M.R.O. 1—77,006—8-6-37.

(1) Number of pages 32.

(2) Date of repair 8-6-[illegible]

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Financial DEPARTMENT.

G.O. No. 934	Press / Mis.
203-205.	
Dated 30-5-	1874.

15/16

Not to be folded or roughly handled

Proceedings of the Madras Government, Financial Department,
30th May 1874.

Read the following papers :—

No. 303. From J. G. COLEMAN, Esq., Officiating President of the Municipal Commission, Madras, to the Honourable D. F. CARMICHAEL, Acting Chief Secretary to Government, Fort St. George, dated Madras, 19th May 1874, No. 315-572.

I have the honour to acknowledge receipt of G.O., No. 697, of the 25th April 1874, calling on me to report " what is the precise position of the drainage project," and, in reply, to state that Mr. Standish Lee, the Executive Engineer of the Municipality, has been for some time collecting information for preparing a scheme, but, owing to his time being much taken up with the water works and other general duties, he has had no time to mature his plans.

2. Mr. Lee's intimate acquaintance with the physical features of Madras will, I have no doubt, enable him to prepare a satisfactory project within a very short period if he is told off to this special duty with an efficient staff to assist him in taking levels and making plans. I have called a meeting of the Drainage Committee for the 20th instant, with the view of obtaining their opinion as to what course should be taken to ensure the rapid completion of the scheme, and will bring the subject again before the Commissioners at the general meeting to be held about the end of next month.

3. You will observe by the Proceedings at the last meeting that, although the drainage was alluded to by me, no discussion ensued.

No. 304. From J. G. COLEMAN, Esq., Officiating President of the Municipal Commission, Madras, to the Honourable D. F. CARMICHAEL, Acting Chief Secretary to Government, Fort St. George, dated Madras, 23rd May 1874, No. 335-615.

In continuation of my letter, No. 315-572, dated 19th instant, I have the honour to inform you that, at the meeting of the Drainage Committee held on the 20th instant, it was resolved that the Executive Engineer to the Municipality, Mr. S. Lee, who has already devoted considerable time and labour to the subject, shall be instructed to prepare a scheme (limited in the first instance to Black Town), and that Rupees 294 per mensem be sanctioned for a temporary establishment of surveyors, draftsmen, &c.

2. Mr. Lee stated that he hoped to be able to submit a scheme within about four months, and, considering the urgency of the question, I have now called a special meeting of the Commissioners for the 3rd proximo, to confirm the above resolutions.

3. The proceedings of this meeting will be forwarded to Government in due course.

No. 305. ORDER THEREON, 30th May 1874, No. 934.

Considering the length of time the question of the drainage project of the town of Madras has been under the consideration of the Municipal Commissioners, the Governor in Council is not satisfied with the information afforded in the foregoing letters.

Proceedings of the Madras Government, Financial Department,
30th May 1874.

2. His Excellency the Governor in Council believes that very elaborate levels were taken by Captain (now Colonel) Tulloch some years back of the town of Madras in connexion with its drainage, and he is of opinion that any scheme which the Executive Engineer of the Madras Municipality may have to propose may be approximately based on those levels.

3. Upon the scheme being approved by the Comissioners and sanctioned by Government, expenditure may be incurred in working out the details.

4. At present all that is known is that Mr. Lee, the Executive Engineer, "has already devoted considerable time and labour" on this drainage project, but with what result there is nothing in the papers which have been submitted to Government to show.

5. His Excellency the Governor in Council is of opinion that the Municipal Commissioners should, before appropriating any money on an establishment for the purpose of taking levels, require the Executive Engineer to submit to them his views on the subject of the drainage project, and the probable expenditure needed to work out the details of such project.

6. The Government await the report of the meeting of the Committee to be held on the 3rd June.

(True Extract.)

D. F. CARMICHAEL,
Acting Chief Secretary.

To the President of the Municipal Commission, Madras.

Exd. J. H. Burns.

Madras
XXIX/5/74

My dear Commissioner

As you are aware
it has been a matter
of the Surgeon to the Mint
to examine
and I find
Assay
of
the Calcutta
Mr. Campbell
with Engineers

Govt. of {1874} Madras.

FINANCIAL.

To
THE PRESIDENT OF THE MUNICIPAL
COMMISSION,
Madras.

Dated May, 30th.

Recd. Encl.

G.O., 30th May 1874, *No.* 934.

MAY.
Nos. 303—305.

Madras Municipality.—The Commissioners informed that Government are not satisfied with the information submitted on the long pending question of the drainage project of the town of Madras, and the action in the matter which the Government desire to be taken intimated to the Commissioners.

I send this
Sweets Relics about
Mr Lees letter for
your perusal, which
you can return - the
Matter will now be taken
up in earnest. With
kind regards
Yours
Chas Watson

From Dr Balfour.

about the Offensive drains across the North Bench Road

At the last Council held in Madras, I was directed to call attention to this matter.

Dr Anderson's Report is instructive - He proposes new drains & to carry all the Sewage into the Sea - Gentleman proposes to utilize the Sewage on his farms & to improve the ditch to prevent it being waterlogged.

We are to hear further shortly.

D.F. 1/6/4.

I understand from the communication that the matter is in a very Short sight

W 1/6/4

C1/6

No 64. 9

To The Depy Surgeon Genl
India Medl Dpt
Fremlney Dr

Sir

In forwarding a report upon the Sewage of this District which falls into the Sea, I have the honor with reference to No 3068 of 30th Ult. to inform you that the delay in submitting the Report was principally owing to my being quite unacquainted with the District & being too ill when I first assumed Charge to make an examination of the System of drainage which I have since done, besides this I have been waiting for information from the Municipal Authorities which not having obtained I have dispensed with rather than delay the Report any longer.

I have the honor to be
Sir
Your Most Obedt Servant
C Anderson
Surgn 4th Dragoons

Madras
16th May 1874.

For Initial

No 3010 - 1874 - 11485 Mly
15-6-74

From The Surgeon
4th District
To The Dep'y Surgeon Gl
Presidency Div

No 64
Dd 16th May 1874
Rec'd 19th May.

Forwards a Report upon the Sewage of the District

Copy transmitted for Executive Office

19/5/74

Madras Municipality.
Executive Engineer's Office.
Madras, 21st May 1874

My dear Sir,

The Two drains on the South beach road will be entirely removed when the Drainage of Madras is carried out, but for the present it is proposed to utilize the sewage in the Tank near the Presidency College on a Sewage Farm

near the Ice house build
grounds, & the drain
to the North of the Cas
house Hotel is to be
straightened & so grad
as to prevent it bein
water-logged. At pres
no sewage finds its
way into the sea b
this ditch, as the
whole is used on

the Ris Aranpet farm.
There is every possibility
of the Drainage of Ranik
being now perfected on.

I remain
Yours faithfully
H. Mc Lee

Edward Balfour Esq.
Surgeon General.

Report upon the Drainage of the 4th District

Principal Outlets

There are three principal outlets for the Sewage of this District, two of them fall into the Sea and the third drains the N. W. corner of the District called Poodoopauktum into the Coonum on the west side of the Mount Road. In this report we are concerned only with the Sewage which falls towards the Sea

Northern Outfall

The Northern outfall is situated about half way between Pycrofts & Ice House Roads on the South beach and drains the greater part of Triplicane and Chepauktum.

Southern Outfall

The Southern outfall is situated between the Ice House and the Capper House Hotel and drains the remaining portion of Triplicane, Royapettah, Teynampett and some other Villages South of the Ice House Road.

System of drainage

The System of drainage in both is much the same Commencing in the Smaller & more remote Streets as Small Channels dug out of the Soil or narrow Open drains made of brick, it gradually expands into brick and Chunnam drains increasing in Size, till they centre in one large Sewer (Covered in the Southern outfall) which eventually leads into an open Channel, which in fine weather is foul & Stagnant and in wet permits the Sewage

to spread over a considerable Area.

The Sewage Farm

The drainage of the Southern portion of the District passes by the Sewage farm where it is supposed to be utilized, but there is evidently more than required, as a large portion of the Sewage is allowed to flow by and stagnate upon the beach.

Material of drains

As before mentioned the small drains are made of brick, a very unsuitable material, as being porous, it becomes saturated with Sewage and permits it to percolate into the Soil. the larger drains are coated with Chunam which however is not able to resist the action of the Sewage matter, and these drains, however much they may be cleaned, will always be foul, and as they run along the principal Streets in front of the Shops where people most do congregate, there is danger of disease being generated from this Source.

Effluvium from the Drains

I enquired of a Shop-Keeper in Triplicane High Road whether there was any Effluvium from the drain in front of his Shop, instead of replying he produced some black metal utensils and said look there! I found them to be Copper discoloured by Sulphuretted Hydrogen, the danger of sleeping in such an atmosphere must be great, how much of the endemic Elphantiasis & of the Epidemic Small pox now prevailing may be due to this cause?

Form of Construction

The form of the drains again is faulty, the existing drains are narrow rectangular channels difficult to clean, & not calculated to promote the flow of the Sewage.

The large Sewers are built of brick in Chunam, the Southern one covered & with man traps at intervals of about 40 yards to enable it to be cleaned, their principal fault is that they are not carried far enough at present they terminate about a 1/4 mile from the sea instead of conveying the Sewage as they should clear of the land

Remedies

The smaller drains up to a width at the top of 18 inches Should be made V shaped, composed of accurately fitting Slabs of some hard Smooth Stone, laid in rubble masonry and united at the edges with hydraulic cement. Such Stones can probably be procured not far from Madras along the line of rail. The large Southern Sewer must remain as it is as the expense of rebuilding it would be too great but if any addition is made I would recommend rough Stone in Chunam in preference to brick. The Northern Channel Should be converted into a Covered Sewer.

Means of Discharging Sewage into the Sea

The great evil of the present System is that the Sewage of the greater portion of this District is brought to the beach, and there allowed to

stagnate till a certain quantity accumulates, or a fall of rain takes place, where a passage is cut through the sand (which can only be done at low water) & the greater part of the filthy mess is allowed to escape into the sea.

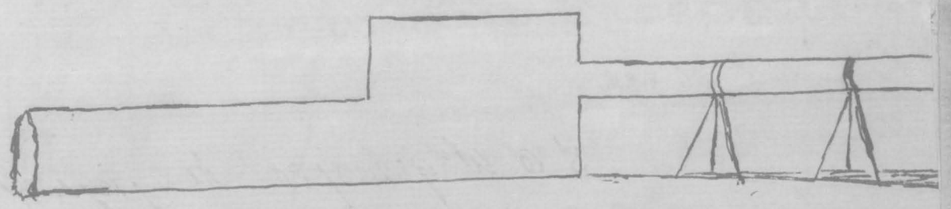
Under existing circumstances it would be idle to flush the drains there being no bounds to the sewage after it leaves the sewer, the increased quantity of fluid would simply spread over a larger area; again simply to carry the present sewers to the edge of the surf would be useless as the mouth of the sewer would soon be choked up with sand or the sewage would be driven backward at high water. A Pumping apparatus is also objectionable involving expense in machinery & labour. the only remedy is a continuous flow of sewage out and beyond the first surf and I will proceed to point out how this can be effected.

Flushing

I take it for granted that there are now the means of flushing the sewers daily; that sufficient water is available for this purpose and that the head of water is sufficient to raise the sewage to the height necessary to carry it over the surf; this being the case I propose to carry the sewers down to the beach but not within reach of the surf, there to build a cistern or reservoir of the requisite

Proposal for carrying the sewage clear of the land

height the outlet of which shall be a pipe carried upon screw piles sufficiently far to deposit the sewage in the sea.



In order to maintain the pressure it will be necessary to close the main traps and to make the covered sewers water tight and it would be necessary of course to provide for the overflow of storm water, otherwise the first heavy fall of rain would burst the sewer, but this I imagine is a matter of no difficulty.

I think the plan I have suggested would rid Madras of an intolerable nuisance and that it can be carried out at very little expense

Allen Evans

Surgeon-Major
4th District

Madras.
16th May 1874

S.O. No. 934 dt/ 30th May 1874.

Forwarded to the Executive Engineer for information.

By Order of the Board
Sd/ [illegible]
Secretary.

Ex. 3010. 1874.

Madras Municipality. X 21

EXECUTIVE ENGINEER'S OFFICE.

No. 315/5-72

Madras, 19th May 1874.

From The Officiating President
Madras Municipality.

To The Chief Secretary to Government
Octacamund.

Sir,

I have the honor to acknowledge receipt of G.O. No 697 of the 25th April 1874, calling on me to report "what is "the precise position of the Drainage "Project" and, in reply, to state that Mr. Standish Lee, the Executive Engineer of the Municipality has been, for some time collecting information for preparing a Scheme, but owing to his time being much taken up with the Water-Works and other general duties, he has had no time to mature his plans.

Mr. Lee's intimate acquaintance with the physical features of Madras will, I have no doubt, enable him to prepare a satisfactory project within a very short period if he is told off to this

to this special duty with an efficient staff to assist him in taking levels and making plans.- I have called a meeting of the Drainage Committee for the 20th Instant with the view of obtaining their opinion as to what course should be taken to ensure the rapid completion of the scheme, and will bring the subject again before the Commissioners at the General Meeting to be held about the end of next month.

You will observe by the Proceedings at the last meeting that, although the Drainage was alluded to by me, no discussion ensued -

I have the honor to be,

Sir,

Your most obedt. Servant

J. Robinson

Chn. President

No. 335/615

Madras Municipality.
EXECUTIVE ENGINEER'S OFFICE.
Madras, 23rd May 1874.

From The Officiating President
Madras Municipality,

To The Acting Chief Secretary to Government
Ootacamund.

Sir, In continuation of my letter No 315/572 dated 19th Instant, I have the honor to inform you that, at the meeting of the Drainage Committee held on the 20th Instant, it was resolved that the Executive Engineer to the Municipality, Mr. S. Lee, who has already devoted considerable time & labour to the subject shall be instructed to prepare a scheme (limited in the first instance to Black Town) and that proposals for two hundred & sixty four per mensem be sanctioned for a temporary establishment of surveyors, draftsmen &c.

Mr. Lee stated that he hoped to be able to submit a scheme within about four months and, considering the urgency of the question, I have now called a special meeting of the Com-

No. 203

Madras, 23rd May 1874.

Forwarded to the Executive Engineer, Madras, for favor of report.

By order,
(illegible)
Secretary.

No. 315/572

Forwarded to the Executive Engineer, Madras, for favor of report.

By order,
(illegible)
Secretary.

missioners for the 3rd Proximo, to confirm the above resolutions

The proceedings of this meeting will be forwarded to Government in due course.

I have the honor to be,
Sir,
Your most obgd. Servant
H Solomon
Offg. President

Financial Department

28

PROCEEDINGS of the MADRAS GOVERNMENT.

Read the following letters from

the Offg President, Municipal Commissioners, Madras. dy 19th & 22d May 1874 Nos

315/572 & 335/615.

305 Order thereon, 7 Octacamund 30 May 1874. No 934

Considering the length of time the question of the Drainage project of the Town of Madras has been under the consideration of the Municipal Commissioners, the Governor in Council is not satisfied with the information afforded in the foregoing letters.

2. His Excellency the Governor in Council believes that very elaborate levels were

Fin 1874 Depart
Proc 29 May
Municipal Dept

From
The Offg President
Mun. Commr Madras

To
The Actg Chief Secretary
to Government

Dated 22d May 1874
Rec'd 25
Answd

No 1110

No 335/615
(Enclosures none)

States in continuation of letter No 315/572 of the 19th Inst. that a Meeting of the Drainage Committee was held on the 20th Inst and sanction was accorded to organize a temporary Establishment for the preparation of the Scheme.

No 304

were taken by Captain (now Colonel) Tulloch some years back of the Town of Madras in connection with its drainage, and that he is of opinion that any scheme which the Executive Engineer of the Madras Municipality may have to propose may be approximately based on those levels.

3. Upon the scheme being approved by the Commissioners and sanctioned by Government, expenditure may be incurred in working out the details.

4. At present all that is known is that Mr. Lee, the Executive Engineer, has already devoted con-

-siderable

considerable time and labor" on this drainage project, but with what result there is nothing in the papers which have been submitted to Government to show.

5. His Excellency the Governor in Council is of opinion that the Municipal Commissioners should, before appropriating any money on an establishment for the purpose of taking levels, require the Executive Engineer to submit to them his views on the subject of the drainage project, and the probable expenditure needed to work out the details of such project.

xx

xx

6. He would await the report of the meeting of the Committee to be held on the 3rd June.

To the President, Municipal Commissioners, Madras.

Despatched 31/5/74.

Sd/- [illegible]

Sec. to Govt.

28/5/74

Govt. of {1874} Madras.

Financial

To
The Presidt. Mund. Commrs.
Madras

Dated May 30 } 1874, No.
Recd. } 434.

Nos. 303. 305.

Madras Munry. The Commrs. informed that Govt. are not satisfied with the information submitted on the long pending question of the Drainage project of the Town of Madras & the action in the matter wh. the Govt. desire to be taken intimated to the Commrs.