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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 1010	Press
181-182	Mis.
Dated 11-4-1870.	

Not to be folded or roughly handled.

*Proceedings of the Madras Government, Public Works Department,
11th April 1870*

No 181. Read the following Circular letter from the Deputy Secretary to the Government of India, Public Works Department, (Buildings and Roads Military,) to the Governments of Bengal, the North Western Provinces, and the Punjab, the Chief Commissioners of Oudh, Central Provinces and British Burmah, the Resident at Hyderabad, and the Agents to the Governor General for Central India and Rajpootana, dated Fort William, 10th March 1870, No 14 —

I AM directed to forward, for information and guidance, a copy of the papers marginally noted, regarding the adoption in Military Cantonments of a trench system of latrines for Natives, and to request that the measure may be given a fair trial with reference to the conservancy arrangements for work-people employed on Military buildings indicated in Public Works Department

Circulars Nos. 34 and 37 of the 13th and 31st May 1869

From the Sanitary Commissioner with the Government of India, to the Officiating Deputy Secretary to the Government of India, Military Department, dated 14th September 1869, No 907.

I HAVE the honour to offer an opinion on the paper received with your docket No 13,* dated the 1st instant, regarding the disposal of the sewage of the cantonment of Fyzabad

* Herewith returned with its enclosures

2 The discussion of this question has been unnecessarily extended and complicated by the introduction of other matters with which it has no immediate concern The point to be determined is simply how may the sewage of cantonments be best disposed of Should it be buried in deep pits as has hitherto been done, and as is still the practice in most stations, or should it be placed in shallow trenches, and the soil afterwards cultivated?

3. I have no hesitation in stating that the pit system is in every respect most objectionable It is expensive, because it necessitates the removal of the night soil to a distance, and because it throws away valuable manure It is, moreover, dangerous, because by missing so much filth, it prevents those chemical changes in the organic matter by which it would otherwise be rendered altogether harmless. I have repeatedly expressed an opinion very much adverse to the continuance of these filth pits, and I observe that similar objections are urged against them by the Army Sanitary Commissioner in their memorandum (paragraph 15), copy of which was forwarded by Her Majesty's Secretary of State for India, and reached me under cover of docket from the Home Department The passage referred to will be found at page 361 of Sanitary Proceedings for the current year

4 The trench system, if properly carried out, is free from these objections It can be conducted with perfect safety, and without offence, at no great distance from the barracks, it will yield profit by the utilization of the sewage, and thereby prove a source of income to the Cantonment funds, which in most places greatly need such assistance. Its general introduction into all stations, whether military or civil, is most desirable

5 I have long been practically acquainted with its working in jails, and during my present visit to Lucknow, have carefully examined it, as carried on in the Central Prison No system could be more successful. The sewage is utilized within the jail garden and a neighbouring farm, and the resulting crops show the benefit, and are in themselves evidence that any baneful elements have been satisfactorily transformed

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6 The rules under which the system is worked are as follow, and it is essential for success that they should be carefully adhered to in all particulars —

"4 Trenches to be dug in the fields of the garden, or neighbourhood of the jail, each trench to be one foot deep (if anything less not more), and of the same breadth, to be filled up to six inches with poudrette, (the separate urine to be poured on this), then to be covered before the next trench is opened, with all the earth taken out of it. A partition of six inches (or less not more) to be left between each, so that in digging another trench, the adjoining one is not opened. If the trench is the whole length of a large field it is useful to leave cross partitions at distances of a few yards, according to the daily space required, so that the trench may be closed in sections as used

"5. After a field has been filled with trenches, it should not be touched for three months, and should then be trenched to a foot deep, at right angles to the line of the original trenches, and the whole of the soil and manure well mixed. It is after this ready for cultivation at once. It can be dug in dry weather at the end of two months, by which time the contents will be quite decayed and inoffensive

"6 If any effluvium whatever is perceived in this process, there is some fault in the management, and the Conservancy Overseer is to blame"

7 I may add that a similar method of employing sewage as manure has been successfully adopted by the Municipality of Cawnpore, and an experiment of a like nature is now being made with regard to the City of Lucknow

From the Sanitary Commissioner with the Government of India, to the Secretary to the Government of India, Military Department, dated 17th December 1869, No 1,282

THE system of latrines now provided in most cantonments of Native troops and followers is open to very serious objections. I have long been impressed with the evils to which it gives rise, and my recent visit to numerous stations has strengthened this conviction

2 The exact plan of latrine adopted varies considerably. Some are roofed in, others are open above, some are constructed of masonry, while others are merely earthen enclosures. The internal arrangements also differ, but all of these places agree in this respect that the ground within them and in their immediate vicinity becomes very soon saturated with sewage, and that they are thus rendered most offensive

3 Owing to the water used for the purposes of ablution, the proper conservancy of a Native latrine is a matter of great practical difficulty, and without a large expenditure on establishment, the result must always be most unsatisfactory. The question is of considerable importance, for not only is the effect of existing arrangements to create and perpetuate a very formidable nuisance, but a large expenditure is being incurred both in this and other Presidencies in the erection and maintenance of Native latrines, which might be avoided with great advantage.

4 I would, therefore, strongly advise that the present system of erecting any permanent structure of this nature should be abolished. Another plan of meeting the difficulty, which will be found to be both much more efficient and economical, should be had recourse to

5 In my letter No 907, dated 14th September, I stated with reference to the disposal of sewage at Fyzabad, the general principles of conservancy which I would recommend, that all sewage should be utilized, that with this view it should be deposited in shallow trenches, and that the ground so manured should be cultivated. I pointed out the benefits of cultivation as a sanitary measure, and showed that no danger need be apprehended from carrying out this system within any portion of the cantonment limits

6 Convenient plots having been assigned for such cultivation, all that is necessary for Native troops and followers is to erect a temporary screen over the trenches in use, the screen being moved from time to time as the fish trenches altered their position. By this means, no nuisance could possibly arise, and the arrangement would be consonant with the habits of the

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sepoys and others who are now often compelled to have recourse to latrines which are of the most offensive description, and which, as they become quickly excrement-sodden, must prove serious sources of danger.

7 At Peshawur the great evils of latrines are very clearly seen. Here, owing to local circumstances, the area of cantonments is somewhat confined and the different lines are crowded together. I have never met with a greater nuisance within any Cantonment than the Native latrines here present. They are situated generally close to the dwellings of the soldiers and followers, in more than one case within a very short distance of the hospital, and within a few yards of the water-supply. When rain falls, sewage must be carried in large quantities into the small stream which is used for drinking

8 The authorities at Peshawur were fully aware of these evils, but a difficulty presented itself in the fact that it is not safe for any one to go out even a few hundred yards from the lines after the dark, and hence the position occupied by the latrines. There is no reason however why the sepoys and others should not go out to some little distance in the early morning, and, if this system were enforced, a very small latrine would suffice for the few visits that are necessary at night

9 Hospital latrines generally are very offensive owing to their being constructed of pucca masonry, and the arrangements of this nature, which exists in the new standard plan of Native Hospital, although provided at considerable expense, are most objectionable. For hospitals a small mud hut with earthen vessels so arranged that no impurities may touch the ground, is the best latrine that can be provided

10 As both economy and efficiency will accrue from the modifications which I suggest, I have the honour to submit these remarks for the consideration of the Government

From the Secretary to the Government of India, Military Department, to the Quarter Master General, dated 25th January 1870, No 1,112.

WITH reference to your letter No 168-C, dated 13th January 1870, regarding the proposal of the Sanitary Commissioner with the Government of India to substitute in cantonments a trench system in lieu of the system of latrines now in force for the use of the Native inhabitants, I am directed to acquaint you that the measure has the entire approval of the Government of India, and I am to request that you will move His Excellency the Commander-in-Chief to issue such instructions as may appear necessary for giving effect to it where feasible, and to favour the Government in this department with copies of such orders

Copy forwarded to the Governments of Madras and Bombay, in the Public Works Department, to the Chief Commissioner of Mysore and Coorg, and to the Military Department, the Adjutant General, the Quarter Master General, and the Sanitary Commissioner with the Government of India, for information.

(Signed) W. A. CROMMELIN, Colonel, R.E.,
Deputy Secretary to the Govt of India

To the Secretary to the Government of Madras in the Public Works Department

No 182.

ORDER THEREON, 11th April 1870, No. 1,010.

MILITARY WORKS, No. 6

COMMUNICATED to the Superintending Engineers of the 3rd and 5th Divisions with a view to their adopting measures for giving the trench system of latrines for Natives a fair trial in connection

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tion with the sanitary arrangements for work-people employed on Military Buildings at Bellary and Bangalore referred to in Circulars from the Government of India Nos. 34 and 37 of the 13th and 31st May 1869 communicated in G. O., Nos. 1,986 and 2,197 of the 18th June and 7th July 1869.

(True Extract)

Colonel, R.E.,
Secretary to Government

To the Superintending Engineers, 3rd and 5th Divisions
,, Military Department.

Exd. E. C. Shunker

P. W. Department

1010
Proceedings of the Madras Government

Under date the 11 April 70.

Read the following

*From The Dy Secretary to the Govt. of India
Government of India
14 of 10 March 1870*

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W.D.

7th The S. Engrs 3rd 15th 8th
1st Military Dept
Recd 13/4/70

20. March 1870 R. 2nd April

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Govt. of INDIA, GOVERNMENT.

PUBLIC WORKS.

The Superintending Engrs.
3rd & 5th Divisions

Dated

Recd

End /

G O 11 April 1870, No 1010.

Nos 181-182

Latrines Circular from the
India relative to the adoption
in half Cantonments, of a trunk
system of latrines for latrines -
and the Engrs of the 3rd & 5th
Divisions with instructions -