors, however, might fear the loss of Cabin Passengers, as the fact of the Mail Steamers bringing Invalids would, no doubt, tend very much against families proceeding to and from England viâ India.

THOS. D. CHAPMAN.

Marine Board, 21st July, 1858.

SIR,

I have the honor to acknowledge the receipt of your letter of the 16th instant, in respect to the proposed establishment in Tasmania of a Sanatarium for English troops serving in India, in which you make enquiries as to the cost, &c. of vessels which might be employed in the service of their transport. In reply to your first question, I beg to inform you that the rate of passage-money charged for 300 or 400 Men may probably fluctuate according to the demand for ships to load home: I presume £20 to £25 per man would be about the rate. The question, of course, would be answered much more satisfactorily in Calcutta than can possibly be done by any one here.

With respect to the second question proposed, the charge to Calcutta would certainly be less, probably about £15 or £20. Many Emigrant ships arriving at Melbourne proceed to Calcutta in search of a homeward freight, having fittings, &c.: some of these could almost at all times be chartered for such a voyage on reasonable terms, perhaps less than the sum I have mentioned.

To your third question I may answer that there would be no difficulty.

With respect to the length of voyage from Calcutta to Hobart Town, it may be estimated:—From Calcutta, by a clipper ship, in the North-east Monsoon, about 45 to 50 days; in the South-west ditto, 65 to 70 days. To Calcutta, leaving this in Winter, the voyage would probably take 50 to 60 days; in the Summer about 70 to 90, but uncertain.

I regret that my absence from Town has prevented my acknowledgment of your letter earlier.

I have the honor to be, Sir,

Your most obedient Servant,

CRAWFORD M. MAXWELL, Chairman.

Lieut.-Colonel Hamilton, R.E.

Hohart Tewn, 21st July, 1858.

SIR,
I have the bonor to acknowledge the receipt of your Circular letter dated the 16th instant, requesting information as to the cost of conveyance from Calcutta to Hobart Town of Invalid Soldiers

I regret it is not in my power to afford accurate information on the subject, as the Colonial shipping are not adapted for the performance of the service, and I am not aware that there are Agents here for British ships of the class required.

I may, however, state for your information generally, that the approximate cost of conveyance from Calcutta to Hobart Town would be about half the rate charged from England to Calcutta,—with an abatement of some 20 per cent. on the round voyage,—say from Calcutta to Hobart Town, and back.

It is not at all probable there would be any difficulty in procuring tonnage suitable for the service, as the vessels which are employed in conveying Troops to India and China, and Emigrants to Australia, would be available for the purpose; and no doubt the service would be performed at the very minimum rate, as freights from India to Europe have fallen to almost a nominal sum. I think the most advantageous arrangements might be made in Calcutta, where suitable vessels may be procured with fittings ready for the purpose.

I have the honor to be, Sir,

Your most obedient Servant,

A. H. MANING.

Lieut.-Colonel Hamilton, R. E.

New Wharf, 22nd July, 1858.

SIR,

In reply to yours of the 20th instant, I think it probable that ships could be chartered at from 18s. to 20s. per ton per month, finding water casks and water; the Government finding provisions and all other necessaries, (but it is usual in hired ships for the Master or Owner to find cooking apparatus, fuel, mess-kitts, tin pots, plates, &c., for the use of the Troops, for the additional allowance of one half-penny per diem per man, and the Officers' mess at 10s. per diem, or about £30 each for their mess down to Hobart Town.)

If the ship is not chartered by the month, but as a passenger ship to convey the Officers and Troops, the ship finding everything, the Officers' passage money would be about £45 per head, and the Troops about £14 or £16 per adult.

I should think there would be no difficulty in obtaining ships for the service, as the ships conveying the Troops to India would be only too willing for a continuance in the employment, and being already fitted up; in fact all ship-owners prefer their ships remaining out while they can get advantageous employment.

In case of a return to India with Convalescents it would make a difference of from £2 to £3 per adult less.

The probable length of the voyage throughout the year to Calcutta from 38 to 45 days, to Bombay 55 to 65 days, with ordinary sailing ships. Clipper ships would do it in less time.

I remain,

Your ohedient Servant,

To the President of the Military Commission.

WM. CROSBY.

Hobart Town, 24th July, 1858.

SIR,

In reply to your letter of 16th instant respecting the conveyance of Invalid Troops from India to this Colony, I beg to state that, if the Troops are to be under the provisions of the Passenger Act (one adult to two tons), I think the expense of conveying each Soldier from Calcutta to Hobart Town (if the ship was discharged at Hobart Town), would be about £30, the ship being properly fitted for the purpose, and finding provisions of the best quality and suitable for Invalids. If the ship were to carry back Convalescents, the expense would be about £25 each way; and if permanently employed, about £20.

An Officer's passage in a well-found ship would be about £50.

There would be no difficulty in getting tonnage for the service. The length of the voyage down would be about sixty days in the South-west Monsoon, and forty-five days in the North-east Monsoon; and the return voyage (reversing the seasons) would be about the same.

The quickest and easiest way of sending the Invalids would be by the Mail Steam Ships, if it were arranged that the steamer, on landing the Mail at Melbourne, should forward her Sydney Mail and passengers by a separate steam vessel, and proceed with the Troops direct to Hobart Town. I can give no information as to the probable expense of this service.

I have the honor to be, Your most obedient Servant, THOMAS BROWN.

Lieut .- Colonel HAMILTON, R.E.

Launceston, 28th July, 1858.

In reply to your letter of the 16th instant, relative to the information required as to the means of conveyance of Invalid Soldiers from India to Hobart Town, I have the honour to state:—

That the rate of passage money by sailing ships may vary much according to circumstances and fluctuations in the rate of freights.

Ships engaged in conveying Troops from England to India, their destination being Australia, and already fitted for the voyage, could convey men at a rate little exceeding the cost of provisions. They might probably be sent by such opportunities at the rate of about £10 or £12 each man, while by vessels chartered for the voyage the rate may be about double; and if ship is taken up in India to terminate the voyage in Hobart Town, and with the view of returning in ballast, Ship-owners would ask a still higher rate.

The rate may also depend on whether the ship carries cargo, and what amount of freight is thus earned.

Convalescents may often be conveyed to India by emigrant ships, proceeding on there after their arrival from England, at low rates; these ships being also fitted for the voyage, and going on in ballast to load for England again.

By taking advantage of such opportunities, the average rate of passage money to be paid for the conveyance of the men between India and the Colonies may probably be under the usual rate of passage money paid for emigrants in first-class ships from England to the Colonies. The usual cabin passage for Officers is about £40 to £50.

There would be no difficulty in finding ships for this service.

I do not know the rates that would be required by the Mail Steamers.

I have the honour to be,

Your most obedient Servant,

A. MACNAUGHTAN.

Lieut .- Colonel Hamilton, R.E.

No. II.

Committee Room, House of Parliament, Tasmania, 5th July, 1858. .

Sir,

His Excellency the Governor of Tasmania having appointed a Commission of Enquiry to report as to the results to be obtained from the establishment in Tasmania of a Military Medical Sanatarium for Sick and Invalid Soldiers from India, I have the honor, as President of the Commission, to beg you will favor me with

- 1. What would be the probable expense of transport, by means of the Peninsular and Oriental Mail Steamers, of the Sick and Invalid Soldiers from Point De Galle to Melbourne?
- 2. Whether, in the event of the Peninsular and Oriental Company undertaking to land them in Melbourne, they would undertake to bring them on to Hobart Town, and the probable expense?
- 3. The cost of the return of the Troops, when restored to health, to Point De Galle; the chance of there being a large number of Invalids sent from India being great, should the result of the enquiry by the Commission be satisfactory to the British and Indian Governments.

I have, &c.

R. G. HAMILTON, President of the Commission.

The Agent to the Peninsular and Oriental Company, Melbourne.

Moore's Wharf, Sydney, 10th July, 1858.

I have the honor to acknowledge receipt of your letter dated 5th instant, addressed to the Agent of the Peninsular and Oriental Steam Navigation Company, which has been delivered to and opened by me, as acting at present in this capacity for them. You must be aware that the Peninsular and Oriental Steam Navigation Company are not, at this time, carrying Her Majesty's Mails, and have no Steam-ships running from India to the Colonies, so that I cannot answer your questions regarding the expense of transport of Invalid Troops from Point de Galle, and their return when restored to health; but I shall forward your letter to the Managing Directors by the Mail for London, closing this evening, and a reply will doubtless reach me in course of Post, which I shall have the honor of forwarding you without delay.

I have said that the Peninsular and Oriental Steam Navigation Company have no Steam-ships running at present to the Colonies, but have reason for believing that a change from the present Admiralty Contract will soon be made, in which case it is more than probable they would carry the Mails under a new arrangement; or they might be induced, without reference to this, to undertake the same in question. It would therefore be satisfactory to me to know whether the matter will be kept open, and how long, for negotiation. I may add that, in event of any circumstances occurring to enable me to tender for the same earlier than the time indicated, I shall lose no time in doing so.

I have the honor to remain,

Sir,

Your most obedient Servant,

HY. MOORE, acting as Agent for the Peninsular and Oriental Steam Navigation Company.

LIEUT.-COLONEL HAMILTON, Chairman of Committee of Enquiry into the Establishment of a Military Medical Sanatarium for Soldiers in India. House of Parliament, Tasmania.

APPENDIX

Commissariat Office, Hobart Town, 9th July, 1858.

In attention to your communication of the 5th instant, I have called upon the proper Officer of my Department to supply the particulars suggested in the paragraphs of your letter marked 1 and 2; and have now the honor and the pleasure to enclose, for the information of the Commission, a letter, with enclosure, addressed to me by Deputy-Assistant-Commissary-General Sale, dated 8th instant.

I have the honor to be,

Sir,

Your most obedient Servant,

STEPHEN OWEN, A.G.

Colonel Hamilton, R.E., President Military Commission of Inquiry.

What would be the expense of transport of men to and from Port Arthur; and what would be the difference in the Contract prices of Rations, Fuel, and Light at Port Arthur and Hobart Town, so as to show the difference in the expense of maintaining an Invalid at the two places? And also state if the Commissariat Stores, in Hobart Town, could be rendered available for Storage?

R. G. HAMILTON.

Returned, with reference to Memo. No. 2, in reply.

STEPHEN OWEN, A.C.G.

Colonel Hamilton, R.E., President Military Commission.

Commissariat Office, 8th July, 1858.

I HAVE the honor to enclose a statement of the cost of one full diet for Troops in Hospital as fixed by War Office Letter, dated 30th May, 1857; viz. 11 d. per diem.

Fuel and Light, also Hospital Comforts (the rates paid for each being shown in the above mentioned statement), are issued at the discretion of the Medical Officer; I have not, therefore, included them in the cost of the Ration.

In answer to Question No. 2 of the letter returned herewith, I have the honor to state that the existing Contracts provide for "any quantities that may from time to time be required;" but, as the Contractors have most probably only estimated for the present force, I think it would be desirable to give them fair warning of any great increase intended to be made in the demands upon them, should such increase be at any future time decided upon.

I have the honor to be,

Sir,

Your most obedient humble Servant,

J. H. SALE, A.C.G., Accountant of Stores.

S. OWEN, Esq., D.A.C.G., Acting Comptroller of Army Expenditure.

SCALE of Hospital Diet.

DIET.	Meat.	Bread.	Potatoes.	Barley.	Salt.	Tea.	Sugar.	Milk.	Vegetables.	Flour.	Rice.
Full	oz. 12 8 4 —	oz. 16 16 12 8 14	oz. 16 8 8	0Z. 2½ 1¾ 1½	OZ.	OZ.	0Z. 134 134 134 134	oz. 6 6 6 6 6 3 pints	oz. 4 3 2	OZ.	oz.

ESTIMATED COST per Contract Price of Full Diet.

	£		
Meat, 12 ozs., at 5d. per lb	0	0	$3\frac{12}{16}$
Bread, 16 ozs., at $2\frac{1}{2}d$. per lb	0	0	218
Potatoes, 16 ozs., at 10s. 9d. per 100 lbs	0	0	14
Barley, pearl, $2\frac{1}{2}$ ozs., at 4d. per lb	0	0	Oig
Salt, $\frac{3}{4}$ oz., at $1\tilde{d}$. per lb	0	0	03
Tea, $\frac{1}{4}$ oz., at 2s. 6 $\frac{1}{6}$. per lb.	0	0	0.7.1
Sugar, 1\(\frac{3}{4}\) ozs., at 5\(\delta\). per lb			
Milk, 6 ozs., at 3d. per pint			
Vegetables, 4 ozs., at 3d. per lb			
Flour, doz., at 3d. per lb	0	0	0_{16}^{16}
Total Cost of full Ration	0	0	11_{16}^{2}
	<u> </u>		

In addition to the above Scale of Diet, the following articles of Fuel and Light, as well as Hospital Comforts, are supplied at the discretion of the Medical Officer in charge:—

Fuel and Light—Contract Prices of—.

Coal, at 30s. per ton, from 1st October next. Wood, hard, at 7d. per 100 lbs.
Ditto, brush, at 10d. per lb.
Ditto, bundle, at 1\frac{14}{2}d. per 3 lbs.
Candles, mould, at 7\frac{1}{2}d. per lb.

Candles, sperm, at 1s. 6d. per lb. Oil, at 4s. 10d. per gallon. Cotton wick, at 1s. 6d. per lb. P. L. cotton, at 4s. per gross.

Hospital Comforts.

Port wine, at 38s. per dozen. Brandy, at 30s. per gallon. Porter, at 14s. 6d. per dozen. Rice, at 3d. per lb. Sago, at 6d. per lb. Arrowroot, at 1s. 5d. per lb. Soap, at 36s. per 100 lbs. Pepper, black, at 1s. per lb. Eggs, at 2s. 1d. per dozen. Oatmeal, at 3d. per pint.

J. H. SALE, D.A.C.G., Accountant of Stores.

Commissariat Store Branch, Hobart Town, 8th July, 1858.

No. 2.

Commissariat Office, Hobart Town, 22nd July, 1858.

Мемо.

The expense of *Transport* of men to and from Port Arthur, or any of the Stations on Tasman's Peninsula, by Steam Vessels, such as the *Culloden*, capable of conveying from 60 to 80 at a time, would be at the present rate of £40 per trip, or 5s. $8\frac{1}{2}d$. per man each way.

The price of the simple Ration on Tasman's Peninsula would exceed that at Hobart Town 3d. per Ration (meat being $\frac{1}{2}d$. per lb. higher); but the increased expense consequent upon the Staff required to make the Issues would be considerable.

The present Commissariat Staff on Tasman's Peninsula is quite useless for the purpose proposed, should Port Arthur or any one other be the *only* Station occupied. It would be necessary to have an Officer on the spot with a moderate share of clerical assistance; &c.; viz.—

•	£		
One D.A.C.G., Pay, Rations, and Forage, per diem	1	0	3
One Temporary Clerk, Pay and Rations, &c. (Rations allowed to			
One Temporary Clerk, Pay and Rations, &c. (Rations allowed to Temporary Clerks in similar situations, otherwise the bare pay			
Temporary Clerks in similar situations, otherwise the bare pay alone is granted)	0	13	4
One Assistant Storekeeper, ditto	0	9	$10\frac{1}{5}$
Two Labourers, ditto, at 6s. 2d. each	0	12	4^{2}
Total	2	15	$9_{\overline{2}}$

In the event of more than one Station being occupied, each would require at least, (in addition to the above for the Head-Quarter Station):—

One Assistant Storekeeper, as above	ō	9	$10\frac{1}{2}$
	0	16	01/2

These calculations are based on the present rates of pay, including the temporary allowance now received.

In the event of a great increase in the numbers to be supplied on Tasman's Peninsula, it would be necessary to consider whether extra Transport might not be required for the conveyance of supplies.

The Culloden, at present employed, furnishes rather more than 1000 Rations per diem, but she is quite capable of conveying more than double that quantity; and now that the wheat is proposed to be landed at Port Arthur direct, instead of being brought to Hobart Town to be ground, the Transport hitherto required for Flour would also be available.

Should the Invalids be stationed at Hobart Town, the increase in the Commissariat Staff I have mentioned would be nearly all avoided.

Stations at a distance from Hobart Town would require the same Staff as detached Stations on Tasman's Peninsula.

J. H. SALE, D.A.C.G., Accountant of Stores.

STEPHEN OWEN, Esq., A.C.G.

Commissariat, Hobart Town, 22nd July, 1858.

J. H. SALE, D.A.C.G.

P.S.—In reference to Store-room available in Hobart Town at present belonging to the Commissariat Department, the building called the Issuing Store, facing Macquarie-street, could be spared.

S. OWEN, Esq., A.C.G.