

Public (189) Department.

ORDINARY MS.

G.O., No. 1111

Dated 31-8-98.

INDEXED.

[Despatch Abstract.]

Comm^d to The P.W. D with refer to para^{ls}
of G.O. no 1062 W dt 29-4-98, letter from the S. G.
submitting his remarks on the alleged
injurious effects of the Gumption Canal
on people & property in the vicinity of
Mylapore.

T
21/9/98

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

Government {1898} of Madras.
PUBLIC.

MISCELLANEOUS.

Recd.

} 1898.

Enclosures

Regd.

Spare copies

G.O., No. 1111, 31st August 1898.

AUGUST.

Communicating to the Public Works Department, with reference to paragraph 4 of G.O., No. 1063 W., dated 27th April 18'8, letter from the Surgeon-General submitting his remarks on the alleged injurious effects of the junction canal on people and property in the vicinity of Mylapore.

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

READ—the following papers:—

G.O., No. 1063 W., dated 27th April 1898.

ABSTRACT.—Directing that enquiries be made into the grievances set forth in a memorial from certain inhabitants of Mylapore as regards the alleged injurious effects of the junction canal on people and property in the vicinity.

Reference No. 1124, Public.

Communicated to the Surgeon-General for report with reference to paragraph 4 of the Government Order.

14th May 1898.

(Signed) A. R. KNAPP,
Under Secretary.

From Surgeon-Major-General C. SIBTHORPE, C.B., F.R.C.P.I., Surgeon-General with the Government of Madras, to the Chief Secretary to Government, dated Camp, Guntakal, 21st August 1898, No. Tour-2—44.

I have the honour to state that, on receipt of memorandum No. 1124, Public, dated 14th May 1898, I called upon the Surgeon, 4th District, in whose jurisdiction Mylapore lies, to investigate the matter and submit a report. It was also suggested to him that he might with benefit consult Surgeon-Lieutenant-Colonel J. Maitland, who has made filarial diseases a special study.

2. Surgeon-Lieutenant Colonel Cook, in his report (copy attached), after dealing with the question of the prevalence of elephantiasis in Mylapore, states that it is hard to determine whether the canal has had any influence on the increase of the disease, although, according to the evidence of the respectable and educated residents of the place, such appears to be the case.

3. Before sending this report to Government I sent it to Dr. Maitland for favour of his views on the main question and attach a copy of his reply for the information of Government. He states that "if the people drink the water of the canal it is possible they might, as a result, get elephantiasis, but in no other way could that canal produce elephantiasis. Water may percolate from the canal into the wells, but it is impossible for the parasite which produces the disease to pass in this manner; it is too big to do so." He further points out that "all the factors necessary for the propagation of elephantiasis and other forms of filarial diseases are present in Mylapore, without taking the canal into account, viz., (1) infected persons, (2) mosquitoes, and (3) wells adjacent to the houses. As long as people continue to drink the water of these wells without effective boiling, so long will the disease continue to flourish in Mylapore, whether there is a junction canal or not."

4. I am inclined to agree with Dr. Maitland and do not think that the canal has had any evil influence in this respect.

ENCLOSURES.

I.

From Lieutenant-Colonel H. D. COOK, M.B., I.M.S., Surgeon, 3rd District, to the Secretary to the Surgeon-General with the Government of Madras (through the Surgeon, 4th District), dated Madras, 25th July 1898, No. 63.

With reference to your Reference on C. No. 604/1, dated the 3rd June 1898, I have the honour, in the first place, to state that, on getting the G.O., No. 1063 of 27th April 1898, forwarded with the above to report on, I was then Acting Surgeon, 4th District, and as I already had begun to make enquiries on the subject, and as my successor was quite new to Madras, we both thought it advisable that I should retain the papers and make the report which I now am in a position to do.

I have traversed the whole of the junction canal from the bridge at the end of Pycroft's road to the village of Mylapore, and there is not the slightest doubt that the water of the canal is filthy and contaminated by sewage; I saw three overflows of sewage between the above bridge and Mylapore; the banks are used as latrines by the residents of small villages near the canal. The water must necessarily be brackish by being connected with the Cooum and the Adyar rivers, the former, in addition, being by no means a clean river.

As to the increase of elephantiasis in Mylapore during the past twenty years, I am convinced is established, and I base this assertion for the following reasons:—

Surgeon-Lieutenant-Colonel J. Maitland rightly says in his letter (forwarded with the report) "that it is quite possible to ascertain by enquiries the extent to which the disease now prevails in comparison with other parts of Madras."

This I have done by repeated inspections of Mylapore and by repeated interviews with the leading respectable residents, official and non-official. From my inspections I have noted the great amount of elephantiasis that exists among young people at ages ranging from about 9 to 21: at one inspection there were collected for me, on a very short notice, about 100 people affected with the disease, and collected by a few of the respectable residents, official and non-official, and a great number of them—in fact, I can safely say, the majority of them—were young people. I have been Surgeon of the 1st District of Madras for eight years, and I most certainly consider that there is more elephantiasis in Mylapore than, for instance, Black Town, and most certainly more among young people; this of itself points to the disease being on the increase for the past twenty years.

It may be urged that, on my inspection, those whom I saw were obtained not only from Mylapore but from other parts of Madras. The residents are quite willing for any officer or committee to make a house-to-house visitation.

I have made several inspections of the town by myself and have noted the prevalence of elephantiasis as I passed through the streets.

Surgeon-Lieutenant-Colonel Maitland remarks: "that very few of the cases of the disease which present themselves for treatment in the Madras hospitals come from Mylapore."

I presume he means people suffering from elephantiasis; none I think resort to any hospitals for elephantiasis of the leg or legs, but only by those affected with elephantiasis of the scrotum, which can be removed by the knife. It must also be borne in mind that Mylapore is very far from the General Hospital, and it would be interesting to know how many patients suffering from other diseases resort to the General Hospital from Mylapore.

I have been informed by a qualified medical practitioner and a gazetted public servant that, in his opinion, there are more cases of elephantiasis in Mylapore than in "other parts of Madras."

Whether the canal has had any influence on the increase of the disease (increase being accepted) is a very hard question to determine.

The wells near the canal are contaminated; they must be, as the canal skirts Mylapore, and the town is situated between the canal and the sea, and most of the wells from which the residents take water are in the same position, percolation must therefore take place.

Surgeon-Lieutenant-Colonel Maitland states that "it is by well water that elephantiasis and other form of filarial diseases are propagated, and by the residents having pipe water to resort to will minimise the increase of elephantiasis."

But, apart from the fact that many of the orthodox Brahmins will only use well water for cooking purposes, pipe water for the residents is not always to be had; it does not extend, I think, to all the streets and houses of Mylapore, especially in the hot months of the year, and when it does extend the water fails. I am told, between the hours of 6 and 10 A.M. and 3 and 6 P.M., just the hours when it is most wanted.

If, therefore, the residents of Mylapore are given ample pipe water, well water need not be drunk or used for cooking purposes, although there are many who won't, out of caste prejudices, use any other water than well water.

No. 1111, PUBLIC, 31st AUGUST 1898.

That the canal has had an evil influence on the disease, the evidence of the most respectable residents asserts and that it has been much on the increase since the canal was constructed; elephantiasis in Mylapore was hardly known before.

This fact can be proved by the evidence of the respectable and educated residents of Mylapore, to whom I have talked on several occasions.

I have only finally to add that, as drinking well water in general is a means for the propagation of elephantiasis, surely the contamination of it with sewage and salt water will not lessen the evil.

As long as there are wells in Mylapore many of the residents will resort to them for cooking purposes, contaminated or not; but there does not seem to be a sufficient supply of pipe water for those who wish to use it.

II.

The first portion of Dr. Cook's report deals with the prevalence of elephantiasis in Mylapore; but this, although an interesting subject, does not affect the main question at issue, viz., whether or not the Mylapore junction canal is the cause of the supposed increase of elephantiasis in Mylapore. It seems certain from the investigations of Dr. Cook that there are at present a good many cases of elephantiasis in Mylapore, and it is therefore certain that a considerable number of the inhabitants of that district still resort to the use of unboiled well water for drinking purposes. It is very regrettable that a disease which is so easily prevented should be so rife in Mylapore as well as other parts of this city.

2. In regard to the second point in Dr. Cook's report, viz., the connection, if any, between the junction canal and the prevalence of elephantiasis, that officer says that "this is a very hard question to determine." In this opinion I totally disagree, as I consider the matter an extremely simple one. If the people drink the water of the canal, it is possible they might, as a result, get elephantiasis, but in no other way could that canal produce elephantiasis. Water may percolate from the canal into the wells, but it is impossible for the parasite which produces the disease to pass in this manner; it is too big to do so.

In conclusion, I would point out that all the factors necessary for the propagation of elephantiasis and other forms of filarial diseases are present in Mylapore, without taking the canal into account, viz., (1) infected persons, (2) mosquitoes, and (3) wells adjacent to the houses. As long as people continue to drink the water of these wells without effective boiling, so long will the disease continue to flourish in Mylapore, whether there is a junction canal or not.

MADRAS,
9th August 1898.(Signed) J. MAITLAND, M.D., Surgn.-Lieut.-Col.,
Senior Surgeon.

ORDER—No. 1111, Public, dated 31st August 1898.

Communicated to the Public Works Department, with reference to paragraph 4 of G.O., No. 1063 W., dated 27th April 1898.

(True Extract.)

G. STOKES,
Chief Secretary.

To the Public Works Department.

End. W. D'Mom.

BUILDINGS AND ROADS.
CIVIL WORKS.Government (1898) of Madras.
PUBLIC WORKS.CHIEF SECRETARY
9. MAY. 1898
GOVERNMENT OF MADRAS

Recd.

Regd.

1898.

Enclosures

Spare copies

G.O., No. 1063 W., 27th April 1898.

Reference Secret No. 112A 7/19. 5. 98.Communicated to the
APRIL. S.S. for a full and early
report with reference
to para 4 of the G.O.

Junction Canal

Directing that enquiries be made into the grievances set forth in a memorial from certain inhabitants of Mylapore as regards the alleged injurious effects of the — on people and property in the vicinity.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

From the Secretary to the Junction Canal Memorial Committee, dated 12th March 1898.

ORDER—No. 1063 W., dated 27th April 1898.

The letter read above submits a memorial from certain inhabitants of Mylapore in Madras on the subject of the Junction canal, the construction of which has, they allege, injuriously affected them. They pray that inquiry into the matter may be made.

2. The memorialists complain that they have been injuriously affected in the following ways:—

(1) The canal holds salt water intermixed with sewage in a state of stagnation and emits noxious effluvia injurious to health.

(2) In a certain area on either side of the canal, it has lowered the water level in their fresh water wells, so that they run dry during the dry season, and during the rainy season draw foul water from the canal by percolation.

(3) In a certain area on either side of the canal there has been a marked deterioration in the yield of plantations. The loss on this account in the shape of rent is estimated at Rs. 5,979 per annum.

(4) The supply of water for irrigation from Mylapore tank (commonly called the long tank) has suffered from the leaky condition of the sluices which carry it across the canal.

(5) The large temple tank in Mylapore has been drained so low that the water is insufficient for the annual festival, or for bathing purposes.

3. The Chief Engineer for Irrigation will investigate grievances (1), (2), (4) and (5) and as regards (2) will cause levels to be carefully taken to the wells and tanks adjacent to the canal so as to test the statements therein made.

4. With regard to item (3) a general inquiry will be made in the Revenue Department as to the alleged deterioration of the agricultural value of the lands referred to, and the statement made in paragraph 8 of the memorial as to the increase of elephantiasis will be inquired into by the Surgeon-General under orders in the Public Department. It should be ascertained whether there has been any increase of the disease in Mylapore during the past twenty years, and, if so, whether the canal has had any evil influence in this respect.

(True Extract.)

[Signature]
Under Secretary to Government.

To the Chief Engineer for Irrigation,
„ Revenue Department,
„ Public Department, ✓ } with a copy of the memorial.
„ Secretary, Memorial Committee.

Exd. Shaik Karim.

FROM
THE INHABITANTS OF MYLAPORE,

8TH DIVISION, MADRAS CITY.

MEMORIAL ABOUT THE JUNCTION CANAL.

1898

To

HIS EXCELLENCY

SIR A. E. HAVELOCK, G. C. M. G., G. C. I. E.,

Governor in Council,

Fort St. George.

*The humble Memorial of the Inhabitants
of Mylapore, a suburb of Madras.*

We most respectfully beg to approach your Excellency in Council with our humble prayer for the removal of the grievance which the excavation, through the heart of Mylapore, of what is known as the Junction Canal has caused to us.

2. As was distinctly predicted by those competent to form a correct opinion of its probable effects, this work has seriously affected our water supply for both irrigation and domestic purposes, and our health and our property have suffered in consequence.

3. This canal which connects the river Adyar at the south end of the town with the Coom in the Government House compound, draws no fresh water, but holds only salt water intermixed with sewage in a state of stagnation and decomposition emitting noxious effluvia. From its low level the canal draws off the fresh water springs from a considerable number of our wells, and the latter consequently run dry during the dry season; while, during the rainy season, when the level of water in the canal rises, they draw its foul water through underground percolation.

4. But it is not merely water supply but also the subsoil that is thus affected. There has been a marked deterioration in the yield of our plantations, and in many cases what were fine cocoa-nut, betel and plantain gardens now scarcely give any crop.

5. The contamination of water and soil as above described is of course restricted to a certain area on either side of the canal; but it is within this limited area that a considerable portion of the valuable house and landed property in this suburb is situated.

6. Furthermore, the irrigation from the Mylapore tank on which the cultivation of paddy lands in this suburb depends, is likewise affected by the sluices which have been provided for its passage across the canal being often out of order and leaky.

7. We submit herewith a statement (Appendix A) shewing the income derived from our garden and paddy lands in the shape of rent before and subsequent to the excavation of this Junction Canal. From this it will be seen that, while the total rental of these properties before amounted to Rs. 6,923, it is now only Rs. 944. The difference, viz., Rs. 5,979, constitutes our loss in so far only as it is capable of being estimated in money; but there is loss not capable of being so estimated; for, no account is kept of the produce used for domestic consumption of kitchen and flower gardens and fruit trees attached to houses, which are not leased out.

8. No doubt, so far as domestic requirements are concerned, the supply of Red Hills water recently introduced may be said to supersede the need for wells; but very few householders have service pipes sufficiently near their dwellings to command the use of Red Hills water for all domestic purposes; the bulk of the population is necessarily to a great extent dependent on its wells. It is moreover to be observed, that water collected in a superficial reservoir and sent down over a considerable distance partly through an open channel and partly through underground pipes can hardly be regarded so pure and wholesome as spring water drawn afresh from wells. Its wells were the boast of Mylapore; many of the well-to-do residents of the other divisions of the city used to obtain their drinking water

from them; and it is a well known fact that the family of the Nabob of the Carnatic was doing so; indeed Mylapore in days gone by enjoyed the reputation of being the healthiest of the native suburbs of Madras. All this has become changed since the excavation of this canal. In this suburb, sickness due to impure air and impure water was almost unknown; one scarcely ever met with a case of elephantiasis; now this disease has become a conspicuous feature of this locality.

9. Another inconvenience to which the population of Mylapore is subjected by this canal, is that it drains the large temple tank situated in the center of the suburb, which, with the temple on one side and the regular lines of houses on the other three sides, presents a picturesque view. The result is that the depth of water that remains in the tank is insufficient for the celebration of the annual floating festival, as also for the people to have their usual daily baths.

10. The ill-effects which have ensued by the excavation of this work were not unforeseen; they were fully represented by us and by the City corporation before it was put in hand. We beg to crave the attention of your Excellency in Council to the report of the meeting held by the Municipal Commissioners (Appendix B), in which was recorded their resolution to submit to Government their "decided opinion" that the proposed Junction Canal was "a most hazardous and inexpedient project." As will be seen from this report, one of the Commissioners, the Rev. Dr. Strachan, remarked that, if this work were carried out, "the fresh water wells in Mylapore would become quite brackish" and that the "Canal would be a pestilential incubus upon the health of the residents of Mylapore." Another Commissioner, Mr. Krishnama Chariar, observed that it would become "a second Cooum." The President, Mr. L. Burrows, recorded his opinion, that the objections urged by the inhabitants of Mylapore in an influential petition to Government were well grounded, and that "the work would be a deleterious one." After what we have said, it is unnecessary to add that our experience of the twenty years which have elapsed since the work was executed bears out these predictions.

11. Our protest elicited from Government in their Order, dated 18th December 1876, No. 3461, an assurance that "every precaution will be taken for providing that sewage shall not enter into the canal, but shall be diverted into the natural drainages which now receive it, and which will be carried under the canal." The Order also assured us, that our "irrigation supply from the Mylapore tank, where intercepted by it, will also be provided for," and that "preventive measures will be taken against the water supply or level of our wells being affected by the canal." We beg with the greatest respect to state, that these assurances have, if at all, been but very imperfectly given effect to. The canal through its connection with the Cooum does receive an admixture of the sewage of Chintadripet and Triplicane, which drains into the latter. It has also become the receptacle to a certain extent of the drains of Mylapore itself. The irrigation supply to our agricultural lands intercepted by the canal is, as we have ventured to state, but inadequately ensured. As for the promised preventive measures against the water supply or level of our wells being affected, we are totally unaware that any such have been taken.

12. If any substantial benefit to the country at large shall have accrued from this work, we would accept the resulting injury to our health and our property as a necessary and unavoidable evil; but we feel sure that careful enquiries will convince your Excellency in Council, that such is far from being the case. We here most respectfully take leave to crave attention to the history of this work given in an issue of the Madras Mail at the time the project was decided upon. (Appendix C).

13. The Government had this Junction Canal project before them for twenty-two years before it was eventually carried out as a Famine Relief work in 1876-77, and during this period it was discussed in all its varied phases as to its feasibility from the Engineering point of view; but it nowhere appears that it was shown from actual statistics that it would prove to be to any considerable extent a work of practical utility to the public.

14. The project was no doubt urged forward on general grounds in 1860. It appeared to the then Governor, Sir Charles Trevelyan, that it was "calculated to mitigate the great and increasing dearth at the Presidency Capital of firewood and all the other necessities of life," and to be on that account a work of a "beneficent and productive character." But it does not seem to have been considered what quantities of firewood and other necessities of life entered the Presidency Capital by the Southern Canal at its southern limit and to what extent they would be cheapened by their carriage by water, instead of, by road, from that point to where this Junction Canal meets the Cooum—a distance of 3 miles and 1,099 yards. It is to be observed, that the northern Canal terminates in the heart of the town, and that the object, therefore, could not have been to facilitate the traffic which entered the town from the north. It was not stated that the Junction Canal would facilitate traffic between the districts on the south and north of the Presidency town. The fact was, there was no such traffic, and the object was only to cheapen supplies of provisions to the Presidency town. At this day, traffic crossing the Presidency town from the north or south is literally *nil*.

15. When the project was submitted for the sanction of the Home Government, the Secretary of State, Sir Charles Wood, observed:—"I am not altogether convinced of the reality of the advantages expected to accrue from connecting the two canals which enter Madras from the north and south. For the special purpose for which the canals were designed, *viz.*, that of bringing supplies to Madras, it is sufficient that they should terminate at convenient points within or near the town. A Junction Canal uniting the terminal points might be very serviceable to whatever through traffic is carried on between the districts lying immediately to the north and south of Madras; but there is nothing to show that any such traffic exists of sufficient importance to warrant an expenditure of three lakhs of Rupees for its accommodation. As, however, your Government are unanimous in approving of the project, and as the Government of India also regard it as one which ought to be executed as soon as funds can be made available for it, I shall offer no obstacle to its adoption."

16. Although the Secretary of State thus gave a reluctant consent, it was not found practicable to put the work into execution. Doubts and difficulties arose in regard to its alignment, and in the course of the discussion which ensued, it was discovered that "unless an ample supply of fresh water could be obtained (this has presumably since been found to be impracticable), the Canal would be a nuisance."

17. In 1866, Lord Napier, the then Governor observed:—"We know what sort of a canal it should be; we know how it should run; and we know that it will cost five lakhs (it has, we understand, actually cost over 7 lakhs): but we still require to know whether it ought to be undertaken and how it is to be paid for." Eventually, all further action on the project was indefinitely suspended, and the Government, in their Order dated 27th February 1871, recorded their final decision that "the project having now been fairly examined and submitted to the judgment of those most directly interested and their opinion being adverse, it must be abandoned for the present."

18. The project was a few years after resuscitated during the days of the Duke of Buckingham, when the famine of 1876-77 rendered it necessary to look about for a large undertaking that would provide employment to the people that flocked in considerable numbers into the city in quest of food, and the strong-willed Duke with his characteristic promptitude came to the decision, that it should at once be carried out. It was accordingly carried out as a Famine Relief work in the face of the strong protest of those whose interests were materially affected and the adverse opinion of the Sanitary and Engineering Officers of Government. The project, it is clear, was not decided upon on its own merits, and it is extremely doubtful whether it would have at all been thought of but for the famine.

19. Upon the order of the Government on our protest, referred to in para 11 *supra*, we at the beginning of 1877 submitted an appeal to the then Secretary of State, The Right Honorable Marquis of Salisbury, and we presume that some communication passed between His Lordship and the Madras Government thereon; but we have no knowledge of its purport.

20. We have shown that the utmost that was expected of this Junction Canal was the cheapening of the traffic that entered the Presidency town from the south to the extent to which it was likely to be cheapened by the substitution of water carriage for the town road over a distance of 3 miles and 1,099 yards. But if there ever was any particular necessity to facilitate the traffic to this limited extent, it has to a great extent been removed by the subsequent completion of the South Indian Railway.

21. We have no means of ascertaining exactly the amount of traffic that passes through the Junction Canal; but we understand that the tonnage of the traffic on the whole line south of Madras at present is about $\frac{1}{10}$ of the total tonnage of traffic on the entire line of the canal including the southern and northern sections, and that it consists chiefly of firewood, cocoanuts and cocoanut and palmyra leaves. It is to be observed that this comparatively very small amount of traffic on the southern section of the canal cannot be taken to have all developed from its junction with the northern section; the traffic already existed and any increase that may have taken place in it from the excavation of the Junction Canal can be no adequate set-off against the loss it has caused to us. It is a fact that firewood and other miscellaneous provisions continue to come from outlying villages on the south in bullock carts and on heads of coolies by road.

22. Neither do we know the amount of revenue the Government derive in the shape of tolls, wharfage and boat-license fees from the southern canal, and the proportion thereof due to the Junction Canal; but we believe we are not far wrong in assuming that the latter, after deducting the proportionate cost of maintenance, including establishment and repairs, is insignificant; at any rate, it must fall considerably short of our loss of income from gardens and other lands, from the Junction Canal, so far as it is capable of being determined by money-value, *vide* para 7 *supra*.

23. We understand that one object the Government had particularly in view when the project of the southern section of the canal was undertaken, was the provision of water carriage for salt from the monopoly factory at Covelong about 15 miles south from the Adyar to the Government Depot at Madras. But the manufacture of salt on Government account at Covelong has ceased now for many years, and such private manufacture on excise licenses as was being carried on latterly has likewise ceased for the last two or three years, so that what small quantities of this commodity still continue to come to Madras by the canal from the south are from the old stocks remaining unsold at that factory. The fact apparently is that the wants of the Presidency town are abundantly met by increased manufacture in northern factories. As respects the three salt manufacturing stations on the coast line further south within a distance of 66 miles from Madras, *viz.*, Cheyur, Chunampet and Merkanam, the salt made at the first two goes southward and westward by the South Indian Railway and that made at the last station, situated furthest, is supplied to the French Settlement at Pondicherry. Covelong is thus the only factory on the south from which any salt can possibly come to Madras; but under the present altered conditions of trade with expanded railway system, any salt that is likely to come to Madras from that factory, in case private manufacture at it is resumed, must be very small.

24. We say nothing of the enormous amount of money which the construction of this small slip of waterway has caused the state; but it is a matter now for the serious consideration of Government whether the advantages derived from it are at all commensurate with the cost which its maintenance entails.

25. In conclusion, our humble prayer is, that your Excellency in Council will be graciously pleased to direct enquiries to be made as to the extent to which the Junction Canal is actually used and the extent to which it has injuriously affected us, and if satisfied that we have a substantial grievance and that the canal is of no appreciable benefit to the state or to the general public, your Excellency in Council will order it to be closed. This measure need not entail any cost on Government; on the contrary it is certain to bring in a profit as a set-off to a certain extent against the loss of the immense amount that has been expended on the acquisition of land for this work. The canal may be divided into convenient building lots and sold by public auction on the condition that the purchasers are to fill them in at their own expense within a given time. As the canal passes for the most part through portions of the town where building sites are greatly in request, the lots will be readily purchased. The prices obtained for them will be the ultimate value of the lots when reclaimed and formed into house or garden sites, minus the cost involved in filling in and levelling them. The amount which the Government realise by this measure will, considering the rush there is certain to be for the lots, be by no means small.

26. We submit herewith a copy of the resolution (Appendix D) passed at a meeting of our body with the Honorable V. Bhashyam Iyengar in the Chair, in accordance with which this humble memorial is most respectfully submitted for the favorable consideration and orders of Your Excellency in Council.

APPENDIX A.

Statement showing the probable loss of income from gardens and paddy lands in
Mylapore from the Junction Canal.

Serial No.	Name of the property.	Extent of Land.	No. of wells in each property.	No. of Ponds	Amount of rent realised before the cutting of the Junction Canal.			Amount of rent now realised.			Difference or Loss.		
					RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
		Cawnies.											
1	Pandarasanadi Land	1½	1	...	70	0	0	20	0	0	50	0	0
2	Pallakumaniam	9	3	1	400	0	0	100	0	0	300	0	0
3	Sri Kabaliswarar flower garden	2	1	...	60	0	0	...	...	...	60	0	0
4	Parangi Pattadai	3	1	...	100	0	0	...	...	...	100	0	0
5	Desikar Parangi Pattadai	5	2	...	175	0	0	10	0	0	165	0	0
6	Balakrishna Parangi Pattadai	1½	0	...	50	0	0	...	...	...	50	0	0
7	Janika Raman Thotam, Municipality ..	6	2	1	70	0	0	...	...	...	70	0	0
8	Tholukachi Thotam	3	1	...	70	0	0	10	0	0	60	0	0
9	Balakrishna Bangalow and garden	2	2	...	20	0	0	...	...	...	20	0	0
10	Soldar Pattadai	5	2	...	175	0	0	...	...	...	175	0	0
11	Madura Pulam	4	3	...	120	0	0	35	0	0	85	0	0
12	Etti Pattarai	2½	2	...	90	0	0	20	0	0	70	0	0
13	Andi Maniam	5	1	...	140	0	0	...	...	...	140	0	0
14	Patti Pulam	1½	2	...	40	0	0	...	...	...	40	0	0
15	Paranathalai	1	1	...	35	0	0	...	...	...	35	0	0
16	Sri Desikar Maniam	2	1	...	56	0	0	...	...	...	56	0	0
17	Motachi Pattarai	5	2	...	175	0	0	...	...	...	175	0	0
18	Sepan Pattadai	10	4	...	350	0	0	...	...	...	350	0	0
19	Thotakadu Medu, night soil Depot	2½	...	...	...	...	...	...	...	...	...	...	...
20	Balakrishna Mudaliar garden	6	2	...	120	0	0	...	...	...	120	0	0
21	Kodamaniam	1	1	...	35	0	0	...	...	...	35	0	0
22	Tambiappan Pattadai	14	4	...	300	0	0	...	...	...	300	0	0
23	Do.												
24	Do.												
25	Do.												
26	Bangalow Thotam	3	2	...	70	0	0	...	...	...	70	0	0
27	Odai	2	...	...	20	0	0	...	...	...	20	0	0
28	Valliswarar Thotam	5	2	...	100	0	0	60	0	0	40	0	0
29	Thotam, Rangachari	2½	1	...	70	0	0	...	...	...	70	0	0
30	Vasanthi Pattadai	5	2	...	140	0	0	60	0	0	80	0	0
31	Thotam Vethappen	5	1	...	140	0	0	60	0	0	80	0	0
32	Garden, Ramachendra Row	2	1	...	35	0	0	...	...	...	35	0	0
33	Valluvan Pattadai	1½	...	...	35	0	0	...	...	...	35	0	0
34	Garden (Velliswarar)	1	1	...	20	0	0	...	...	...	20	0	0
35	Labbai Thotam	12	4	1	350	0	0	100	0	0	250	0	0
36	Eluppa Thoppu	2½	1	...	100	0	0	...	...	...	100	0	0
37	Kabaliswarar Garden	2½	1	...	35	0	0	...	...	...	35	0	0
38	Do. Bangalow	10	2	2	35	0	0	...	...	...	35	0	0
39	Manam Patrai	9	3	...	250	0	0	100	0	0	150	0	0
40	Kallikattai Land	2	...	...	40	0	0	20	0	0	20	0	0
41	Elupa Thoppu	2½	1	...	80	0	0	...	...	...	80	0	0
42	Valluvan Pattadi	3	2	...	90	0	0	...	...	...	90	0	0
43	Kalli Pattadai	2	1	...	60	0	0	20	0	0	40	0	0
44	Panjanga Maniam	1½	1	...	45	0	0	20	0	0	25	0	0
45	Sachithananda Mudaly garden	2½	1	...	70	0	0	40	0	0	30	0	0
46	Tambiappan Pattadai	¾	...	...	18	0	0	10	0	0	8	0	0
47	Kasavaperumal Land	¼	...	...	10	0	0	4	0	0	6	0	0
48	Sathan Pattadai	20	4	1	420	0	0	...	...	...	420	0	0
49	Thambiappan Land	7	2	...	180	0	0	70	0	0	110	0	0
50	Patti Pulam	2½	2	...	70	0	0	...	...	...	70	0	0
	Carried over...	199½	73	6	5134	0	0	759	0	0	4375	0	0

APPENDIX B.

THE MADRAS MUNICIPALITY.

A GENERAL MEETING of the Municipal Commissioners was held on Wednesday 20th December 1876 at twelve noon. There were present Mr. L. R. Burrows, Acting President, the Rev. Dr. Strachan, Mr. Vencatramiah Garu, Mr. Vanugopaul Charlu, Mr. Soomasoondrum Chettiar, Mr. B. Lavery, Mr. Rungiah Naidu, Colonel W. S. Drever, Mr. Theroovengada Moodelly, Mr. C. Grant, Mr. Krishnamah Charriar and Mr. J. Hamnett.

The sixth subject was an order of Government directing that the Junction Canal between the Adyar and Cooum rivers be commenced as a Famine Relief Work.

The President observed that as this was an important subject he would like to know if the Commissioners had anything to say respecting it.

The Rev. Dr. Strachan remarked that it would be pernicious and useless to carry out this work. The water was not fit for irrigation or domestic use, and if the proposition should be carried out, the fresh water wells in Mylapore would become quite brackish. It was therefore pernicious to open out a work which would do more harm than good. It was also a useless measure to undertake the work. If 10,000 persons were to be engaged on the work, the moment it is commenced some 40,000 thousands would come forward. In this over-crowded city where disease and pestilence were staring us in the face, he did not think it wise or prudent to proceed with the work. It was stated that the object of the work was to bring food into Madras. Dr. Strachan thought that this difficulty was overcome by the establishment of the South Indian Railway Company. The Canal would be a pestilential incubus upon the health of the residents of Mylapore, and it would be neither useful nor ornamental.

Colonel Drever in seconding Dr. Strachan remarked that cholera was rife now, and that between 40 and 50,000 persons were fed daily. It was wrong in principle to bring more down into Madras, and if this work was proceeded with, he thought that things would come to a worse crisis.

Mr. Krishnama Chariar also strongly deprecated the idea of opening out this work. If this work was carried out, he considered that Madras would have a second Cooum, and moreover he did not think that it would be a financial success.

Mr. Hamnett remarked that he did not think that the Commissioners should consider the financial point of the undertaking. Government no doubt, he said, must have obtained the advice of the proper officers on the subject, and they must also have had the opinion of the Sanitary Officer.

Mr. Burrows said that there was no doubt that the Sanitary Officers of Government must have given their views on the subject. The Commissioners would have been placed in a better position if the report of the Sanitary Officer was communicated to them. Viewing it from a non-professional stand-point, he considered that the work would be a deleterious one. An influential petition was forwarded to Government by the inhabitants of Mylapore, and he considered that their objections were well grounded. Mr. Burrows thought that the canal would be a bad thing for the town. It was then proposed by Rev. Dr. Strachan, seconded by Colonel Drever and carried:—

That the Commissioners desire with all deference to the Government to state their decided opinion that the proposal to form a canal between the Adyar and Cooum rivers as a Famine Relief Work, is, in the highly insanitary condition of the city at present, a most hazardous and inexpedient project, and they would earnestly urge its being finally abandoned.

Serial No.	Name of the property.	Extent of Land.	No. of wells in each property.	No. of Ponds.	Amount of rent realised before the cutting of the Junction Canal.			Amount of rent now realised.			Difference or Loss.		
					RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
	Brought Forward...	1994	73	6	5134	0	0	759	0	0	4375	0	0
51	Amman Koil Thalai	24	2		70	0	0	70	0	0			
52	Arumaga Chary Thotam, night soil	44	2		140	0	0	100	0	0	40	0	0
53	Depot	14	1		14	0	0				14	0	0
54	Chunnambu Kalava	24	1		175	0	0	15	0	0	160	0	0
55	Arthajama Thotam	4	1		140	0	0				140	0	0
56	Kemal Thotam	3	1		80	0	0				80	0	0
57	Pilla Kollai	3	1		80	0	0				80	0	0
58	Poniah, Pilla Kolai	24	1		100	0	0				100	0	0
59	Samathi Pattadi	2	1		50	0	0				50	0	0
60	Kaliva Modu	3	1		80	0	0				80	0	0
61	Iya Mudaliar Garden	34	1	1	105	0	0				105	0	0
62	Picha Pillai Pattadai	34	2		100	0	0				35	0	0
63	Luxan Pattadai	1	1		35	0	0				70	0	0
64	Soolai Pulam	2	1		70	0	0				35	0	0
65	Kanjivarthan Pattadai	1	1		35	0	0						
66	Thevadia Maniam	5	2		175	0	0				175	0	0
67	Palla Pattadai, Hon'ble Bhashyam	3	2		105	0	0				105	0	0
68	Do. Venkata Varadia Chettiar	24	1		60	0	0				60	0	0
69	Shaku Mastan garden	1			35	0	0				35	0	0
70	Natu Subraya Mudaliar land	3	1		35	0	0				35	0	0
71	Kottai Koli	24	1		70	0	0				70	0	0
72	Do. (Vengdasubn Chetty)	3		1	35	0	0				35	0	0
73	Rangian Thotam...												
74													
	TOTAL...	259	98	8	6923	0	0	944	0	0	5979	0	0

APPENDIX C.

HISTORY AND VALUE OF THE JUNCTION CANAL,

(As given in the Madras Mail when the cutting of the Junction Canal was decided upon).

We have ascertained that the sudden resolution of the Madras Government to commence, and carry sharply through, a canal of about four miles in length to join the Sadras and Cochrane canals is not regarded with approval by officers of the Department of Public Works. The pressing necessity of finding work for the thousands of people who are friendless, homeless, and starving in the town, is denied by nobody; but the work which has been selected by the Government for their relief, will not, it is apprehended, yield any fair return in any shape to the State. We have repeatedly had occasion to urge that the Government should not be so appalled by the trying circumstances of the moment, as to lose sight of the importance of obtaining some valuable result by their violation, under dire compulsion, of the maxims of politico-economy. In all probability the distress resulting from failure of crops will come to an end in six or seven months at the latest, and it is a matter of the first importance that when the cost of combating famine is totalled, we may, with some degree of complacency, regard the creation by famine expenditure of works likely to contribute to the well-being of the country at large. The recent revelation by the Government of India of the critical state of the Imperial finances, and the warlike outlook in Europe and Central Asia, prove that the present is a singularly unfortunate time for the occurrence of famine; but the very stringency of the finances should warn the Government so to expend money in the relief of distress as to achieve some permanent good for the country which may be accepted as a fair compensation for an unwelcome and untimely but unavoidable outlay.

Regarded not only as a relief work, but also as an undertaking affecting the eventual well-being of the Presidency Town, the Junction Canal project has not much to commend it. For two and twenty years has the proposal to effect the union of the canals been before the Madras Government. The expenditure of time, ink, pens and paper in reporting upon it, has been enormous, but the more it has been looked at, the less has it been liked. To Lieutenant CHAMBERS, R. E., belongs the honor of having prepared the first of many surveys and estimates for it. This officer was Superintendent in 1854 of the Sadras canal, and he proposed to carry the Junction from Sadras to the Adyar, through the compound of the house now occupied by Mr. GUJAPUTHE Row, and thence to Nungumbaukum and the Cooum. His estimate was rupees 2,68,000 exclusive of compensation for damage to property. Captian COLLYER, R. E., followed with a modification of Lieutenant CHAMBERS' proposal, in view to avoiding the destruction of valuable house property in Nungumbaukum, and suggestions were approved by Colonel LAWFORD, R. E., Captian JOHNSON, R. E., and Lieutenant SANKEY, R. E. Three years slipped away; much was written; nothing done. In January 1857, however, Colonel ARTHUR COTTON, R. E., by order of Government, reported upon the several proposals before them, and characteristically condemned them all. He urged that "whatever the cost may be, we ought to carry the canal where it is wanted," and with this truism as his motto, he proposed that the line of canal should pass through Puen's gardens at the Adyar, through the fields and gardens east of Mowbray's road, through the compound of the house lately occupied by Mr. ORR, and now by Colonel HANDS, on to Royapettah, passing the Club Chambers at PATER's gardens, through the BEGUM's grounds, across the Mount Road by SHAW's shop, and thence into the Cooum close to the Mahomedan burial-ground. He advocated a high level canal, 10 feet above mean sea level, provided with locks; and he proposed that water should be pumped into it by a steam engine as required. The estimated cost was rupees 2,93,000 including compensation for damage to property. The Government ordered the Water Supply Committee to report upon Colonel COTTON's Report; but a few days after the order was published, the Mutiny broke out, and the Committee delegated their duty in the matter to Mr. KENNEDY, C. E. That gentleman then prepared plans and estimates in accordance with Colonel COTTON's suggestions, though

he did himself not approve of the Colonel's high level idea, and was in favor of a sea level canal on the same line. Two years more passed; good deal more reporting went on, but no action was taken.

Then Sir CHARLES TREVELYAN appeared on the scene with the proverbial zeal of a new broom. To him the proposed Junction Canal commended itself as a work of a "beneficent and productive character" that was "calculated to mitigate the great and increasing dearness at the Presidency capital of firewood and all the other necessities of life." His Excellency, in a Minute, stated that the work "ought to be undertaken without delay by the direct action of the Government." He pointed out that "upwards of 60 miles of canal on the north, and 40 miles on the south of Madras, have already been made by the Government, and the whole of this long line of navigation will be rendered more useful and remunerative by the construction of this connecting link which will be only 3 miles and 1,099 yards long." "It is not right that the State, that is the public, should lose the benefit of its large previous outlay for want of the small additional expenditure required to connect the existing lines of navigation on the north and south of Madras." Thereupon, the Government ordered Colonel BELL, their Chief Engineer, to prepare the necessary working plans and estimates for the projects referred to by the Governor "to be undertaken at the cost of the State, viz., the Junction Canal between the Cooum and Adyar, and the canal from the Medical College at the south-east end of Black Town to the Light-house." And so urgent was Sir CHARLES TREVELYAN, that Colonel BELL was directed to report without waiting for details, the probable amount which could "be expended on these works within the current official year." His Excellency requested the "general sanction" of the Government of India to an expenditure of a lac in the current year, "pending the submission of detailed estimates." The Supreme Government approved of the proposal, but owing to their want of authority to give sanction, referred it to the Home Government for orders. In January 1860, the detailed plans were submitted by Mr. KENNEDY together with an estimate of rupees 3,59,300. The Government being of opinion that "this work does not yield in importance to any that could be proposed, and that measures ought to be adopted to secure its early commencement," approved of the plans, and entered the estimate in their Budget of 1860-61. But Sir CHARLES WOOD, Secretary of State, did not share Sir CHARLES TREVELYAN's enthusiasm about the work, for in February 1860 the former wrote:—

"I am not altogether convinced of the reality of the advantages expected to accrue from connecting the two canals, which enter Madras from the north and south. For the special purpose for which the canals were designed, viz., that of bringing supplies to Madras, it is sufficient that they should terminate at convenient points within or near the town. A Junction Canal, uniting the terminal points, might be very serviceable to whatever through traffic is carried on between the districts lying immediately to the north and south of Madras, but there is nothing to show that any such traffic exists of sufficient importance to warrant an expenditure of three lacs of Rupees for its accommodation. As, however, your Government are unanimous in approving of the project, and as the Government of India also regard it as one which ought to be executed as soon as funds can be made available for it, I shall offer no obstacle to its adoption. It will be for you to determine whether the requisite funds can be spared from the amounts to be hereafter annually placed at your disposal for expenditure on Public Works."

The ardour of the Madras Government was not, however, damped by this judicious expression of doubt, but Mr. KENNEDY was ordered to commence operations, and with the sanction of the Government of India, rupees 1,50,000 were placed at his disposal for the purpose. That gentleman thereupon began to mark out the route and to clear the line, when some one suggested another trace nearer the sea; and the Government ordered Mr. KENNEDY to pause while they set to work talking about the rival projects. Their Chief Engineer, Colonel HORSLEY, R.E., reported most unfavourably upon the suggested coast line; but the Government were by no means satisfied. But they paid that officer the very poor compliment of calling

his report a "very summary one." At the same time they gave a cuff to Mr. KENNEDY "whose estimate for the purchase of the land by the route proposed by him is much understated;" and they concluded a waspish Order by stating that "the Chief Engineer is accordingly requested to have the examination made by a competent officer, whose report should be laid before Government, accompanied by any remarks which Colonel HORSLEY, on further consideration of the subject may wish to offer." Dr. DOPPING, C.E., was now called in, and he prepared fresh plans, and a fresh estimate (Rs. 4,36,975) for the inland line. Colonel HORSLEY forwarded this estimate, and in a review of it cut down the cost to Rs. 3,86,000, and calculated the expense of the alternative coast line at Rs. 5,00,000. The papers were then referred to Colonel RUNDALL, R.E., who drew up an elaborate history of the whole subject, and gave his adhesion to the inland line. But as all the "doctors differed," Sir WILLIAM DENISON, R.E., the new Governor, who had just arrived, ordered the papers to "lie over."

A month afterwards His Excellency took the matter in hand, and returned to the proposal made in 1856 by Lieutenant CHAMBERS, chiefly with a view to the water supply of Madras. In June 1862, the Government returned to the attack, adopted a scheme for a high level fresh water canal, and ordered Mr. KENNEDY to prepare plans and estimates. The order was DENISONIAN, and, according to Mr. W. FRASER, C.E., "a grave misconception pervades the whole." Mr. KENNEDY thereupon reverted to Colonel COTTON's plans, supplemented by a scheme for filling the Mylapore and Nungumbankum tanks, and estimated the cost at Rs. 7,50,000. But the Government passed no order on the subject, and the question remained in abeyance until January 1864, when the Government of India inquired what were the obstacles that prevented "the carrying out of the sanctioned extension from the Adyar to the Cooum." Another period of inaction now ensued, until March 1865, when Mr. FRASER, was appointed Superintendent of the East Coast Canal, and was directed to consider the construction of a high level fresh water canal from the Adyar to the Cooum in connection with the water works and other projects. Nothing seems to have been done until "the approach of the famine of 1866," when, according to Mr. FRASER's account, "the preparation of the plans of the Junction Canal was hastened for the purpose of supplying unskilled labour for the people who were expected to crowd into Madras." But "it was subsequently considered that unless an ample supply of fresh water could be obtained, the canal would be a nuisance, and the preparation of the plans was ordered to be suspended."

This was ten years ago. Again, famine approaches. Again, is the Junction Canal thought of for "purpose of supplying unskilled labour for the people who crowd into Madras"; and on the 29th ultimo, the present Government ordered "the District Engineer to take immediate measures for undertaking the opening of the canal as a Famine Relief Work." We learn that:—"The line to be opened is that accurately described in paragraph 4 of Mr. FRASER's Report, recorded with Government Order No. 1585 of 1st July 1870. But it is determined that it shall be straightened through the Chepauk Park, but so that its central line shall not be nearer the front of the Revenue Board Office than 40 yards. This section will be laid out, without delay, for inspection and final approval. Commencement will also be made at once with laying out the line of canal from the Adyar end; and it will be surveyed and levelled accurately; and schedules of the land required to be taken up prepared without delay so as to admit of the Collector taking the necessary means for valuing and acquiring it. The canal will be laid out for a bottom width of 20 feet, and depth of 4½ feet below mean sea level, and slopes of 2 to 1; 10 feet span will suffice for all overbridges."

Mr. FRASER's estimate was Rs. 5,02,377; he stated in his report that the "articles of produce" conveyed by the Sadras canal are "principally firewood, dressed and undressed stone, rice, cocoanuts, palm leaves, &c." That is all. His line leaves the Adyar river, opposite the outlet of the Sadras canal, is carried through Puan's garden, thence to Yellapathamada Covil road, across Luz Church road, near the house now occupied by Mr. MAUDE, thence to the Mylapore road, Barber's Bridge road, through Kistnampet, across the Ice House road, past

the west side of the Hindoo burying ground, across the Triplicane drain, across PYCROFT'S road and through Chepauk and Government House Parks into the Coom.

LORD NAPIER, in a Minute of the 25th May 1866, gave a lukewarm support to the project, which he says had been strongly recommended to his attention by his predecessor in office. He was constrained to state that notwithstanding the great accumulation of papers on the subject, "we know what sort of a canal it should be; we know how it should run; and we know that it will cost five lacs;" but "we still require to know whether it ought to be undertaken, and how it is to be paid for." The proposed canal "is a project in which the Government is in some degree directly interested with reference to the transport of Salt, and to the supply of various public establishments with certain commodities." But his Lordship considered that as the interest of the work is undoubtedly local, it is a Municipal as well as an Imperial one, and, therefore, that "before embodying any definite judgment on the project, the Government ought to take the opinion of the Municipal Commission and of the public." Accordingly,—and we beg the particular attention of the Duke of BUCKINGHAM to this point—"I propose," said LORD NAPIER, "that the papers now before Government on this question be communicated to the Municipal Commission, and the Chamber of Commerce, and that they be laid on the Editor's Table." His Lordship's suggestion was acted upon. The Municipal Commissioners refrained from expressing any opinion as to whether the advantages that the canal would afford, compared with the outlay and the inconvenience it would cause, were such as to render the execution of the work desirable, but they represented that the Municipality was not in a position to contribute to the undertaking. The Government profited by the objections raised, and, on the 27th February 1871 recorded that the "project having now been fairly examined, and submitted to the judgment of those most directly interested, and their opinion being adverse, it must be abandoned for the present. The information which has been collected will doubtless be of use should the subject be hereafter revived under more favourable auspices."

It has now been revived under the auspices of the Duke of BUCKINGHAM, but the project has not been re-submitted to the judgment of "those most directly interested." We are, however, in a position to affirm that the project is disapproved by Engineers, by Sanitary Officers, by House-owners, and by many who have given a dispassionate attention to the subject. The chief objection to the canal is now, just as much as it was six years ago, that "it will eventually lapse into the *cloaca maxima* of the southern, as the Coom already is of the central part of the town." It will, in short, confer upon Triplicane, Mylapore, the Luz, and Adyar the questionable blessing of having a minor Coom not running through but in their midst. It will possibly be useful in bringing a few cocoanuts and cadjans, and some firewood to market, but if 25 per cent. be added to the estimate, the outlay will represent an annual charge at only 5 per cent. of Rs 2,600 per mensem in perpetuity, exclusive of the charge for maintenance and cleansing. Since the scheme was started this city has been placed in communication with the north, north-west and west by means of the Madras Railway, and with the south and south-west by the South India line. The town is no longer landlocked, and it has yet to discover the need of a junction between its northern and southern canals. No trade ever will pass from the northern canal into the southern, or *vice versa*; and no passenger traffic worth a moment's consideration can be counted upon. Commercially the proposed Junction Canal will be valueless; and if it cannot be shewn that it will "pay" it ought not to be undertaken. But, when we view it as what it is sure to become, a filthy stagnant sewer, passing through some of the poorest and most crowded quarters of the town, we are entitled to ask the Government to reconsider their present resolution, which amounts simply to this, that an abiding mischief will be done to the town in order that temporary employment may be found for starved-out ryots. Necessity, it is said, has no law; but ere the present Government rush in where seven previous Administrations have refused to tread, we would beg them to take heed lest, by discounting the future to secure a momentary relief, they render the last state of this town worse than the first!

APPENDIX D.

17th May 1896.

A public meeting of the citizens and landholders of the 8th Municipal Division was held yesterday at 7 A. M., at the Athenæum Hall, Mylapore, for the purpose of considering the inconveniences and discomforts caused by the Buckingham canal and for taking action to remedy them. There was a fairly large gathering and the Hon'ble Mr. V. Bhashyam Iyengar, C. I. E., was in the chair.

Mr. T. R. RAMANADHA IYER, after reading the notice convening the meeting, spoke in Tamil in regard to the history of the Canal. He said that the junction Canal was undertaken in 1876 as a famine relief work, at a cost of 20 lakhs of rupees. Before the days of this junction, the Sadras Cannal ended at the Adyar in the South and the Cochrane Canal in the North stopped at the Central Station. In those days the Government had the salt trade in its hands. The salt brought to the Adyar could not be sent to the Salt Cotaurs. But owing to a change in the policy of Government now there was no more necessity for bringing salt from one place to another. In 1866 an attempt had been made to connect the South and North Canals by means of the present junction Canal; but owing to the strong protest of the residents of Mylapore the attempt had been abandoned. When in 1876 the attempt was made again by the Duke of Buckingham the people of Mylapore strongly protested against it. The Madras Municipality was also unanimously against it and forwarded this unanimous Resolution to the Government:—"That the Commissioners desire with all deference to the Government to state their decided opinion that the proposal to form a Canal between the Adyar and Coom rivers as a Famine Relief Work is, in the highly insanitary condition of the city at present, a most hazardous and an inexpedient project, and they would earnestly urge its being finally abandoned." When a deputation waited upon the Duke of Buckingham he said that he would undertake to give them the assurance that their well-waters would not be spoiled. The speaker then proceeded to give instances in which owing to the percolation of the Canal water into the wells and lands, the lands had ceased to yield any crop, and had greatly deteriorated in value. The Canal was not a source of profit to the Government. It had been classed under non-remunerative works. Annually three lakhs of rupees were spent on establishment and only Rs. 70,000 was the income out of it. No salt, either Government or private, was now carried by means of the Canal.

Mr. V. C. DESIKA CHARIAR, B. A. B. L., spoke of the Canal as a source of ill-health to the people. Even though the pipe system had been introduced, some people, out of religious or some other objection continued to use well-water. Before the opening of the Canal there was not a single case of elephantiasis in Mylapore but now it had become very prevalent. Triplicane and Chintadripet sewage was diverted into the Buckingham Canal through the connection with the Coom. Owing to the absence of running drains in Mylapore sewage in that neighbourhood was also let into the Canal. Wells sunk recently became brackish owing to the percolation from the Canal. The Hon'ble Mr. Bhashyam Iyengar some years ago had bought a piece of land for gardening. When it was bought, it was solely because it was a good land. But now no crop of any sort could be raised on it in spite of the lavish expenditure on its improvement. This was due to the presence of the Canal near the land. At the time the Canal was opened, all except the Government, were opposed to it. The question of the opening of this junction Canal had been considered on four occasions previous to the Duke of Buckingham's time, and on each of those occasions it had to be given up on account of the impracticability and uselessness of the scheme. In reply to the petition protesting against the opening of the junction the Duke of Buckingham's Government said:—"The petitioners may rest assured that every precaution will be taken for providing that sewage shall not enter into the Canal, but shall be diverted into the natural drainages which now receive it, and which will be carried under the Canal. The irrigation supply from the Mylapore or other tanks where intercepted by it will also be carefully provided for, and preventive measures will be taken against the water-supply or level of their wells being affected by the Canal.

The alternative route suggested by the petitioners was fully considered some years since, as well as some other suggested lines, and was thrown out on professional grounds—which decision the recent consideration confirms." Both these promises remained unfulfilled. The Canal was not used for any useful purpose, and the following remark which the *Madras Mail* made then in an article on the history and value of the junction Canal had only become too true:—"It will, in short, confer upon Triplicane, Mylapore, the Luz and Adyar the questionable blessing of having a minor Cooum not running through, but in their midst. It will possibly be useful in bringing a few cocoanuts and cadjans, and some firewood to market, but if 25 per cent. be added to the estimate, the outlay will represent an annual charge at only 5 per cent. of Rs. 2,600 per mensem in perpetuity, exclusive of the charge for maintenance and cleansing." Even the then Secretary of State to whom our appeal had been made was not convinced of the usefulness of the undertaking, but, in agreeing reluctantly with this Government, remarked as follows:—"I am not altogether convinced of the reality of the advantages expected to accrue from connecting the two canals, which enter Madras from the North and South. For the special purpose for which the Canals were designed, viz., that of bringing supplies to Madras, it is sufficient that they should terminate at convenient points within or near the town. A junction Canal, uniting the terminal points, might be very serviceable to whatever through traffic is carried on between the Districts lying immediately to the North and South of Madras, but there is nothing to show that any such traffic exists of sufficient importance to warrant an expenditure of three laks of Rupees for its accommodation. As, however, your Government are unanimous in approving of the project, and as the Government of India also regard it as one which ought to be executed as soon as funds can be made available for it, I shall offer no obstacle to its adoption. It will be for you to determine whether the requisite funds can be spared from the amounts to be hereafter annually placed at your disposal for expenditure on Public Works." Mr. Desika Chari then moved "That in the opinion of this meeting it is necessary to take action and move the Government of Madras earnestly praying to close up what is known as the Buckingham Canal, being the junction Canal between the Adyar and the Barbers' bridge, as being injurious both to the health of the Mylapore public and to the cultivation of the extensive garden lands situate within a radius of two furlongs on either side of it by the brackish water of the Canal percolating into wells in the houses and in the gardens."

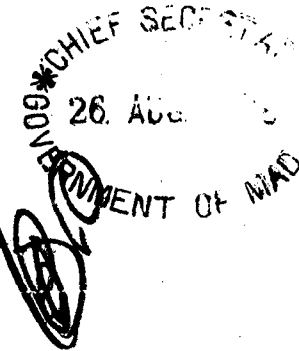
MR. M. SAMINADHA MOODELLY seconded the Resolution which was put to the meeting and carried.

MR. C. SAMBIAH CHETTY next proposed. "That the following gentlemen do form a Committee with power to add to their number, for collecting the necessary information and for submitting a Memorial to Government setting forth all the grievances:—The Hon'ble V. Bhashyam Iyengar, P. Chentsal Rao, Dewan Bahadur R. Raghunatha Rao, T. Murugesu Moodelliar, T. R. Ramanadha Iyer, P. Iyasawmy Moodelliar, T. Ramachendra Rao, M. N. Narayanasawmy Moodeliar, C. Sambiah Chetty, Rai Bahadur V. Krishnama Chariar, T. Parthasarathy Iyengrr, V. Krishnasawmy Iyer, V. C. Desika Chariar, M. Swaminatha Moodeliar, (Secretary). Carried.

The meeting terminated with a vote of thanks to the Chairman.

Public (1898) Department.

CURRENT No. 27/1898



From Surgeon Major. Genl. C. Vithalappa
Surgeon Genl. with the Govt of Madras

Order No. 1111, 31st August 1898.

Communicated to the
P.W.D. with reference to
para 4 of G.O. to W.B.S.W.
d. 25-4-98.

No. 2244

Dated 21st August

Received } 26

Registered

Enclosures Two

Spare copies -

SUBJECT.

P.W.D. (A) of current & of enclosure. Submits remarks on Memo
No. 1124 Public of 14 May 98
re the alleged injurious effects
of the junction canal on people
& property in the vicinity of
Mylapore

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

2 24/8/78

The first portion of Dr. Cook's report deals with the prevalence of elephantiasis in Mylapore; but this, although an interesting subject, does not affect the main question at issue, viz. whether or not the Mylapore junction Canal is the cause of the supposed increase of elephantiasis in Mylapore. It seems certain from the investigations of Dr. Cook that there are at present a good many cases of elephantiasis in Mylapore and it is therefore certain that a considerable number of the inhabitants of that district still resort to the use of unboiled well water for drinking purposes. It is very regrettable that a disease which is so easily prevented should be so rife in Mylapore, as well as other parts of this city.

In regard to the second point in Dr. Cook's report, viz. the connection, if any, between the junction canal and the prevalence of elephantiasis, that officer says that "this is a very hard question to determine". In this opinion I totally disagree as I consider the matter an extremely simple one. If the people drink the water of the canal it is possible they might as a result get elephantiasis, but in no other way could that ~~canal~~ ^{canal} produce elephantiasis. Water may percolate from the canal into the wells but it is impossible for the parasite which produces the disease

Enclavedo por 1 a 1000 4/11 21/8/96

8

Dr. J. Maitland, M.D.,
Surgeon Lentfoot,
Senior Surgeon.

Yours an

Surgeon Captain
 of the 1st Regt of Mass.
 1862

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1118

Surgeon-Lt-Colonel J.Maitland rightly says in his letter (forwarded with the report).

this I have done by repeated inspections of Mylapore, and by repeated interviews with the leading respectable residents official and non-official. From my inspections, I have noted the great amount of elephantiasis that exists among young people at ages ranging from about 9 to 21, at one inspection there were collected for me on a very short notice about 100

able affected with the disease and collected by a few of the respectable residents official and non-official and a great number of them, in fact, I can safely say, the majority of them are young people. I have been Surgeon of the first District of Madras for eight years and I most certainly consider that there is more elephantiasis in Mylapore than for instance Black Town, and most certainly ~~and most certainly~~ more among young people; this of itself points to the disease being on the increase for the past twenty years.

It may be urged that on my inspection those whom I saw were obtained not only from Mylapore but from other parts of Madras. The residents are quite willing for any officer or Committee to make a house to house visitation.

I have made several inspections of the town by myself and have noted the prevalence of elephantiasis as I passed through the streets.

Surgeon-Lieutenant-Colonel Maitland remarks -
"that very few of the cases of the disease which present themselves for treatment in the Madras Hospitals come from Mylapore"

I presume he means people suffering from elephantiasis, none I think resort to any hospitals for elephantiasis of the leg or legs, but only by those affected with elephantiasis of the scrotum, which can be removed by the knife. It must also be borne in mind that Mylapore is very far from the General Hospital and it would be interesting to know how many patients suffering from other diseases resort to the General Hospital from Mylapore.

I have been informed by a qualified Medical practitioner, and a gazetted public servant that in his opinion there are more cases of elephantiasis in Mylapore than in "other parts of Madras".

Whether the canal has had any influence on the increase of the disease (increase being accepted) is a very hard question to determine.

The wells near the canal are contaminated; they must be as the canal skirts Mylapore and the town is situated between the canal and the sea, and most of the wells from which
the

the residents take water are in the same position, ~~perceptible~~ ⁴⁹ ~~and~~ ^U ~~therefore~~ ^U take place.

Surgeon-Lt-Colonel Maitland states that "it is by well water that elephantiasis and other form of filarial diseases are propagated and by the residents having pipe water to resort to will minimise the increase of elephantiasis."

But apart from the fact that many of the Orthodox Brahmins will only use well water for cooking purposes, pipe water for the residents is not always to be had, it does not extend I think to all the streets and houses of Mylapore especially in the hot months of the year, and when it does extend the water fails, I am told, between the hours of 6 and 10 A.M. and 3 and 6 P.M. - just the hours when it is most wanted.

If, therefore, the residents of Mylapore are given ample pipe water, well water need not be drunk or used for cooking purposes although there are many who wont, out of caste prejudices, use any other water than well water.

That the canal has had an evil influence on the disease, the evidence of the most respectable residents asserts and that it has been much on the increase since the canal was constructed, elephantiasis in Mylapore was hardly known before.

This fact can be proved by the evidence of the respectable and educated residents of Mylapore to whom I have talked on several occasions.

I have only finally to add that as drinking well water in general is a means for the propagation of elephantiasis, surely the contamination of it with sewage and salt water will not lessen the evil.

As long as there are wells in Mylapore many of the residents will resort to them for cooking purposes contaminated or not but there does not seem to be a sufficient supply of pipe water for those who wish to use it.
(True copy)

[Signature]
Surgeon-Captain,
Acting Secretary to the Surgeon-General
with the Government of Madras.

respectable residents official and non-official and a great
number of them

CURRENT NO. 2

OFFICE OF SURGEON-GENERAL

No. *1002*
144

WITH THE GOVERNMENT OF MADRAS,
Camp Guntakul 21st Aug. 1898
Madras,

From

SURGEON-MAJOR-GENERAL C. SIBTHORPE, C.B., F.R.C.P.I.,

SURGEON-GENERAL WITH THE

GOVERNMENT OF MADRAS,

To

THE HON'BLE THE CHIEF SECRETARY TO GOVERNMENT,

Public DEPARTMENT.

SIR,

I have the honor to state that on receipt of Memorandum No. 1124 Public dated 14th May 1898 I called upon the *Sing* District in whose jurisdiction Mylapore lies to investigate the matter and submit a report. It was also suggested to him that he might with benefit consult *Surgeon-General* Colonel J. Maitland who has made filarial diseases a special study.

2. *Surgeon-Lieut. Col. Cook* in his report (attached) after dealing with the question of the prevalence of elephantiasis in Mylapore states that it is his opinion to determine whether the canal has had any influence on the increase of the disease, although according to the evidence of the respectable and educated residents of the place such appears to be the case.

3. Before sending this report to Government I sent it to Dr. Maitland for favour of his views on the main question and attach a copy of his reply for the information of Government. He states that "if the people drink the water

Government 1898 of Madras.
PUBLIC.

MISCELLANEOUS.

<i>Recd.</i>	} 1898.	<i>Enclosures</i>
<i>Regd.</i>		<i>Spare copies</i>

G.O., No. 111, 31st August 1898.

AUGUST.

Communicating to the Public Works Department, with reference to paragraph 4 of G.O., No. 1063 W., dated 27th April 1898, letter from the Surgeon-General submitting his remarks on the alleged injurious effects of the junction canal on people and property in the vicinity of Mylapore.

The Canal it is possible they might as a result
of elephantiasis but in no other way could that
canal produce elephantiasis. Water may percolate
from the canal into the wells but it is impossible
for the parasite which produces the disease to
pass in this manner, it is too big to do so."

He further points out that "all the factors
necessary for the propagation of elephantiasis
in other forms of filarial diseases are present
in Mylapore, without taking the canal into account
viz (1) infected persons, (2) Mosquitoes and (3)
wells adjacent to the houses. As long as people
continue to drink the water of these wells without
boiling, so long will the disease continue
to flourish in Mylapore, whether there is a junction
or not

I am inclined to agree with Dr. Maitland
and do not think that the canal has had any
influence in this respect.

I have the honor to be

Sir,
Your most Obedt. Servant.

C. J. Murphy.

Surgeon Major General.
Surgeon General with the Govt of Madras.

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

READ—the following papers:—

G.O., No. 1063 W., dated 27th April 1898.

ABSTRACT.—Directing that enquiries be made into the grievances set forth in a memorial from certain inhabitants of Mylapore as regards the alleged injurious effects of the junction canal on people and property in the vicinity.

Reference No. 1124, Public.

Communicated to the Surgeon-General for report with reference to paragraph 4 of the Government Order.

14th May 1898.

(Signed) A. R. KNAPP.
Under Secretary.

From Surgeon-Major-General C. SIBTHORPE, C.B., F.R.C.P.L., Surgeon-General with the Government of Madras, to the Chief Secretary to Government, dated Camp, Guntakal, 21st August 1898, No. Tour-2—44.

I have the honour to state that, on receipt of memorandum No. 1124, Public, dated 14th May 1898, I called upon the Surgeon, 4th District, in whose jurisdiction Mylapore lies, to investigate the matter and submit a report. It was also suggested to him that he might with benefit consult Surgeon-Lieutenant-Colonel J. Maitland, who has made filarial diseases a special study.

2. Surgeon-Lieutenant Colonel Cook, in his report (copy attached), after dealing with the question of the prevalence of elephantiasis in Mylapore, states that it is hard to determine whether the canal has had any influence on the increase of the disease, although, according to the evidence of the respectable and educated residents of the place, such appears to be the case.

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4. I am inclined to agree with Dr. Maitland and do not think that the canal has had any evil influence in this respect.

Government { 1898 } of Madras.

PUBLIC.

MISCELLANEOUS.

Recd.

Enclosures

1898.

Regd.

Spare copies

G.O., No. 1111, 31st August 1898.

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ENCLOSURES.

I.

From Lieutenant-Colonel H. D. COOK, M.B., I.M.S., Surgeon, 3rd District, to the Secretary to the Surgeon-General with the Government of Madras (through the Surgeon, 4th District), dated Madras, 25th July 1898, No. 63.

With reference to your Reference on C. No. 604/1, dated the 3rd June 1898, I have the honour, in the first place, to state that, on getting the G.O., No. 1063 of 27th April 1898, forwarded with the above to report on, I was then Acting Surgeon, 4th District, and as I already had begun to make enquiries on the subject, and as my successor was quite new to Madras, we both thought it advisable that I should retain the papers and make the report which I now am in a position to do.

I have traversed the whole of the junction canal from the bridge at the end of Pycroft's road to the village of Mylapore, and there is not the slightest doubt that the water of the canal is filthy and contaminated by sewage; I saw three overflows of sewage between the above bridge and Mylapore; the banks are used as latrines by the residents of small villages near the canal. The water must necessarily be brackish by being connected with the Cooum and the Adyar rivers, the former, in addition, being by no means a clean river.

As to the increase of elephantiasis in Mylapore during the past twenty years, I am convinced is established, and I base this assertion for the following reasons:—

Surgeon-Lieutenant-Colonel J. Maitland rightly says in his letter (forwarded with the report) "that it is quite possible to ascertain by enquiries the extent to which the disease now prevails in comparison with other parts of Madras."

This I have done by repeated inspections of Mylapore and by repeated interviews with the leading respectable residents, official and non-official. From my inspections I have noted the great amount of elephantiasis that exists among young people at ages ranging from about 9 to 21: at one inspection there were collected for me, on a very short notice, about 100 people affected with the disease, and collected by a few of the respectable residents, official and non-official, and a great number of them—in fact, I can safely say, the majority of them—were young people. I have been Surgeon of the 1st District of Madras for eight years, and I most certainly consider that there is more elephantiasis in Mylapore than, for instance, Black Town, and most certainly more among young people; this of itself points to the disease being on the increase for the past twenty years.

It may be urged that, on my inspection, those whom I saw were obtained not only from Mylapore but from other parts of Madras. The residents are quite willing for any officer or committee to make a house-to-house visitation.

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Surgeon-Lieutenant-Colonel Maitland remarks: "that very few of the cases of the disease which present themselves for treatment in the Madras hospitals come from Mylapore."

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Whether the canal has had any influence on the increase of the disease (increase being accepted) is a very hard question to determine.

The wells near the canal are contaminated; they must be, as the canal skirts Mylapore, and the town is situated between the canal and the sea, and most of the wells from which the residents take water are in the same position, percolation must therefore take place.

Surgeon-Lieutenant-Colonel Maitland states that "it is by well water that elephantiasis and other form of filarial diseases are propagated, and by the residents having pipe water to resort to will minimise the increase of elephantiasis."

But, apart from the fact that many of the orthodox Brahmins will only use well water for cooking purposes, pipe water for the residents is not always to be had; it does not extend, I think, to all the streets and houses of Mylapore, especially in the hot months of the year, and when it does extend the water fails. I am told, between the hours of 6 and 10 A.M. and 3 and 6 P.M., just the hours when it is most wanted.

If, therefore, the residents of Mylapore are given ample pipe water, well water need not be drunk or used for cooking purposes, although there are many who won't, out of caste prejudices, use any other water than well water.

4

No. 1111, PUBLIC, 31st AUGUST 1898.

That the canal has had an evil influence on the disease, the evidence of the most respectable residents asserts and that it has been much on the increase since the canal was constructed; elephantiasis in Mylapore was hardly known before.

This fact can be proved by the evidence of the respectable and educated residents of Mylapore, to whom I have talked on several occasions.

I have only finally to add that, as drinking well water in general is a means for the propagation of elephantiasis, surely the contamination of it with sewage and salt water will not lessen the evil.

As long as there are wells in Mylapore many of the residents will resort to them for cooking purposes, contaminated or not; but there does not seem to be a sufficient supply of pipe water for those who wish to use it.

II.

The first portion of Dr. Cook's report deals with the prevalence of elephantiasis in Mylapore; but this, although an interesting subject, does not affect the main question at issue, viz., whether or not the Mylapore junction canal is the cause of the supposed increase of elephantiasis in Mylapore. It seems certain from the investigations of Dr. Cook that there are at present a good many cases of elephantiasis in Mylapore, and it is therefore certain that a considerable number of the inhabitants of that district still resort to the use of unboiled well water for drinking purposes. It is very regrettable that a disease which is so easily prevented should be so rife in Mylapore as well as other parts of this city.

2. In regard to the second point in Dr. Cook's report, viz., the connection, if any, between the junction canal and the prevalence of elephantiasis, that officer says that "this is a very hard question to determine." In this opinion I totally disagree, as I consider the matter an extremely simple one. If the people drink the water of the canal, it is possible they might, as a result, get elephantiasis, but in no other way could that canal produce elephantiasis. Water may percolate from the canal into the wells, but it is impossible for the parasite which produces the disease to pass in this manner; it is too big to do so.

In conclusion, I would point out that all the factors necessary for the propagation of elephantiasis and other forms of filarial diseases are present in Mylapore, without taking the canal into account, viz., (1) infected persons, (2) mosquitoes, and (3) wells adjacent to the houses. As long as people continue to drink the water of these wells without effective boiling, so long will the disease continue to flourish in Mylapore, whether there is a junction canal or not.

MADRAS,
9th August 1898.

(Signed) J. MAITLAND, M.D., Surgn.-Lieut.-Col.,
Senior Surgeon.

ORDER—No. 1111, Public, dated 31st August 1898.

Communicated to the Public Works Department, with reference to paragraph 4 of G.O., No. 1063 W., dated 27th April 1898.

(True Extract.)

G. STOKES,
Chief Secretary.

To the Public Works Department.

End. W. D'Moon.

ENCLOSURES.

I.

From Lieutenant-Colonel H. D. COOK, M.B., I.M.S., Surgeon, 3rd District, to the Secretary to the Surgeon-General with the Government of Madras (through the Surgeon, 4th District), dated Madras, 25th July 1898, No. 63.

With reference to your Reference on C. No. 604/1, dated the 3rd June 1898, I have the honour, in the first place, to state that, on getting the G.O., No. 1063 of 27th April 1898, forwarded with the above to report on, I was then Acting Surgeon, 4th District, and as I already had begun to make enquiries on the subject, and as my successor was quite new to Madras, we both thought it advisable that I should retain the papers and make the report which I now am in a position to do.

I have traversed the whole of the junction canal from the bridge at the end of Pycroft's road to the village of Mylapore, and there is not the slightest doubt that the water of the canal is filthy and contaminated by sewage; I saw three overflows of sewage between the above bridge and Mylapore; the banks are used as latrines by the residents of small villages near the canal. The water must necessarily be brackish by being connected with the Cooum and the Adyar rivers, the former, in addition, being by no means a clean river.

As to the increase of elephantiasis in Mylapore during the past twenty years, I am convinced is established, and I base this assertion for the following reasons:—

Surgeon-Lieutenant-Colonel J. Maitland rightly says in his letter (forwarded with the report) "that it is quite possible to ascertain by enquiries the extent to which the disease now prevails in comparison with other parts of Madras."

This I have done by repeated inspections of Mylapore and by repeated interviews with the leading respectable residents, official and non-official. From my inspections I have noted the great amount of elephantiasis that exists among young people at ages ranging from about 9 to 21: at one inspection there were collected for me, on a very short notice, about 100 people affected with the disease, and collected by a few of the respectable residents, official and non-official, and a great number of them—in fact, I can safely say, the majority of them—were young people. I have been Surgeon of the 1st District of Madras for eight years, and I most certainly consider that there is more elephantiasis in Mylapore than, for instance, Black Town, and most certainly more among young people; this of itself points to the disease being on the increase for the past twenty years.

It may be urged that, on my inspection, those whom I saw were obtained not only from Mylapore but from other parts of Madras. The residents are quite willing for any officer or committee to make a house-to-house visitation.

I have made several inspections of the town by myself and have noted the prevalence of elephantiasis as I passed through the streets.

Surgeon-Lieutenant-Colonel Maitland remarks: "that very few of the cases of the disease which present themselves for treatment in the Madras hospitals come from Mylapore."

I presume he means people suffering from elephantiasis; none I think resort to any hospitals for elephantiasis of the leg or legs, but only by those affected with elephantiasis of the scrotum, which can be removed by the knife. It must also be borne in mind that Mylapore is very far from the General Hospital, and it would be interesting to know how many patients suffering from other diseases resort to the General Hospital from Mylapore.

I have been informed by a qualified medical practitioner and a gazetted public servant that, in his opinion, there are more cases of elephantiasis in Mylapore than in "other parts of Madras."

Whether the canal has had any influence on the increase of the disease (increase being accepted) is a very hard question to determine.

The wells near the canal are contaminated; they must be, as the canal skirts Mylapore, and the town is situated between the canal and the sea, and most of the wells from which the residents take water are in the same position, percolation must therefore take place.

Surgeon-Lieutenant-Colonel Maitland states that "it is by well water that elephantiasis and other form of filarial diseases are propagated, and by the residents having pipe water to resort to will minimise the increase of elephantiasis."

But, apart from the fact that many of the orthodox Brahmins will only use well water for cooking purposes, pipe water for the residents is not always to be had; it does not extend, I think, to all the streets and houses of Mylapore, especially in the hot months of the year, and when it does extend the water fails. I am told, between the hours of 6 and 10 A.M. and 3 and 6 P.M., just the hours when it is most wanted.

If, therefore, the residents of Mylapore are given ample pipe water, well water need not be drunk or used for cooking purposes, although there are many who won't, out of caste prejudices, use any other water than well water.

That the canal has had an evil influence on the disease, the evidence of the most respectable residents asserts and that it has been much on the increase since the canal was constructed; elephantiasis in Mylapore was hardly known before.

This fact can be proved by the evidence of the respectable and educated residents of Mylapore, to whom I have talked on several occasions.

I have only finally to add that, as drinking well water in general is a means for the propagation of elephantiasis, surely the contamination of it with sewage and salt water will not lessen the evil.

As long as there are wells in Mylapore many of the residents will resort to them for cooking purposes, contaminated or not; but there does not seem to be a sufficient supply of pipe water for those who wish to use it.

II.

The first portion of Dr. Cook's report deals with the prevalence of elephantiasis in Mylapore; but this, although an interesting subject, does not affect the main question at issue, viz., whether or not the Mylapore junction canal is the cause of the supposed increase of elephantiasis in Mylapore. It seems certain from the investigations of Dr. Cook that there are at present a good many cases of elephantiasis in Mylapore, and it is therefore certain that a considerable number of the inhabitants of that district still resort to the use of unboiled well water for drinking purposes. It is very regrettable that a disease which is so easily prevented should be so rife in Mylapore as well as other parts of this city.

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