(1) பக்கங்களின் எண்ணிக்கை 28

(2) புதுக்கித் திருப்பிய நாள் 23.6.89

(3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம்

தமிழ்நாடு ஆவணக் காப்பகம்.

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மடிக்கவோ கண்டபடி கையாளவோ கூடாது

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GOVERNMENT OF MADRAS.

MILITARY DEPARTMENT.

Sanitary—Reports and Returns.

Read the following papers:—

No. 185. *From Brigadier-General M. C. FARRINGTON*, C.B., *Adjutant-General, Madras Army, to Brigdr.-Genl. A. KENNEY-HERBERT, Secretary to Government, Military Department; dated Ootacamund, 12th February* 1890, *No.* 318-*BA* (*Sanitary—Reports and Returns*).

In forwarding the Sanitary Report on British troops in the Madras Command for the year 1888, I am desired to state, for the information of Government, that the duplicate copy of the report has been forwarded to the Under-Secretary of State for War with the following remarks by His Excellency the Commander-in-Chief on some of the subjects noticed by the Surgeon-General, Her Majesty's Forces.

2. With reference to Proceedings of Madras Government, No. 2768, dated 25th April 1889, I am to state that this report could not be submitted earlier as numerous references had to be made to General Officers Commanding Districts, &c., by the Quarter Master General.

BANGALORE DISTRICT.

Urinaries and Latrines in the Parade Barracks.—The General Officer Commanding has been desired to bring the want of the former to the notice of the Standing Barrack Committee, but no suitable site is available for the erection of an additional latrine to these barracks.

Extension of Surface Drainage, Parade Barracks.—An estimate, amounting to Rs. 8,112, for completing the system of drainage for these barracks was sanctioned in Proceedings of Madras Government, No. 6100, dated 7th September 1888, and the work will be carried out as soon as funds can be made available for the purpose.

Extension of Surface Drainage, Cavalry Barracks.—This item has been included in the schedule of minor works, 1890-91, costing Rs. 500 and under, and will be carried out as soon as funds are available.

Nullah in rear of the Pensioners' (Grasscutters') Lines adjacent to Royal Horse Artillery.—An estimate, amounting to Rs. 2,846, for improving the condition of these lines has been sanctioned by Government, and the work will be carried out as soon as funds are available.

Open Nullah between the Pensioners' (Grasscutters') Lines and South Station Hospital.—With reference to the nullah being used as a latrine by Natives, in consequence of imperfect police supervision, the Superintendent of Police has pointed out that the ground in the vicinity of the nullah is not patrolled by his subordinates, and that, if their services are required, a money grant will be needed from funds at the disposal of the Military Department to provide the requisite staff, &c. The General Officer Commanding Bangalore District reports that the nullah at present is perfectly clean.

Coffee-shop of Infantry not being well supplied with Europe Articles of Food.—An extract of this has been sent to the General Officer Commanding Bangalore District for such action as he might deem necessary.

Water-supply Scheme, Bangalore.—Government in O.G., No. 1826 W., dated 18th May 1889, recommended the Ruchanhalli supply scheme for the consideration of the Government of India.

Quarters for men of the Army Hospital Native Corps.—Estimates for this work are being revised by the General Officer Commanding Bangalore District, and the matter will receive due consideration.

Extension of Surface Drainage to the North and South Station Hospitals.—The General Officer Commanding reports that the extension of surface drainage to the North Station Hospital only is considered desirable, and he has been requested to bring this requirement forward in his next schedule of military works requirements.

BELGAUM.

Surface Drainage generally.—There are surface drains in the British Infantry barrack lines, but they are not so complete as they might be. The enormous expense, however, of relaying them and of constructing other surface drains does not permit of the project being taken in hand.

Latrines, Royal Artillery Barracks.—The General Officer Commanding Belgaum District reports regarding the ventilation of these latrines that no further expenditure on them is desirable, while with reference to the condition of the floors it is stated that these at present consist of rammed earth, which is considered more suitable for the purpose than any other, and, being occasionally replaced, foul smell would be effectually prevented.

Additional ventilation of Sergeants' Mess and Billiard-room, Royal Artillery.—The General Officer Commanding states that from the position of the barracks and amount of wind that blows through these barracks seem to afford sufficient air.

Nullah between the Station Hospital and British Infantry Lines.—This nullah was lately cleaned out and all vegetable matter removed. The Executive Engineer has been called upon to submit an estimate of cost for rendering the nullah "pucka."

Light Privy for the British Infantry Lines.—The Executive Engineer has been desired to submit an estimate for providing a suitable light corrugated iron privy as recommended by the Surgeon-General.

Repairs to, or reconstruction of, Lavatories in old British Infantry Lines.—An estimate for this work has been called for and will be duly considered when received.

Reading-room, British Infantry Lines.—The reading-room of the British Infantry barracks is a portion of the regimental institute and has already a larger area than is authorised.

Floors of verandahs of blocks, Family Quarters, British Infantry Barracks.—The floors are in bad condition and the budget for 1890-91 contains an item of Rs. 9,130 for their renewal, but no funds have been allotted for the purpose.

Fort Barracks.—The better drainage of these barracks would be a decided advantage, but the cost would be prohibitive in consequence of the ground in the Fort being very low.

Objectionable portion of a Latrine.—The Executive Engineer has been requested to submit an estimate for removing the present latrine and for converting the old mortuary into one.

Additional ventilation to all Barrack-rooms, Canteens, Coffee-shops, &c.—Some additional ventilation has been provided as far as funds at the disposal of the General Officer Commanding would permit, but the provision of ridge ventilation would be a very expensive matter. It is reported that the barracks were built many years ago for the accommodation of many more men than are now allotted to them, and the General Officer Commanding states that, assuming they were built on an approved

plan and were considered to be sufficiently ventilated for the larger body of men they were originally intended to accommodate, it may be presumed that the ventilation would suffice for the smaller number now occupying them.

Station Hospital—Surface Drainage and improvement of Floors, &c.—The provision of surface drainage would be very costly. An estimate for flagging the hospital verandahs and latrines at a cost of Rs. 5,387 is included in the budget for 1890-91, but no funds have been allotted for the work.

A further report on the ventilation of the No. 1 Ward Lavatory and "Detained Ward" latrine has been called for and will be submitted when received.

BELLARY.

Surface Drainage.—The General Officer Commanding Belgaum District has been desired to report regarding the provision of surface drainage at this station, and a further report will be made on this point on receipt of the information called for.

Planting of Trees generally.—It has been reported that the soil of Bellary is not favorable to the growth of vegetation in connection with a proposal to plant trees near the Madras Cavalry lines.

SOUTHERN DISTRICT.

Lunatic Ward at Wellington.—This requirement has been brought forward and has been included in the list of military works submitted to Government in connection with the budget of the coming year.

Accommodation for men of the Army Hospital Native Corps.—An estimate, amounting to Rs. 11,170, for providing quarters for 32 men of the Army Hospital Native Corps at Wellington has been sanctioned by Government (*vide* Proceedings of Government, No. 7078, dated 16th October 1889).

Water-supply, Wellington.—An estimate for laying on water to the barracks has been sanctioned by Government in O.G., No. 3423, dated 27th May 1889.

Drainage and Water-supply of Coonoor Bazaar.—The Municipal Council states that the question of piping the drinking-water channel is now under consideration. As regards drainage, a scheme has already been prepared and the Government has promised to take into favorable consideration an application for a loan to carry it out as soon as the municipal funds are placed on a proper footing.

Extension of the present Masonry Drains of Wellington.—The Executive Engineer, Nilgiri Division, has been called upon for early report regarding the extension of the present masonry drains of Wellington, and a report on this subject will be furnished later on receipt of information called for.

CANNANORE.

Defective Lighting of Barracks.—The Deputy Surgeon-General recommends the provision of an extra lamp with supply of kerosine oil till tattoo for each barrack-room, as the men are occupying double accommodation, and the sanction of Government will be obtained to their supply accordingly.

MALAPURAM.

Damp condition of Staff Sergeants' Quarters.—An estimate for the construction of new quarters has been sanctioned and funds for the work allotted from savings in the general estimate.

SECUNDERABAD DISTRICT.

Improved Surface Drainage.—The Executive Engineer, Secunderabad District, states that it is difficult to know what improvement could be effected as regards the discharge from the vicinity of the lines of the rainfall which occurs there; that the natural channels described in the report slope so steeply that they carry off storm water nearly as rapidly in their present state as they would if they were lined

with masonry. The cost of providing these drains would probably be about two lakhs, and the General Officer Commanding concurs in his opinion that it is doubtful whether such expenditure would have an appreciable effect in reducing the saturation of the ground by rainfall. The remarks of the Army Sanitary Commissioner on surface drainage, viz., that drainage for the removal of rainfall must be effected over the surface, while mere surface cuts, except on steep inclines only, afford a more certain means of waterlogging the subsoil, are worthy of consideration; and, with reference to these remarks, the provision of masonry drains to these barracks appears advisable.

Drainage of swampy ground near the Barracks and planting it with trees.—With reference to this, Government has been addressed regarding the acquisition of the swampy land in the Secunderabad cantonment.

Exposed condition of the 2nd British Infantry Barracks.—Orders were issued for the closing of the doors and windows of these barracks on the windward side during the nights, and the Officer Commanding the regiment reports that the men approve of the arrangement which will be continued during the cold weather. At present the rooms are not rendered too stuffy thereby.

Reroofing 2nd British Infantry Barracks.—A sum of Rs. 47,000 having been allotted by the Government of India in the current year's budget for this work, it will doubtless be completed at an early date.

Coffee-shop of the Infantry and Artillery not affording sufficient variety in Articles of Food.—An extract of this was sent to the General Officer Commanding Secunderabad District, who reports that the supply was exhausted for a time owing to the great demand, but now hams, cheeses, bacon and preserves of all kinds are available in the coffee-shops of the Infantry and Artillery.

The Meat Ration being very thin and lacking in nutritive qualities.—This has been brought to the notice of the Commissary-General and orders have been passed.

Defects in Cook-houses of British Corps at Secunderabad.—A sum of Rs. 8,000 has been entered in the district schedule for the ensuing year for improvements to these cook-houses, and for providing meatsafes, &c.

Insufficient accommodation at the South Station Hospital, &c., and want of a suitable Female Hospital.—These questions are receiving attention, and the proceedings of the committee assembled to report on the best measures to be adopted to improve the former and provide for the latter have been forwarded to the Surgeon-General, Her Majesty's Forces, for consideration and remarks, and, when returned, they will be finally disposed of.

MADRAS.

Occupation of the ground floor, King's Barracks.—It has been decided that the ground floor of these barracks should not find accommodation permanently for a larger number of men than 62.

Position of the Station Hospital at Madras.—The question of a suitable site for a new hospital is now receiving the attention of a committee ordered to be assembled for the purpose.

Water-supply to the Upper-storey Station Hospital.—A plan and estimate for the work is under preparation by the Public Works Department, and the want of this requirement will be duly noted.

Quarters for Subordinates or Hospital Attendants.—These requirements will be duly considered in connection with the new scheme for locating the hospital elsewhere, at present receiving attention. An estimate for quarters for men of the Army Hospital Native Corps is being revised by the General Officer Commanding Madras District.

POONAMALLEE.

Quarters for the Hospital Subordinate.—It has been proposed to accommodate this medical subordinate in the Government quarters at present occupied by him with the addition of a temporary stable and servants' quarters thereto. An estimate for these additions will be prepared under the orders of the General Officer

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Commanding as soon as the opinion of the Deputy Surgeon-General is obtained as to the desirability of this proposal.

Quarters for men of the Army Hospital Native Corps.—An estimate for this work has been submitted for the sanction of Government.

ST. THOMAS' MOUNT.

Ventilation of Latrines and Kitchens, East and West Barracks.—Estimates have been called for for remedying the defects brought to notice.

Quarters for Hospital Staff.—The Public Works Department has been called upon to submit an estimate for converting the family quarters of the old north and south barracks into quarters for warrant officers and staff sergeants, and the work when carried out will afford suitable accommodation. An estimate for quarters for men of the Army Hospital Native Corps at this station has been submitted for the sanction of Government.

BURMA—RANGOON.

Offensive smells from Urinals attached to the British Infantry Barracks.—The Deputy Surgeon-General considers they are not too close for day use and too far for night use, but with regard to the offensive smell from them he states that, with proper care and conservation, this could be avoided. The General Officer Commanding concurs in this opinion and has issued orders accordingly.

Water-supply.—A scheme for this purpose is included in the coming year's budget. Sanction has been at times accorded for the hire of water-carts to convey water to the troops at this station when the wells have failed.

THAYETMYO.

Damp condition of Cells.—General Gordon reports that no complaints regarding the condition of these cells reached him before. The rainfall at Thayetmyo is so small that the defect must have been apparent for a very short time. A drain to carry off water has been cut around the building and the result is reported as favorable.

TOUNGOO.

Quarters for men of the Army Hospital Native Corps.—The General Officer Commanding reports that these men have now got good quarters.

MANDALAY.

Quarters for Medical Subordinates.—These will be erected in due course, but must await their turn with due regard to other more pressing requirements.

Drainage and Water-supply.—Drainage works in progress. Water-supply scheme receiving consideration.

Conservancy of the Native Town.—General Gordon states that this is an Imperial question involving an enormous outlay to make it satisfactory. Very much depends on the provision of good metalled roads, and, as soon as these are provided, a proper system of conservancy will be instituted.

BHAMO.

Sanitation of the Native Town.—This hardly appears a military question. The want of sanitary arrangements is well known to Government, and steps are being taken to introduce proper conservancy among the various classes residing in Bhamo. These have never been interfered with before, and it is therefore a delicate matter requiring careful handling and one involving very heavy expenditure.

Drainage of Marsh outside the Stockade.—This is now receiving consideration, but the engineering difficulties are great and the cost will be heavy.

SUWEBO.

Barracks and Buildings.—The Government of India recently sanctioned an estimate, amounting to Rs. 1,44,459, for constructing four half-company barracks with outhouses for the British Infantry at this station.

BERNARDMYO.

Want of a Crowley Cart.—A Crowley cart is shortly expected for this station.

SALEMMYO.

Condition of Buildings, &c.—Salemmyo has been given up as a station for British troops.

MYINGYAN.

Accommodation for Hospital Subordinates.—The retention of Myingyan as a station for British troops is not yet certain, but the General Officer Commanding reports that the medical subordinates have very fair temporary quarters.

MEIKTILA.

Hospital Accommodation.—New temporary hospital accommodation has been provided at this station, which is considered ample. A new permanent hospital is likely to be erected very shortly.

KONI.

Water-supply.—Samples of this water have been sent to the Deputy Surgeon-General, Rangoon, for analysis, but the result is not yet known. Koni has not been occupied by British troops since the departure of the 1st Battalion, Rifle Brigade, and ere long it is expected that a reduction will be effected in the strength of the Native garrison occupying the station.

SANITARY REPORT OF BRITISH TROOPS IN THE MADRAS COMMAND DURING 1888.

In the year 1888 the average strength of British troops serving in the Madras Presidency was 14,073, which is an increase of 2,335 on the previous year. The ratio of admission to hospital per mille of strength was 1,349·67 and the death ratio 15·63, showing an increase respectively of 108·06 and 2·68 on the previous year. There have been 9 cases of small-pox, 4 at Bangalore and 5 at Secunderabad; 1 death from this disease occurred at the latter station. In the previous year there had been an entire immunity from this disease among British troops serving in the Madras command. Of cholera, 59 cases occurred; of these, 40 or 67·7 per cent. proved fatal. Of the 59 attacks, 6 were sporadic; 1 each was contributed by St. Thomas' Mount, Bellary, Rangoon and Thayetmyo, while 2 cases occurred at Toungoo. The remaining 53 cases occurred in Upper Burma, and in a more or less epidemic form at four stations, viz., at Mandalay 15, Myingyan 12, Fort Stedman 10, and Bhamo 4, while 12 cases occurred in troops on the march.

In the year under report 104 cases of enteric fever occurred, of which 32 or 30·7 per cent. proved fatal. As usual Secunderabad and Bangalore head the list with 41 and 35 cases, respectively. Seven other stations give 1 case each, five give 2 cases each, one station had 3 cases and two stations give 4 cases each. The accumulated evidence of years on the distribution of this specific fever seems to indicate that however true it may be that the specific cause of the disease is a propagable organism, and that the disease must be classed among contagious fevers, yet it is very doubtful that contagion plays an important part in the spread of the disease; for in practice we find, in this country at all events, that there is very little "spread." The steady monotony with which Secunderabad and Bangalore year after year contribute the greatest number of cases of this disease seems to show that their notoriety in this respect is caused by local conditions.

No new facts have been ascertained which would throw any light on what the local conditions of these two stations which are so favorable to the causation—whether origin or propagation it is difficult to say—of enteric fever; for, while propagation may be admitted in the abstract or theoretical sense, few persons are now able to hold against the overwhelming evidence of experience to the contrary that propagation by contagion excludes a *de novo* inception of the disease.

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BANGALORE DIVISION INCLUDING BELGAUM AND CEDED DISTRICTS.

The general health of the troops in the division has been good.

The sanitation of the barracks and buildings connected therewith has been satisfactory.

In Bangalore the proximity of the Native bazaars to the Parade and Ulsoor barracks is in many respects objectionable, as they are far from being in a proper sanitary condition. The barracks afford ample and well-ventilated accommodation, the inner verandahs of all are occupied as sleeping apartments and are provided with designation boards showing the cubic space which is ample. These verandahs have always been used as dormitories. The urinals attached to the parade barracks are insufficient considering the strength of the battalion now occupying them, and it seems desirable that one should be erected in rear of the library and another on the spare piece of ground between the swimming-bath and the cook-house. The latrines occupy a position on either flank of these barracks and afford sufficient accommodation, but the distance of the central blocks from them is very considerable (363 yards). An additional latrine for the latter would be a great boon and convenience if it were found practicable and not encroaching upon the parade grounds or the main public road. A further extension of the surface drainage of the Infantry and Cavalry barrack grounds on a scale similar to that which has been carried out in the Artillery lines is very necessary. The nullah in rear of the Pensioners' lines and adjacent to the Royal Horse Artillery lines is in an insanitary state. It is recommended to be filled up and a proper drain constructed for about half a mile from the lines. The open nullah between the Pensioners' lines and the South Station Hospital is used as a latrine by the Natives. This objectionable practice is due to imperfect police supervision.

The coffee-shops of the Cavalry Regiment are amply provided with almost every description of eatables procured from Europe. Those of the Infantry Regiments were not so well supplied and admit of considerable development.

In any health report of Bangalore the drinking-water supply must occupy the foremost place, as it has been for years past the subject of almost continuous consideration. So much has already been said on this subject that it would not serve any useful purpose to dwell upon it further than to say that everything is being done by way of filtration and boiling to render it as fairly potable as possible. It is, however, very important that the distribution of the drinking water here and in all other cantonments should be effected by casks with openings at the top sufficiently large for cleansing, or by zinc buckets in place of puckals and mussacks. An order of Government in the Public Works Department, No. 25 W., dated 8th January 1889, has approved of the proposal that the drinking-water supply be obtained from sources outside the Bangalore cantonment, and estimates are now being prepared having that object in view.

North Station Hospital.—The latrines have been furnished with fixed seats in place of the old-fashioned closed stools. A great inconvenience has arisen from the fact that the hospital staff and Army Hospital Native Corps have no accommodation provided for them in or near the hospital enclosure. The apothecaries occupy some of the married quarters in the parade barracks.

South Station Hospital.—There is no accommodation for the Army Hospital Native Corps, who are obliged to live in some instances two miles distant from the hospital. There are no pegs in the wards for hanging patients' helmets on.

The necessity of extended surface drainage applies equally to the grounds of both hospitals.

Belgaum.—There is a marked deficiency of surface drainage all over the cantonment here also.

The ventilation of latrine 34/3 of Royal Artillery barracks and that of the Infantry barracks is bad and ridge ventilation is necessary. The floors are of clay, and it is very desirable that they should be concreted or covered with some other impermeable material. The Sergeants' Mess and Billiard-room of the Royal Horse Artillery require additional ventilation by windows and openings near the roof. The large natural drain or nullah situated between the Infantry barracks and hospital, into which a considerable portion of the surface drainage runs, requires to be cleared out, deepened and, if practicable, made pucka. The Infantry privies—two in number, one at each flank of the barrack buildings—are a considerable distance (about 250 yards) from the central block. A light privy of corrugated iron suitably paved and ventilated might with great advantage and convenience be erected near the central rooms. The lavatories in the old barracks are in a dilapidated condition and are urgently in need of repair or reconstruction.

The reading-room of the new Infantry barracks is scarcely large enough for the requirements of the troops. The floors in the verandahs of blocks of family quarters are made of clay. Asphalte or concrete is recommended to be substituted.

Fort Barracks—The Hospital Bungalow used as Quarters for the Troops.—Surface drainage is much needed all round this building and outhouses. The latrine is structurally defective and objectionably placed as regards the men's rooms, and it is recommended that it should be removed altogether. The disused mortuary could at small cost be converted into an excellent privy.

All barrack rooms, canteens, coffee-shops, lavatories, cook-houses, urinals and privies are much in need of additional ventilation by ridges and openings in the walls. The surface drainage around all the buildings is very imperfect.

Station Hospital.—Surface drainage very defective. Rain water issuing from roof pipes floods and tears up the ground.

No. 1 Ward Lavatory is much in need of additional lighting and ventilation. The verandah floors of the "detained" and No. 2 Wards are of clay. These should be concreted. The "Detained Ward" latrine requires additional ventilation by windows and ridges and its floor should be concreted.

The night-soil is removed from barracks in imperfectly closed iron receptacles placed on ordinary rubbish carts. Crowley carts have not yet been provided as the Bombay Government does not consider them suitable to the local conditions of cantonments in the Bombay Presidency. Inquiries are being made by Government as to what would be the best pattern filth cart to adopt.

Bellary.—Malarial fevers of all kinds are specially prevalent among European and Native troops. The composition of the ground is a black cotton soil on which rests a thick layer of disintegrating primary rock. In the presence of great sun-heat it favors, to an exceptional degree, the development and evolution of malarial poisons. At this station, as at Secunderabad and Bangalore, the surface drainage should be carried out in well laid, properly pointed surface channels. This and the planting of fast-growing trees and shrubs would largely avail in diminishing the malarial diseases from which the troops now suffer so much.

The water-supply of the cantonment requires to be put upon a much more satisfactory basis than at present obtains. Much correspondence has taken place on this subject, and it is satisfactory to know that a committee has been ordered to assemble for the purpose of submitting some definite proposals for the improvement of the water-supply of the cantonment.

SOUTHERN DISTRICT.

The health of the troops at Wellington, Calicut and Malapuram has been good, and at Cannanore indifferent. During the second quarter of the year the health at Malapuram was indifferent.

The sanitation of the barrack buildings and hospitals at these stations has been satisfactory with the following exceptions:—

At *Wellington* a lunatic ward attached to the hospital is [illegible]

The Army Hospital Native Corps attendants are not provided with quarters, and are consequently obliged to live at considerable distance from their work.

This is the cause of great inconvenience and affects prejudicially the discipline of the men.

At *Cannanore* the lighting of the barracks is reported by Dy. Surgeon-General Farquhar to be defective.

At *Malapuram* the Medical officer in charge states that the staff sergeants' quarters are damp and their drainage insufficient.

The distribution of the water-supply at Wellington by means of leather buckets and puckally bags is very objectionable, and it is important that zinc buckets be substituted for these. The water up to the points of distribution is pure and wholesome. As this is a sanitarium for invalids and young soldiers, it is recommended that the water should be laid on to cook-houses and barracks in the usual way.

The sanitary condition of the Coonoor bazaar is very fair, but the Deputy Surgeon-General represents that it can never be all that is desirable till the water-supply is piped and a system of drainage carried out. Bearing in mind the fact that this is the bazaar to which the young soldier has constant access and from which he obtains various supplies, it is of the first importance that its sanitary condition should be as good as it is possible to make it.

The drainage of Wellington is favored by the ground conformation. It would be advisable to have the present masonry drains extended so that their contents could be carried still further away from barracks. Drainage should also be extended to the Coonoor bazaar.

SECUNDERABAD DISTRICT.

The health of the troops in this district has been fair and shows a decided improvement compared with the previous year. The sanitation of the barracks and hospitals has been satisfactory.

Secunderabad.—The great radical defect which universally prevails here is the total absence of artificial surface drainage. There are absolutely no means of carrying off storm water except by the natural channels which are formed in due course by the cutting up of the surface into deep rugged drains, rendering the ground broken and uneven. The surface soil at Secunderabad is composed to a great extent of disintegrated granite, and it is a well recognized fact that no structure harbours more closely the poison of malaria and evolves it more readily in the presence of heat and moisture than a decomposing granite soil.

A thorough system of surface drainage is strongly recommended as a means of reducing the serious diseases and mortality of this station.

The next point that calls for remedial measure is the drainage of the low swampy ground between the two Infantry barracks. Here the ground is low and unwholesome, and to this

cause has been attributed much of the malarial fevers from which the troops have suffered from time to time. That such in all human probability is the case, the experience of other localities similarly circumstanced tend to show. With a view to alleviate the noxious effects produced by the wind blowing over this malarial swamp towards the barracks, the Medical authorities have from time to time recommended that belts of fast-growing trees be planted between the swampy ground and the barracks. This, no doubt, would be attended with very considerable improvement and indeed the planting of trees over the whole cantonment of Secunderabad, especially in the neighbourhood of the European barracks, would add immeasurably to the comfort and appearance of the cantonment which at present is singularly bare and from the perpetual glare very distressing to the eyes.

The 2nd British Infantry barracks in South Trimulgherry occupy, *en echelon*, an extended area on an elevated and sloping piece of ground faultlessly situated were it not so much exposed to the south-west monsoons. Strong draughts of cold and damp air blowing in upon the men especially at night during the monsoon season are certainly very objectionable and are well calculated to be the exciting cause of many diseases. It is very important that steps should be taken to protect the men from these injurious influences. The roofs of the barracks of the 2nd British Infantry Regiment have been in a leaky condition for some time, and have quite recently been the subject of correspondence. The Medical officer in charge, South Station Hospital, reports as follows:—

"The reroofing with Allahabad tiles of the 2nd British Infantry barracks, which was proposed to be done in 1888, did not take place; this is a serious matter, as the roofs are in a very bad state, and during the rains the men suffered much inconvenience and discomfort." The accommodation here is scarcely sufficient for a battalion of full Indian strength. The comfort of the men would be largely added to if each block were furnished with a certain number of cane-lounging chairs. They are specially needed in the cool of the afternoon during the hot season.

The coffee-shops of the Infantry and Artillery were fairly provided, but did not afford that variety in articles of food, which so largely contributes to the health of the men. In the coffee-shop of the 7th Hussars every variety of food, such as cheeses, hams, bacons, preserves of all kinds were procurable, and it was possible at any moment of the day to obtain a good and wholesome meat at a very moderate rate.

The accommodation generally has been sufficient with the exception of Cavalry barracks where, owing to the strength of the present regiment (600), it has been found necessary to occupy as dormitories the rooms of the lower stories, recreation rooms, gymnasium, &c., and tents. These arrangements have been found indispensable pending the erection of the new barracks which are now being built.

The meat ration has been found to be very thin and lacking in nutritive qualities; mutton issued usually twice a week and beef five times being grass-fed in a place where even moderately good grass is scarce, neither can ever be possibly good. Green vegetables are very few and insufficient; supplied only about twice a week. Nothing affects more prejudicially the health of troops—especially that of young soldiers—than meat of inferior quality and insufficiency of green vegetables. Deputy Surgeon-General Roberts states that "there are certain defects in the cook-houses that admit of easy improvement and which, when effected, will materially assist in the better cooking of the food."

"(*a*) The cooking ranges in all the cook-houses of Royal Artillery and Cavalry are too low and the ovens are too small. The ranges should be elevated three feet from the ground and so built that the smoke should go up the chimney; in the middle of each range should be a large oven.

"(*b*) In the British Infantry some of the cooking ranges are in a dilapidated condition and all smoke more or less. They should be rebuilt on the plan recommended for the Cavalry and Artillery.

"Meatsafes should be provided. Iron tubs should be substituted for the present wooden ones in the British Infantry. Frying pans should be provided for the Cavalry and Artillery; the Infantry have been provided with them."

Hospitals.—There are three station hospitals, viz., South, North and Central, for the sick of the Infantry, Cavalry and Artillery, respectively. The south has accommodation for 200 beds. This is the utmost limit it could be made to supply, and even then it would be scarcely sufficient to meet the requirements of the two Infantry regiments of full strength as well as the departments. This building has a very imposing appearance, but it lacks in many respects the requirements of a good hospital. The wards run across the building and are draughty and noisy. They were, however, well provided with screens and were on the whole very comfortable. A large lavatory close to the building would add much to the comfort of the sick.

A detached building, formerly an hospital sergeant's quarters, has been appropriated for an officer's hospital—a most necessary and useful institution.

The central and the north have sufficient accommodation and are exceedingly clean and comfortable.

The hospital for women and children occupies one of the family quarters of the 1st British Infantry Regiment.

Although a good many alterations and improvements have been effected with a view to making it more comfortable and suitable, still it is not, and never could be made, a good hospital. When it is considered that provision has to be made for general diseases as well as lying-in cases, no building short of one specially constructed for the purpose can be satisfactory. In a station of such a size and extent as Secunderabad there should be a station female hospital in a suitable and convenient position fitted up with all modern requirements.

The water-supply has been good. The wells from which it is obtained are situated on ground free from impurities.

MADRAS DISTRICT.

The general health of the troops in this command has been good.

Fort St. George, in which the barracks for British troops stationed in Madras are situated, is overcrowded, but the barracks themselves have not been so.

The sanitation of the barracks has been well cared for. The Infantry barracks are so placed that they cannot be perfectly ventilated. The ground floors in these barracks should not be occupied by troops for any length of time.

The *Station Hospital, Madras*, is badly situated on account of its proximity to the main road and the river Cooum, the latter containing much sewage matter. As a building, however, with the exception of some minor defects, it meets the requirements. Although piping has been laid down, water has not been supplied to the upper storey.

Under the orders of Government a committee recently assembled to report upon a site suitable for a new station hospital at Cupid's Bow.

The present hospital contains no quarters for subordinates or hospital attendants.

At *Poonamallee* the barracks consist of four blocks in two parallel ranges. Various improvements have been effected in them from time to time, the latest being the removal of walls enclosing the verandahs and preventing free perflation of air.

The hospital is a large double-storied building well ventilated. There are no quarters for the apothecary in subordinate charge nor for the hospital attendants.

The drainage of Poonamallee is fairly good except at the outskirts, where it is indifferent or completely wanting. Difficulty in drainage is inherent owing to the position. To make it effectual great expenditure would have to be incurred.

Of *St. Thomas' Mount* the Senior Medical officer remarks of the north and south barracks that "their nearness to the hill, bad site and faulty construction have ensured their continued disease." The ridge ventilation of some of the latrines is insufficient.

Several new drains have been made to carry away surface water, but a more extended system is required.

The ventilating apertures of the kitchens are insufficient for the egress of smoke. There are no public quarters for hospital staff and attendants.

NAGPORE DISTRICT.

This report only deals with the force up to the 1st October 1888, from which date it was transferred from the Madras to the Bombay command.

The general health of the troops has been fairly good.

The "Old barracks" have been occupied by the Royal Artillery and the "New barracks" by the Middlesex Regiment. No overcrowding has taken place and sanitation has been satisfactorily maintained. There are plenty of trees between the barrack blocks which afford requisite shade.

The construction of the garrison prison has been rapidly pushed on. The hospital and subsidiary buildings have been kept in good sanitary condition and there has been no overcrowding.

Deputy Surgeon-General deFabeck reports that the quality of the bread supplied to the troops has been objected to as being frequently sour, badly baked, and made of inferior flour. The contractor has been fined.

The water-supply is described as good and abundant.

The following works have been completed during the period under notice:—

At *Kamptee* alterations and additions to the British Infantry canteen.

Rebuilding open stone drain from back of armourers' shop to large nullah near rifle range.

Renewing floors of urinals in British Infantry lines with new concrete and asphalte.

Reroofing latrines of Royal Artillery guard-rooms and cells.

Reroofing with Allahabad tiles line houses Nos. 1 and 2, Royal Artillery lines.

Reroofing latrines Nos. 1 and 2, Royal Artillery lines, with new timber and Allahabad tiles.

Reroofing passage from guard-room to cells and from cells to latrine.

LOWER BURMA DISTRICT.

The health of the troops has been fair.

Deputy Surgeon-General Donnelly reports that the barracks at Rangoon are well elevated above the ground, airy, cheerful and well adapted to the nature of the climate, being equally well protected from sun and rain.

The barracks occupied by the Royal Artillery are of older construction and the site is not so good, but there has been ample accommodation. The Medical officer in charge of station hospital states that the urinals attached to the Infantry barracks are too close to them and cause an unpleasant smell, while they are too far for night use.

The hospital has been suited for requirements and its sanitation is described as satisfactory.

Drainage has not at any time been considered defective. Open masonry drains run round each barrack block and convey the drainage into iron pipes which carry it a considerable distance down the hill on which the barracks are situated.

Water has been supplied from wells and has occasionally run short, necessitating its being drawn from a distance in carts. Surgeon-Major Gormley recommends that the same system which supplies the town with water should be also extended to cantonments and barracks.

At *Thayetmyo* the cells are reported to be damp owing to water lodging in the space below the arches during the rains.

At *Toungoo* no quarters are provided for men of the Army Hospital Native Corps.

UPPER BURMA FORCE.

Myingyan and Mandalay Districts.—The general health of the troops in this district has been indifferent, but at Mandalay the Deputy Surgeon-General reports that there has been a considerable improvement in the health of the troops compared with the previous year.

The Mandalay district consists of a low flat tract of country lying between the Irrawady and the Shan Hills, the plain is in many places below the level of the river, the water of which is kept out by an enormous bund.

The cantonments at Mandalay occupy the site of the old enclosed city and are about two and a half miles from the river and towards the north-east of the native town. The old palace is situated in the centre of cantonments. The only elevated portion of ground in the vicinity is Mandalay hill to the north-east of the town and within 500 yards of cantonments. This hill consists of gravel rock with a soil of alluvial clay.

The cantonments are about 1¼ miles square and surrounded by a brick wall banked up with mud, outside the whole runs a moat from 100 to 150 feet wide and from 8 to 10 feet deep. The native houses which formerly existed within cantonments have now been almost all removed.

The European Infantry barracks are placed at the north-east corner of the cantonment; they are built of teakwood and are raised about 10 feet from the ground. A verandah 12 feet wide runs round each block, the floors are of pounded clay, sand and gravel. The barrack buildings are arranged in parallel rows on open ground and have double roofs with ridge ventilation. Doors, windows and ridge ventilators ensure a free supply of air. The recreation rooms afford ample space. The Artillery barracks are situated outside the palace enclosure and are reported to be fairly satisfactory.

The hospital consists of three wooden structures arranged *en echelon*; they are raised 12 feet from the ground and are connected with each other by covered ways. The ground floors of two of them are of concrete and contain offices, store-rooms and surgery. They contain 125 beds; accommodation has been sufficient, but there are no suitable quarters for hospital subordinates, and this want has been much felt.

Water has been obtained from the moat. It is conveyed into the moat from the Nanda lake; the lake itself is fed by streams which flow into it from the Shan Hills and also by a branch from the Naddya river. The supply is reported to have been sufficient and of good quality. From the moat a channel leads into the palace which, together with wells situated inside the palace enclosure, supplies drinking water to this portion of the cantonment.

On a recent analysis the moat water was found to contain an undue amount of organic matter; its use, however, has not been found to produce injurious results. A scheme has been projected for bringing water from its source by means of pipes through filtering beds and when realised will be of great advantage.

The drainage has been natural. Cuttings have been made when required to carry off storm water which has been found to collect in pools in various directions. Drainage works are now in progress.

The conservancy of the native town is reported as being at a very low ebb, cleansing being chiefly performed by packs of dogs, pigs and birds.

Canteens and coffee-shops have been in existence and supplies in them have been satisfactory.

Cooking arrangements have given satisfaction, but the food, consisting chiefly of beef, has been found monotonous. Mutton has been supplied only once or twice a month, as its price has been almost prohibitive, but the sick have been supplied with it twice a week.

Bhamo.—This station is situated on the left bank of the Irrawady at an elevation of about 640 feet. It extends for 1½ miles along the bank of the river. The troops have been accommodated in three forts outside the town, one fort A to the north-east, another fort B to the east and the third fort C to the south-east of the town. In the last-mentioned fort the majority of the garrison have been accommodated. There has been overcrowding at times,

but the erection of a new building lately has obviated this. The basement flooring of the barracks has been recommended to be laid with concrete as it was found that the fine dust from the existing flooring permeated everything.

The hospital is an ordinary full company barrack built of corrugated iron. The main room is 180 feet long, 30 wide and 21 high, affording room for 50 beds. It has been found insufficient for requirements during the unhealthy season, and an unoccupied barrack had to be utilized as an auxiliary hospital.

The cook-houses, lavatory and latrines are only temporary bamboo buildings. A permanent cook-house has lately been built and is reported to be nearly ready for use.

Water has been obtained from wells, as that obtainable from the near side of the river has been found of bad quality from sewage contamination. The supply has been good, the wells being protected from possible contamination.

The sanitation of the native town is very bad.

A marsh exists outside the stockade which is supposed to be the main cause of the prevalence of malarial fevers; efforts are now being made to drain it, but probably will be only partially successful.

The climate is reported to be pleasant from November to March, but during the rainy season from June to October it is unhealthy, malarial fevers being very prevalent.

Shwebo.—At this station the barrack buildings are reported to have been constantly in need of repair and generally in a somewhat dilapidated condition. There has been insufficient accommodation in the guard-room. Sanitation has generally been well attended to.

A Buddhist monastery and a wooden shed with a double roof have been used for the accommodation of the sick; the former building accommodated 12 and the latter 20 sick. On the arrival in November of Hampshire Regiment with a number of sick, another large monastery was occupied.

Bernardmyo.—This station is situated on the slope of a valley surrounded by hills and at an altitude of 5,800 feet. The hills immediately around are covered with dense jungle which is burnt every cold weather by the inhabitants. Rocks, chiefly limestone, appear frequently on the surface.

The valley slopes to the west and a tolerably large stream runs through it. The soil is loam, underlaid with clay; some marshy ground exists about ¼ of a mile from the station.

The troops have been accommodated in four barracks built of wood with thatched roofs; the floors are raised from the ground five feet at one end and three at the other. Half of one barrack is screened off to act as a library and reading-room. A space exists between the walls and roof which allows of ventilation.

The buildings are draughty; they each contain two fireplaces and fuel has been supplied in abundance; occasional overcrowding took place.

The hospital is a building similar to the barracks.

The water-supply has been abundant and of good quality, sparkling and pleasant to taste; it collects on the hills to the east of the station and is brought thence in wooden bamboo pipes.

In the latrines the want of a Crowley cart has been experienced. The filth receptacles have been cleansed twice daily. The lavatories are merely thatched sheds, they have paved drains.

The rations have been described as monotonous, no mutton being available except for hospital purposes. Vegetables have grown well and there has been an abundant supply.

Salemyo is situated in the valley of the Irrawady about 9 miles distant from the river. The surrounding country is flat and under wet cultivation for the greater portion of the year.

The barracks are all of a temporary nature and are described as being in a ruinous condition after having been two years in use. They are built of mats and have thatched roofs. The upper portions of the walls are raised outwards for purposes of ventilation.

The hospital is a similar building, the roof leaks badly during the rains, and the walls and posts are stated to be undermined by destructive insects.

The floors of the bath-rooms are not paved, which causes them to be sodden with water.

The canteen is situated beneath the hospital, which is an objectionable arrangement. It is anticipated that this station will be relinquished as a military post.

Myingyan.—This was the head-quarters of the 2nd Brigade. The barracks are built of teakwood and have double roofs with ridge ventilation and broad verandahs. They are raised from the ground and are well lighted by means of doors and windows. Kerosine lamps are used at night. The buildings have been found suitable, but constantly need repairs. One of them was used as a hospital and was well adapted for the purpose.

The recreation rooms are reported to have been particularly good.

The want of accommodation for hospital subordinates has been a source of much inconvenience.

Food-supplies were fairly plentiful, beef of good quality was supplied, but mutton was issued only once or twice a month.

Fresh vegetables were procurable daily.

Cooking arrangements were satisfactory.

The water-supply has been abundant and its quality good; it has been boiled and filtered before use.

The drainage has been chiefly natural. Cuttings have been made wherever required to carry off storm water.

Meiktila.—The quarters occupied by the troops consisted of buildings of bamboo with mat walls, thatched roofs and wooden floors. They stand on slightly rising ground on the banks of a lake about 15 miles in circumference. The lake is about 200 yards from the barracks. Its depth varies according to season, but as the shore shelves rapidly, little ground is left exposed to the sun and this dries quickly. No marshy land or cultivated ground exists in the vicinity. The barracks are all of a temporary nature and are reported as having been constantly in need of repairs. A hut was used for the purpose of a canteen and a coffee-shop has been provided.

The beer has frequently had to be condemned.

The hospital consisted of two wards and a dispensary. It had accommodation for 25 beds. The roof was found to leak during the rainy season and the walls became undermined from the attacks of destructive insects.

The water has been obtained from wells well protected from impurities. Supply inexhaustible and quality good; it has been filtered before use.

The bath-rooms are built of the same material as the barracks and are raised 3 feet from the ground. The floor underneath being unpaved has been constantly sodden. Waste water has been run off by means of shallow drains into the nearest nullah.

Minbu.—On the breaking up of the Upper Burma field force this station was abandoned for British troops.

The quarters which they occupied were temporary, consisting of bamboo huts with mat walls, bamboo flooring and thatched roof.

The hospital was a similar structure and answered the temporary requirements.

Kosi.—This station is situated in the Southern Shan States at an elevation of over 4,000 feet, and it has been only occupied temporarily by British troops. The quarters consisted of huts of mud walls plastered over. The roofs were of thatch and a space 9 inches wide existed between the walls and roof for ventilation. During the rainy season in spite of woodfires it was found difficult to keep the huts at a proper temperature.

No canteen was established, but a coffee-shop was provided.

Drinking water was only obtainable from streams and in the rainy season this source became impregnated with organic matter and was thought to be the cause of a considerable number of admissions for bowel-complaints.

OOTACAMUND,
29th August 1889.

(Signed) J. A. HANBURY, M.D.,
Surgeon-General, Her Majesty's Forces.

Return showing the Admissions and Deaths among the Troops during the several months of the year 1888.

Diseases.	January.			February.			March.			April.			May.			June.			July.			August.			September.			October.			November.			December.			Total.			Average number constantly sick.
	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	
I.—GENERAL DISEASES.																																						
Group "A."																																						
Small-pox																																						0·19
Other eruptive fevers																																						0·22
Enteric fever																																						18·93
Other continued fevers																																						38·94
Sub-Group I. Remittent fever																																						0·77
Yellow fever																																						64·93
Cholera																																						0·32
Dysentery	10	116		16	115		26	183		10																												
Other diseases	1																																					
Total	11	116		16	115		26	183		10																											1,810	86	5	11·99
Sub-Group II.—Malarial fevers	187			114			110			24			1			2			2			1			1			1			1			1			3,450	30		10·04
Sub-Group III.—Septic diseases	2																																				11			0·87
Sub-Group IV. Syphilis, primary	72			24			24			125			245			318			219			205			181			161			67			12			1,151			09·38
Do. secondary	24			24			24			125			245			318			219			205			181			161			67			12			511			15·47
Gonorrhœa	72			24			24			125			245			318			219			205			181			161			67			12			2,256			169·61
Total	72			24			24			125			245			318			219			205			181			161			67			12			3,957	2		308·71
Sub-Group V.—Hydrophobia, &c.																																						
Group "B."																																						
I.—Parasitic diseases	3																																					1·58
II. Effects of climate																																						0·03
III. Alcoholism	10																																					5·73
Group "C."																																						
Debility, &c.	26																																				529	2		31·82
Group "D."																																						
Rheumatism	20			3			10			11			22			15			11			6			3			3			1						366			27·11
Tubercular disease	3			3			10			11			22			15			11			6			3			3			1						41			8·95
Other diseases	15			5			5			22			55			68			57			24			14			8			2						176			11·47
II.—LOCAL DISEASES.																																						
1. Nervous system.	15			5			5			22			55			68			57			24			14			8			2						147			10·76
2. Eye	3			1			2			3			10			6			5			2			1			1									25			8·69
3. Ear	7			2			2			5			10			6			5			2			1			1									181			8·93
4. Other organs of special sense	1																																					9·11
Diseases of the 5. Circulatory system	3			1			1			2			5			3			3			1			1			1									301			13·39
6. Respiratory do.	2			1			1			2			5			3			3			1			1			1									127			19·15
7. Digestive do.	1			1			1			2			5			3			3			1			1			1									319			100·77
8. Lymphatic and glandular system	6			2			2			5			10			6			5			2			1			1									2,159	35		66·98
9. Urinary system	1			1			1			2			5			3			3			1			1			1									383	1		6·98
10. Generative do.	3			1			1			2			5			3			3			1			1			1									1,426			8·48
11. Organs of locomotion	2			1			1			2			5			3			3			1			1			1									93			6·72
12. Connective tissue	1			1			1			2			5			3			3			1			1			1									360			15·94
13. Skin	6			2			2			5			10			6			5			2			1			1									1,033			39·31
III.—Poisons																																						
IV.—Injuries.																																						
1. General																																						
2. Local																																						
3. In action																																						
By spontaneous disease																																						
Cause unknown (refers to deaths only)																																						
General Total	1,006	9	1	1,013	7	3	1,583	12	1	1,585	10	5	1,585	8	3	1,548	12	1	1,548	12	1	1,548	12	1	1,548	12	1	1,548	12	1	1,548	12	1	1,548	12	1	18,994	196	34	1,081·17

Return showing the Admissions and Deaths among the Troops during the several months of the year 1888—cont.

Average strength 14,078.

Diseases.	August.			September.			October.			November.			December.			Total.			Average number constantly sick.
	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	Admitted.	In hospital.	Died	
I.—GENERAL DISEASES.																			
Group "A."																			
Small-pox	4	1		1			1									6	1		0·19
Other eruptive fevers	1						3									4			0·22
Enteric fever	19	6		10	6		10			1	1					39	32		18·93
Other continued fevers	93			90			24			4						211	1		38·94
Sub-Group I. Remittent fever																			
Yellow fever		2	2		1		61	4		88			68	1		219	85	5	0·77
Cholera	86	1		73	1		2						1			162	15		64·93
Dysentery										1	1		1			3	2		0·32
Other diseases	205	10		181	7		161			94	2		86	6		1,810	86	5	11·99
Total	308	3		364	1		388			378	4		352		1	3,450	30		10·04
Sub-Group II.—Malarial fevers	2						1			1						11			0·87
Sub-Group III.—Septic diseases	73	18		74	22		123	43		149	36		122	3	1	1,151	511		09·38
Sub-Group IV. Syphilis, primary	139	4		187	4		266	6		270	4		258	4		2,256	46		169·61
Do. secondary																			
Gonorrhœa																			
Total	276			313			372			455			385			3,957	2		308·71
Sub-Group V.—Hydrophobia, &c.																			
Group "B."																			
Sub-Group I.—Parasitic diseases	4			7			6			1						67			1·58
Sub-Group II. Effects of climate	20			35			21			16			19			217			0·03
Sub-Group III. Alcoholism																			5·73
Group "C."																			
Debility, &c.	96	1		73			56			51	1		31			529	2		31·82
Group "D."																			
Rheumatism	34			42			27			23			20			366			27·11
Tubercular disease	1			3	1		3			2			4			41			8·95
Other diseases	13			10			14			14			8			176			11·47
II.—LOCAL DISEASES.																			
1. Nervous system.	18			15	1		18			7			13			147	4		10·76
2. Eye	3			3			3			1			1			25			8·69
3. Ear	23			20			18			11			17			181			8·93
4. Other organs of special sense	25			22			23			8			12			201			9·11
Diseases of the 5. Circulatory system	11			13			7			13			10			127			13·39
6. Respiratory do.	21			25	1		27			24			33			319	9		19·15
7. Digestive do.	216	4		184	15		152			134	1		134	1		2,159	35		100·77
8. Lymphatic and glandular system	42			49	1		60			51			74			583	1		6·98
9. Urinary system	7			3			8			2			6			61			8·48
10. Generative do.	34			126			87			135			170			1,426			6·72
11. Organs of locomotion	24			16			25			9			19			360			15·94
12. Connective tissue	83	1		84			95			71			65			1,033			39·31
13. Skin																			
III.—Poisons	2			1			1									12	1		0·62
IV.—Injuries.																			
1. General																			
2. Local	134	1		130	2		129	1		133	2		178	3		1,591	33	3	1·91
3. In action																			
By spontaneous disease																			
Cause unknown (refers to deaths only)																			
General Total	1,728	16	1	1,743	15	1	1,689	16	1	1,676	11	2	1,751	12	3	18,994	196	34	1,081·17

Return of Non-Commissioned Officers and Privates invalided and Officers who have obtained Sick Leave of the Troops serving in the Madras Command from 1st January to 31st December 1888.

(Only such invalids as have embarked for England.)

Station.	Rank.	Names.	Period of resi. dence in India.	Disease for which invalided or obtained Sick Leave.	Period under treatment.	Whether probable result of this climate or of a previous course of service elsewhere.
			YS. M.		DAYS.	
Madras ...	Sergeant ...	J. W. Edwards ...	16 0	Debility ...	1	In India.
	Private ...	L. Gilks	8 0	Do.	190	Do.
	Do. ...	J. Tew	4 0	Palpitation ...	81	Do.
	Do. ...	W. Cox	4 0	Do.	98	Do.
	Do. ...	J. Twitchen ...	6 0	Do.	110	Do.
St. Thomas' Mount.	Sergeant ...	J. Fisher... ...	8 2	Dysentery ...	15	Do.
	Gunner ..	J. Mulholland ...	1 4	Congestion of liver	62	Do.
	Staff Sergeant Instructor.	P. Harris... ...	8 2	Debility... ...	17	Do.
	Dist. Sergt.-Major.	J. McChesney ...	9 2	Do.	46	Do.
Poonamallee.	Private ...	Thomas Farrell ...	3 11	Melancholia ...	93	Do.
	Corporal ...	Charles Anderson.	8 1	Tubercle of lung...	79	Do.
	Gunner ...	Thomas Walters...	2 1	Dysentery ...	156	Do.
	Driver ...	James Driscoll ...	3 3	Do.	85	Do.
	Gunner ...	Joseph Peel ...	2 4	Tubercle of lung...	105	Do.
	Private ...	John Chapman ...	1 3	Dysentery ...	134	Do.
	Do. ...	Stephen Bennett...	0 11	Do.	131	Do.
	Sergeant ...	James Marsh ...	14 3	Scrofula	36	Do.
	Lance Corpl.	John Boyle ...	1 2	Hepatitis	108	Do.
	Private ...	James Mullins ...	5 4	Secondary syphilis.	177	Do.
	Sergeant ...	John Clarke ...	1 4	Dysentery ...	198	Do.
	Do. ...	William Mills ...	2 4	Congestion of cerebrum.	246	Do.
	Private ...	George Cook ...	2 11	Dysentery ...	149	Do.
	Do. ...	James McCamley.	5 11	Spasmodic asthma.	68	Do.
	Lance Corpl.	Thomas Coonan ...	2 1	Secondary syphilis.	61	Do.
	Do. ...	Robert Potts ...	7 5	Rheumatism ...	144	Do.
	Private ...	Morris Mahoney...	3 11	Keratitis suppurative.	76	Do.
	Do. ...	William Pruce ...	2 2	Ulcer. of laryux...	209	Do.
	Do. ...	Benjamin Howells.	7 5	Fracture	25	Do.
	Do. ...	John Tracey ...	7 1	Secondary syphilis.	189	Do.
	Do. ...	Joseph Askham ...	4 5	Rheumatism ...	124	Do.
	Do. ...	Robert Cox ...	1 10	Hepatitis	164	Do.
	Do. ...	William Henry Foster.	7 5	Paraplegia ...	129	Do.
	Do. ...	John McCormick.	4 11	Rheumatism ...	91	Do.
	Do. ...	William Tilbury...	1 4	Sunstroke ...	101	Do.
	Do. ...	Walter Ed. Cox...	3 11	Fracture	157	Do.
	Do. ...	Hugh Miller ...	5 11	Dysentery ...	163	Do.
	Do. ...	John Murray ...	7 5	Hemiplegia ...	151	Do.
	Do. ...	William Mills ...	2 2	Dilatation of heart	146	Do.
	Corporal ...	Thomas Reher ...	3 11	Dysentery ...	234	Do.
	Private ...	Richard Rothwell.	7 1	Secondary syphilis.	133	Do.
	Do. ...	Timothy Kidhane.	2 1	Do. ...	202	Do.
	Do. ...	Patrick Hill ...	3 11	Ague	87	Do.
	Do. ...	Bernard Healey ...	3 11	Palpitation ...	54	Do.
	Do. ...	Patrick Mulroney.	3 11	Secondary syphilis.	129	Do.
	Do. ...	John Curran ...	3 11	Debility	151	Do.
	Do. ...	John Batwell ...	3 11	Epilepsy	6	Do.
	Do. ...	William Pope ...	3 11	Secondary syphilis.	400	Do.

Return of Non-Commissioned Officers and Privates invalided, &c.—cont.

Station.	Rank.	Names.	Period of resi. dence in India.	Disease for which invalided or obtained Sick Leave.	Period under treatment.	Whether probable result of this climate or of a previous course of service elsewhere.
			YS. M.		DAYS.	
Poonamallee.	Private ...	Patrick Broderick.	2 0	Secondary syphilis	124	In India.
	Do. ...	Patrick Cronin ...	3 11	Tubercle of lung...	81	Do.
	Do. ...	Thomas Murphy...	3 11	Palpitation ...	52	Do.
	Do. ...	George Coss ...	3 10	Debility	293	Do.
	Do. ...	Daniel Riordan ...	4 0	Tubercle of lung ...	113	Do.
	Do. ...	Michael Keefe ...	3 11	Do. ...		Do.
	Do. ...	H. Taylor ...	2 6	Dementia... ...	...	Do.
	Lance Corpl.	D. Carroll ...	3 10	Mania	...	Do.
	Private ...	J. St. John ...	2 4	Melancholia ...	...	Do.
	Do. ...	W. Wiltshire ...	2 0	Idiocy	...	Do.
	Do. ...	Thomas Murphy...	7 2	Melancholia ...	...	Do.
	Armourer Sergeant.	A. Crooks ...	7 0	Dementia ...	...	Do.
Wellington (Depôt.)	Private ...	P. Larkin ...	3 10	Secondary syphilis.	166	Do.
	Do. ...	P. Kelly	1 2	Palpitation ...	130	Do.
	Do. ...	E. Wheeler ...	5 6	Ankylosis ... of	395	Do.
	Sergeant ...	C. Hearl	2 6	Ulceration of fauces	46	Do.
	Private ...	J. Lynch ...	2 1	Secondary syphilis.	137	Do.
Wellington (Royal Fusiliers.)	Do. ...	R. Wright ...	0 7	Rheumatism ...	105	Do.
	Colr. Sergt.	C. Williams ...	14 4	Bright's disease ..	112	Do.
	Corporal ...	A. J. Tully ...	3 3	Secondary syphilis.	387	Do.
	Private ...	W. C. Dean ...	8 11	Neuralgia ...	221	Do.
	Do. ...	D. Bonnett ...	5 4	Secondary syphilis.	500	Do.
	Do. ...	J. Johnson ...	2 0	Do. ...	120	Do.
	Do. ...	C. F. Brett ...	2 0	Ametropia/e ...	325	Do.
	Do. ...	C. J. Mertens ...	6 1	Idiocy	135	Do.
Cannanore ...	Do. ...	G. Deaville ...	7 1	Debility	30	Do.
	Do. ...	G. Gee	2 0	Do.	30	Do.
	Do. ...	H. Watts... ...	2 1	Dysentery ...	76	Do.
	Do. ...	G. Orbell... ...	5 10	Hernia	...	Do.
	Do. ...	W. Murphy ...	3 2	Chronic pneumonic phthisis.	10	Do.
	Do. ...	W. Tyler	3 10	Debility	112	Do.
	Do. ...	F. Smith	1 8	Do.	82	Do.
	Do. ...	A. Ames	2 7	Diarrhœa... ...	119	Do.
	Do. ...	H. Hurrell ..	4 7	Hernia	38	Do.
	Do. ...	C. Simpson ...	1 7	Stricture of urethra.	104	Do.
	Do. ...	J. Beauchamp ...	1 7	Hernia	3	Do.
	Do. ...	A. Woods ...	4 8	Val. disease of heart.	53	Do.
North Bangalore.	Do. ...	D. Andrews ...	1 10	Secondary syphilis.	42	Do.
	Do. ...	C. A. Burgess ...	1 10	Do.	147	Do.
	Lance Corpl.	W. Charlton ...	1 10	Do.	36	Do.
	Private ...	J. Davis	1 0	Bronchitis catarrh.	111	Do.
	Do. ...	A. Harris ...	1 10	Varix	7	Do.
	Do. ...	A. Jackson ...	1 10	Dysentery ...	117	Do.
	Do. ...	J. Potter	1 9	Asthma	41	Do.
	Corporal ...	W. Richards ..	1 9	Secondary syphilis.	22	Do.
	Lance Corpl.	C. A. Warne ...	2 0	Nephritis	39	Do.
	Private ...	C. Williams ..	8 2	Tubercle of lung.	124	Do.
	Do. ...	G. Cooper ...	2 4	Debility	172	Do.
	Do. ...	W. Lamb ...	2 7	Palpitation	163	Do.
	Do. ...	W. Godfrey ...	2 4	Congestion of brain.	174	Do.
	Do. ...	E. West	2 4	Epilepsy	182	Do.
	Do. ...	W. Bubkingham.	2 4	Palpitation ...	154	Do.

Return of Non-Commissioned Officers and Privates invalided, &c.—cont.

Station.	Rank.	Names.	Period of residence in India.	Disease for which invalided or obtained Sick Leave.	Period under treatment.	Whether probable result of this climate or of a previous course of service elsewhere.
			YS. M.		DAYS.	
North Bangalore.	Private ...	A. Sharpe ...	2 4	Deafness	19	In India.
	Do. ...	H. Hobson ...	1 7	Hernia	19	Do.
	Do. ...	W Newman ...	1 7	Deafness	28	Do.
	Do. ..	H Wakefield ...	1 6	Flat Foot ...	19	Do.
	Lance Corpl.	F. Kennedy ..	0 8	Incontinence of urine.	118	Do.
	Private ...	W. Johnston ...	2 7	Stricture	47	Do.
	Do. ...	W. Perry... ...	5 1	Do.	19	Do.
	Do. ..	A. Groves ...	1 7	Hernia	128	Do.
	Do. ...	R. Wood ...	2 7	Do.	143	Do.
	Do. ...	G. Richards ...	2 4	Wound	10	Do.
	Do. ...	H. Gittens ...	1 6	Anæmia	72	Do.
	Do. ...	S. Carter ...	2 2	Secondary syphilis.	42	Do.
	Do. ...	J. Pearcy ...	3 8	Wound eye ...	32	Do.
	Do. ...	S. G. Randall ...	1 7	Inflam. lymphatic glands.	192	Do.
	Do. ...	H. Abbott ...	1 7	Debility	23	Do.
	Do. ...	A. E. Bolwell ...	2 5	Sprain	10	Do.
	Do. ...	F. Darch ...	2 5	Deafness	12	Do.
	Do. ...	S. Hawkins ...	2 9	Inflam. middle ear.	96	Do.
	Do. ...	R. Burns ...	2 7	Melancholia ...	126	Do.
	Sergeant ...	H. Lane	6 8	Dementia ...	142	Do.
South Bangalore.	Gunner ...	J. O'Neill ...	3 2	Debility	43	Do.
	Private ..	G. Hodgson ...	0 3	Do.	68	Do.
	Do. ...	J. Emby	0 3	Perforation membrane tympani.	30	Do.
	Do. ...	C. H. Munday ...	4 0	Val. disease of heart	31	Do.
	Corporal ...	J. White	10 6	Lacerated gunshot wound, accdl.	109	Do.
	Gunner ...	A. Reynolds ...	8 6	Hepatitis	109	Do.
	Sergeant ..	T. H. Griffin ...	7 9	Do.	125	Do.
	Gunner ...	W. Gibs	0 7	Fracture	100	Do.
	Driver ...	G. P. Pennington.	4 7	Do.	145	Do.
	Private ...	A. E. Lee ...	0 7	Ankylosis ...	153	Do.
	Do. ...	W. Greaves ...	0 7	Palpitation ...	92	Do.
	Sergeant ...	S. H. Baker ...	0 7	Hæmaturia ...	47	Do.
	Do. ...	E. A. Davidson ...	0 7	Varix	10	Do.
	Private ..	W. Duval ...	0 7	Bronchitis ...	43	Do.
	Do. ...	W. Winter ...	0 7	Necrosis	74	Do.
	Do. ...	McKennon ...	0 7	Deafness	13	Do.
	Do. ...	G. Beck	0 7	Dysentery ..	130	Do.
	Driver ...	T. Addy	0 7	Deafness	58	Do.
	Do. ...	H. Harris ...	5 8	Periostitis ...	91	Do.
	Do. ...	T. Smith	8 9	Ch. Synovitis ...	142	Do.
	Bombardier...	G. Reynolds ...	8 9	Stricture of urethra	20	Do.
	Driver ...	W. Bates... ...	17 4	Hepatitis	27	Do.
	Do. ...	H. Shapherd ...	2 6	Posterior curvature of spine.	84	Do.
	Do. ..	J. Commerford ...	1 10	Perforation membrane tympani.	40	Do.
	Private ...	T. Mansfield ...	0 7	Debility	60	Do.
	Gunner ...	W. Connelly ...	0 9	Ankylosis ...	18	Do.
	Driver ...	H. Mathews ...	2 8	Debility	21	Do.
	Gunner ...	J. Smiles	8 0	Do.	95	Do.
	Private ...	C. Payne	1 0	Dementia ...	120	Do.
			7 8	Melancholia ...	112	Do.

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Return of Non-Commissioned Officers and Privates invalided, &c—cont.

Station.	Rank.	Names.	Period of residence in India.	Disease for which invalided or obtained Sick Leave.	Period under treatment.	Whether probable result of this climate or of a previous course of service elsewhere.
			YS. M.		DAYS.	
Bellary ...	Driver ...	H. Kilbride ...	8 4	Debility	7	In India.
	S. Smith ...	C. E. Brown ...	13 4	Fracture	18	Do.
	Private ...	G. Beach	8 11	Gonl. rheumatism.	83	Do.
	Do. ...	B. Kenney ...	3 6	Bronchitis ...	43	Do.
	Do. ..	G. Parker ...	3 6	Debility	67	Do.
	Do. ...	T. Perry	1 2	Tubercle of lung.	188	Do.
	Do. ...	E. Turrell ...	3 6	Hernia Ingl. ...	67	Do.
	Do. .	G. Warbey ..	3 6	Val. disease of heart	42	Do.
	Do. ...	L. Woodcock ...	2 4	Fracture left leg ...	11	Do.
	Do. ...	A. Jacobs ...	1 2	Abscess, C. T. ...	60	Do.
	Sergeant ...	J. Woods ...	12 0	Debility	9	Do.
	Gunner ...	P. Cameron ...	1 10	Val. disease of heart	106	Do.
	Do. ...	J. Brown	2 7	Inflam. tympani suppurative.	19	Do.
	Do. ...	W. Bowker ...	8 8	Diabetes insipidus.	33	Do.
	Bugler ...	H. Osborne ...	0 6	Chorea	19	Do.
	Private ...	E. Thornton ...	17 8	Toxic paralysis ...	33	Do.
Belgaum ...	Sergeant ...	A. Knight ...	9 2	Congestion of liver	30	Do.
	Bombardier...	C. Ellis	9 2	Hepatitis	60	Do.
	Sergeant ..	W. Flynn ...	0 5	Rheumatism ...	90	Do.
	Corporal ...	J. Turner ...	8 2	Congestion of liver	60	Do.
	Lance Corpl.	J. Martin ...	1 3	Hepatitis	30	Do.
	Private ...	J. Boit	6 11	Pleurisy	30	Do.
	Do. ...	A. Bristow ...	4 11	Effects of the presence of foreign body.	30	Do.
	Do. ...	C. Bryant ...	0 5	Secondary syphilis.	120	Do.
	Do. ...	G. Chambers ...	0 5	Do. ...	90	Do.
	Do. ...	S. Denmede ...	4 2	Bronchitis catarrh.	90	Do.
	Do. ...	J. R. Gardener ...	2 0	Secondary syphilis.	30	Do.
	Do. ...	W. Harney ...	2 5	Dysentery ...	120	Do.
	Do. ...	H. Hayman ..	3 5	Hepatitis ...	90	Do.
	Do. ...	A. Hull	0 5	Secondary syphilis.	90	Do.
	Do. ...	W. Jones ...	1 4	Rheumatism ...	210	Do.
	Do. ...	J. E. Leonard ...	2 0	Debility	60	Do.
	Do. ...	J. Lewis	2 5	Secondary syphilis	90	Do.
	Do. ...	J. H. Morgan ...	4 2	Anæmia	30	Do.
	Do. ...	T. Morgan ...	2 0	Rheumatism ...	180	Do.
	Do. ...	J. Moss	8 2	Tubercle of lung...	180	Do.
	Do. ...	E. Perris ...	5 1	Congestion of liver.	60	Do.
	Do. ...	S. Phillips ...	4 11	Hepatitis ...	60	Do.
	Do. ...	W. Smith ...	6 11	Debility	30	Do.
	Do. ...	F. Francis ...	4 1	Melancholia ...	60	Do.
	Bandmaster...	W. D. Peachy ...	7 0	Paralysis ...	30	Do.
	Sergeant ...	J. Madely ..	7 6	Debility	30	Do.
	Do. ...	J. Simmon ...	1 3	Dysentery ...	120	Do.
	Armourer Corporal.	F. Biddescomb ...	5 11	Tubercle of lung...	60	Do.
	Do. ...	C. Newport ...	3 2	Anæmia	30	Do.
	Private ...	E. Aldridge ...	3 10	Dysentery ...	30	Do.
	Do. ...	T. Bugden ...	3 11	Asthma	90	Do.
	Do. ..	F. Claydon ...	1 4	Congestion of liver.	60	Do.
	Do. ...	J. Condon ...	1 4	Sunstroke ...	30	Do.
	Do. ...	J. Courtney ...	3 10	Bright's disease ...	90	Do.
	Do. ...	J. E. Curle ...	1 3	Palpitation ...	60	Do.
	Do. ...	T. Edge	3 10	Dysentery ...	30	Do.

Return of Non-Commissioned Officers and Privates invalided, &c.—cont

Station.	Rank.	Names.	Period of residence in India.	Disease for which invalided or obtained Sick Leave.	Period under treatment.	Whether probable result of this climate or of a previous course of service elsewhere.
			YS. M.		DAYS.	
Belgaum...	Private	W. F. Jones ...	1 4	Debility	30	In India
	Do.	A. Jones	1 3	Dysentery ...	90	Do.
	Do.	T. Kerton ...	7 6	Stricture of urethra	60	Do.
	Do.	W. Mead ...	2 4	Anæmia	30	Do.
	Do.	A. Mellish ...	2 4	Ulcer of rectum ...	30	Do.
	Do.	D. Meredith ...	3 0	Sunstroke ...	120	Do.
	Do.	W. Spencer ...	3 2	Anæmia	30	Do.
	Do.	T. Trestler ...	1 3	Hepatitis ...	90	Do.
	Do.	F. Williams ...	4 10	Stricture of urethra	150	Do.
	Do.	P. Bronan ...	2 3	Dementia ...	60	Do.
	Gunner	G. Peck	8 9	Dysentery ...	30	Do.
	Driver	P. McErlane ...	9 9	Secondary syphilis.	150	Do.
	Sergeant	C. Cassidy ...	3 0	Debility	30	Do.
	Private	J. Cadby ...	2 7	Deafness	30	Do.
	Do.	A. B. Cole ...	2 7	Do.	30	Do.
	Do.	R. Copstick ...	1 11	Dysentery ...	90	Do.
	Do.	B. Denslow ...	4 9	Secondary syphilis.	30	Do.
	Do.	J. D. Dum ...	3 0	Conjunctivitis purulent.	60	Do.
	Do.	T. Gibbs ...	4 0	Secondary syphilis	60	Do.
	Do.	J. Harwood ...	1 0	Val. disease of heart	90	Do.
	Do.	F. W. Hooper ...	1 11	Palpitation ...	30	Do.
	Do.	T. Morton ...	2 7	Secondary syphilis.	30	Do.
	Do.	W. Murray ...	1 11	Paralysis ...	60	Do.
	Do.	G. Neate ...	4 0	Secondary syphilis.	30	Do.
	Do.	J. Peddle ...	3 6	Do. ...	90	Do.
	Do.	W. Rose ...	2 7	Do. ...	60	Do.
	Do.	F. Sellar ...	2 7	Abscess cont. tissue	30	Do.
	Do.	G. Smith ...	7 6	Carcinoma ...	120	Do.
	Do.	I. Smitherane ...	2 7	Ankylosis ...	30	Do.
	Do.	J. Squire ...	4 0	Inflam. lymphatic vessels.	60	Do.
	Do.	W. Underwood ...	4 0	Debility	60	Do.
	Do.	W. White ...	1 0	Secondary syphilis.	30	Do.
	Do.	J. Williams ...	1 11	Do. ...	120	Do.
	Sergeant	W. F. Winter ...	6 5	Debility	30	Do.
	Do.	J. W. Whitby ...	8 8	Ankylosis ...	30	Do.
	Corporal	H. Aylett ...	7 9	Dysentery ...	60	Do.
	Do.	G. Powers ...	3 9	Do.	90	Do.
	Private	G. Alder	4 8	Debility	30	Do.
	Do.	T. Benrose ...	5 9	Do.	30	Do.
	Do.	F. W. Boon ...	1 11	Do.	30	Do.
	Do.	J. Crepin... ...	4 6	Do.	30	Do.
	Do.	G. Isteed... ...	1 11	Anæmia	30	Do.
	Do.	G. Long	8 0	Debility	30	Do.
	Do.	W. Malling ...	5 5	Rheumatism ...	30	Do.
	Do.	W. Peurice ...	3 0	Ague	30	Do.
	Do.	T. Roberts ...	5 6	Debility	30	Do.
	Do.	W. Scribbens ...	6 5	Secondary syphilis.	60	Do.
Central Secunderabad.	Gunner	F. Stanley ...	1 11	Dysentery ...	123	Do.
	Do.	J. Anderson ..	2 6	Do.	110	Do.
	Do.	J. Madden ...	5 3	Do.	67	Do.
	Driver	R. Chilton ...	1 4	Do.	63	Do.
	Gunner	H. Stockdale ...	2 4	Do.	29	Do.
		H. Dyer	9 4	Hepatitis		

Return of Non-Commissioned Officers and Privates invalided, &c.—cont.

Station.	Rank.	Names.	Period of residence in India.	Disease for which invalided or obtained Sick Leave.	Period under treatment.	Whether probable result of this climate or of a previous course of service elsewhere.
			YS. M.		DAYS.	
Central Secunderabad.	Gunner ...	M. Flannaghan ...	2 4	Tubercle of lung...	109	In India.
	Driver ...	R. Towse... ...	5 0	Secondary syphilis.	106	Do.
	Do. ...	H. Jarvis... ...	0 9	Debility	169	Do.
	Do. ...	W. Harley ...	1 11	Vertigo	112	Do.
	Gunner ...	J. Wilson ...	0 7	Secondary syphilis.	156	Do.
	Do. ...	C. Crouk... ...	0 1	Acute pneumonic phthisis.	...	Do.
	Do. ...	A. Brown ...	10 10	Dementia ...	...	Do.
North Secunderabad.	Private ...	F. Collins	1 2	Synovitis	113	Do.
	Do. ...	L. Madge ...	1 2	Piles	92	Do.
	Do. ...	D. Watson ...	0 11	Chronic pneumonic phthisis.	65	Do.
	Lance Corpl.	W. Gadd	1 2	Do. ...	63	Do.
	Private ...	G. Wildes ...	0 11	Do. ...	34	Do.
	Do. ...	A. Hayton ...	1 2	Dysentery ...	89	Do.
	Lance Corpl.	T. Lloyd ...	1 8	Varicocele ...	16	Do.
	Do. ...	S. W. Simmons ...	1 8	Hernia inguinal ...	5	Do.
	Private ...	G. R. Hall ...	1 8	Inflam. extl meatus.	6	Do.
	Do. ...	W. Dorman ...	1 8	Debility	28	Do.
	Do. ...	W. Welch ...	1 6	Secondary syphilis.	71	Do.
	Do. ...	J. Brown... ...	2 11	Hepatitis	76	Do.
South Secunderabad.	Do. ...	W. Rogers ...	2 1	Ozæna	100	Do.
	Do. ...	J. White... ...	2 1	Chronic pneumonic phthisis.	46	Do.
	Do. ...	A. Speckernell ...	4 2	Dysentery ...	145	Do.
	Do. ...	G. King	2 1	Tubercle of lung ...	3	Do.
	Do. ...	G. Dancer ...	2 7	Deafness	11	Do.
	Do. ...	J. H. Williams ...	3 6	Deformity of foot, ankylosis.	12	Do.
	Corporal ...	J. Elcock... ...	5 10	Hepatitis	45	Do.
	Do. ...	R. Bailey... ...	6 11	Do.	...	Do.
	Private ...	J. Booker... ...	6 11	Dysentery ...	...	Do.
	Do. ...	W. Gardener ...	7 10	Do.	...	Do.
	Do. ...	G. Nicholas ...	6 11	Do.	...	Do.
	Do. ...	G. Cane	2 8	Hepatitis... ...	3	Do.
	Do. ...	W. Cole	2 8	Debility	116	Do.
	Do. ...	T. Brewer ...	4 2	Dysentery ...	2	Do.
	Do. ...	W. Robinson ...	1 10	Secondary syphilis.	133	Do.
	Do. ...	G. Moon	1 10	Debility	14	Do.
	Do. ...	E. Curtis	2 2	Dysentery ...	84	Do.
	Do. ...	W. Simms ...	1 10	Debility	...	Do.
	Do. ...	H. S. Mills ...	4 2	Do.	...	Do.
	Do. ...	A. Palmer ...	1 10	Orchitis	27	Do.
	Do. ...	J. Draper... ...	1 10*	Debility	...	Do.
	Do. ...	J. Heeping ...	2 0	Dementia ...	52	Do.
	Do.	W. Bell	10 2	Tubercle of lung	...	Do.
	Sergt.-Major.	G. H. Barke ...	2 1	Non-malignant new growth exostosis jaw.	44	Do.
	Sergeant ...	A. Roberts ...	2 1	Tubercle of lung.	...	Do.
	Driver ...	S. Nesbitt ...	2 1	Rheumatism ...	116	Do.
	Lance Corpl.	J. Ballard ...	2 1	Do. ...	161	Do.
	Private ...	H. Seard ...	2 1	Hepatitis ...	41	Do.
	Do. ...	J. Kendell ...	3 0	Abscess of liver ...	...	Do.
	Do. ...	C. Smith ...	5 0	Debility	55	Do.
	Do. ...	G. Standon ...	5 0	Amputation of arm. Wound forearm.	48	Do.

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Return of Non-Commissioned Officers and Privates invalided, &c.—cont.

Station.	Rank.	Names.	Period of residence in India.	Disease for which invalided or obtained Sick Leave.	Period under treatment.	Whether probable result of this climate or of a previous course of service elsewhere.
			YS. M.		DAYS.	
South Secunderabad.	Corporal ...	J. Mann	2 8	Abscess cellr. tissue.	10	In India.
	Sergeant ...	W. Robinson ...	8 6	Melancholia ...	58	Do.
Kamptee ...	Gunner ...	C. Holt	8 2	Perforation membrane tympani	60	Do.
	Corporal ...	A. Tyler	7 4	Tubercle of lung.	38	Do.
	Private ...	W. Griffiths ...	7 6	Debility	65	Do.
	Lance Corpl.	W. Oakden ...	2 2	Diarrhœa ...	49	Do.
	Private ...	T. Lawrence ...	1 5	Secondary syphilis	21	Do.
	Do. ...	H. Gooden ...	7 6	Hepatitis	18	Do.
	Do. ...	J. Nash	5 4	Rheumatism ...	40	Do.
	Do. ...	R. Meade	5 2	Hepatitis ...	37	Do.
	Do. ...	C. W. Stedman ...	1 6	Spasmodic asthma.	11	Do.
	Corporal ...	J. H. Hamilton ...	5 4	Debility	9	Do.
	Private ...	G. M. Simpson ...	1 6	Abscess cont. tissue.	69	Do.
	Do. ...	J. Doyle	3 11	Secondary syphilis.	221	Do.
Rangoon ...	Gunner ...	F. Day	3 5	Palpitation ...	63	Do.
	Do. ...	H. Mabbutt ...	5 10	Locomotor ataxy.	25	Do.
	Do. ...	W. Johnson ...	5 8	Ague	84	Do.
	Do. ...	A. Fox	6 0	Inflam. lymphatic glands.	34	Do.
	Private ...	W. Lambeth ...	0 9	Dysentery ...	134	Do.
	Do. ...	G. Naylor ...	0 9	Do. ...	62	Do.
	Do. ...	W. Webster ...	0 9	Do. ...	111	Do.
	Do. ...	H. Waring ...	0 9	Secondary syphilis	76	Do.
	Do. ...	P. Mullaney ...	0 9	Do.	206	Do.
	Do. ...	F. Woodward ...	0 9	Parasites Echinococcus hominis.	99	Do.
	Do. ...	F. Bennett ...	0 9	Debility	230	Do.
	Do. ...	J. Allen	0 9	Do.	53	Do.
	Do. ...	T. Wilshaw ...	0 9	(Lupus) non-malignant new growth	56	Do.
	Do. ...	A. Devaney ...	0 9	Scrofula	213	Do.
	Do. ...	T. Williams ...	0 9	Epilepsy	94	Do.
	Do. ...	H. Ellis	0 9	Val. disease of heart.	83	Do.
	Do. ...	G. Knott	0 9	Palpitation ...	173	Do.
	Do. ...	J. Calvert ...	0 9	Inflam. ingl. glands.	197	Do.
	Do. ...	E. Steele	2 0	Melancholia ...	6	Do.
	Do. ...	G. Brown	6 2	Val. disease of heart	137	Do.
	Do. ...	E. Price	2 11	Gunshot wound ...	93	Do.
	Do. ...	J. Murphy ...	1 0	Melancholia ...	47	Do.
	Do. ...	G. King	2 11	Ulcer of cornea ...	15	Do.
	Do. ...	J. Heath	2 1	Debility	17	Do.
	Do. ...	H. Powell ...	2 1	Inflam. of brain ...	53	Do.
	Do. ...	M. Driscoll ...	3 10	Sunstroke ...	53	Do.
	Do. ...	P. Callaghan ...	2 1	Do. ...	53	Do.
	Do. ...	R. Mutch ...	9 6	Ulcer (of leg) ...	53	Do.
	Do. ...	T. Jones	2 1	Diarrhœa ...	16	Do.
	Do. ...	W. Preece ...	3 10	Epilepsy	27	Do.
	Do. ...	J. Coxton ...	2 1	Wound. Gunshot act.	50	Do.
	Do. ...	J. Fielding ...	2 1	Hernia	95	Do.
	Do. ...	T. McNeil ...	3 10	Hemiplegia ...	65	Do.
	Do. ...	A. Quinn ...	3 10	Hepatitis		

12/1040

Return of Non-Commissioned Officers and Privates invalided, &c.—cont.

Station.	Rank.	Names.	Period of residence in India.	Disease for which invalided or obtained Sick Leave.	Period under treatment.	Whether probable result of this climate or of a previous course of service elsewhere.
			YS. M.		DAYS.	
Rangoon ...	Private ...	A. Stockwell ...	1 5	Mania	50	In India.
	Do. ...	E. Troy	3 10	Debility	34	Do.
	Do. ...	J. Robinson ...	3 10	Val. disease of heart	134	Do.
	Do. ...	W. Brown ...	11 1	Deafness	106	Do.
Toungoo ...	Lance Corpl.	W. Preese ...	3 9	Paraplegia ...	101	Do.
	Private ...	I. Vaughan ...	3 0	Palpitation ...	...	Do.
	Do. ...	I. Slater ...	3 6	Contraction of tendons.	41	Do.
	Do. ...	T. Morgan ...	2 2	Val disease of heart	70	Do.
	Do. ...	I. Hill	4 6	Debility	86	Do.
	Do. ...	I. Powell ...	0 9	Val. disease of heart.	138	Do.
	Do. ...	I. Sullivan ...	3 8	Palpitation ...	52	Do.
	Do. ...	I. Owen	2 0	Debility	221	Do.
	Do. ...	W. Kirby ...	3 7	Mania	...	Do.
	Do. ...	T. Burton ...	2 8	Palpitation ...	...	Do.
	Do. ...	M. McEvoy ...	3 6	Do. ...	...	Do.
	Do. ...	D. Brian	4 6	Do. ...	...	Do.
	Do. ...	H. Lewis	0 10	Asthenopia ...	...	Do.
	Do. ...	I. White	2 8	Palpitation ...	55	Do.
	Do. ...	T. Clear	3 6	Do. ...	93	Do.
	Do. ...	I. Smith	1 6	Debility	75	Do.
	Do. ...	R. Hughes ...	3 6	Abscess cont. tissue.	75	Do.
	Do. ...	I. Rogers ...	2 3	Dysentery ...	...	Do.
	Do. ...	R. Hill	3 6	Palpitation ...	...	Do.
	Do. ...	W. Thomas ...	3 6	Dislocation clavecle	...	Do.
	Do. ...	J. Curran ...	8 0	Myopia	...	Do.
	Do. ...	J. Loft	1 8	Neuralgia ...	...	Do.
	Do. ...	D. Kelly	1 9	Dementia ...	171	Do.
	Do. ...	E. Way	8 0	Dysentery ...	156	Do.
	Do. ...	W. Vale	5 5	Hepatitis ...	135	Do.
Myingyan ...	Do. ...	W. Dines ...	2 11	Dysentery ...	110	Do.
	Do. ...	T. Murray ...	2 11	Primary syphilis	94	Do.
	Do. ...	A. Long		Simple continued fever.	141	Do.
	Corporal ...	G. Swinyard ...	3 8	Dysentery ...	43	Do.
	Private ...	W. Sutton ...	7 11	Ague	43	Do.
	Sergeant ...	H. Shaw	3 8	Dysentery ...	120	Do.
	Private ...	W. Day	8 0	Peritonitis ...	49	Do.
	Do. ...	E. Tarling ...	5 8	Dysentery ...	43	Do.
	Do. ...	S. Cox	0 10	Debility	145	Do.
	Do. ...	T. Naylor ...	6 4	Do.	47	Do.
	Do. ...	A. M. Mealing ...	2 0	Simple continued fever.		
	Ry. Engineers					

Sick Officers.

Corps.	Rank.	Names.	Period of residence in India. YRS.	MS.	DS.	Disease for which invalided or obtained Sick Leave.	Period under treatment. DAYS.	Whether probable result of this climate or of a previous course of service elsewhere.	If an Officer, to what place and for what period has he gone on sick leave.
1st Battalion, Rifle Brigade.	Lieut.-Colonel ...	L. Cary	8	0	0	Simple continued fever ...	37	India ...	England.
2nd Battalion, Royal Fusiliers.	Captain	H. L. Hutchins ...	12	1	0	Debility	60	Do. ...	Do.
6th Dragoon Guards ...	Do.	E. C. Bethune ...	6	0	0	Compound fracture ...	45	Do. ...	Do.
1st Battalion, Duke of Cornwall's Light Infantry.	Do.	H. C. Perkins ...	0	7	0	Hœmoptysis	18	Do. ...	Do.
2nd Battalion, Middlesex Regiment.	Do.	R. F. Westmacott ...	3	0	0	Debility	60	Do. ...	Do.
1st Battalion, Belooch Regiment.	Do.	H. Sinclair	12	0	0	Malarial cachexia	8	Do. ...	Do.
Judge Advocate-General's Department.	Do.	M. E. Welch	17	0	0	Debility	12	Do. ...	Do.
2nd Battalion, Royal Fusiliers.	Major	E. A. Mostyn	13	0	0	Bronchial catarrhal ...	56	Do. ...	Do.
21st Hussars	Do.	P. M. King	0	8	0	Contusion	49	Do. ...	Do.
U Battery, 1st Brigade, Royal Artillery.	Do.	F. Twymain	3	0	0	Iritis	60	Do. ...	Do.
19th Madras Infantry ...	Do.	B. W. Pollard ...	17	6	0	Bright's disease	13	Do. ...	Do.
2nd Battalion, Royal Fusiliers.	Lieutenant ...	F. J. Rhodes	3	8	0	Compression of brain ...	192	Do. ...	Do.
I Battery, 3rd Brigade, Royal Artillery.	Do. ...	O. R. Tancock ...	1	6	0	Enteric fever	88	Do. ...	Do.
I Battery, 4th Brigade Royal Artillery.	Do. ...	P. Broaderick ...	2	0	0	Simple continued fever ...	31	Do. ...	Do.
S Battery, 1st Brigade, Royal Artillery.	Do. ...	W. M. Grower ...	2	2	0	Enteric fever	41	Do. ...	Do.
7th Queen's Own Hussars.	Do. ...	C. W. Firebrace ...	0	2	0	Gonorrhœa	42	Do. ...	Do.
	Do. ...	R. M. Poore	1	4	0	Hepatitis	11	Do. ...	Do.
	Do. ...	G. N. Going	2	10	0	Piles	28	Do. ...	Do.
1st Battalion, Hants Regiment.	Do. ...	G. H. Nicholson ...	2	0	0	Debility	18	Do. ...	Do.
	Do. ...	G. A. McLean Buckler.	0	3	0	Do.	12	Do. ...	Do.
	Do. ...	R. M. Barrington ...	2	0	0	Deafness	21	Do. ...	Do.
2nd Battalion, Middlesex Regiment.	Do. ...	R. M. C. Glymi ...	2	3	0	Ague	180	Do. ...	Do.
2nd Battalion, South Wales Borderers.	Do. ...	G. H. Grant	3	6	0	Simple continued fever ...	27	Do. ...	Do.
1st Bombay Lancers ...	Do. ...	G. Stavely	7	9	0	Ague	8	Do. ...	Do.
	Do. ...	C. W. Ducat	6	10	0	Diarrhœa	7	Do. ...	Do.
2nd Battalion, South Wales Borderers.	Do. ...	A. C. Way	5	6	0	Ague	12	Do. ...	Do.
2nd Battalion, Royal Munster Fusiliers.	Do. ...	Fredk. Mellows ...	1	9	0	Secondary syphilis ...	18	Do. ...	Do.
21st Hussars	2nd Lieutenant ...	D. Cripps	7	0	0	Abscess connective tissue ...	18	Do. ...	Do.
7th Queen's Own Hussars.	Lieutenant Hon.	R. Marsham	0	2	0	Enteric fever	32	Do. ...	Do.
Medical Staff ...	Surgeon-Major ...	R. W. O'Donnell ...	2	0	0	Tubercle of lung	19	Do. ...	Do.
	Surgeon	F. W. D. Harris ...	2	8	0	Dysentery	8	Do. ...	Do.
	Do.	W. L. Lane	7	6	0	Diarrhœa	30	Do. ...	Do.
	Do.	B. A. Maturin ...	2	0	0	Enteric fever	120	Do. ...	Do.
Indian Medical Department.	Do.	W. H. Karney ...	0	5	0	Mania	10	Do. ...	Do.
	Do.	M. J. Blancard ...	0	10	0	Ague	26	Do. ...	Do.
Medical Staff ...	Do.	H. V. Dillau	2	0	0	Renal calculus	19	Do. ...	Do.
	Do.	W. H. Bennett ...	4	8	0	Simple continued fever ...	27	Do. ...	Do.
	Do.	S. C. Philson ...	2	0	0	Remittent fever	6	Do. ...	Do.
	Do.	Bran	2	8	0	Hepatitis	23	Do. ...	Do.
Army Veterinary Department.	Veterinary Surgeon.	G. F. Davis	11	6	0	Do.	27	Do. ...	Do.

OOTACAMUND,
29*th August* 1889.

(Signed) J. A. HANBURY, M.B., K.C.B.,
Surgeon-General Her Majesty's Forces.

13/1000

No. 186. *From Brigadier-General M. C. FARRINGTON, C.B., Adjutant-General, Madras Army, to Brigadier-General A. KENNEY-HERBERT, Secretary to Government, Military Department; dated Ootacamund, 26th February 1890, No. 454-BA (Sanitary—Reports and Returns).*

In continuation of this office letter No. 318-BA of the 12th instant, I am desired to report as follows on certain points connected with the Sanitary Report of British troops for 1888.

BELGAUM.

2. *Ventilation and Lighting of No. 1 Ward Lavatory and Detained Ward Latrine, Station Hospital.*—It is reported that the ventilation and lighting of No. 1 ward lavatory are now excellent, three large windows having recently been placed in the south and west walls. That of the detained ward latrine is also reported as satisfactory, two large windows having been placed in the north wall and ridge ventilation added to it.

SOUTHERN DISTRICT.

Extension of the present Masonry Drains, Wellington.—The question of drainage of Wellington is still under consideration, but as Executive Engineers are at present handing over charge of works connected with the Military Department to the Military Works Department, it will, in all probability, take some time before this question can be definitely replied to.

SECUNDERABAD DISTRICT.

Insufficient accommodation at the South Station Hospital, Secunderabad.—The Commander-in-Chief has approved of certain proposals in communication with the Surgeon-General, Her Majesty's Forces, which, if carried out, will meet all requirements. The General Officer Commanding has been desired to submit the necessary plans and estimates of the work.

Female Hospital, Secunderabad.—The Commander-in-Chief has approved of proposals for the conversion of the existing Public Works Department stores into a female hospital, and the necessary plans and estimates for the work have been called for. The Surgeon-General, Her Majesty's Forces, concurs in considering these arrangements satisfactory.

POONAMALLEE.

Quarters for Hospital Subordinates.—In modification of previous proposals, it has now been decided to reserve the quarters at present occupied by the Apothecary for a second junior warrant officer, and to provide suitable quarters for the former by hiring a building. The General Officer Commanding Madras District has been requested to report whether it would be feasible to hire quarters when required or to build new quarters, and, in the event of the latter being preferable, to submit plans and estimates for the work at an early date.

No. 187. ORDER THEREON, 18th March 1890, No. 2026.

Ordered that the report be printed and copies forwarded to Her Majesty's Government.

2. Agreeably to Proceedings of Government, No. 892, dated 4th February 1890, the submission of the report to the Government of India will be discontinued.

Exd. J. Henricus.

3. Endeavours should be made to submit this report earlier in future as the value of such reports depends, in a great measure, on their punctual submission.

(True Extract.)

A. Kenney-Herbert
Brigdr.-Genl.,
Secretary to Government.

To the Adjutant-General.
" Quarter Master General.
" Commissary-General.
" Surgeon-General, Her Majesty's Forces.
" Surgeon-General with the Government of Madras.
" Sanitary Commissioner.
" Public Works Department.

Govt. of {1890} Madras.

MILITARY.

To

THE ADJUTANT-GENERAL,
&c., &c., &c.

Dated March, 18th.

Issued

Recd. Encl.

G.O., 18th March 1890, No. 2026.

MARCH.
Nos. 185—188.

Sanitary—Reports and Returns.

British Troops.—Sanitary report on the — in the Madras Command for 1888, forwarded to Her Majesty's Government.

Recorded.

31.3.90

Recd 31.3.90

S.E. III Circle
S.E. IV Circle
S.E. V Circle
} for information

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