(1) Number of pages 32

(2) Date of repair 10.6.87

(3) Initials of the Referencer

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Public works DEPARTMENT

G.O. No. / B.P. No.	931 W.	Press. / Mis.
Dated	22.3.1883.	19 .

5.6.17

Not to be folded or roughly handled

931/1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 171.

Read—the following papers:—

G.O., dated 17th March 1883, No. 580, Public.

No. 171-A.

From Deputy Surgeon-General M. C. FURNELL, M.D., F.R.C.S., Sanitary Commissioner for Madras, to the Chief Secretary to Government, Public Department, dated Madras, 16th March 1883, No. [illegible]61.

I have the honor, in continuation of my memorandum accompanying letter, No. 234, of 5th March 1883, to report to Government that, hearing cholera had made its appearance in the town, I deemed it advisable to visit Ootacamund.

2. I inspected the lake several times with the Local Sanitary Officer and Engineer. I also visited the Marliamund reservoir.

3. The attempt to drain the eastern or upper part of the lake has resulted in laying bare a large spit of land on the western side close to the Willow bund, and a good deal of the margin of the lake all round, and in various recesses under Bishopsdown, Audry House, &c.

4. The inhabitants complain a good deal of the smells emanating from these places, more especially the dry land near the Willow bund. This is said to be more especially noticeable after a shower of rain followed by a hot sun.

5. During my stay no rain fell in Ootacamund, but standing on the Willow bund a fish-like sickening odour was perceptible, and on walking over the land which has been laid bare this was still more apparent; on a part of the land west of the bund, where a large drain from the Butcher's hill empties itself, the smell is very pronounced, and also in several parts of the eastern side where drains from the bazaar run down.

6. I am decidedly of opinion that the present state of things is dangerous to the community in a sanitary point of view, and likely to become more so when rain shall have fallen followed by a hot sun.

7. The people, deprived of ready access to water for domestic purposes, complain bitterly, the more so that a diminished supply is now allowed from the Marliamund reservoir, owing to its being far from full; the drains also, not being flushed on account of this short water supply, are in the bazaar more offensive than usual.

8. My opinion is it would be better to stop at once the running off of the water, and that some other plan should be adopted to reclaim the upper or east end of the lake.

No. 172.

Order—dated 22nd March 1883, No. 931 W., Public Works.

In the present state of the question connected with the lowering of the level of the water in the lake at Ootacamund, it is not, in the opinion of Government, necessary at present to do more than direct—

(1) the cessation of any further lowering of the level,
(2) the early completion of the regulating sluices in front of the waste weir,
(3) the immediate sowing of all the exposed portions of the lake bed with either grass or koralee seed,
(4) the removal, desiccation and burning of all rank vegetation and aquatic plants exposed in the lowering process, and
(5) the effective flushing and scavenging of the bazaar drains.

2. The needful orders under heads (1), (2), (3) and (4) above will at once be issued by the Chief Engineer and under (5) by the President, Municipal Commission.

3. From all the reports which have reached the Government it is clear that the scavenging of the bazaar drains has been greatly neglected of late, and that this is in some measure due to a misapprehension as to the level at which the water in the Marliamund reservoir should be maintained, which has led to the drains being insufficiently flushed.

4. Whatever the cause, the condition of the bazaar drains is and has been most unsatisfactory, and His Excellency the Governor in Council must look to a sufficient and early remedy being carried out by the President of the Municipal Commission in consultation with Dr. Nanney.

(True Extract.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

To the Superintending Engineer, Fourth Circle.
„ President, Municipal Commission, Ootacamund.
„ Sanitary Commissioner.
„ Public Department.
„ Financial Dept.

Exd. C. Howarth.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1883) Madras.

PUBLIC WORKS.

Dated March 22nd.

Recd. *Encl.*

G.O., 22nd March 1883, No. 931 W.

MARCH.
Nos. 171-172.

Ootacamund Lake

Ordering the cessation of any further lowering of the level of the —, &c.

17th March 1883, No. 530, Public.

931/3

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

Read—again the following paper:—

G.O., dated 23rd February 1883, Mis. No. 401, Public.

Read—the following paper:—

Memorandum by the Chief Engineer, Public Works Department.

As requested in a telegram from Government, which reached me on the evening of the 16th, at Beypore, I proceeded to Ootacamund to inspect the work now going on in lowering the level of the lake.

2. On the evening of the 18th instant I met the Collector, Executive Engineer, also Drs. Farquhar and Nanney on the spot.

3. No smell was perceptible on the Willow bund, though Dr. Nanney mentioned that a little was observable in the mornings, and no sickness in any way traceable to sewage emanations had as yet exhibited itself.

4. Out on the drying mud flats, where there is a good deal of weed exposed and in a decaying condition, there is, as was to be expected, a little smell; but as the weed is collected, dried, and either burned (a matter which is being attended to by the Executive Engineer), or otherwise disposed of, this will in all probability disappear.

5. Smell there certainly is from the bazaar drains, but this has all along been the case, and will continue till the drainage scheme now under execution has been completed.

6. Just at present, owing to the necessity for conserving the supply of water in the Marlimund reservoir, the drains are only occasionally flushed. There are, moreover, no sufficient arrangements for disposing of the washings from the slaughter-houses.

7. This latter defect will, it is understood, be ere long dealt with, as far as possible, by the President of the Municipal Commission; but it is needless to say that neither of the nuisances adverted to either affect or are affected by the level of the water in the lake.

8. The hot sun and extremely dry air now prevailing at Ootacamund are, to the best of my judgment, highly favorable to the success of the operations of lowering the lake, which has hitherto been accompanied by very much less nuisance than I anticipated.

9. The level of the water is now about 6 feet below the sill of the waste weir, and as there is still more water east of the Willow bund than desirable, I have authorized the Executive Engineer to run off another foot in depth.

10. This will probably lay bare all but two patches, one near the A.B.C. ground, which can eventually be dealt with by the silting process, and another at the south corner, east of the bund.

11. To prevent the bazaar drainage spreading over the dried bed, I have directed the Executive Engineer to excavate small pits at the end of each about 50 feet south of the roadway, which can be periodically cleared out. This arrangement should answer well till the main intercepting sewer has been constructed, as I hope it may be in two and-a-half or three years time.

12. The Executive Engineer is at once to push on with the construction of the regulating sluices at the waste weir, and this work, when finished, will allow of the lake water being retained at any level, high or low, that may be desired in the interests of sanitation.

13. The dried up portion of the lake bed is necessarily irregular and unsightly, but is very much freer from sewage deposits and their results than could have been anticipated.

14. When the rains commence and circumstances favor, the surface irregularities can be trimmed down, a clear central channel cut, and the rest laid down in grass, and be otherwise prepared for eventual laying out in the manner suggested by the Improvement Committee.

15. On the whole, therefore, the position of matters is very favorable, and, so far at least, no evil results traceable to the lowering of the water in the lake is discoverable.

Madras,
20th February 1883.
(Signed) R. H. SANKEY, Colonel, R.E.,
Chief Engineer, P.W.D.

No. 458-C.

Transferred to the Public Department, with reference to the correspondence herewith returned and demi-official note from the Chief Secretary.

Madras,
20th February 1883.
(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Government, P.W.D.

Order—dated 23rd February 1883, Mis. No. 401, Public.

Communicated to the Sanitary Commissioner, Madras, with reference to his demi-official note, dated February instant, and original papers received therewith returned.

(True Extract.)

C. G. MASTER,
Chief Secretary.

To the Sanitary Commissioner, with papers.
„ Public Works Department.
„ President of the Municipal Commission, Ootacamund.

Read—also the following papers:—

From A. J. B. ATKINSON, Esq., Acting Collector of Nílgiris, to the Chief Secretary to Government, dated Ootacamund, 18th February 1883, No. 11.

I have the honor to acknowledge the receipt of your telegram, dated 15th February 1883, and to state that I instructed the officers named in it accordingly.

2. In consequence of a telegram from the Chief Engineer to the Special Sanitary Officer direct directing him to warn me to attend at the Willow bund at an hour subsequently fixed at 5-30 P.M. to-day, I attended after church, being some three minutes late.

3. I have no clear idea of the result of to-day's conference. A suggestion was made to dig holes in the lake at the foot of each drain. This will be done. Approval was also given to a cistern under each slaughter-house. This I had already provided for.

4. But I do not feel that the question asked by the Special Sanitary Officer has been answered, which was whether the lowering of the lake is or may be prejudicial to the public health. At present there is no sickness which can be attributed to it as a cause, but I intend to ask the opinion of the Medical Officers as to what means are to be adopted to prevent any evils which may possibly arise on the presumption that the reclamation scheme is to proceed.

931/4

From A. J. B. ATKINSON, Esq., Acting Collector of Nílgiris and President of the Municipal Commission, Ootacamund, to the Chief Secretary to Government, dated Ootacamund, 21st February 1883, No. 12.

In reference to the last paragraph of my letter, No. 11, dated 19th February 1883, I have the honor to submit a memorandum drawn up by the two Medical Officers of Ootacamund and myself regarding the lowering of the lake.

2. Although, perhaps, the memorandum sufficiently conveys my views, still I desire to avail myself of the opportunity of placing my opinion on record.

First.—I consider that the beginning has been made in the wrong direction. The sewer should have been made first, and the bazaar drainage channels, which are intended to run into it, afterwards. Until the sewer is built the drainage must run somewhere, and it is better that it should run into a flowing stream than on to a stagnant morass. For that reason I advocate the enlargement of the main lake delivery channel throughout all its length, banked on both sides, with holes to carry off the town drainage, and the ornamentation of its sides.

Secondly.—I deprecate the consideration that the Ootacamund lake, *the* feature of the place from all sides, is to be "a thing of the past." When the monsoon comes, the rain down the main delivery channel, as well as the increased volumes down the drainage channels, will fill up the lake below the Willow bund to its ancient level, some seven feet above the level at what the water now lies. A sluice in the Willow bund bridge, opening only one way, will prevent the water backing up; and the proper level of the water below the Willow bund can be safely kept by a lowering of the sill of the weir or by an additional shutter in the bund (not Willow bund) sluice.

Thirdly.—The retention of the water below the Willow bund will be the means of supply to the persons who align the lake's margin of water for washing purposes in which they are now deficient, and in which they must ever be deficient, so long as the channel from the Marlimund reservoir is open and liable to be topped and wasted.

Enclosure.

Memorandum of Meeting of the following Officers held at Ootacamund on Wednesday, 21st February 1883:—

J. C. Larminie, Esq., Executive Engineer, Public Works Department.
Surgeon-Major L. C. Nanney, Special Sanitary Officer.
Surgeon-Major W. Farquhar, M.D., Senior Medical Officer.
A. J. B. Atkinson, Esq., Acting Collector and President, Ootacamund Municipality.

1. Mr. Larminie states that the intention is to run off another foot of water and that will probably expose nearly all the land above the Willow bund. He does not think that it will make any appreciable difference on the water below the bund. Then the intention is to plant up the reclaimed parts with grass, &c.

2. After discussion it was proposed—

(*a*) That the channel from Charing Cross should be cut straight through and below the Willow bund so as to tap the slaughter-house drain, and that the eleven bazaar drains should be conducted into it.

(*b*) It was shown that, as regards the fear of the mere drying up of the lake, no actual sickness has as yet occurred, and that the drying is now spread over nearly as large a space as it ever will be. The fear now, however, is that as the drains will flow on to earth instead of into water, unwholesome emanations will probably arise which may be injurious to health.

(*c*) It was proposed that the bazaar drains should at once be carried below and under the bazaar road into the channel proposed, until the oviform drain be built.

(*d*) That the Government be asked to give the free services of a gang of fifty or sixty convicts to cut the channel proposed, and that the Department of Public Works carry the drains under the road.

(*e*) It was shown that a present and actual evil arising from the lowering of the lake is the want of water to people living on its margin, which is badly complained of.

3. In these circumstances, we, the undersigned, are of opinion that, although the reclamation of the upper part of the lake may be allowed to proceed, no further lowering of the water below the Willow bund should take place. We echo public opinion in stating that we consider

that the water below the Willow bund should be raised, as soon as possible, to its pristine level and kept there.

(Signed) L. C. NANNEY, Special Sanitary Officer,
Surgeon-Major, I.M.D.
(„) W. FARQUHAR, M.D.,
Surgeon-Major, I.M.D.
(„) A. J. B. ATKINSON,
Acting Collector and President.

No. 452.

Transferred to the Public Works Department.

Fort St. George,
28th February 1883.

(Signed) C. G. MASTER,
Chief Secretary.

To the Public Works Department, with original papers.

Memorandum by the Chief Engineer, Public Works Department.

Under Memorandum No. 452, of 28th February 1883, Public Department, letters from the Collector of the Nílgiris, dated 18th and 21st February 1883, Nos. 11 and 12, are transferred to this department.

2. These bear chiefly on the scheme for lowering the level of the lake at Ootacamund, a work which, as forming one of the numerous proposals for the improvement of that station and approved of by Government under G.O., of 1st February 1882, No. 286 W., has now for some time been in progress.

3. In compliance with a telegram from Government which met me at Beypore and allowed me only just time to arrange by wire with Dr. Nanney (in the absence of any information as to whether the Collector was present or absent), I made a hasty visit to the station on the 18th ultimo. The results of this visit I have already reported in my Memorandum, No. 458, of 20th February 1883, submitted to the Chief Secretary.

4. As I notice from the letters and Committee's Proceedings now before me, and also from the numerous communications which have lately appeared in the newspapers, that much misapprehension exists in regard to the objects in view in lowering the lake level, it will be better here to requote the observations made by the Improvement Committee appointed under G.O., 6th June 1881, No. 1408 W:—

* * * *

"29. Next in importance to the proper provision of surface drains for the several bazaars, &c., is the removal of the sewage, which is at present, with the exception of that from Kandal, discharged into the lake, the water of which thus becomes more foul year by year. The upper portion east of the Willow bund is now in great measure a sedgy pond, covered with much floating weed, and with sewage accumulations at the extremity of all the bazaar drains. Instead of the beautiful feature which it might easily, with a little care and taste, be made, the lake is rapidly becoming a disgrace to Ootacamund.

* * * *

"52. There are two ways of dealing with the matter—(1) by raising the level of all the affected grounds, or (2) by lowering the level of the water in the lake, which necessarily keeps up the spring level. The latter is obviously by far the cheapest plan, all that is needed being to cut down the level of the waste weir at the bund from three to six feet as may be desirable; in fact, by just so much as will lay dry the portion east of the Willow bund. The ground so reclaimed may quickly and at small expense be turned into pleasure and recreation ground.

"53. The latter are much wanted for such purposes as Cricket, Polo, and Gymkana sports, for which the present A B C grounds are much too restricted.

"54. It must be borne in mind that the lake, as it stands, fulfils no useful functions for Ootacamund. It irrigates no ground below its bund, its water is unfit for drinking, unused for boating, and, if not ornamental, is valueless if not worse, as being little better in its present state than a receptacle for sewage.

"55. The slope of the margins being very steep, the lowering of the present water level by six feet would not narrow the present spread of the water in all by more than thirty or thirty-five feet at most: practically therefore this proposal, while pointing to an easy means for improving sensibly the sanitary condition of all east and north of the Willow bund, and affording scope for improvements, otherwise unattainable, would to no sensible degree interfere with the extent of the lake to the west of that point.

"56. Instead, moreover, of leaving this latter portion in its present bald, unplanted, and uncared for condition, particularly along its northern margin, the Committee strongly advocate all the knolls down to the water's edge being planted with selected trees (conifers chiefly) thereby turning the lake into the most attractive feature in Ootacamund."

In his letter, No. 12, Mr. Breeks Atkinson observes as follows:—

5. "I deprecate the consideration that the Ootacamund lake, the feature of the place from all sides, is to be a thing of the past." It is not a little singular that with the order of Government, which I have above quoted, before him, the objects and reasons for the work in question should be so misapprehended.

6. The upper part of the lake had become extremely offensive, and, under the action of natural forces, was becoming worse daily. Nothing remained but to resort either to the expensive process of filling in with earth, leaving only a central drainage channel, or to lower the level of the water so as to lay, if possible, all east of the Willow bund dry. This, as costing a mere trifle compared with the expense of the filling in process, was naturally advocated by the Improvement Committee. It had also the no small advantage of at once making the A B C ground drier than it would otherwise be, and affording an opportunity of turning the whole of the ground east of the Willow bund into a handsomely laid out People's Park with gymkana, &c.

7. Opportunity was also to be taken in thus curtailing the extent of the lake to plant up the margins ornamentally, instead of allowing it to continue in its present neglected unkempt condition.

8. The process by which a work of this kind is carried to its completion is often the reverse of pleasant. Whenever mud flats have to be exposed in lowering the water level prior to redressing and final formation, weed is exposed, and, till dried and burnt, gives off a certain amount of smell, &c.; but, as shown in my note of the 20th instant, the whole is proceeding most satisfactorily under the hot sun and fine dry air at present prevailing at Ootacamund.

9. Owing to the large amount of silt brought down from the northern valley to the west of the Willow bund, much more land has been laid bare than was originally contemplated, but this, like the rest, will in time be ornamentally planted and laid out.

10. The Collector, in the letter previously quoted, observes how the monsoon water, venting itself down the central channel, "will fill up the lake below the Willow bund to its ancient level, some seven feet above the level at what the water now lies," and proposes that "a sluice in the Willow bund bridge, opening only one way, will prevent the water backing" into the eastern or upper end of the lake.

11. The Committee also, who sat on the 21st February subsequent to my visit, are evidently impressed with the same idea, as in paragraph 3 they observe, "we echo public opinion in stating that we consider that the water below the Willow bund should be raised, as soon as possible, to its pristine level and kept there."

12. As this immediately follows their concurrence in the desirability of reclaiming the east or upper part of the lake, it follows, in their opinion, the lower part of the lake should be kept full of water, the level of which shall always be seven feet above that in the upper.

13. I really do not think that the gentlemen who signed these proceedings had any clear or lucid idea as to what they were suggesting, which was tantamount to proposing that water from the supply channel of the lake should run down the valley by gravity to the bridge at the Willow bund, and then, heedless of this universal force, mount up seven feet and remain there in spite of nature's laws.

14. The Collector, who also signs the proceedings, evidently had some misgivings on this score and proposes a sluice "opening only one way," but evidently forgot that, in the process of filling the lower part of the lake, and, indeed, under all circumstances,

the water must run down from the upper into the lower part of the lake. It is clearly needless to consider seriously any such suggestions. The waste weir is now being lowered seven feet, and this amount of water will be run off the whole lake and will seldom, except in flood, be any higher than weir level.

15. The matter remains therefore precisely as originally formulated by the Improvement Committee; either the Ootacamund lake must, by keeping up the old level of the water, be allowed to go on from bad to worse, getting more and more sedgy and disagreeable, if not also more unsanitary, or, by lowering the level of the water as now being effected, be made a source of great ornament and use to the station.

16. I am unable to agree with the Collector regarding the sequence in which the several works should be carried out. The Improvement Committee had clearly before them the terrible condition of the bazaar drains, and very properly decided that these were the first to be rectified.

17. The complaints of bad smell at Ootacamund are mainly now attributable to the state of the bazaar drainage, which we are doing our best to rectify as speedily as possible.

18. The main sewer will, I hope, follow next so soon as funds can be spared, and in the meanwhile palliatives of various kinds must be adopted. It may take from three to four years before the whole drainage system is brought into a thoroughly satisfactory state, and in the meanwhile it is to be hoped that, for the sake of the beneficial objects in view, reasonable consideration and allowances be made for some admitted inconveniences which are unavoidable in the process.

19. The Executive Engineer will, I feel assured, act in entire harmony with the Sanitary Officer, and will use his best endeavours to mitigate any well-founded objection or grievance on the part of the public.

20. Of the minor points needing attention, I may now briefly say—

(1) The ends of the cut-stone street drains will be carried some way past the road tunnels and made to discharge into pits till the main intercepting sewer has been constructed. The arrangements, with proper scavenging, should prove a great relief, and be, I should hope, very effectual in preventing smell and any flow of sewage over the reclaimed ground.

(2) The employment of convicts, as suggested by the Committee, would be very advantageous. They could clear weeds and rank vegetation, level down the old bed, sow grass, plant trees, &c.

(3) The clearance of a central drainage duct for the whole of the upper valley, as necessarily forming part of the original improvement scheme, calls for no remark further than that convicts might with great advantage be employed upon it.

21. As the public are not unnaturally much interested in the scheme, I should be glad to see the whole correspondence printed and given to the Press, and shall be quite prepared subsequently to add any information in my power.

(Signed) R. H. SANKEY, Col., R.E.,
Chief Engineer, P.W.D.

No. 550-C.

Transferred to the Public Department in continuation of endorsement, No. 458-C, dated 20th February 1883.

CHEPAUK,
7th March 1883.

(Signed) R. H. SANKEY, Col., R.E.,
Secy. to Govt., P.W.D.

To the Public Department, with original papers.

A certain portion of the upper waters might, under other conditions than now obtain, be diverted by high level channels along both sides of the valley, but certainly not as matters stand, and in all cases would leave the upper portion of the lake a morass in the monsoon.

From Deputy Surgeon-General M. C. FURNELL, M.D., F.R.C.S., Sanitary Commissioner for Madras, to the Chief Secretary to Government, dated Madras, 5th March 1883, No. 234.

I have the honor to report that I have carefully read over the correspondence which accompanied your demi-official note, and have placed my views in the form of a memorandum, herewith sent, as being the easiest way of alluding to the different memoranda and letters.

731/6

ENCLOSURE.

Memorandum by Sanitary Commissioner on Ootacamund Lake.

Read again letters, Nos. 230, 236, and 341, from Dr. Nanney, Special Sanitary Officer, Ootacamund, dated 16th and 27th January and 6th February 1883, respectively.
Telegram from Government to Colonel Sankey, Chief Engineer.
Memorandum of Chief Engineer, Public Works Department, dated 20th February 1883.
Read also letter, No. 11, of 18th February 1883, from Acting Collector of Nílgiris, to the Chief Secretary to Government.
Letter, No. 12, of 21st February 1883, from Acting Collector of Nílgiris, to the Chief Secretary to Government.
Memorandum of Meeting of Executive Engineer, Medical Officers, and Acting Collector of Nílgiris, dated 21st February 1883.

Colonel Sankey, in consequence of the letters of Special Sanitary Officer, visited Ootacamund at Government's request. In his memorandum of 20th February 1883, the Chief Engineer describes the position of matters as very favorable, and so far at least no evil results traceable to the lowering of the water in the lake is discoverable, and he "authorised the Executive Engineer to run off another foot in depth" of the lake water.

Subsequent to the visit of Colonel Sankey, the Acting Collector addressed the Chief Secretary (letter, No. 11, dated Ootacamund, 18th February 1883), in which, in paragraph 4, he says, "But I do not feel that the question asked by the Special Sanitary Officer has been answered, which was whether the lowering of the lake is, or may be, prejudicial to the general health.

"Accordingly the opinion of the Medical Officer was asked as to what means are to be adopted to prevent any evils which may possibly arise on the presumption that the reclamation scheme is to proceed."

The opinion of the Medical Officer and the Executive Engineer, Public Works Department, is embodied in memorandum, dated 21st February 1883, which is forwarded by the Acting Collector with covering letter, No. 12, of 21st February 1883. I agree with all the propositions of the Medical Officer and Acting Collector contained in the memorandum, and their recommendations should, in my opinion, be carried into effect.

I have also had an interview with Colonel Sankey on the subject, and he agrees with the recommendation of the Acting Collector and Medical Officers, but points out that it will be simply a physical impossibility "to raise the water below the bund (*i.e.*, on the west side) to its pristine level" without again submerging the reclaimed land east of the Willow land.

It seems to me then that a new, or rather two new questions arise—

I. Is it desirable to do away with so much of the lake, which no doubt has been a "distinct feature of the place?"

II. Did the Improvement Committee, when they acquiesced in the upper or eastern portion being reclaimed and laid out as ornamental ground, anticipate it would involve the reclamation of so large a portion of the western portion?

I should answer both questions in the negative. I feel sure the Improvement Committee, of which I was a member, had no idea that reclaiming the eastern would entail laying bare so large a tract of the western portion of the lake.

From all points of view—sanitary, æsthetic, and financial—I think it would be better to have an honest sheet of water than a reclaimed swamp, which must necessarily during the monsoon months be more or less a morass, for the whole drainage of the surrounding hills naturally finds its way down there.

It will be seen from paragraph 12 of Colonel Sankey's memorandum that the Executive Engineer is "at once to construct regulating sluices which will admit of the water being retained at any level, high or low, that may be desired in the interests of sanitation;" so that apparently there will be no difficulty in the matter, and there need be no regret, for what has been done has not only thrown light on the physical conformation of the lake, which evidently before was a secret, but has enabled the department to clear the lake of weeds which were fast closing it and had become an eyesore. The water if again allowed to flow back to its original bed will now form a pellucid lake.

MADRAS,
5th March 1883.

(Signed) M. C. FURNELL, M.D., F.R.C.S.,
Sanitary Commissioner for Madras.

ORDER—dated 17th March 1883, No. 580, Public.

The papers above recorded will be communicated to the President, Municipal Commission, Ootacamund; and also printed and placed on the Editors' table.

(True Extract.)

G Carter
Chief Secretary.

To the President of the Municipal Commission, Ootacamund.
" Public Works Department.
" Sanitary Commissioner.
Editors' Table.

Exd. A. Aubert and others.

931/7

G.W. C No. 2435

B

Govt. of {1883} Madras.

PUBLIC.

~~Communicated to the Supt. of Eng. 4th Circle~~

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8 pe
recd 20.3.83

Issued

Recd. 19/3/83. Encl.

G.O., 17th March 1883, No. 580.

MARCH.

Ootacamund Lake.

Communicating to the President, Municipal Commission, Ootacamund, papers relating to the scheme for lowering the level of the —.

S.E. 4th Circle

With order

71

No. 361. 93/16

Office of Sanitary Commissioner
Madras March 16th 1883

From,

Deputy Surgeon Genl. M. C. Furnell M.D. F.R.C.S.
Sanitary Commissioner for Madras

To,

The Chief Secretary to Government.
Public Department Fort Saint George

Sir

I have the honor, in continuation of my Memo accompanying letter No. 234 of 5th March 1883 to report to Government that, hearing Cholera had made its appearance in the town, I deemed it advisable to visit Ootacamund.

2. I inspected the Lake several times with the Local Sanitary Officer and Engineer. I also visited the Marliamund reservoir.

3. The attempt to drain the eastern or upper part of the Lake has resulted in laying bare a large spit of land on the

western

western side close to the Willow bund, and a good deal of the margin of the Lake all round, and in various recesses under Bishopdown, Audry House &c.

4. The inhabitants complain a good deal of the smells emanating from these places more especially the dry land near the Willow bund. This is said to be more especially noticeable after a shower of rain followed by a hot sun.

5. During my stay no rain fell in Ooty, but standing on the Willow bund a fish-like sickening odour was perceptible and on walking over the land which has been laid bare this was still more apparent; on a part of the land west of the bund, where a large drain from the Butcher's Hill empties itself the smell is very pronounced; and also in several parts of the eastern side where drains from the bazaar run down.

6. I am decidedly of opinion that

that the present state of things is dangerous to the community in a sanitary point of view, and likely to become more so when rain shall have fallen followed by a hot sun.

7. The people, deprived of ready access to water for domestic purposes complain bitterly, the more so that a diminished supply is now allowed from the Marliamund reservoir owing to its being far from full; the drains also, not being flushed on account of this short water supply, are in the bazaar more offensive than usual.

8. My opinion is it would be better to stop at once the running off of the water, and that some other plan should be adopted to reclaim the upper or east end of the Lake.

I have the honor to be, Sir
Your most Obedient servant.
M. C. Furnell
M.D. FRCS.
Sanitary Commissioner for Madras.

931/110.

P W C No 251

Public (Sndrs) Dept.

From

Deputy Surgeon General
M. C. Furnell M.D. FRCS
Sanitary Commissioner for Madras

To,

The Chief Secretary to
Government
Public Department
Fort Saint George

[illegible]

Dated 16th }
Despd " } March 1883.
Recd 17 }

CURRENT No. 617

No. 361

Enclos. 1

Subject.
Submitting remarks
on the Ootacamund Lake

CHIEF SECRETARIAT
17 MAR 83
DEPARTMENT OF MADRAS

A No 931 W of 22.3.83

931/11

H.E. G.O. 17/3/83 No 580 Public

Letter from Depy Surgn Genl M C Furnell M D Sanitary Commr No 361 dated 16/3/83 to the address of the Chief Secy to Govt

In the present state of the question connected with the lowering of the level of the water in the Lake at Ootacamund it is not in the opinion of Government necessary at present to do more than direct (1) the cessation of any further lowering of the level (2) the early completion of the regulating sluices in front of the waste weir (3) the immediate lowering of all the exposed portions of the lake bed with either grass or Koralee seeds (4) the removal desiccation & burning of all rank vegetation & aquatic plants exposed in the lowering process and (5) the effective flushing & scavenging of the Bazar drains

The needful orders under heads (1) (2) (3) and (4) above will at once be issued by the Chief Engineer and under (5) by the President Municipal ~~Sanitary~~ Commission

From all the reports which have reached the Government it is clear that the scavenging of the Bazar drains has been greatly neglected of late, and that this is in some measure due to a misapprehension as to the level at which the water in the Marlimund Reservoir should be maintained which has led to the drains being insufficiently flushed

93/12

Whatever the cause the condition of the Bazar drains is and has been most unsatisfactory and H.E. the G. in C. must look to a sufficient and early remedy being carried out by ~~Dr. Vanny with the cooperation of~~ the President of the Municipal Committee in consultation with Dr. Vanny

21/3/83

To Supdt. Engr. 4th Circle
" Prest. Mun. Commn. Ootac
" Dep. Sanitary Commissioner
" Public Depts.

931

No. 931 W

B Works
3

Public Works Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 22nd March/83

931/13

Read the following

Proceedings, Public Department, H.E. No. 580 d/ 17th March/83. quoted

Letter from Dy Surgeon General, M. C. Furnell, M.D. Sanitary Commissioner to the Chief Secy to Govt } " " 361 d/ 16th printed

In the present state of the question connected with the lowering of the level of the water in the Lake at Ootacamund, it is not, in the opinion of Government, necessary at present to do more than direct

(1) the cessation of any

further lowering of the level

(2) the early completion of the regulating sluices in front of the waste weir

(3) the immediate sowing of all the Exposed portions of the lake bed with either grass or Koralee seed

(4) the removal, desiccation and burning of all rank vegetation and aquatic plants Exposed in the lowering process, and

(5) the effective flushing and scavenging of the Bazaar drains

2. The needful orders under heads (1) (2) (3) and (4) above will at once be issued by the Chief Engineer and under (5) by the President Municipal Commission.

3. From all the reports which have reached the Government it is clear that the scavenging of the Bazaar drains has been greatly neglected of late, and that this is in some measure due to a misapprehension as to the level at which the water

in the Marli-mund Reservoir should be maintained which has led to the drains being insufficiently flushed.

4 Whatever the cause, the condition of the Bazaar drains is and has been most unsatisfactory and His Excellency the Governor in Council must look to a sufficient and early remedy being carried out by the President of the Municipal Commission in consultation with

Dr. Nancy

S 21/3

931/15

To,

The S.E. Fourth Circle
" President Municipal Com.
Ootacamund
" Sanitary Commissioner
" Public Dept
" Financial Dept.

8 S.E. Desp'd 12/3

3 SC

To,
The Chief Secy to Govt.
for countersignature

F.D. desp'd 29/3

x desp'd 9/4

7c.
296c. 8-2-84.

931/16

21 MR83

10-3-94

2433
25/3

Govt. of (1883) Madras.

PUBLIC WORKS.

Dated [illegible] 21/3

Recd. [illegible] Entd.

G.O. 22-3 1883, No. 931W

Nos. ~~173 174~~
171-172

Ootacamund Lake

Ordering the cessation of any further lowering of the level of the [illegible] &c

9.0/5

Entered in the Receipt Bk