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MADRAS RECORD OFFICE.

Government of Madras.

Financial DEPARTMENT.

G.O. No. 1414 Press Mis.

59-60

Dated 5-1- 1874.

8/9

Not to be folded or roughly handled

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No. 40

Kistna District
Engineer's Office
Masulipatam
2nd June 1874

From

Major J.O. Hasted R.E.
District Engineer, Kistna,

To,

G.D. Leman Esqr.,
President of Masulipatam
Municipal Commission.

Sir,

With reference to G.O. Financial Department No. 163 dated 5th February 1874, I have the honor to report, after personal inspection of the cesspools in most parts of Masulipatam, on the drainage of the town.

2. My report has been delayed in the hope of obtaining a copy of some remarks made by the Sanitary Commissioner on the subject of cesspools in the town, which has been disappointed.

3. The drainage of Masulipatam over of surface water has always been a difficulty, as the town is built on a succession of sand ridges and hollows, parallel to the general line of the coast, the highest of which is but little more than 10 feet above High Water, while the lowest of the hollows is only just above the Sea level. Various cuts have been made at times into the Swamps

both to the east and west of the town, but these channels have so slight a fall that water only trickles along them and being cut entirely through loose sand, became filled up very quickly.

4 It is evident that open channels in this situation would not answer for the conveyance of sewage water not only because they would rapidly become series of stagnant offensive pools, but because the soil would continually absorb the filth, and the channels would become as objectionable as any cesspool.

5 The principal objection to open masonry drains is the want of fall. Open drains with a fair fall even when well flushed periodically, can hardly be kept inoffensive, but here the fall is insufficient, and good water for flushing can scarcely be spared, and in addition to this the town is such a straggling one that the cost of the masonry drains would be beyond the means of the Municipality.

6 A complete system of covered drains would of course be the best arrangement, but in this case the want of fall would necessitate pumping up the sewage water, and the expense of such a scheme would be so enormous compared with the income of the Municipality that it is not worth considering.

7 The existing cesspools are as bad as

any thing can be. I inspected some, from which the smell was perfectly poisonous, and I recommended that they should be filled in with clean sand at once and the water allowed to pass over them. One reason for these cesspools being so inordinately offensive is, I believe, that they contain not only sewage water, but rubbish that should have found its way into the dust bins, and the combination emits of course as sickening an effluvium as any thing can produce.

8 I am disposed to recommend that cesspools in some places should still be retained, but that they should be so dealt with that they may not be a nuisance to the neighbourhood. In houses where there are backyards of any extent, cesspools in the backyards exist, and these need not be interfered with unless they become a nuisance. In the smallest houses no cesspool is necessary, the water used in cooking, which is nearly all the sewage, as washing is performed outside, is absorbed in the sandy soil, before it has become offensive and probably in this state does little harm. But where large houses have no backyard, there must, I think, be a cesspool in the street, and the Municipal Commissioners must remove the contents periodically or run a considerable risk of poisoning the inmates of surrounding houses.

I would suggest that the sewage should be received in metallic buckets or well tarred wooden tubs placed in small masonry wells and closed with a well-fitting cover, a small spout conveying the water from the house drain into the buckets. These buckets being furnished with handles could be raised and emptied into a Cart as often as might be necessary.

9- From what I have seen of the town I believe that the number of places at which it would be necessary to establish outside cesspools is not so great that the Municipality cannot deal with them, at all events the worst places, which are well known as standing nuisances, might be attended to at once, and others taken up as necessity compels.

Should it be beyond the power of the Municipality to provide for emptying cesspool buckets to the extent required, I would suggest the advisability of detailing Scavengers to cover all sewage running into the streets every morning with earth. In many of the small streets where there is no made road sewage water runs into the Road, and there lies till absorbed. A little fresh earth thrown on every morning would prevent its becoming offensive.

10 I would particularly call attention to the necessity of having cesspools with

buckets in the neighbourhood of the good water pipes and reservoirs instead of allowing filth to soak into the grounds. The water supply of the Town is drawn from these reservoirs for 10 or 11 months in the year and for the remaining month or two from pits dug near the line of pipes, where the water is generally found to be good. Such being the case, it is of importance to prevent any sewage water being absorbed by the soil in the neighbourhood, more especially as the pipes themselves are earthenware and to some extent porous. The old wells in gardens and Court yards are now hardly used I believe for drinking purposes, and then, the existing cesspools &c do not pollute the drinking water, and one objection to cesspools in backyards is to a great extent removed.

I have &c &c

/Signed/ J. Hasted Major R.E.

District Engineer Kistna

/True Copy/.

President

Enclosure in a letter from the President of the Municipal Commissioners, Kistna District, to the Acting Collector, Secretary to Government, Financial Department, dated 21st August 1874, No 1404.

S.O. 1404.

Copy of the District Engineer's letter, Dated 17/8/74

Kistna District
Collector's Office.
Masulipatam.
21st August 1874.
Dept 24

From G.D. Lewan Esquire,
President, Municipal Commissioners,
Kistna District.

To the Honorable D.F. Carmichael,
Ag: Chief Secretary to Government,
Financial Department,
Ootacamund.

Sir.

Referring to G.O. No 163 of 3 February 1874, I have the honor to forward the *letter of the District Engineer reporting his views on the best way of getting rid of Sewage water in the Town of Masulipatam.

*No 40 dated 2 June 1874.

2. He proposes, instead of the present cess-pools of brick and chunam, a small ma-

=Sourcy well into which a bucket that can be lifted is to be fitted and the liquid removed in carts.

3. I do not think his plan will improve matters. The bucket, if it be made large enough to contain all the sewage water, will be too large to be lifted. If it be made small enough to be lifted, it will overflow into the well and the well will become exactly what the cesspools are now, and be as difficult to keep clean.

4. I have lately experimented with a simple hole made in the Earth and the Earth prevented falling into it by the Common Earthenware rings used for wells. I make it without bottom and with a cover. The water then gradually soaks through and disappears. I prevent any absolute filth from passing into the hole by a grating and having a pipe (with a very small orifice) to pass the

water out of the premises into the street: for, if the water is allowed to be mixed with filth, the pipe will soon choke and the premises be inundated. With a tight fitting wooden lid such a place is not offensive.

5. As the District Engineer says these are better avoided in the vicinity of the water-pipes: but as long as the backyard cesspools exist, the Extra Contamination to the water by these will be very insignificant: and I do not apprehend any great danger as the water must soak some 4 to 10 ft to get to the ordinary water level, and in so doing should purify itself to a very considerable extent.

6. If the thing I am now trying should be found after a time to become filthy from the Earth absorbing the impurities of the water, it can be cleaned by removing the Earth

at the bottom and replacing it by fresh soil.
y. This would not be so costly an arrange
= ment as removing the water by carts.

I have the honor to be. Sir.
Your most obedient servant.

[signature]

President

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Recd 1874 Department.

From No. 1793

The President

Municipal Commissioner

Kistna District

To

The Acting Chief Secretary

to Government.

Financial Department

Octacamund.

Dated 21st August 1874.

Received 24th ——

No. 1404

Enclosure 1.

Submitting report on the District Engineer's views regarding the best way of getting rid of sewage water in the Town of Masulipatam

Referred.

6

Octacamund 25th Sept 1874.

Returned for the opinion of the Municipal Commissioners

Secretary Municipal Commissioners

(2/9. 24/9.

Govt. of {1874} Madras.

Financial

To

The Sanitary Comr.
Madras

G. O. 5 Sept, 1874, No 1494

Nos. 59-60.

Masulipatam Municipality

Report of the President on the District Engineer's views regarding the best way of getting rid of Sewage water in the town of Masulipatam referred for the opinion of the Sanitary Comr.