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MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 1422	Press
518-519	Mis-
Dated 27. 5. 1865.	

Not to be folded or roughly handled

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*Proceedings of the Madras Government, Public Works Department,
27th May 1865.*

No. 518. Read the following Proceedings of the Madras Government in the Military Department :—

Passing orders on certain correspondence relative to the several routes available for the conveyance of Stores to Secunderabad, and referring to the Commander-in-Chief the question of removing the 19th Regiment to Dowlaishweram, &c. } (Here enter 6th May 1865, No. 1,705)

No. 519. ORDER THEREON, 27th May 1865, No. 1,422.

CIVIL WORKS, No. 76.

* Dated 6th March 1865, No 10,327.

1. The Military Department refer, for consideration in this Department, paragraphs 13 and 14 of a letter* from the Commissary General, in which it is stated that when the rail is open to Ghooty the direct route from Cuddapah towards Secunderabad via Nundial will be abandoned, and the large outlay now being incurred on it will be lost. The road from Ghooty to Kurnool and onwards to Secunderabad is represented to be in excellent order, with the exception of only a small portion of twelve miles in the Hyderabad territory.

2. The Government are by no means disposed to depreciate the value of the direct route from Cuddapah to Kurnool, traversing as it does the rich valley of the Koondaur, and some of the best portions of the Cuddapah and Kurnool Districts. The necessity for its early completion was strongly urged by the local authorities not only on Military grounds, but on account of its importance as a feeder to the North-West Line of Railway, and as a valuable Trunk Road. It is observed that no less

† From Nundial to Cuddapah frontier	...	RS	60,000
From Cuddapah to Kurnool do	...	..	62,000

‡ Rupees 90,205, up to March 1865.

than Rupees 1,22,000† have been sanctioned for the improvement of this line of communication between Nundial and Cuddapah, and that the greater part of this amount has been expended,‡ while the balances of the estimates have been provided in the Budget for 1865-66

3. The Government are glad to receive so favorable an account of the road from Ghooty to Kurnool, and they hope that, with the grant which is annually provided for its maintenance, it will continue to be kept up in its present state of repair.

(True Extract)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

To the Military Department.
,, Superintending Engineer,  Division.

Exd. S. T. Augustin.

MILITARY DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following papers—

From the Deputy Quarter Master General, Fort Saint George, 16th February 1865, No. 1961; to the Secretary to Government, Military Department.

In reference to paragraph 2 of Order of Government, No. 647, dated 14th instant, I have the honor, by desire of His Excellency the Commander-in-Chief, to report that the Police Authorities were applied to, to take charge of the public buildings at Dowlaishweram when vacated by the Sappers and Miners, as they were on the 1st instant.

2. To supply the necessary Guard, the Superintendent of Police at Rajahmundry reports that an extra Establishment of three men will be required at the annual cost of Rupees 234. I am to solicit the sanction of Government to this expenditure, pending the decision of Government regarding the final disposal of the buildings.

3. I would beg to be favored with the early orders of Government, regarding the disposal of the Sapper Huts; whether they are to be sold for occupancy by tenants, and what are not sold, dismantled and the materials sold, as proposed in my letter, No. 10,808, dated 29th November 1864.

4. The Huts in question are the property of Government under the authority of Order of Government, No. 4291, dated 5th December 1859.

With Report from the Acting Controller of Military Accounts, 23rd Feb. 1865, D.

From the Commissary General, Madras, 6th March 1865, No. 10,327; to the Secretary to Government, Military Department, Fort Saint George.

I have the honor to submit for the information of Government, a report on the several routes available for the conveyance of Stores to Secunderabad.

2. There are three routes to be considered, the first from Madras, viâ Cuddapah, Gooty and Kurnool, about 562 miles, of which 262 are by Rail—the second also from Madras viâ Cuddapah and Nundial being 526 miles, of which 262 are by Rail—the third from Masulipatam being 210 miles.

3. To commence with the first route, *vis.*, that from Madras viâ Cuddapah, Gooty and Kurnool—all Stores would go to Cuddapah by Rail, and on arriving at the Terminus would require a Store-room for their reception, and as a Warrant Officer would be entrusted with the duties of forwarding them on, suitable accommodation must be provided for him.

4. A building sufficient for these two purposes could not be erected even on the most economical plan for less than 4,500 Rupees. There is a large upper-storied house, about 200 yards from the Station, which is offered for sale—if this building

had been safe, it would have answered both as a Rest-House, Warrant Officers' Quarters and a Store-house, but it is so delapidated that it would be unsafe to put Stores or Troops into it, and would be a very unadvisable investment. The price asked is 10,000 Rupees, although 7,000 would probably purchase it—when once the Railway is open to Gooty the Store-rooms at Cuddapah would be useless.

5. The great difficulty however is to procure Carriage from Cuddapah onwards—Carts are plentiful, but the Railway engages every Cart that offers, at 2 Annas per Cart per mile, and at this rate a man making a daily trip of 16 miles earns 2 Rupees per day or 60 Rupees per month, added to this they are never delayed in waiting for work, their loads being always ready at the Railway Depot. The distances travelled are short varying from 15 to 25 miles, so that at no time are they removed to any distance from their homes, and the articles carried are not liable to injury from rough usage.

6. On the other hand, a Cart-owner taking Commissariat Stores to Secunderabad, would have to undertake a journey of 300 miles without any certainty of a return load, as the trade between Hyderabad and Cuddapah is very limited. Moreover, Commissariat Stores could not be sent off by twos and threes like iron rails or Pot sleepers, but the Contractor must wait until he has collected a sufficient number of Carts. He would also be responsible for loss and wastage, which, in the case of spirits and Malt Liquor, frequently fall heavily on the Contractor.

7. But the case will mainly turn on the question of remuneration. With all the disadvantages above enumerated, it is hopeless to expect that Cart-owners will leave the Railway-work, which they do like for Government employment, which is universally unpopular, unless tempted by very high pay.

8. Now, at the rate paid by the Railway Company, the price per ton ($2\frac{1}{4}$ Carts) for Stores from Cuddapah to Secunderabad, (300 miles) would be Rupees 84-6-0, to which must be added 10 Rupees per ton for Rail charges. We cannot however expect to get Carts at the rates now paid by the Railway Company, and I do not think that Rupees 120 per ton would cover the expense, and this alone would prevent our sending Stores by this route, as long as the Rail is only open to Cuddapah.

9. Moreover, from Cuddapah to Tadputry, (60 miles) which is the boundary of the Division, the rivers and nullahs are all unbridged and would be impassable during the greater part of the rainy season, and even at this period of the year the Bullocks found great difficulty in crossing the sandy beds of the nullahs. After crossing the Cheyar at Tadputry, (no bridge) and entering the Bellary District, the roads were better.

10. From Gooty to Kurnool and onwards to Secunderabad, the roads are in splendid order, with the exception of a short piece of 12 miles between the Toombodra and Kistna, this part of the road, or rather track, is at this season of the year quite passable, but as only very small portions of it are metalled, it would be very difficult in the rains.

11. I think therefore that it is of the greatest importance to devote any disposable funds for Military roads to the repair of this portion of the road, if commenced at once, it would be complete by the time the Rail is open to Gooty, and

it would thus connect two of the finest roads in Southern India, viz, that from Gooty to Kurnool and from the Kistna to Secunderabad, thus rendering the communication between Madras and Secunderabad perfect.

12. When therefore the line to Gooty is open, which may be about the year 1867, this would be undoubtedly the best route for Stores to Secunderabad and Bellary; ground for a Depot should be secured at once, and buildings commenced in due time, so that it may be completed by the time the Rail is finally open.

13. The second and more direct route from Cuddapah to Secunderabad, via Nundial, is about 264 miles (exclusive of 262 miles by Rail). The road between Nundial and Kurnool is said to be very bad, and a large sum of money is being expended on it. It appears to me that this is a mistake, as when once the Rail is open to Gooty, and is thus put into communication with the fine road above mentioned, the direct road from Cuddapah will be quite deserted and the value of the repairs now being made will be lost. The money now being laid out on this road would be far better expended in completing the indifferent part of the Secunderabad road between the Toombodra and Kistna.

14. In other respects also this route is not recommended for Stores, as buildings would have to be erected at Cuddapah, which buildings, as well as the route itself, would be deserted as a Military road as soon as the Rail opens to Gooty, whilst the latter place combines the advantage of being a Depot both for Secunderabad and Bellary.

15. There remains now the Masulipatam route to be considered, this is by far the shortest of the whole, being only 210 miles, whereas the road from Cuddapah via Gooty is 562, and the Nundial 526, or omitting the Rail, these latter are 303 and 264 respectively. The road is good throughout, and there is but little competition amongst the Cart-owners.

Masulipatam—16. The fine block of Commissariat Godowns being the first to encounter the storm wave were levelled with the ground, but the old Arsenal and Barracks escaped and will, if placed at my disposal, afford ample accommodation for Commissariat Stores and Warrant Officers and Sergeants' Quarters at a trifling cost to Government.

17. I fully concur in the advisability of converting the present Commissariat Office into a Small Cause Court, a public building sufficient for an Office might be obtained in the Fort, but as all dwellings in the vicinity of the Fort, suitable for the residence of either Officers or Clerks, have been destroyed, and the Establishment would thus have to live at a considerable distance from their work, or build, which it would be hard to oblige them to do, for the short period which will elapse before the adoption of the Gooty route.

18. I would therefore recommend that the allowance of 42 Rupees a month, granted for an Office prior to the present building being handed over to us, may be again sanctioned, except it be decided upon having no Native Regiment at Masulipatam, in which case a part of one of the Barracks might be converted into a Commissariat Office.

19. The cost per ton to Hyderabad by this route is 45-15, to this must be added the extra freight charged for landing the Porter at Masulipatam direct, this

(at 3 Rupees per Cask and four Casks per ton) would make the total cost 57-15, as contrasted with 120 Rupees per ton by the Cuddapah route. Arrack and Bedding sent from Madras would cost 15 Rupees per ton more.

20 In concluding this part of my Report, I will sum up by pointing out that as long as the Rail is only open to Cuddapah, this route would be the longest, the most difficult and the most expensive, and that until the Rail is completed to Gooty, the Masulipatam route is by far the best, but when once the Rail is complete to Gooty, all Stores should go by that route.

21. I had also an opportunity, with reference to Order of Government, No. 2840 of 17th August 1864, of consulting with the various Contractors working on the roads from Masulipatam to Secunderabad and Kamptee, as to the feasibility of forwarding Government Stores and Troops by Transit, but the expense of this mode of conveyance would more than counterbalance any advantage which would accrue from the Stores being a shorter time on the road.

22. Moreover, no transit could possibly pay unless we could ensure constant employment for the Transit Carts, but as our Stores arrive from England only at distant intervals, we should have a press of work at one time with comparatively little to do at another.

23. I am therefore of opinion, that we should give up all intention of sending Stores by transit at present.

24. With reference to Proceedings of Government No. 687, dated 16th February 1865, I have the honor to state that I still consider it would be preferable to send the Kamptee Porter *via* Masulipatam and not by Bombay, as the Cyclone has made no alteration in our arrangements. In a demi-official communication lately received by me from the Executive Officer at Kamptee, he begs that I will send as few Stores as possible by the Bombay route, as he finds the greatest difficulty in getting Carts to convey the Stores from Sheagaum to Kamptee, a distance of about 200 miles, even at the exorbitant rate of 50 Rupees a Cart.

25. I propose therefore to call for Tenders in the usual manner for the conveyance of Stores between Masulipatam and Secunderabad and Kamptee, the Contract to be for a period of two years or until the Rail is open to Gooty on the one hand and Nagpore on the other. I have ascertained from the Indian Carrying Company that they will not be prepared to take up the Contract within that period.

TROOPS.—26. The same difficulties which tell against the Cuddapah road for Stores render it equally inapplicable for the transit of Troops. With a light Carriage and posted Bullocks, my rate of travelling in the Cuddapah District was just $2\frac{1}{2}$ miles an hour, the Bullocks were heavy and slow, and the greatest delays occurred at every stage. Three Rest-Houses would also require to be built at a cost of not less than 2,500 Rupees each, and these would be useless as soon as the Rail is open to Gooty.

27. As regards the Masulipatam route for Troops, there are advantages as well as disadvantages. The road is good and the distance almost one-half less than that by Cuddapah and Gooty—there are Rest-Houses all along and a well organized Transit. On the other hand the old Barracks, although capable of being turned into Store-rooms at a little expense, could not be made comfortable for European Soldiers, except after a considerable outlay—the water in the Fort is not drinkable, and fresh water must be brought in from a considerable distance.

28. It is moreover doubtful whether Masulipatam will long continue healthy, and the anchorage being 5 miles from the shore, the Troops are exposed for a considerable time to a hot sun in passing to and from the Ship.

29. Mr. Maiden, the energetic Master Attendant, has made considerable improvement in the description of Boats used in landing and shipping Troops and Stores, but even with these the men must always be several hours in the Boats.

30. The only other route for Troops, and the one which appears to me to be the best, is that *via* Bangalore, Bellary and Kurnool, but as His Excellency the Commander-in-Chief has recently travelled over this road, it will be unnecessary for me to make any remarks on the subject.

MEMORANDUM of the cost of sending Stores to Secunderabad by the routes reported on in this letter.

	Cart hire.	Extra freight for landing Malt Liquor at Masulipatam.	Total per ton.
	RS A.	RS A.	RS A.
Masulipatam	per ton. 45 15	12 0	57 15
		Freight for Arrack and other articles.	
		RS A.	
Do	do. 45 15	15 0	60 15
		Railway charges.	
		RS A.	
Cuddapah and Gooty	do 84 6	10 0	94 6
Cuddapah and Nundial	do 73 1	10 0	83 1
(Signed) JOHN HILL, Colonel, Commissary General.			

From the Quarter Master General, Fort Saint George, 9th March 1865, No. 2931; to the Secretary to Government, Military Department.

Referring to the Proceedings of Government as per margin, relative to the arrangements that should ultimately be

12th January, No. 361.
26th " " 365
27th " " 365
17th February " 698

made in connection with the restoration or abandonment of Masulipatam as a Military Cantonment, I have the honor, by order of His Excellency the Commander-in-Chief to say, that he can see no reason whatever why Samulcottah should not serve as well as Masulipatam, for the purpose of providing against any disturbance on the Nizam's Frontier. When the Canals are navigable, which they are for several months of the year, Bezwarrah is one day's journey from Masulipatam, and three from Samulcottah; and the latter Station is itself nearer in a direct distance from the Nizam's Frontier opposite to it than Masulipatam is, moreover, the chances of disturbance are every day diminishing—no such thing having occurred for several years past. The health of the Regiment at Masulipatam has of late years suffered more than any Regiment, at any other Station in the Presidency; whereas Samulcottah is as salubrious and comfortable a Station as can be found any where.

2. Regarding the discontinuance of Masulipatam as a point of embarkation and debarkation, the Commander-in-Chief would be very glad if a substitute for it could be found, but he sees no means of attaining this. The one irremediable objection to the Port is the extreme distance that Ships have to lie at anchor, usually about five miles. But then it is the nearest Port to Secunderabad, the distance being a five days journey, with all the appliances of Rest Houses, Transit, &c., at hand, and public buildings available for temporary occupation.

3. There are only two other ways of reaching Secunderabad from the Eastern Coast, *viz*, from Cocanada and Madras. Cocanada is an easy place to land at, but the distance from the shore is not inconsiderable. There are no Buildings or Establishment of any sort to resort to, and a body of Troops could not possibly stay there except in Camp. From Cocanada to Bezwarrah it is a three days' voyage on the Canal, Boats being always available to any reasonable extent, each capable of holding 50 or 60 men. Arrived at Bezwarrah, there is nothing but a Rest-House. The town being a dirty and usually an unhealthy place, no body of Troops could be detained there in Camp; and detention would be necessary because the Transit cannot Command any but a very limited number of Bullocks. The Cocanada route is therefore at present unsuitable, and so it was declared to be in former years, when Sir Charles Trevelyan was pushing on the use of the Godavery River.

4. There is then the Madras route. One days Rail would take a Regiment to Cuddapah. Thence to Kurnool, distance 124 miles, is over an unmade road, with Cattle all absorbed in the Public Works Department, the Railway and the Irrigation Company's Works; without Rest-Houses, &c. It would be probably difficult, even if the road is put in order (*vide* my letter to Government, dated 11th January 1865, No. 365,) to find any one who would undertake a Contract for the conveyance of Troops. From Kurnool to Secunderabad, the road except between the two rivers is excellent, and so is the Cattle, but there is not a large number available at once, though if a Transit were established and regular payments ensured, the Ryots would probably, as elsewhere, find the work profitable, and would be ready with an increased number. There are no Rest-Houses on this road. There are therefore obstructions at present to the use of it. In consequence it has been found necessary to send a Battery recently arrived from Tonghoo and destined for Secunderabad, round by Bangalore and Kurnool, temporary Stations (Tents) being placed between Kurnool and Secunderabad as Rest-Houses.

5. The Commander-in-Chief is not now therefore prepared to say that Masulipatam should be finally given up as a place of embarkation or debarkation. For the present, and until the consequences of the late Cyclone are more fully developed, its discontinuance is of course necessary. Meanwhile, however, the Rest-House Establishments on the Masulipatam line are without occupation, and the Transit Contract having expired, it is not renewed; but this being a subject apart from the main purport of this Report, will be considered in a separate letter.

6. Government decline to build permanent Lines for the 19th Regiment as recommended by the Commander-in-Chief, His Excellency has therefore no alternative than to recommend that retaining Samulcottah as a Garrison in place of Masulipatam. The advance asked for as a loan should be granted to the 19th Regiment to build permanent Lines (tiled) for themselves; and that to encourage the Regiment to do this, as well as to enable it to recover itself after the late disaster, it should be allowed to stay the usual period of four years.

Proceedings of the Madras Government, Judicial Department.

Read the following endorsement from the Under Secretary to Government, Military Department.

Referring certain correspondence, in view to sanction being accorded to the expenditure on account of the Police Guard required for the protection of the public buildings at Dowlaishweran, vacated by the Sappers and Miners. } Dated 28th February 1865.

Referred to the Inspector General of Police.

FORT SAINT GEORGE, } (Signed) A. J. ARBUTHNOT,
10th March 1865. } *Chief Secretary.*

From the Inspector General of Police, Madras, 24th March 1865, No. 646; to the Chief Secretary to Government, Fort Saint George.

General Department.

With reference to correspondence regarding public buildings at Dowlaishweram referred to me for report, I have the honor to suggest that, to save the expense of entertaining extra Policemen, which will certainly be necessary, if the buildings be handed over to the custody of the Police, Pensioners should be employed on the duty, as was recently done for the protection of buildings at Arcot.

2. The Police Budget cannot provide for any extra Establishment.

ORDER THEREON, 28th March 1865, No. 475.

The foregoing letter from the Inspector General of Police, is communicated to the Military Department.

(True Extract.)

(Signed) A. J. ARBUTHNOT.

Chief Secretary.

Referred to the Commander-in-Chief, (Quarter Master General's Department,) with advertence to Proceedings of Government, No. 3705, dated 19th October 1864. 1st April 1865.

From the Principal Inspector General Medical Department, Fort Saint George, 31d April 1865, No. 111; to the Secretary to Government, Military Department.

In forwarding for the consideration of His Excellency the Governor in Council, the accompanying Report* of the Inspector General of Hospitals on the present and probable future Sanitary state of the

Town and Fort of Masulipatam, I think it my duty to state that in my opinion, great danger exists, and will continue for a considerable period of time, to the inhabitants of the place and its neighbourhood, from disease likely to be induced by the state of the soil, and I most earnestly deprecate any measures which may tend to augment the population of the place, and beg most respectfully to urge that no Troops should, for some time at any rate, be located there

REPORT upon the present and probable future Sanitary state of the Town and Fort of Masulipatam.

"The Cantonment of Masulipatam stands on a low sandy ridge, about two miles from the Sea between the beach, which is raised a little by sand banks, and the town, the ground is so low that it forms a swamp, and sometimes a considerable extent in the monsoon, in about the centre of which stands the Fort, that part of the swamp north-east of the Fort is only overflowed at spring tides during the monsoon."

"When under water, the swamp extends beyond the limits of the Native Town, but its deepest part is near the south-west side of the Fort, where it is usually a bed of mud in the dry season of the year, and through which a Canal runs to the Sea from the Kistna river."

"The Fort, as before said, stands about the middle of the swamp, opposite to the north-east end of the Native town, with which it communicates by a Causeway"

"The ridge on which the Pettah and Cantonment stand, is about a mile north-west of the Fort; it is four miles and a half in length, by one in breadth, being highest near the south-west extremity, but falls so much in the direction of the Native town, that the greater part of it, and

the Cantonments are but little raised above the level of the swamps when flooded, and from the difficulty or perhaps impossibility of the water running off, many parts remain flooded for several weeks—attempts have been made to drain the place by means of labor, though never on so large a scale as was attempted in 1838, but even after Channels have been made, the trouble and attention necessary to keep them open, when cut through sand, is so great that it can scarcely be effected.”

2. “The site of the Native town particularly at the south-west end is low and subject to much inconvenience from the lodgment of water.”

3. The above is taken from the Medical Report on the topography of Masulipatam, and although written upwards of twenty years ago, is a very fair description of the place as it now is

4. At page 11 of the same Report, under the head of Public Buildings, it is said “the water is generally brackish chiefly from containing muriate of Soda, which however is in much larger proportion than in others.”

5. Dr Robertson, Zillah Surgeon of Masulipatam, and to whom I am much indebted for the assistance he has afforded me in carrying out my inquiries during my two visits, informed me that there is not a Well with pure water in the Station, only two were not flooded by Sea water. The water from those Wells was of course in great demand, but from the great drain upon them, the brackish water from the adjacent sub-soil finding admittance, and they rapidly became unfit for use, and are so still, five months after the inundation.

6. Upon examining any new cut Channel, salt is to be seen oozing from the sides, nor is this to be wondered at, as the Sea water from its immense weight easily penetrated to a great depth into the soil, which is loose and sandy, and it is impossible to say when it may be sufficiently purified to yield good water. Had the Canal not been available, it is thought that no one could have remained in Masulipatam

7. I could not detect any saline taste in the water from the Canal, but as it is at present conveyed in an open Channel cut in the sand, it can scarcely be free from salt, however, there evidently is not enough to render it unfit for drinking, a more serious matter is, that the Channel being open, admits of its contents being polluted by the inhabitants, and the Cattle in the neighbourhood. From the state of the soil it is evident that the Residents in Masulipatam must, for an indefinite period, be dependent for water for drinking and culinary purposes upon the supply from the Canal.

8. In the rough plan which accompanies this report, the red line drawn from the Sultanagram swamp, shows the distance to which the Channel is open, it is, I understand, intended to carry it on as far as the small square marked “Robertson’s Pettah” and eventually to enclose the water from the bridge over the swamp in a masonry conduit. This will be a vast improvement, but I should fear that a heavy masonry conduit would, on a sandy soil like that of Masulipatam, be apt to sag, and allow of a communication with the adjacent soil which is impregnated with putrid and dissolving animal matter.

9. Before leaving the subject of the water supply, I beg to point out the very short distance to which the Canal water is carried, and should it be intended that a Regiment be again located in the old Lines, that the nearest point from which the Canal water can be procured is nearly three miles distant from them

10. The drainage of Masulipatam has always been difficult and very imperfect, and judging from the uniform level of the ground on which the town stands, it is evident that to carry out efficiently the scheme now proposed, there must be a great outlay not only at first, but annually, perhaps greater than may be commensurate with the size and importance of the Station

11. In the Proceedings of Government of the 2nd of February last, No. 5, Dr Robertson assumes that there were probably in Masulipatam after the Cyclone, 60,000 carcasses of men and different animals.

12. The Honorable Mr Ellis believes that he is not exaggerating when he estimates the loss of life in the Town and Fort at 15,000 or about one-third of the population

13. I understand that more recent inquiries have led the authorities at Masulipatam to consider that the loss of life has been somewhat less than was at first conjectured

14. Three-thousand bodies are said to have been burnt in Masulipatam, and many are supposed to have been carried out to Sea. We are told that 1,000 bodies were buried in the Fort and its

immediate neighbourhood, we know not how many were buried in the Town, but from the statements of those who were there at the time of the Cyclone, the numbers must have been very great

15. I am informed that there was much difficulty found in getting people to move the dead bodies, although none in getting places for their reception dug, consequently most of bodies were buried close to where they were found. The burying places are thus not confined to particular localities, but extend over the greater part of Masulipatam and the Fort.

16. Only a few days ago (I am writing upon the 22nd of March) three bodies were found in one of the swamps in the neighbourhood, and there appears every reason to believe that others may still be lying under the ruins of the houses, or in the adjacent topes, covered by the fallen trees, or the masses of Palmyra leaves which I observed huddled together as I approached Masulipatam from the north

17. It is no exaggeration therefore to designate Masulipatam “a large grave-yard,” and looking upon it as such, I beg to be permitted to note my own views as to the possible effects of the Cyclone upon the Sanitary state of this Station. In confirmation of them, which I respectfully call attention to the Extracts (marked A and B) from the works of Dr Parbes, Professor of Military Hygiene, Medical School, Chatham, Dr Lancaster, Coroner of London, whose opinions upon Hygienic subjects are received as authorities by the public and the Medical profession in England.

18. I am at present separated from my Library, or I might have quoted many more authorities, but I think the Extracts hereafter given are sufficient to shew the extreme gravity of the question as to the future of Masulipatam.

19. Dr Robertson in paragraph 3rd of his letter, 16th January says “* * *
Pro of Govt, No 5, 2nd Feby. 1865.

“Those (dead bodies) left uninterred on the adjoining plains, have long ceased to be noxious, showing very distinctly, that putrefaction of dead bodies is not *per se* a sufficient cause to generate epidemic disease”

20. This opinion should be qualified, different views certainly exist as to the effects of effluvia from unburied animals whilst undergoing the process of decomposition, but many cases recorded are, in which they are known to have been, productive of *Diarrhoea and Dysentery*

21. In considering this question, it appears to me that at different times, different agencies are at work, at Masulipatam for example, the pestiferous effects may have been modified to some extent by the fact of the dead bodies having been immersed in salt-water, and a strong Sea breeze blowing. The bodies found in one of the swamps a few days ago were in a wonderful state of preservation.

22. Whatever difference of opinion may exist as to the noxiousness or otherwise of decomposing animal matter exposed to atmospheric influences, there is none as to its effects after it has been buried, it then forms combinations when in contact with vegetable, mineral and other substances, the precise nature of which we are not fully acquainted with, but innumerable facts prove that animal matter in this state is pestiferous, whether it be contained in the drinking water, or in the air itself.

23. The Principal Inspector General will no doubt recollect the fearful out-break of sickness, which took place some years ago, in the neighbourhood of several burying places in London, upon the ground being disturbed for the purpose of interring fresh bodies, and that the alarm consequent upon this led to the general prohibition of *intergral* interments, by Act of Parliament, in London

24. Dr Parbes, Professor of Military Hygiene at the Medical School, Chatham, says “Mr Chadwick (report on interments in Towns) and the General Board of Health, have also summed up the recent evidence, which shews, that in Church-yards thickly crowded with dead, gases are given off, which if not productive of any disease, yet increase the amount both of sickness and mortality, in some instances this may be from the contamination of the drinking water, but in other cases, as in the houses bordering the old city grave-yards, where the water was supplied by public Companies, the air also must have been in fault. In the houses which closely bordered the old city yards, which were crowded with bodies, Cholera was fatal in 1849, and I was informed by some practitioners that no cases recovered, I was informed also that all other severe diseases in these localities, assumed a very violent and unfavorable type.”

Manual of Military Hygiene, page 100.

“In 1854 I was” says Dr Lancaster, “required by the Vestry of the Parish of Saint James, Westminster, to examine the water from the Pump in Broad Street, Golden Square, Cholera

had broken out there, and killed 500 people in less than a week. I detected nothing remarkable in that water, but the playments of a fungus * * *

It was a very curious fungus.

Its discovery in the water led to an investigation of the condition of the Well, and when it was discovered, that the Well had for sometime been in communication with the Cess-pool of an adjoining house, and subject to periodical overflows of its contents

I have since seen the flocculent fungi in impure water * * *

These fungi form filaments which are accompanied with some ugly-looking animalcules, which are seldom found in pure water.

There is also an ill-flavored looking little worm, much smaller than a thread worm, but belonging to the same family of animals, which constantly presents itself in impure waters—these things live in water containing decomposing animal and vegetable matter, and it is this matter which is injurious, so that although the living creatures themselves are not injurious, the water they live in is lecture upon food—page 26

25. There is a tradition that a pit exists in the neighbourhood of Golden Square which was used during the plague as a burying place.

26 Dr. Parbes in the Chapter upon the "affections of the alimentary mucus membrane," remarks, "suspended animal and especially focal matters have produced Diarrhoea in many cases, such water always contains dissolved organic matters to which the effect may be partly owing * * *

In cases in which the water is largely contaminated with sewage, it is important to observe that the symptoms are often Choleric (purging, vomiting, Cramps, and even some loss of heat) manual—page 49.

27. In connection with these Extracts, I beg to direct attention to the following paragraphs from Dr Robertson's letter, * dated Masulipatam, 2nd February, page 2nd—during the past month there has been a very extensive prevalence

of Diarrhoea and Dysentery. The Diarrhoea was of a very peculiar nature such as I have seldom witnessed before, the evacuations had almost exactly the nature and appearance of Choleric dejections—paragraph 3rd—from personal enquiries I am of opinion that nearly one-fourth of the population has been thus affected * * *

Para. 4. On the morning of the 30th, it was reported to me by one of the subordinates that several people had died of Cholera during the preceding night, but on subsequent investigation it appeared these people had died from Diarrhoea rather than Cholera; for though vomiting and purging may have been observed during life, certain it is that no similar cases have since occurred in that locality * * *

Paragraph 5. I think I am correct in stating that every European child in the Cantonment has suffered more or less from Diarrhoea, and that only one child had died, is simply to be attributed to the speedy removal of the worst cases.

Paragraph 6 "The Prisoners kept very healthy up till the middle of the month, since that time, Fever, Dysentery, and Diarrhoea have been very prevalent * * * I may mention that every precaution has been taken both as regards their accommodation and the supply of the best food and water"

28. The similarity between the outbreaks of sickness narrated by Parbes and Lancaster in the Extracts quoted in Sections A, B, and C, and that which occurred at Masulipatam is so very remarkable that the conclusion is inevitable, that the person which produced them was of the same character as that at Masulipatam, although as yet perhaps less intensified than the other places, but that it is present there, and may be brought into action any moment cannot be denied

29. Since January there has been comparatively little sickness, should the ground not be interfered with, it is not at all improbable that the next may be a healthy year, "notwithstanding" Dr Robertson's letter of 2nd February, paragraph 7, which says much dead and decaying vegetable matter still exist, and there are filthy pools of stagnant water which generally emit a most "offensive smell." The Town is in a cleaner state than it formerly was, and many of the poor creatures who would have succumbed to ordinary disease have been swept away.

30 In the present state of the Station, it appears to me to be inexpedient that steps should be taken to induce any increase in the present number of inhabitants.

31. The Lines of the Regiment of Native Infantry having been swept away, and a large number of the houses of the Native inhabitants destroyed, new Lines and Houses must be erected. This cannot be done without the chance of opening up many of the pits in which masses of either human or other animal bodies have been deposited, the danger of such a proceeding is shown in the quotations marked A, B, and C.

(Signed) J SHAW,
Inspector General of Hospitals

MASULIPATAM, }
23rd March 1865 }

From the Quarter Master General, Fort Saint George, 6th April 1865, No. 4120 ;
to the Secretary to Government, Military Department

Adverting to Order of Government, dated 28th March 1865, No. 475, Judicial Department, referred to the Commander-in-Chief on the 1st instant, I have the honor, by order of His Excellency to state that, unless there is some Superior present to see that they do their duty, little dependence can be placed on the Pensioners appointed to take charge of buildings. This point was dwelt upon in this Office letter recorded in Order of Government, dated 19th October 1864, No. 3705, as a reason for retaining the services of a Barrack Serjeant at Arcot.

2. It would thus be necessary to employ at least a Constable or a Non-Commissioned Officer of the Police to look after the Pensioners, four of whom would be required to take charge of the public Buildings in such a straggling place as Dowlaishweram.

3. As represented in Major Lawder's letter, No. 1961, dated 16th February 1865, the Superintendent of Police at Rajahmundry states that he will only require an extra Establishment of three Policemen at an annual cost of Rupees 234. The employment of a Constable and four Pensioners would at least cost this sum, and the buildings would not be so well guarded, His Excellency the Commander-in-Chief therefore recommends that the employment of the extra establishment proposed by the Superintendent of Police be sanctioned.

With Report from the Acting Controller of Military Accounts, 11th April 1865, C.

ORDER, No. 1705, 6th May 1865.

The Governor in Council learns from the papers above recorded, that the time has not yet arrived for any permanent alterations in the route by which Commissariat and other stores are conveyed to Secunderabad and Kamptee, but that on the Railway being opened as far as Gooty, a change may then be advantageously made, the course proposed in paragraph 25 of the Commissary General's Report is accordingly approved.

2. Referring to paragraph 12, the Governor in Council observes that the Commissary General should communicate at once with the Revenue Authorities, to ascertain what buildings or ground can be made available in Gooty for Commissariat purposes, and then submit to Government a full report of his requirements for the proposed Depot

3. The subject of paragraphs 13 and 14 will be considered in the Public Works Department. It appearing, however, that the portion of Road between the two rivers adverted to in paragraph 10, is within the Hyderabad Territory, * a communication will, accordingly, be made to the Resident on paragraphs 10 and 11.

4. Adverting to paragraph 16, the Governor in Council observes that paragraph 5 of the Quarter Master General's letter, leaves it doubtful, for the present,

* Scott's Road Book of Southern India, route No. 17.

whether Masulipatam can be given up as a Port of embarkation or debarkation for Troops, as, however, arrangements* are in progress for all Troops from England destined for Kamptee and Secunderabad, being landed in future at Bombay, thereby considerably reducing the numbers passing through Masulipatam, and it being absolutely necessary that accommodation for the Commissariat Stores of Malt Liquor, &c., should be available, the buildings referred to by the Commissary General may be made over for that purpose, reserving, however, such portion of them, in communication with the Quarter Master General, as will suffice for the small bodies of European Troops probably landing there *en route* to the Stations in question.

5. Paragraph 17 will be communicated to the Public Department, with reference to paragraph 1 of the Order in that Department, of 11th January 1865, No. 40.

6. Under the circumstances represented in Dr. Shaw's Report, coupled with the urgent recommendation of the Principal Inspector General Medical Department, in his letter above recorded, the Governor in Council considers the retention of a Regiment of Native Infantry at Masulipatam to be, for the present at least, inexpedient.

7. Before sanctioning, however, the advance required to enable the men of the 19th Regiment to build Lines at Samulcottah, the Governor in Council deems it advisable to refer, for the consideration of His Excellency the Commander-in-Chief, the question of removing the Corps to Dowlaishweram, where its position, in reference to the Nizam's Frontier, would, if any thing, be more convenient than at Samulcottah, while the expected completion of the large Central Jail at Rajahmundry, for the accommodation of about one thousand Prisoners, renders the proximity of a regular Corps highly desirable. Government understand that the buildings at Dowlaishweram are suitable for the accommodation of a Native Regiment, and that the Lines lately vacated by the Sappers and Miners will be in so far available for housing the Corps. If the proposed transfer of the Corps to Dowlaishweram be decided on, the cost of the movement will be defrayed by Government.

8. Pending the final decision of the above question, the employment of the extra Police Establishment, for the safe custody of the public buildings at Dowlaishweram, applied for in the Quarter Master General's letter, No. 1961, above recorded, is sanctioned.

To the Resident at Hyderabad. | Here enter 6th May 1865, No. 1706.

(True Extract.)

Manmohan Singh
Under Secretary to Government.

To the Quarter Master General.

- „ Controller of Military Accounts.
- „ Commissary General.
- „ Judicial Department.
- „ Principal Inspector General Medical Department, with 2 enclosures.
- „ Revenue Department.
- „ Public Works Department. *With 10 copies*
- „ Public Department.
- „ Adjutant General.
- „ Military Accountant.
- „ Examiner Pay Department.

Exd. J. E. Cashart.

P.W. 1865 Department.
Pro. of Govt. for May
No. 1626

Pro. of the Madras Govt.
in the Military Dept.

Df 6^a } May 1865
Recd 11^a }
A: 1705

Passing orders on
certain correspondence
relative to the several routes
available for the con-
veyance of stores to Seem-
underabad, and referring
to the Comdr-in-Chief
the question of removing
the 19th Regiment to
Daulaishwaram &c.

A: 5/18.

Civil Works

Public Works Department
No. 1422

Proceedings of the Madras Government
Under date the 27th May 1865.
Read the following

Pro. of the Madras Govt. in the
Military Dept.

Passing orders on certain
correspondence relative to the
several routes available for the
conveyance of stores to Seem-
underabad, and referring to the
Comdr-in-Chief the question
of removing the 19th Regt to Daulaishwaram &c.

x d/ 6 March/65 - 10327

The Military Dept. refer
for consideration in this Dept.
Paras 13 & 14 of a letter from the
Commissary General in which
it is stated that when the rail
is open to Jhooly, the direct
route from Cuddapah towards
Seemunderabad via Kundial
will be abandoned & the large
outlay now being incurred on
it will be lost. The road from
Jhooly to Kurnool & onwards
to Seemunderabad is represented
to be in excellent order with
the exception of only a small
portion of 12 miles in the

W.M.
W.M.

the grant which is annually provided for its maintenance, it will continue to be kept up in its present state of repair.

LB

Hydrabad territory.

The Govt are by no means disposed to depreciate the value of the direct route from Cuddapah to Kurnool, traversing as it does the rich valley of the Nandam & some of the best portions of the Cuddapah & Kurnool Districts. The necessity for its early completion was strongly urged by the local authorities not only on military grounds, but on account of its importance as a feeder to the G. W. line of Railway & as a valuable trunk road. It is observed that no less than Rs. 1,22,000 have been sanctioned for the improvement of this line of communication between Kurnool & Cuddapah, & that the greater part of this amount has been expended while the balances of the estimates have been provided in the Budget for 1885/86.

The Govt are glad to receive so favorable an account of the road from Ghosky to Kurnool, & they hope that with

* From Kurnool to Cuddapah } Rs. 60,000
frontier -
" Cuddapah to Kurnool } - 62,000
frontier

* Rs. 90,205 up to March 1885.

To The Public Dept
" Supg. Engr 3rd Div
Decr 29th May

No. 1865 Dept.
Pro: of Govt for May

A-1422

Pro: of the Madras Govt
Of 27th May 1865

From Milly: Dept^{re} refer.
• ring for consideration certain
Correspondence relative to the
Several routes available for
the Conveyance of Stores to
Secunderabad & with orders
Hereon -

A-510-519