

al & Munl. (189⁶) Department.

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G.O., No. 716 M

DATED 29th April 1896

[Despatch Abstract.]

Inspection Notes.

Recording, with remarks, the Sanitary Commissioner's
----- on the Negapatam Municipality.

BACK PAPERS.

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

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Gobt. of {1896} Madras.
LOCAL AND MUNICIPAL.

Issued

Recd.

Encl.

G.O., No. 716 M., 29th April 1896.

APRIL.

Inspection Notes.

Recording, with remarks, the Sanitary Commissioner's — on the Negapatam Municipality.

Endt. on Cur. No. 761, Rev.

Forwarded.

(Signed)

N. E. MARJORIBANKS,
Ag. Head Assistant Collector.30th January 1896.
To the Collector of Tanjore.

Endt. on Cur. No. 97, ML.

Forwarded.

The requisite steps are being taken for the removal of the latrine referred to in paragraph VII and the matter is having attention.

VALLAM,
12th February 1896.(Signed) G. STOKES,
Collector.

ORDER—No. 716 M., dated 29th April 1896:

Recorded, with the following remarks:—

- (1) The attention of the Sanitary Commissioner will be drawn to the remarks of the Chairman on paragraph (1) (a) of the inspection notes.
- (2) The question raised in paragraph (3) regarding the maintenance of the drainage channel has been finally settled in G.O., No. 1472 W., dated 14th June 1894, communicated with G.O., No. 856 M., dated 5th July 1894.
- (3) The open-space latrine referred to in clause (4) (g) should be removed without delay.
- (4) The municipal council's decision on the question of levying fees for the removal of sewage-water, referred to in the Chairman's remark on paragraph (6), should be reported to Government.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To the Chairman, Municipal Council, Negapatam.

„ Collector of Tanjore.
 „ Sanitary Commissioner.
 „ Sanitary Engineer.

Editors' Table.

End. A. Raitt.

(xviii) *Providing an odourless pump and cart for removal of sewage.*—As regards the cart with odourless pump attached, the Chairman will place himself in communication with Messrs. Massey and Co. and the Chairman of the Municipal Council of Bezwada, and bring up the matter before the council with full details as regards the cost, working, &c.

(xix) *Sewage filter.*—The council notes that the Chairman has already made a model filter as per sketch enclosed in his notes and is now trying it. He will report the result to the council and if the experiment is successful, such filters will be made and sold to the house-holders.

(xx) *Distribution of sewage in Hathway's park.*—The suggestions made will be carefully attended and the sewage distributed among the grass plots accordingly.

As regards the establishment the Sanitary Commissioner's views are approved by the council and provision for a reduced establishment has accordingly been made in the budget for the ensuing official year.

(xxi) *Providing separate receptacles for deposit of rubbish.*—The idea of a "separate receptacle system" does not meet with the approval of the council. The difficulties in the way are great. In the first place the only places available in native houses for locating the proposed receptacles are pyals and alodies in the front where the occupants sit, transact business and receive visitors. In the next place kerosine tins or cases are too small for the purpose.

(xxii) *Rubbish depot sites.*—Arrangements are being made to secure less objectionable sites for rubbish depôts, regard being had, at the same time, to their accessibility to the conservancy carts. The Negapatam rubbish is being used for filling up the hollows to the east of the Hathway's garden and that at Velippalaiyam and Nagore commands a ready sale to the rice-fields.

(xxiii) *Departmental management of conservancy carts.*—Departmental management of conservancy bullocks was found by experience to be exceedingly difficult and the work done was unsatisfactory. It was not practicable to exercise effective supervision over the feeding and upkeep of the bulls. The loss by deaths and wear and tear was considerable. Arrangements have therefore been made from the middle of the current month (January 1896) to have the supply of bulls and drivers made by a contractor, to whom adequate rates have been sanctioned by the council. M.R.Ry. P. S. Krishnaswami Nayudu Garu and M.R.Ry. C. R. Kunjapadam Aiyar Avargal dissenting.

(xxiv) *Increasing the number of night-soil carts.*—The maximum quantity of work will be exacted from the existing carts and steps will be taken to increase the number according as funds permit.

(xxv) *To increase the staff.*—This is a question of finance and as at present circumstanced with a water-supply scheme on its hands, the council will not be able to very nearly double the cost of the sanitary staff.

(xxvi) *Private scavenging.*—Special measures have been adopted since the beginning of the current month to secure a systematic inspection of the private privies of the house-holders who are not served by the municipality and prosecution of such of them as keep their backyards in a filthy condition. The sanitary inspectors have been furnished with books of printed forms of notices of inspection to be served on the house-holders. Already fresh houses are coming in under the private scavenging system, and before the official year closes, the council hopes to have a large increase in the number of houses served under this system.

(xxvii) *Using slaughter-house filth for cultivation.*—This suggestion will receive attention. If no cultivation is possible, arrangements will be made for the sale of the refuse as manure.

All the other suggestions of the Sanitary Commissioner will receive close attention and prompt action will be taken.

(Signed) P. RATNASABHAPATI PILLAI,
Chairman.

of wooden bricks more so. The Chairman will, however, address the Sanitary Commissioner for further particulars as regards the cost of this innovation suggested when compared with the present system of laterite roads.

(vi) *Surface drainage.*—The question of the drainage into sea of the storm water of the town near the jetty wall has formed the subject of a long series of correspondence between this council and Government from 1886 downwards. The council has repeatedly pressed that the extension of the jetty wall right into the mouth of the municipal drainage channel by the Public Works Department has closed it effectually with the result that a large quantity of water stagnates periodically in the locality. The cost of remedy is a legitimate charge upon the Public Works Department.

The market tank is full with water and is used for sundry washing purposes. The cost of filling it up will exceed Rs. 700, clean earth having to be carted to the site from a great distance. The council will see that the tank is properly conserved.

(vii) *Water-supply.*—The Sanitary Engineer has already made arrangements to make a survey for a water-supply scheme for this town.

(viii) *Contamination of Tamaraiikulam by the public offices' latrine.*—This matter has already received attention. A substantial brick wall has been erected between the Tamaraiikulam tank-bund and the public offices compound to prevent washings going into the tank. From the endorsement of the Collector of Tanjore, No. 234, dated 19th December 1894, the council notes that arrangements are being made by the Revenue authorities for its removal to another convenient place. Their attention will again be drawn to this subject.

(ix) *Contamination of other reserved tanks.*—The sanitary staff and the watchmen of the tanks have received stringent orders and the approaches strictly guarded. The proposed conversion of the drinking-water tanks into big wells by providing platforms for people to stand upon when drawing water is beyond the ordinary means of the council, and is further unnecessary in the face of a water-supply scheme which has been taken on hand.

(x) *Disconnecting the dhobies' tank from the supply channels.*—The connection of the dhobies' tank with the supply channel of the town tanks was removed in 1890. The council understands that the Taluk Board of Negapatam has again taken action in the matter and the Chairman will address the President on the subject.

(xi) *Ingress of the Uppanar water into the tanks.*—The ingress of the Uppanar water into the Akkaraikolam and the Webster's tank has been effectually put a stop to.

(xii) *Existence of a dust-bin near the tank "Teppakolam."*—There is no tank called "Teppakulam." However, if there is one near any tank, it will be removed forthwith.

(xiii) *Selection of rubbish depot sites.*—The council notes that the Chairman has already taken steps in securing fresh sites of unobjectionable kind for storing rubbish in Nagore and Velippalaiyam.

(xiv) *Contamination of the supply channels to certain private tanks.*—The attention of the owners of these tanks has been and will again be drawn to the evil noticed and the same remedied.

(xv) *Removal of the latrine opposite Sattaya Pillay's choultry.*—The removal of the latrine will cause a great hardship to the residents in the neighbourhood. The bunds of the supply channel will be raised, strengthened and sloped away from the bed.

(xvi) *Providing the Jubilee well with a cover.*—This well is fenced with wooden pailings and there is no access to it whatever. The water is being raised by means of a steam-pump. As suggested by the Sanitary Commissioner, the well will be fitted up with a wooden covering.

(xvii) *Levy of fees for the removal of sewage.*—This question is now pending before a committee of the council and will shortly be disposed of.

Inspection Notes.

staff should be mustered, and a certificate as to their fitness for work be submitted by the Chief Sanitary Inspector to the Chairman, who should himself occasionally verify the results. Equally systematically should all conservancy plant be examined, and its fitness for work be certified to. Collection of taxes is certainly not the correct duty of the sanitary staff. I advise their employment on this duty cease.

Chairman's Remarks.

(Signed) W. G. KING, Surgn.-Lt.-Col.,
Sanitary Commissioner for Madras.

(Signed) P. RATNASABAPATHY PILLAY,
Chairman.

EXTRACT from the Proceedings of the Municipal Council, Negapatam, at a meeting held at 7-30 A.M. on Thursday, the 23rd January 1896.

2. Read notes of the Sanitary Commissioner, Madras, on his inspection of this municipality in October last.

Resolutions—

(i) *Damp proof course.*—The recommendation of the Sanitary Commissioner will be acted upon in the case of new buildings permitted under section 180 of the Municipal Act. A clause will be inserted in the licenses directing the use of well-burnt brick in chunam from the foundation up to a sufficient height above the street level in the building of walls and the plastering thereof with a thick coating of Portland cement. In the case of indifferent bricks, they will be required to be plunged in boiling tar and pitch. This precaution will prevent dampness and crumbling in the walls only. As regards the dampness in the floors of the dwelling houses which is even more serious, the council would thank the Sanitary Commissioner to offer suggestions. In such cases the council would direct the pavements of floors to be made upon a thick layer of dry sand.

(ii) *Thinning out and re-aligning the crowded parts.*—This is a large scheme and finance stands in the way. As regards the fishermen's hutting ground, action has already been taken. The sanction of Government has been received for the entertainment of a survey staff, and the Executive Engineer, who is a member of the council, has been requested to carry out the work of plotting and re-aligning the huts. As the site of the huts is Government property, the Revenue Department will be addressed on the subject of the cost and compensation to the hut-holders.

There is a group of huts at the turn to the beach road in its north end and the council will take early steps to secure the site under the Land Acquisition Act or by private negotiation and throw it open for widening the thoroughfare.

(iii) *Building of huts irregularly.*—Action has already been taken for the removal of thatched huts on the beach road. The council would also instruct the Chairman to disallow all thatched huts on road and street sides abutting public thoroughfares and water-tanks, &c. The council notes with approval the action of the Chairman who has already issued orders in the matter.

(iv) *Encroachments on street lands.*—The closest scrutiny will be exercised in view to the prevention of encroachments on municipal and street lands. The rules on the subject have just been revised by the council.

(v) *Use of vitrified bricks and wood as road material.*—An experiment on the lines indicated was made by the council under the superintendence of Colonel C. E. Creighton, but without success. Use of vitrified bricks is prohibitive in cost and that

Inspection Notes.

Chairman's Remarks.

The following is the result of vaccination during the last six monthly period :—

Total births during preceding six months.	Number vaccinated		Number vaccinated a second time because first operation proved unsuccessful.		Postponed under medical certificate at the end of six months.	Died.	Left the town.	Un-accounted for.	Ratio of successful vaccinations to total births, per cent.
	Success-fully.	Unsuccess-fully for the first time.	Success-ful.	Unsuccess-ful.					
701	119	..	..	..	35	100	155	1	16.97

(13) *Registration.*—The table given below exhibits the results of registration of vital statistics during the last three years :—

Years.	Birth-ratio per mille of the estimated population.	Death-ratio per mille of the estimated population.	Percentage of deaths from							Ratio of deaths of infants under one year of age per mille to registered births in the preceding year.	Ratio per mille of deaths of infants between one and five years of age to population of that age.
			Cholera.	Small-pox.	Fevers.	Dysentery and diarrhoea.	Injuries.	Other causes.			
1893		29.8	28.2	5.7	2.3	24.4	10.2	1.0	56.4	352.3	170.7
1894		31.3	37.1	9.1	1.2	21.0	11.7	..	57.0	363.8	227.3
1895		29.5	26.2	0.2	..	27.3	8.5	0.7	63.3	278.4	151.2

These figures show that registration is carelessly conducted, the birth-rate being sufficiently significant of this fact. As for the remaining figures, the heavy proportion of the preventible diseases of cholera, dysentery and diarrhoea demonstrate to the full how marked are both the evil condition of the water-supply and filth of the soil to which I have alluded. No better proof could be adduced of the latter condition, irrespective of the plain fact that each day adds enormous increments of unremoved night-soil to the town than that at the end of one year of life of 1,000 infants, no less than 278.4 die.

(14) *Sanitary Administration.*—More care seems to me requisite as to the choice of municipal servants. On entertaining permanent men, the municipality has the right to send them to the Civil Surgeon to be medically examined as to fitness. This valuable right should be exercised; otherwise there must result loss of municipal funds from the entertainment of feeble, old, or too juvenile persons. My inspection of the staff showed me that such loss does occur. At regular intervals, the

These suggestions will be acted upon.

Inspection Notes.

(g) In the houses of the Muhammadans cess-pits which contain faecal matter are common. They should be abolished without delay, and private scavenging be insisted upon.

(9) *Slaughter-houses*.—The plan and structure are bad at Nagore. The plan of the building, as it stands, should be sent to the Sanitary Board for revision. The filth from this slaughter-house is taken as far as the beach and there thrown away. This is a waste of material and labour. It would be far wiser and more economical to bury the matter on the spot in trenches and attempt cultivation over them.

(10) *Cattle Slaughter-house, Negapatam*.—This building is so narrow that the whole of the walls up to the roof are splashed with blood and filth. These walls are of plain lime plaster. On the floor were found lying fragments of guts, &c., from the slaughter of the previous day. The reservoir containing the washings of the previous day was in a most offensive condition. The well is unprotected and is in a filthy state. The floor is evidently meant to be cement plastered, but the work has, according to my notion, been very badly scamped. It is now fast-going to wreck. This flooring should be at once removed, and the contractor should be called to account. The walls also should be cement-plastered up to the eaves, as it is evident from the space at command being so narrow, this is required. The well should be covered and a pump having its suction pipe in the well outside should be placed inside the slaughter-house.

(11) *The Negapatam Slaughter-house and Market*.—The remarks made in my report of 1893 stand good to this day as to these institutions. The recommendations made were simple and highly desirable. It seems to me that no good ground has been given for not carrying them out.

(12) *Vaccination*.—All vaccination work is performed with fresh animal lymph. The following shows the result of inspection of children met in the streets:—

Number examined.			Percentage of protected.			Percentage of unprotected.			Percentage marked with small-pox.			Total.		
Under one year of age.	One to five years.	Five to ten years.	Under one year of age.	One to five years.	Five to ten years.	Under one year of age.	One to five years.	Five to ten years.	Under one year of age.	One to five years.	Five to ten years.	Number examined.	Percentage of protected.	Percentage of unprotected.
7	17	13	85.7	70.6	53.8	14.3	29.4	15.4	..	..	30.8	37	67.6	21.6
														10.8

Chairman's Remarks.

This suggestion will receive attention. If no cultivation is possible, arrangements will be made for the sale of the refuse as manure.

The suggestions made in detail will be carried out at an early date.

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Chairman's Remarks.

(c) I would suggest that the following staff would more correctly meet the needs of the town. This represents a heavy addition, but it is only by providing for efficiency that efficiency can be obtained. The proposed incidence here for conservancy and sanitary staff sufficient for 60,000 persons is only 4 pies per head per month, or a total of 4 annas per annum per head. But by abolishing the useless expenditure on sewage carts, this would be reduced to 3 pies per head per month or 3 annas per annum:—

This is a question of finance, and as at present circumstanced with a water-supply scheme on its hands, the council will not be able to very nearly double the cost of the sanitary staff.

	On starting.		At the end of three years.
	RS. A. P.		RS. A. P.
1 Chief Sanitary Inspector on Rs. 75 — 100 + 15 ..	90 0 0	1 Chief Sanitary Inspector on Rs. 75 — 100 + 15 ..	115 0 0
1 2nd-class Sanitary Inspector on Rs. 45 — 60 + 7-8-0 ..	52 8 0	1 2nd-class Sanitary Inspector on Rs. 45 — 60 + 7-8-0 ..	67 8 0
1 3rd-class Sanitary Inspector on Rs. 25 — 35 + 7-8-0 ..	32 8 0	1 3rd-class Sanitary Inspector on Rs. 25 — 35 + 7-8-0 ..	42 8 0
6 Conservancy overseers	72 0 0	6 Conservancy overseers	72 0 0
120 Toties	660 0 0	120 Toties	660 0 0
60 Sweepers	240 0 0	60 Sweepers	240 0 0
15 Peons	80 0 0	15 Peons	80 0 0
Total ..	1,227 0 0	Total ..	1,277 0 0

(d) The iron latrine near the Durga is in good order except the basement, which requires repair. The cess-pool should be provided with an iron receptacle. A correct ablution place and water should be provided on the spot.

Will receive attention.

(e) This latrine should be worked strictly on the dry-earth system being near houses. The new latrine on the standard plan near the Uppanar should have an impervious pathway of concrete cement plastered, or of Cuddapah slabs cement pointed.

(f) Private scavenging has advanced but little. There are now but 1,530 of a total of 9,793 houses that are attended to under this system. In this matter, I would advise each of the councillors to pledge themselves at the meeting convened to consider these notes to exert their influence, and give a report of the result of their labours at the ensuing, which should be attached to this for the information of Government.

Special measures have been adopted since the beginning of the current month to secure a systematic inspection of the private privies of the house-holders who are not served by the municipality and prosecution of such of them as keep their backyards in a filthy condition. The sanitary inspectors have been furnished with books of printed forms of notices of inspection to be served on the house-holders. Already fresh houses are coming in under the private scavenging system, and before the official year closes, the council hopes to have a large increase in the numbers of houses served under the system.

Inspection Notes.

the direction of efficiency, and is a matter that the municipality is indebted for to the energy and forethought of their Chairman, Mr. Oliver, lately deceased. The municipality should attempt to make the sewage farms sustain the bullocks upon the grass or upon hay produced there, instead of upon straw purchased.

(8) *Night-soil and Conservancy.*—Arrangements are dangerously defective. There are but eighteen latrines for a total population of 59,221. In this connection it must be remembered that the area covered by the municipality is 6.5 square miles. There are but eleven carts, which make at the outside two trips daily. They are thus capable of conveying at the utmost 516 cubic feet of a total of 618 cubic feet of excreta *minus* the urine. The provision is inadequate. Not less than 40 rubbish and 16 night-soil carts, making three trips daily, are required.

(a) The matter of conservancy should at once demand the attention of the municipality. A committee of the councillors that would take the trouble to completely work out the question should be assembled. The staff required, the routes to be taken by carts, the depôts to which they should deliver their contents, and the method of check of delivery and of the general management of the depôts should all be correctly put on record. If the municipality find they cannot afford carts in sufficient number to meet the demands, they should select certain of the more-crowded parts of the town. If the municipality will appoint this committee and the committee elects to place itself in communication with me, I need not say I shall be glad to supply all information they may require in detail.

(b) In the meantime, I would point out that the conservancy staff is not correctly organized. The following is the staff as it stands :—

	RS.	A.	P.
1 Chief Sanitary Inspector	65	0	0
1 Nuisance Inspector	20	0	0
3 " Inspectors at Rs. 15	45	0	0
1 Kurnam	10	0	0
1 Peon	7	0	0
13 Peons at Rs. 6	78	0	0
43 Male sweepers at Rs. 5-8-0	236	8	0
68 Female sweepers at Rs. 4	272	0	0
1 Maistry	8	0	0
3 Pettaimen	13	8	0
Total	755	0	0

Chairman's Remarks.

bullocks. The loss by deaths and wear and tear was considerable. Arrangements have therefore been made from the middle of the current month (January 1896) to have the supply of bullocks and drivers made by a contractor, to whom adequate rates have been sanctioned by the council.

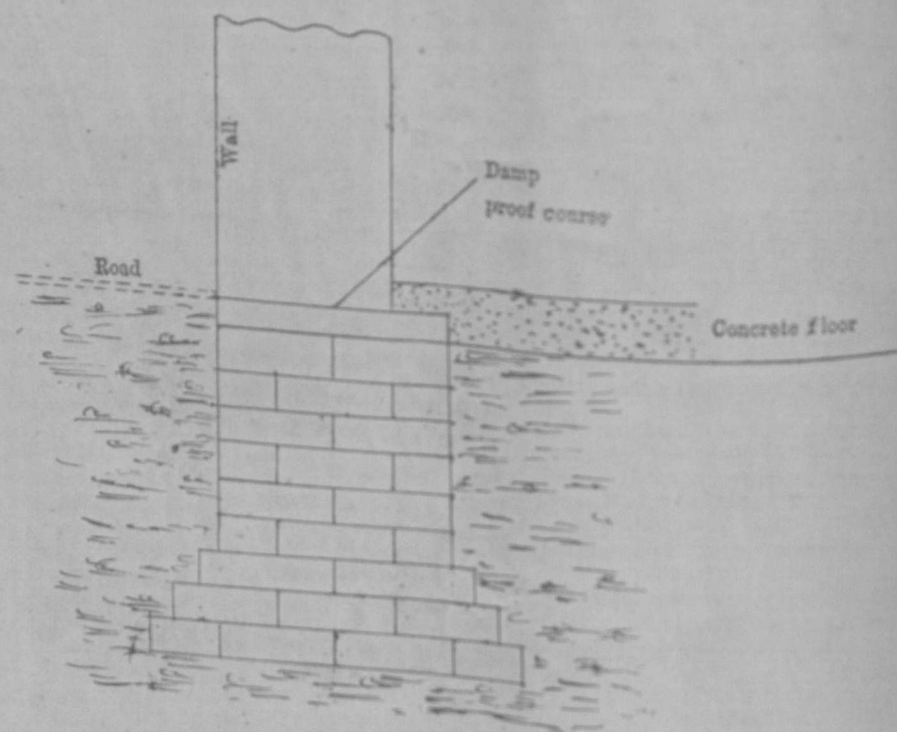
M.R.Ry. P. S. Krishnaswami Nayudu Garu and M.R.Ry. C. R. Kunjitapadam Aiyar Avargal dissenting.

The maximum quantity of work will be exacted from the existing carts, and steps will be taken to increase the number according as funds permit.

The points noted herein will receive careful attention. The Chairman will place himself in communication with the Sanitary Commissioner in view to getting such information as may be required.

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Chairman's Remarks.



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Litho. Survey Office, Madras.
1896

(7) *Rubbish disposal.*—(a) The dust-bins available are chiefly of the old brick pattern in very bad order. These should be removed as soon as possible, either in favour of corrugated iron dust-bins with concrete surfaces on which they can be stood or—what I would much prefer to see—the municipality should introduce “the separate receptacle system.” By this I mean the removal of rubbish by a system of calling from house to house. Each house-holder is expected daily, at such an hour in the morning as the municipality may think fit, to place in a convenient site on or near his verandah, or front of the house, a receptacle of such pattern as the municipality may direct. This may be in the form of an open box, such as shown in the diagram. Probably kerosine tins strengthened at the sides with strips of iron, or “dozen cases” would serve the purpose. The rubbish-cart should have a bell attached to warn the house-holders as to its approach. The cartman would then simply have to lift the receptacle into his cart as it passes house after house. This saves much cool labour in sweeping, and moreover ought to suit native ideas expressed in the difficulty of persuading caste native females to approach ordinary public dust-bins.

(b) The municipality have hitherto made the mistake of placing all their depôts to the west of their water-supply channels; thus ensuring that these shall be contaminated. All rubbish depôts should be to the east, or the sea-shore line of the town on the area between the sea-shore and the Nagore road. As there is practically no sale for rubbish in Negapatam, it seems to me the first thing the municipality can do is to invest in one or more incinerators. My suggestion in 1893 was to combine incineration with the question of providing “clinker” for the roads and the vitrifying of bricks. This is a question on which any large engineering firm, such as Messrs. Richardson and Cruddas, Bombay, or Messrs. Burn and Company, Calcutta, could advise the municipality as to procedure.

(c) One very great improvement the municipality has effected is the substitution of their own well-fed and strong bullocks for the weakly half-starved animals that were formerly expected to fulfil it. This undoubtedly is a move in

The idea of a separate receptacle system does not meet with the approval of the council. The difficulties in the way are great. In the first place the only places available in native houses for locating the proposed receptacles are pyals and alodies in the front, where the occupants sit, transact business and receive visitors. In the next place kerosine tins or cases are too small for the purpose.

Arrangements are being made to secure less objectionable sites for rubbish depôts, regard being had, at the same time, to their accessibility to the conservancy carts. The Negapatam rubbish is being used for filling up the hollows to the east of Hathway's garden, and that at Velippalaiyam and Nagore commands a ready sale to the rice-fields.

The departmental management of the conservancy bullocks was found by experience to be exceedingly difficult, and the work done was unsatisfactory. It was not practicable to exercise effective supervision over the feeding and upkeep of the

Inspection Notes.

Chairman's Remarks.

(b) If the municipality determine to continue the arrangement of removing sewage, they should do so only on condition that the cost is borne by the house-holders. But I consider they would be justified in providing suitable plant and working it under municipal care. For this no better arrangement could be obtained than the cart of which I gave a diagram in my last notes with an odourless pump attached. The Municipality of Bezvada has ordered one from Messrs. Massey and Co., Madras. But where the house-holders are so badly off that even this method is out of their power, I would advise the adoption of the "Vizianagram sewage filter," the action of which I fully explained to the councillors, and of which I enclose a diagram for their information. It seems to me, therefore, with this cheap expedient at their disposal, there need be no good ground for any inhabitant allowing *untreated* sewage to flow upon the ground. If each councillor in his ward would take the matter up earnestly, there can be no doubt that this simple measure would produce a vast improvement upon the general sanitary condition of the town.

(c) *Sewage Garden.*—In Hathway's park, the municipality have, for sometime past, maintained cultivation under sewage. This is, as already stated, brought there by carts. There is a cistern within the ground intended for the receipt of sewage, but it has obviously not been in use for a long period. Instead of taking it to this point, diluting it with water, and subsequently distributing it for irrigation, as should be done, the carts are brought to the side of the paths and discharge their contents upon the edge of the grass plots. There results a complete failure as to equable distribution of the sewage, which should be aimed at. It seems to me that the number of labourers employed here is more than is necessary. Ten persons and one maistri are employed. Of these, five seemed to me physically feeble persons, whose services could be of little real benefit. This is, however, a matter I do not venture to give a positive opinion upon. I merely suggest that it is a question the council should take into consideration whether the present establishment is really necessary, and, if it be so, whether the labour is of the correct quality.

As regards the cart with an odourless pump attached, the Chairman will place himself in communication with Messrs. Massey and Co. and the Chairman of the Municipal Council of Bezvada, and bring up the matter before the council with full details as regards the cost, working, &c.

As regards the suggestion of the Sanitary Commissioner to use sewage filters, the council notes that the Chairman has already made a model filter as per sketch enclosed in these notes, and is now trying it. He will report the result to the council, and if the experiment is successful, such filters will be made and sold to the house-holders.

The suggestions made will be carefully attended to and the sewage distributed among the grass plots accordingly.

As regards the establishment, the Sanitary Commissioner's views are approved by the council and provision for a reduced establishment has accordingly been made in the budget for the ensuing official year.

Inspection Notes.

Chairman's Remarks.

"open space" latrine at the point at which the channel enters the tank, which must during rainfall empty its contents into the channel. Anything more filthy than the conditions surrounding this tank can hardly be conceived; yet, I was assured, that it is largely used by the people and much appreciated by them. The least that can be done for the improvement of this unsatisfactory source of water-supply is the removal of the latrine and the filling in with clean material of the pits in the neighbourhood. Mr. Subbayya Pillai should then be invited to have the water lifted by picottah to a filter bed and well.

(h) The Jubilee well cannot be considered a safe source of supply until it is provided with a cover. Just as it is necessary to supply the tank into which the water is discharged by the pump with a cover, so it is the case with the well.

(i) The well much used by Hindus in the Victoria park as well as others in the same area require repair as to their parapet walls and platforms and the provision of drains.

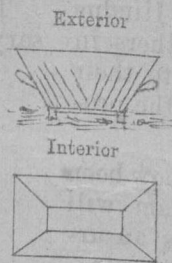
(5) *Sewerage.*—(a) It having now been definitely decided that Negapatam will accept a water-supply scheme as an urgently-required measure before the introduction of a sewerage system, it remains again to refer to the palliative measures for removal of sewage water suggested in my former report. I find the municipality still removes sewage at the cost, not of the individuals benefited, but of the municipal funds.

(6) They entertain nineteen cess-pool carts at a cost of Rs. 15 each. Allowing that these carts fulfil five trips per day (which is unlikely), the result would be the removal of 12,074.5 gallons of sewage. This would represent at the maximum that the cess-pools of 402 houses (at five inhabitants per house) are being attended to, so that for the convenience of this small number the public pay Rs. 3,400 yearly, or at the rate of 15 pies per gallon or three-fourths of an anna per small chatty (5 gallons) of sewage water removed. This is anything but a good bargain, and I again ask the municipality to consider why they should not cause the inhabitants to pay for removal as in the case of the Municipalities of Bellary, Ellore, Bezwada, Guntur, Masulipatam, Mayavaram, Rajahmundry, &c.

The removal of the latrine suggested will cause a great hardship to the residents in the neighbourhood. The bunds of the supply channel will be raised, strengthened and sloped away from the bed.

The Jubilee well is fenced with wooden palings, and there is no access whatever to it. The water is being raised by means of a steam-pump. As suggested by the Sanitary Commissioner, the well will be fitted up with a wooden covering.

This will be attended to and the necessary repairs carried out.



The question of the levy of fees from house-holders for removal of sewage is now pending before a committee of the council and will shortly be disposed of.

Inspection Notes.

Chairman's Remarks.

and is further unnecessary in the face of a water-supply scheme which has been taken on hand.

(c) The dhobies still wash in the Manjikulam, the channel of which is liable to, and does, back up during rainfall into the channel supplying the two chief tanks of the town—although I think I had good ground for proving a connection between the use of the water so contaminated and the cholera epidemic of 1890.

(d) Not only are these tanks open to contamination in this manner, but, as has been pointed out to the council by the Civil Surgeon Mr. Oosman Sahib during the rise of the tide, the Uppanar sends before it the filth from the bank of rubbish in the Hathway's park and from the latrine situated in its spread, &c. This arises from careless management of the sluices, which are either damaged or have no boards. This should be remedied without delay, and it should be seen that the sluice is water-tight.

(e) The arrangement of having a dust bin close to the Teppakulam cannot be said to be good. It should be removed from this site.

(f) The council has been most unfortunate as to the selection of the correct position for the rubbish depôts, as has been pointed out to them by the Civil Surgeon. Thus, near the Ichenkulam is a large rubbish depôt. An effort has been made to place a wall round the depôt and thus confine the surface drainage. This is certainly better than nothing in that some filtration must occur. But this does not meet the requirement of the case. Every particle of rubbish should be removed from the neighbourhood *at once*, or the tank should be abandoned. In this connection it must be remembered that the slope in any case goes towards the channel supplying the Nagore tanks.

(g) The Velippalaiyam rubbish depôt drains direct into the channel which supplies the Tamaraikulam, Gunappa Chetti and Subbayya Pillai's tanks. The washings of a graveyard are also received before delivery in these tanks. But to the Subbayya tank is added a considerable *extra* amount of filth. Not only is the drainage of certain very filthy houses received into it direct, but there exists an

The connection of dhobies' tank with the supply channel of the town tanks was removed in 1890. The council understands that the Taluk Board of Negapatam has again taken action in the matter, and the Chairman will address the President on the subject.

The ingress of the Uppanar water into the Akkaraikulam and the Webster's tank has been effectually put a stop to.

There is no tank called Teppakulam. However, if there is a dust-bin near any tank, it will be removed forthwith.

The council notes that the Chairman has already taken steps in securing fresh sites of unobjectionable kind for storing rubbish in Nagore and Velippalaiyam.

The attention of the owners of these tanks has been and will again be drawn to the evil noticed and the same remedied.

Inspection Notes.

Chairman's Remarks.

promise, should receive attention "as opportunities offer" seem in no way to have been acted upon. I again call attention to my recommendations. I would, however, add that I consider that the filling in or draining, if that be feasible, of the tank near the market is desirable. It should be possible to utilize the plot that would be so formed with profit, by employing the refuse from the slaughter-house and sullage from the market which are close at hand. Even were sand only used for filling—and of this there is no lack in Negapatam—it should be possible, with the aid of this manure and sewage, in time to produce good soil and profit from vegetables growing on the site.

(4) *Water-supply.*—(a) In my last notes in view of the fact that Rs. 10,000 were available, I pressed the question of utilizing sub-soil water delivered protected in certain sections of the town by pumping and lifting to cisterns. This, I believe, would have been a very great boon to the people, and would have represented money well spent in their sanitary interest. When, however, the council's proposal as to an open channel was rejected by Government, the money intended for water-supply was directed to other purpose. Now, however, that Negapatam has definitely accepted a water-supply scheme, it would no longer be financially sound to entertain this matter. Nevertheless, my further remarks as to the protection of the water-supply by temporary expedients remain as fully applicable.

(b) The cutcherry latrine and the cutcherry compound up to date contribute faecal matter during rainfall to the Tamaraikulam tank. Webster's tank, Totakulam and Marikalkulam remain innocent of any endeavour to protect the water-supply from the defilement consequent upon persons walking direct into the water. The banks of the Akkaraikulam and the Webster's tank were on my visit exactly in the state I had seen them in 1890 and in 1893, that is, defiled with faecal matter.

series of correspondence between this council and Government from 1886 downwards. The council has repeatedly pressed that the extension of the jetty wall right into the mouth of the municipal drainage channel by the Public Works Department has closed it effectually with the result that a large quantity of water stagnates periodically in the locality. The cost of the remedy is a legitimate charge upon the Public Works Department.

The market tank is full with water and is used for sundry washing purposes. The cost of filling it up will exceed Rs. 700, clean earth having to be carted to the site from a great distance. The council will see that the tank is properly conserved.

The Sanitary Engineer has already made arrangements to make a survey for a water-supply scheme for this town.

This matter has already received attention. A substantial brick wall has been erected between the Tamaraikulam tank bund and the public offices compound to prevent washings going into the tank. From the endorsement of the Collector of Tanjore, No. 234, dated 19th December 1894, the council notes that arrangements are being made by the Revenue authorities for its removal to another convenient place. Their attention will again be drawn to this subject.

The sanitary staff and the watchmen of the tanks have received stringent orders, and all the approaches are strictly guarded. The proposed conversion of the drinking-water tanks into big wells by being provided with platforms for people to stand upon when drawing water is beyond the ordinary means of the council,

Inspection Notes.

Chairman's Remarks.

entertain doubt) be disposed of otherwise than by simply concluding that loans would be necessary, and, this being so, that they would not be within the financial powers of the municipality.

(d) Not only is it necessary to combat the evil effect of existing overcrowding upon the soil, but to take care that the mistake be not allowed in respect to future building operations.

(e) A very frequent condition is the building of huts without due care as to their order and without provision for conservancy, the excuse given by the sanitary staff being that these are upon "private land." Sections 187 and 226, however, give ample power in this respect, and the provisions should be enforced.

(f) Encroachments are also by no means rare. One very marked instance is that of a new line of bazaars erected near the head of Kottapalaiyam street in such a manner as to in great part occlude the entrance although not actually standing within the limits of that street.

(g) Another source of insanitary conditions near dwellings is the freedom with which huge pits are excavated by persons taking earth for making the mud walls of huts. These they fail to fill up, and thus stagnant pools of water are found; or, worse, they remain partially filled with rubbish. The council should insist that all such places should be filled with clean earth—*vide* section 227.

(2) Roads.—(a) Of a total income of Rs. 70,677 last year, Rs. 11,108 was spent upon roads, being 109 per cent. of the revenue derived from tolls. Yet Negapatam must be regarded as very badly off in this matter. Practically all but the main roads are mere sandy tracks.

(b) I laid before the council the proposal to make, as frequently and successfully pursued in America, brick pavement roads. This was promised attention, but nothing has been done in the matter. It seems to me, in consideration of the heavy expenditure of importing so unsatisfactory a material as laterite from Tanjore by rail, that the matter merits careful attention and experiment.

(3) Surface drainage.—(a) Numerous suggestions were made under this head which, notwithstanding the council's

Action has already been taken for the removal of thatched huts on the beach road. The council would also instruct the Chairman to disallow all thatched huts on road and street sides abutting public thoroughfares and water-tanks, &c. The council notes, with approval, the action of the Chairman who has already issued orders in the matter.

The closest scrutiny will be exercised in view to the prevention of encroachments on municipal and street lands. The rules on the subject have just been revised by the council.

This point will receive close attention and prompt action will be taken to bring the offenders to justice.

An experiment on the lines indicated was made by the council under the superintendence of Colonel Creighton, but without success. Use of vitrified bricks is prohibitive in cost, and that of wooden bricks more so.

The Chairman will, however, address the Sanitary Commissioner for further particulars as regards the cost of the innovation suggested when compared with the present system of laterite roads.

The question of the drainage into sea of the storm water of the town near the jetty wall has formed the subject of a long

Inspection Notes.

Chairman's Remarks.

herein enclose a diagram for information, and trust this simple matter will receive attention.

(b) In the second paragraph under this head I advocated the buying up of houses and the cutting of roads as essential for perflation, and the proper sanitary condition in the over-crowded parts of the town, viz., near Karian Pillaiyar Kovil, old street—the quarter chiefly inhabited by Eurasians—and in the fishermen's hutting ground near the jetty. None of these suggestions have been attended to on the ground that the council is "not in a position to raise a loan." But, on the other hand, the council certainly made no attempt, as they were invited to do, to make estimates. It is worth remembering that, under the Land Acquisition Act, the property could be acquired at reasonable figures, and that in again disposing of the land for the erection of a better class of houses, which are urgently required, there would be a likelihood of a considerable offset. Granting it was beyond the power of the municipality to make a large expenditure under this one head, there can be no reason why, as has been actually accomplished in Adóni and in Kurnool, year by year, allotments should not be made for the purchase of houses and land and the steady improvement of localities, by the opening up of properly formed roads.

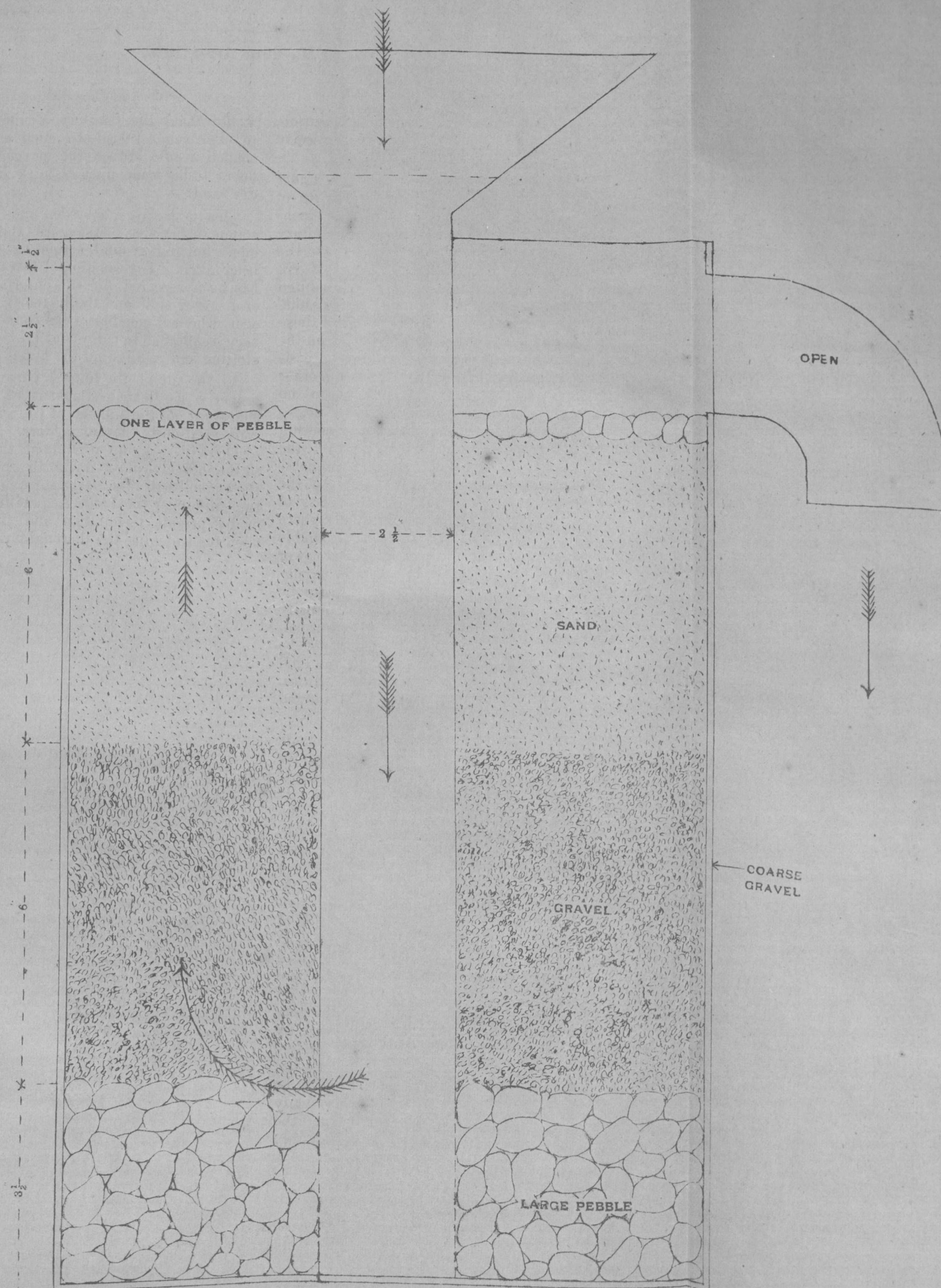
(c) That there existed the elements of success in a scheme which allowed for the buying up of land and re-selling it for erection of houses in Negapatam is sufficiently shown by the fact that the South Indian Railway contemplate making a number of houses at their own expense for the accommodation of over a 1,000 workmen employed daily by the company. On the Deputy Sanitary Commissioner again pressing the question of the condition of the fishermen's huts, I am glad to find the council has so far given some attention to the matter. But I would ask them to go further than this and proceed to action. The various localities mentioned should be carefully inspected by the council as a body, and some determination should be arrived at, in each case, as to the nature of improvement to be effected, and estimates should be really made, and the suggestions (as to the necessity for which no one can possibly

would thank the Sanitary Commissioner to offer suggestions. In such cases the council would direct the pavements of floors to be made upon a thick layer of dry sand.

This is a large scheme, and finance stands in the way. As regards the fishermen's hutting ground, action has already been taken. The sanction of Government has been received for the entertainment of a survey staff, and the Executive Engineer, who is a member of the council, has been requested to carry out the work of plotting and re-aligning the huts.

As the site of the huts is Government property, the Revenue Department will be addressed on the subject of the cost and compensation to the hut holders.

There is a group of huts at the turn to the beach road in its north end, and the council will take early steps to secure the site under the Land Acquisition Act or by private negotiation and throw it open for widening the thoroughfare.



GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper:—

From M.R. Ry. P. RATNASABHAPATI PILLAI Avargal, Chairman, Municipal Council, Negapatam, to the Chief Secretary to Government (through the Head Assistant Collector and the Collector of Tanjore), dated Negapatam, 28th January 1896, No. 778.

I have the honour to submit, herewith, the notes of the Sanitary Commissioner, Madras, on his inspection of this municipality with replies of the council noted on the margin.

2. An extract from the proceedings of the council, dated 23rd instant, in which the inspection notes were discussed by it, is enclosed.

ENCLOSURES.

Inspection Notes of the Sanitary Commissioner for Madras.

TANJORE DISTRICT.

NEGAPATAM MUNICIPALITY.

Inspected 14th to 21st October 1895.

Population as per census of 1891

59,221

Inspection Notes.

Chairman's Remarks.

I find it necessary to again advance several of the suggestions made by me in my report of 1893. I the more willingly adopt the course of again advancing these—as I am convinced, after my personal consultation with the councillors, that several simple suggestions made were not adopted from my intentions being misunderstood. I therefore request the Chairman will place before the councillors the report referred to, as a reference in perusing the following remarks:—

(1) *Dwellings.*—(a) Under this head I pointed out the desirability of using "damp-proof courses" in houses. It was not intended that the council should proceed on a work of destruction, and pull down the houses that this single course might be inserted. On the opposite, I advised that, when the question of new buildings came before them, this should be enforced under section 180, on the ground that "in this locality" (Negapatam) "no house can be said to be sanitariously safe, unless this precaution be taken." The council met this with the suggestion that a "special establishment to work and supervise it would be necessary." This conclusion is incorrect. I

The recommendation of the Sanitary Commissioner will be acted upon in the case of new buildings permitted under section 180 of the Municipal Act. A clause will be inserted in the licenses directing the use of well-burnt brick in chunam from the foundation up to a sufficient height above the street level in the building of the walls, and the plastering thereof with a thick coating of Portland cement. In the case of indifferent bricks they will be required to be plunged in boiling tar and pitch. This precaution will prevent dampness and crumbling in the walls only. As regards the dampness in the floors of the dwelling-houses, which is even more serious, the council

2065 m 95 1286 m 93
1308 m 95 868 m 96
953 m 95 343 m 94
955 m 95 52 m 95
1765 m 95
1605 m 91
1351 m 91
634 m 88
966 m 87
C.No. 5574

Order No. 716 m 29.4.96
Recorded with the following

remarks:—

(1) The attention of the Sanitary Commissioner will be drawn to the remarks of the Chairman on Para (1) (a) of the Inspection notes.

(2) The question raised in para (3) regarding the maintenance of the drainage channel has been finally settled in f.o. no. 1472 W of 14-6-94 communicated with f.o. no. 856 m of 5-7-94.

(3) The open space latrine referred to in clause (4) (g) should be removed without delay.

(4) The Municipal Council's decision on the question of levying fees for the removal of sewage water referred to in the Chairman's remarks on para (6) should be reported to Govt.

To
24/4/96
27.4.96
Chairman, M.C. Negapatam
Collector of Tanjore
Sanitary Commissioner
Sanitary Engineer
Editor's Table. Dwp. 23/5/96

W. Ragh
Plus 53 m

Negapatam
9/1/96

As regards the establishment the Sanitary Commissioner's views are approved by the council and provision for a reduced establishment has accordingly been made in the budget for the ensuing official year.

(xx) *Providing separate receptacles for deposit of rubbish.*—The idea of a "separate receptacle system" does not meet with the approval of the council. The difficulties in the way are great. In the first place the only places available in native houses for locating the proposed receptacles are pyals and alodies in the front where the occupants sit, transact business and receive visitors. In the next place kerosine tins or cases are too small for the purpose.

(xxi) *Rubbish depôt sites.*—Arrangements are being made to secure less objectionable sites for rubbish depôts, regard being had, at the same time, to their accessibility to the conservancy carts. The Negapatam rubbish is being used for filling up the hollows to the east of the Hathway's garden and that at Velippalayam and Nagore commands a ready sale to the rice-fields.

(xxii) *Departmental management of conservancy carts.*—Departmental management of conservancy bullocks was found by experience to be exceedingly difficult and the work done was unsatisfactory. It was not practicable to exercise effective supervision over the feeding and upkeep of the bullocks. The loss by deaths and wear and tear was considerable. Arrangements have therefore been made from the middle of the current month (January 1896) to have the supply of bullocks and drivers made by a contractor, to whom adequate rates have been sanctioned by the council. M.R.Ry. P. S. Krishnasamy Naidu Garu and M.R.Ry. C. R. Kunjithapatham Iyer Avergal dissenting.

(xxiii) *Increasing the number of night-soil carts.*—The maximum quantity of work will be exacted from the existing carts and steps will be taken to increase the number according as funds permit.

(xxiv) *To increase the staff.*—This is a question of finance and as at present circumstanced with a water-supply scheme on its hands, the council will not be able to very nearly double the cost of the sanitary staff.

(xxv) *Private scavenging.*—Special measures have been adopted since the beginning of the current month to secure a systematic inspection of the private privies of the house-holders who are not served by the municipality and prosecution of such of them as keep their backyards in a filthy condition. The sanitary inspectors have been furnished with books of printed forms of notices of inspection to be served on the house-holders. Already fresh houses are coming in under the private scavenging system, and before the official year closes the council hopes to have a large increase in the number of houses served under this system.

(xxvi) *Using slaughter-house filth for cultivation.*—This suggestion will receive attention. If no cultivation is possible, arrangements will be made for the sale of the refuse as manure.

All the other suggestions of the Sanitary Commissioner will receive close attention and prompt action will be taken.

(Signed) P. RATNASABAPATHY PILLAY,
Chairman.

Endt. on Cur. No. 761, Rev.

Forwarded.

(Signed) H. E. MARJORIBANKS,
Ag. Head Assistant Collector.

30th January 1896.
To the Collector of Tanjore.

Forwarded.

The requisite steps are being taken for the removal of the latrine referred to in paragraph VII and the matter is having attention.

VALLAM,
12th February 1896.

(Signed) G. STOKES,
Collector.

of the inspection notes
records in 80 no 953m
7.6.95.

council has repeatedly pressed that the extension of the jetty wall right into the mouth of the municipal drainage channel by the Public Works Department has closed it effectually with the result that a large quantity of water stagnates periodically in the locality. The cost of remedy is a legitimate charge upon the Public Works Department.

The market tank is full with water and is used for sundry washing purposes. The cost of filling it up will exceed Rs. 700, clean earth having to be carted to the site from a great distance. The council will see that the tank is properly conserved.

(vi) *Water-supply.*—The Sanitary Engineer has already made arrangements to make a survey for a water-supply scheme for this town.

(vii) *Contamination of Thamaraiakolam by the public offices latrine.*—This matter has already received attention. A substantial brick wall has been erected between the Thamaraiakolam tank bund and the public offices compound to prevent washings going into the tank. From the endorsement of the Collector of Tanjore, No. 234, dated 19th December 1894, the council notes that arrangements are being made by the Revenue authorities for its removal to another convenient place. Their attention will again be drawn to this subject.

(viii) *Contamination of other reserved tanks.*—The sanitary staff and the watchmen of the tanks have received stringent orders and the approaches strictly guarded. The proposed conversion of the drinking-water tanks into big wells by providing platforms for people to stand upon when drawing water is beyond the ordinary means of the council, and is further unnecessary in the face of a water-supply scheme which has been taken on hand.

(ix) *Disconnecting the dhobies' tank from the supply channels.*—The connection of the dhobies' tank with the supply channel of the town tanks was removed in 1890. The council understands that the Taluk Board of Negapatam has again taken action in the matter and the Chairman will address the President on the subject.

(x) *Ingress of the Uppanar water into the tanks.*—The ingress of the Uppanar water into the Akkaraikolam and the Webster's tank has been effectually put a stop to.

(xi) *Existence of a dust-bin near the tank "Teppakolam."*—There is no tank called "Teppakolam." However, if there is one near any tank, it will be removed forthwith.

(xii) *Selection of rubbish depot sites.*—The council notes that the Chairman has already taken steps in securing fresh sites of unobjectionable kind for storing rubbish in Nagore and Velippalayam.

(xiii) *Contamination of the supply channels to certain private tanks.*—The attention of the owners of these tanks has been and will again be drawn to the evil noticed and the same remedied.

(xiv) *Removal of the latrine opposite Sattaya Pillay's choultry.*—The removal of the latrine will cause a great hardship to the residents in the neighbourhood. The bunds of the supply channel will be raised, strengthened and sloped away from the bed.

(xv) *Providing the Jubilee well with a cover.*—This well is fenced with wooden pailings and there is no access to it whatever. The water is being raised by means of a steam-pump. As suggested by the Sanitary Commissioner, the well will be fitted up with a wooden covering.

(xvi) *Levy of fees for the removal of sewage.*—This question is now pending before a committee of the council and will shortly be disposed of.

(xvii) *Providing an odourless pump and cart for removal of sewage.*—As regards the cart with odourless pump attached, the Chairman will place himself in communication with Messrs. Massey and Co., and the Chairman of the Municipal Council of Bezvada, and bring up the matter before the council with full details as regards the cost, working &c.

(xviii) *Sewage filter.*—The council notes that the Chairman has already made a model filter as per sketch enclosed in his notes and is now trying it. He will report the result to the council and if the experiment is successful, such filters will be made and sold to the house-holders.

(xix) *Distribution of sewage in Hathway's park.*—The suggestions made will be carefully attended and the sewage distributed among the grass plots accordingly.

staff should be mustered, and a certificate as to their fitness for work be submitted by the Chief Sanitary Inspector to the Chairman, who should himself occasionally verify the results. Equally systematically should all conservancy plant be examined, and its fitness for work be certified to. Collection of taxes is certainly not the correct duty of the sanitary staff. I advise their employment on this duty cease.

(Signed) W. G. KING, Surgn.-Lt.-Col.,
Sanitary Commissioner for Madras.

(Signed) P. RATNASABAPATHY PILLAY,
Chairman.

EXTRACT from the Proceedings of the Municipal Council, Negapatam, at a meeting held at 7-30 A.M. on Thursday, the 23rd January 1896.

2. Read notes of the Sanitary Commissioner, Madras, on his inspection of this municipality in October last.

Resolutions—

(i) *Damp proof course.*—The recommendation of the Sanitary Commissioner will be acted upon in the case of new buildings permitted under section 180 of the Municipal Act. A clause will be inserted in the licenses directing the use of well-burnt brick in chunam from the foundation up to a sufficient height above the street level in the building of walls and the plastering thereof with a thick coating of Portland cement. In the case of indifferent bricks, they will be required to be plunged in boiling tar and pitch. This precaution will prevent dampness and crumbling in the walls only. As regards the dampness in the floors of the dwelling houses which is even more serious, the council would thank the Sanitary Commissioner to offer suggestions. In such cases the council would direct the pavements of floors to be made upon a thick layer of dry sand.

(ii) *Thinning out and re-aligning the crowded parts.*—This is a large scheme and finance stands in the way. As regards the fishermen's hutting ground, action has already been taken. The sanction of Government has been received for the entertainment of a survey staff, and the Executive Engineer, who is a member of the council, has been requested to carry out the work of plotting and re-aligning the huts. As the site of the huts is Government property, the Revenue Department will be addressed on the subject of the cost and compensation to the hut-holders.

There is a group of huts at the turn to the beach road in its north end and the council will take early steps to secure the site under the Land Acquisition Act or by private negotiation and throw it open for widening the thoroughfare.

(iii) *Building of huts irregularly.*—Action has already been taken for the removal of thatched huts on the beach road. The council would also instruct the Chairman to disallow all thatched huts on road and street sides abutting public thoroughfares and water-tanks, &c. The council notes with approval the action of the Chairman who has already issued orders in the matter.

(iv) *Encroachments on street lands.*—The closest scrutiny will be exercised in view to the prevention of encroachments on municipal and street lands. The rules on the subject have just been revised by the council.

(v) *Use of vitrified bricks and wood as road material.*—An experiment on the lines indicated was made by the council under the superintendence of Colonel C. E. Creighton, but without success. Use of vitrified bricks is prohibitive in cost and that of wooden bricks more so. The Chairman will, however, address the Sanitary Commissioner for further particulars as regards the cost of this innovation suggested when compared with the present system of laterite roads.

(vi) *Surface drainage.*—The question of the drainage into sea of the storm water of the town near the jetty wall has formed the subject of a long series of correspondence between this council and Government from 1886 downwards. The

N. Mariadass

Inspection Notes.

The following is the result of vaccination during the last six monthly period :—

Total births during preceding six months.	Number vaccinated		Number vaccinated a second time because first operation proved unsuccessful.		Postponed under medical certificate at the end of six months.	Died.	Left the town.	Un-accounted for.	Ratio of successful vaccinations to total births, per cent.
	Success-fully.	Unsuccess-fully for the first time.	Success-ful.	Unsuccess-ful.					
701	119	..	..	..	35	100	155	1	16.97

(13) Registration.—The table given below exhibits the results of registration of vital statistics during the last three years :—

Years.		Birth-ratio per mille of the estimated population.	Death-ratio per mille of the estimated population.	Percentage of deaths from						Ratio of deaths of infants under one year of age per mille to registered births in the preceding year.	Ratio per mille of deaths of infants between one and five years of age to population of that age.
				Cholera.	Small-pox.	Fevers.	Dysentery and diarrhoea.	Injuries.	Other causes.		
1893		29.8	23.2	5.7	2.3	24.4	10.2	1.0	56.4	352.3	170.7
1894		31.3	37.1	9.1	1.2	21.0	11.7	..	57.0	363.3	227.3
1895		[29.5	26.2	0.2	..	27.3	8.5	0.7	63.3	278.4	151.3

These figures show that registration is carelessly conducted, the birth-rate being sufficiently significant of this fact. As for the remaining figures, the heavy proportion of the preventible diseases of cholera, dysentery and diarrhoea demonstrate to the full how marked are both the evil condition of the water-supply and filth of the soil to which I have alluded. No better proof could be adduced of the latter condition, irrespective of the plain fact that each day add enormous increments of unremoved night-soil to the town than that at the end of one year of life of 1,000 infants, no less than 278.4 die.

(14) Sanitary Administration.—More care seems to me requisite as to the choice of municipal servants. On entertaining permanent men, the municipality has the right to send them to the Civil Surgeon to be medically examined as to fitness. This valuable right should be exercised; otherwise there must result loss of municipal funds from the entertainment of feeble, old, or too juvenile persons. My inspection of the staff showed me that such loss does occur. At regular intervals, the

These suggestions will be acted upon.

Inspection Notes

Chairman's Remarks.

(g) In the house of the Muhammadans cess-pits which contain foecal matter are common. They should be abolished without delay, and private scavenging be insisted upon.

(9) *Slaughter-houses*.—The plan and structure are bad at Nagore. The plan of the building, as it stands, should be sent to the Sanitary Board for revision. The filth from this slaughter-house is taken as far as the beach and there thrown away. This is a waste of material and labour. It would be far wiser and more economical to bury the matter on the spot in trenches and attempt cultivation over them.

This suggestion will receive attention. If no cultivation is possible, arrangements will be made for the sale of the refuse as manure.

(10) *Cattle Slaughter-house, Negapatam*.—This building is so narrow that the whole of the walls up to the roof are splashed with blood and filth. These walls are of plain lime plaster. On the floor were found lying fragments of guts, &c., from the slaughter of the previous day. The reservoir containing the washings of the previous day was in a most offensive condition. The well is unprotected and is in a filthy state. The floor is evidently meant to be cement plastered, but the work has, according to my notion, been very badly scamped. It is now fast-going to wreck. This flooring should be at once removed, and the contractor should be called to account. The walls also should be cement-plastered up to the eaves, as it is evident from the space at command being so narrow, this is required. The well should be covered and a pump having its suction pipe in the well outside should be placed inside the slaughter-house.

(11) *The Negapatam Slaughter-house and Market*.—The remarks made in my report of 1893 stand good to this day as to these institutions. The recommendations made were simple and highly desirable. It seems to me that no good ground has been given for not carrying them out.

(12) *Vaccination*.—All vaccination work is performed with fresh animal lymph. The following shows the result of inspection of children met in the streets:—

Number examined.			Percentage of protected.			Percentage of unprotected.			Percentage marked with small-pox.			Total.			
Under one year of age.	One to five years.	Five to ten years.	Under one year of age.	One to five years.	Five to ten years.	Under one year of age.	One to five years.	Five to ten years.	Under one year of age.	One to five years.	Five to ten years.	Number examined.	Percentage protected.	Percentage unprotected.	Percentage marked with small-pox.
7	17	13	85.7	70.6	53.8	14.3	29.4	15.4	..	..	30.8	37	67.6	21.6	10.8

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Inspection Notes.

(c) I would suggest that the following staff would more correctly meet the needs of the town. This represents a heavy addition, but it is only by providing for efficiency that efficiency can be obtained. The proposed incidence here for conservancy and sanitary staff sufficient for 60,000 persons is only 4 pies per head per month, or a total of 4 annas per annum per head. But by abolishing the useless expenditure on sewage carts, this would be reduced to 3 pies per head per month or 3 annas per annum :—

	On starting.		At the end of three years.
	RS. A. P.		RS. A. P.
1 Chief Sanitary Inspector on Rs. 75 — 10 + 15	90 0 0	1 Chief Sanitary Inspector on Rs. 75 — 100 + 15	115 0 0
1 2nd-class Sanitary Inspector on Rs. 45 — 60 + 7-8-0	52 8 0	1 2nd-class Sanitary Inspector on Rs. 45 — 60 + 7-8-0	67 8 0
1 3rd-class Sanitary Inspector on Rs. 25 — 35 + 7-8-0	32 8 0	1 3rd-class Sanitary Inspector on Rs. 25 — 35 + 7-8-0	42 8 0
6 Conservancy overseers	72 0 0	6 Conservancy overseers	72 0 0
120 Toties	660 0 0	120 Toties	660 0 0
60 Sweepers	240 0 0	60 Sweepers	240 0 0
15 Peons	80 0 0	15 Peons	80 0 0
Total ..	1,227 0 0	Total ..	1,277 0 0

(d) The iron latrine near the Durga is in good order except the basement, which requires repair. The cess-pool should be provided with an iron receptacle. A correct ablution place and water should be provided on the spot.

(e) This latrine should be worked strictly on the dry-earth system being near houses. The new latrine on the standard plan near the Uppanar should have an impervious pathway of concrete cement plastered, or of Cuddapah slabs cement pointed.

(f) Private scavenging has advanced but little. There are now but 1,530 of a total of 9,793 houses that are attended to under this system. In this matter, I would advise each of the councillors to pledge themselves at the meeting convened to consider these notes to exert their influence, and give a report of the result of their labours at the ensuing, which should be attached to this for the information of Government.

Special measures have been adopted since the beginning of the current month to secure a systematic inspection of the private privies of the house-holders who are not served by the municipality and prosecution of such of them as keep their backyards in a filthy condition. The sanitary inspectors have been furnished with books of printed forms of notices of inspection to be served on the house-holders. Already fresh houses are coming in under the private scavenging system, and before the official year closes, the council hopes to have a large increase in the numbers of houses served under the system.

Chairman's Remarks.

This is a question of finance, and as at present circumstanced with a water-supply scheme on its hands, the Council will not be able to very nearly double the cost of the sanitary staff.

Will receive attention.

the direction of efficiency, and is a matter that the municipality is indebted for to the energy and forethought of their Chairman, Mr. Oliver, lately deceased. The municipality should attempt to make the sewage farms sustain the bullocks upon the grass or upon hay produced there, instead of upon straw purchased.

(8) *Night-soil and Conservancy.*—

Arrangements are dangerously defective. There are but eighteen latrines for a total population of 59,221. In this connection it must be remembered that the area covered by the municipality is 6.5 square miles. There are but eleven carts, which make at the outside two trips daily. They are thus capable of conveying at the utmost 516 cubic feet of a total of 618 cubic feet of excreta minus the urine. The provision is inadequate. Not less than 40 rubbish and 16 night-soil carts, making three trips daily, are required.

(a) The matter of conservancy should at once demand the attention of the municipality. A committee of the councillors that would take the trouble to completely work out the question should be assembled. The staff required, the routes to be taken by carts, the depôts to which they should deliver their contents, and the method of check of delivery and of the general management of the depôts should all be correctly put on record. If the municipality find they cannot afford carts in sufficient number to meet the demands, they should select certain of the more crowded parts of the town. If the municipality will appoint this committee and the committee elects to place itself in communication with me, I need not say I shall be glad to supply all information they may require in detail.

(b) In the meantime, I would point out that the conservancy staff is not correctly organized. The following is the staff as it stands:—

	Rs.	A.	P.
1 Chief Sanitary Inspector	65	0	0
1 Nuisance Inspector	20	0	0
3 " = Inspectors at Rs. 15	45	0	0
1 Kurnam	10	0	0
1 Peon	7	0	0
13 Peons at Rs. 6	78	0	0
43 Male sweepers at Rs. 5-8-0	236	8	0
68 Female sweepers at Rs. 4	272	0	0
1 Maistry	8	0	0
3 Pettaimen	13	8	0
Total	755	0	0

bulls. The loss by deaths and wear and tear was considerable. Arrangements have therefore been made from the middle of the current month (January 1896) to have the supply of bulls and drivers made by a contractor, to whom adequate rates have been sanctioned by the council.

M.R.Ry. P. S. Krishnasamy Naidu Garu and M.R.Ry. C. R. Kunjithapatham Iyer Avargal dissenting.

The maximum quantity of work will be exacted from the existing carts, and steps will be taken to increase the number according as funds permit.

The points noted herein will receive careful attention. The Chairman will place himself in communication with the Sanitary Commissioner in view to getting such information as may be required.

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Inspection Notes.

(7) *Rubbish disposal.*—(a) The dust-bins available are chiefly of the old brick pattern in very bad order. These should be removed as soon as possible, either in favour of corrugated iron dust-bins with concrete surfaces on which they can be stood or—what I would much prefer to see—the municipality should introduce “the separate receptacle system.” By this I mean the removal of rubbish by a system of calling from house to house. Each house-holder is expected daily, at such an hour in the morning as the municipality may think fit, to place in a convenient site on or near his verandah, or front of the house, a receptacle of such pattern as the municipality may direct. This may be in the form of an open box, such as shown in the diagram. Probably kerosine tins strengthened at the sides with strips of iron, or “dozen cases” would serve the purpose. The rubbish-cart should have a bell attached to warn the house-holders as to its approach. The cartman would then simply have to lift the receptacle into his cart as it passes house after house. This saves much cool labour in sweeping, and moreover ought to suit native ideas expressed in the difficulty of persuading caste native females to approach ordinary public dust-bins.

(b) The municipality have hitherto made the mistake of placing all their depôts to the west of their water-supply channels; thus ensuring that these shall be contaminated. All rubbish depôts should be to the east, or the sea-shore line of the town on the area between the sea-shore and the Nagore road. As there is practically no sale for rubbish in Negapatam, it seems to me the first thing the municipality can do is to invest in one or more incinerators. My suggestion in 1893 was to combine incineration with the question of providing “clinker” for the roads and the vitrifying of bricks. This is a question on which any large engineering firm, such as Messrs. Richardson and Cruddas, Bombay, or Messrs. Burn and Company, Calcutta, could advise the municipality as to procedure.

(c) One very great improvement the municipality has effected is the substitution of their own well fed and strong bullocks for the weakly half-starved animals that were formerly expected to fulfil it. This undoubtedly is a move in

The idea of a separate receptacle system does not meet with the approval of the council. The difficulties in the way are great. In the first place the only places available in native houses for locating the proposed receptacles are pyals and alodies in the front, where the occupants sit, transact business and receive visitors. In the next place kerosine tins or cases are too small for the purpose.

Arrangements are being made to secure less objectionable sites for rubbish depôts, regard being had, at the same time, to their accessibility to the conservancy carts. The Negapatam rubbish is being used for filling up the hollows to the east of Hathway's garden, at that at Velippalayam and Nagore commands a ready sale to the rice-fields.

The departmental management of the conservancy bullocks was found by experience to be exceedingly difficult, and the work done was unsatisfactory. It was not practicable to exercise effective supervision over the feeding and upkeep of the

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Inspection Notes.

(b) If the municipality determine to continue the arrangement of removing sewage, they should do so only on condition that the cost is borne by the house-holders. But I consider they would be justified in providing suitable plant and working it under municipal care. For this no better arrangement could be obtained than the cart of which I gave a diagram in my last notes with an odourless pump attached. The Municipality of Bezwada has ordered one from Messrs. Massey and Co., Madras. But where the house-holders are so badly off that even this method is out of their power, I would advise the adoption of the "Vizianagram sewage filter," the action of which I fully explained to the councillors, and of which I enclose a diagram for their information. It seems to me, therefore, with this cheap expedient at their disposal, there need be no good ground for any inhabitant allowing untreated sewage to flow upon the ground. If each councillor in his ward would take the matter up earnestly, there can be no doubt that this simple measure would produce a vast improvement upon the general sanitary condition of the town.

(c) *Sewage Garden.*—In Hathway's park, the municipality have, for sometime past, maintained cultivation under sewage. This is, as already stated, brought there by carts. There is a cistern within the ground intended for the receipt of sewage, but it has obviously not been in use for a long period. Instead of taking it to this point, diluting it with water, and subsequently distributing it for irrigation, as should be done, the carts are brought to the side of the paths and discharge their contents upon the edge of the grass plots. There results a complete failure as to equable distribution of the sewage, which should be aimed at. It seems to me that the number of labourers employed here is more than is necessary. Ten persons and one maistry are employed. Of these, five seemed to me physically feeble persons, whose services could be of little real benefit. This is, however, a matter I do not venture to give a positive opinion upon. I merely suggest that it is a question the council should take into consideration whether the present establishment is really necessary, and, if it be so, whether the labour is of the correct quality.

Chairman's Remarks.

As regards the cart with an odourless pump attached, the Chairman will place himself in communication with Messrs. Massey and Co., and the Chairman of the Municipal Council of Bezwada, and bring up the matter before the council with full details as regards the cost, working, &c.

As regards the suggestion of the Sanitary Commissioner to use sewage filters, the council notes that the Chairman has already made a model filter as per sketch enclosed in these notes, and is now trying it. He will report the result to the council, and if the experiment is successful, such filters will be made and sold to the house-holders.

The suggestions made will be carefully attended to and the sewage distributed among the grass plots accordingly.

As regards the establishment, the Sanitary Commissioner's views are approved by the council and provision for a reduced establishment has accordingly been made in the budget for the ensuing official year.

Vatthapany

Inspection Notes.

space" latrine at the point at which the channel enters the tank, which must during rainfall empty its contents into the channel. Anything more filthy than the conditions surrounding this tank can hardly be conceived; yet, I was assured, that it is largely used by the people and much appreciated by them. The least that can be done for the improvement of this unsatisfactory source of water-supply is the removal of the latrine and the filling in with clean material of the pits in the neighbourhood. Mr. Soobiah Pillay should then be invited to have the water lifted by picottah to a filter bed and well.

(h) The Jubilee well cannot be considered a safe source of supply until it is provided with a cover. Just as it is necessary to supply the tank into which the water is discharged by the pump with a cover, so it is the case with the well.

(i) The well much used by Hindus in the Victoria park as well as others in the same area require repair as to their parapet walls and platforms and the provision of drains.

(5) Sewerage.--(a) It having now been definitely decided that Negapatam will accept a water-supply scheme as an urgently-required measure before the introduction of a sewerage system, it remains again to refer to the palliative measures for removal of sewage water suggested in my former report. I find the municipality still removes sewage at the cost, not of the individuals benefited, but of the municipal funds.

(6) They entertain nineteen cess-pool carts at a cost of Rs. 15 each. Allowing that these carts fulfil five trips per day (which is unlikely), the result would be the removal of 12,074.5 gallons of sewage. This would represent at the maximum, that the cess-pools of 402 houses (at five inhabitants per house) are being attended to, so that for the convenience of this small number the public pay Rs. 3,400 yearly, or at the rate of 15 pies per gallon or three-fourths of an anna per small chaty (5 gallons) of sewage water removed. This is anything but a good bargain, and I again ask the municipality to consider why they should not cause the inhabitants to pay for removal as in the case of the municipalities of Bellary, Ellore, Bezwada Guntur, Masulipatam, Mayavaram, Rajahmundry, &c.

Chairman's Remarks.

The removal of the latrine suggested will cause a great hardship to the residents in the neighbourhood. The bund of the supply channel will be raised, strengthened and sloped away from the bed.

The Jubilee well is fenced with wooden palings, and there is no access whatever to it. The water is being raised by means of a steam-pump. As suggested by the Sanitary Commissioner, the well will be fitted up with a wooden covering.

This will be attended to and the necessary repairs carried out.

The question of the levy of fees from house-holders for removal of sewage is now pending before a committee of the council and will shortly be disposed of.

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Vathagur

Inspection Notes.

(c) The dhobies still wash in the Manjeekolam, the channel of which is liable, and does, back up during rainfall into the channel supplying the two chief tanks of the town—although I think I had good ground for proving a connection between the use of the water so contaminated and the cholera epidemic of 1890.

(d) Not only are these tanks open to contamination in this manner, but, as has been pointed out to the council by the Civil Surgeon Mr. Oosman Sahib during the rise of the tide, the Uppanar sends before it the filth from the bank of rubbish in the Hathway's park and from the latrine situated in its spread, &c. This arises from careless management as to the sluices, which are either damaged or have no boards. This should be remedied without delay, and it should be seen that the sluice is water-tight.

(e) The arrangement of having a dust-bin close to the Teppakolam cannot be said to be good. It should be removed from this site.

(f) The council has been most unfortunate as to the selection of the correct position for the rubbish depôts, as has been pointed out to them by the Civil Surgeon. Thus, near the Ichenkolam is a large rubbish depôt. An effort has been made to place a wall round the depôt and thus confine the surface drainage. This is certainly better than nothing in that some filtration must occur. But this does not meet the requirement of the case. Every particle of rubbish should be removed from the neighbourhood at once, or the tank should be abandoned. In this connection it must be remembered that the slope in any case goes towards the channel supplying the Nagore tanks.

(g) The Velippalayam rubbish depôt drains direct into the channel which supplies the Tamrakolam, Gunappa Chetty and Seebiah Pillay's tanks. The washings of a graveyard are also received before delivery in these tanks. But to the Seebiah tank is added a considerable extra amount of filth. Not only is the drainage of certain very filthy houses received into it direct, but there exists an "open

Chairman's Remarks.

The connection of dhobies' tank with the supply channel of the town tanks was removed in 1890. The council understands that the Taluk Board of Negapatam has again taken action in the matter, and the Chairman will address the President on the subject.

The ingress of the Uppanar water into the Akkarakolam and the Webster tank has been effectually put a stop to.

There is no tank called Teppakolam. However, if there is one near any tank, it will be removed forthwith.

The council notes that the Chairman has already taken steps in securing fresh sites of unobjectionable kind for storing rubbish in Nagore and Velippalayam.

The attention of the owners of these tanks has been and will again be drawn to the evil noticed and the same remedied.

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(3) *Surface drainage.*—(a) Numerous suggestions were made under this head which, notwithstanding the council's promise, should receive attention "as opportunities offer" seem in no way to have been acted upon. I again call attention to my recommendations. I would, however, add that I consider that the filling in or draining, if that be feasible, of the tank near the market is desirable. It should be possible to utilize the plot that would be so formed with profit, by employing the refuse from the slaughter-house and sillage from the market which are close at hand. Even were sand only used for filling—and of this there is no lack in Negapatam—it should be possible, with the aid of this manure and sewage, in time to produce good soil and profit from vegetables growing on the site.

(4) *Water-supply.*—(a) In my last notes in view of the fact that Rs. 10,000 were available, I pressed the question of utilizing sub-soil water delivered protected in certain sections of the town by pumping and lifting to cisterns. This, I believe, would have been a very great boon to the people, and would have represented money well spent in their sanitary interest. When, however, the council's proposal as to an open channel was rejected by Government, the money intended for water-supply was directed to other purpose. Now, however, that Negapatam has definitely accepted a water-supply scheme, it would no longer be financially sound to entertain this matter. Nevertheless, my further remarks as to the protection of the water-supply by temporary expedients remain as fully applicable.

(b) The cutcherry latrine and the cutcherry compound up to date contribute focal matter during rainfall to the Thamaraikeḷam tank. Webster's tank, Totakolam and Marikalkolam remain innocent of any endeavour to protect the water-supply from the defilement consequent upon persons walking direct into the water. The banks of the Akarakolam and the Webster's tank were on my visit exactly in the state I had seen them in 1890 and in 1893, that is, defiled with focal matter.

The question of the drainage into sea of the storm water of the town near the jetty wall has formed the subject of a long series of correspondence between this council and Government from 1886 downwards. The council has repeatedly pressed that the extension of the jetty wall right into the mouth of the municipal drainage channel by the Public Works Department has closed it effectually with the result that a large quantity of water stagnates periodically in the locality. The cost of the remedy is a legitimate charge upon the Public Works Department.

The market tank is full with water and is used for sundry washing purposes. The cost of filling it up will exceed Rs. 700, clean earth having to be carted to the site from a great distance. The council will see that the tank is properly conserved.

The Sanitary Engineer has already made arrangements to make a survey for a water-supply scheme for this town.

This matter has already received attention. A substantial brick wall has been erected between the Thamaraikeḷam tank bund and the public offices compound to prevent washings going into the tank. From the endorsement of the Collector of Tanjore, No. 234, dated 19th December 1894, the council notes that arrangements are being made by the Revenue authorities for its removal to another convenient place. Their attention will again be drawn to this subject.

The sanitary staff and the watchmen of the tanks have received stringent orders, and all the approaches strictly guarded. The proposed conversion of the drinking-water tanks into big wells by being provided with platforms for people to stand upon when drawing water is beyond the ordinary means of the council, and is further unnecessary in the face of a water-supply scheme which has been taken on hand.

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as to the nature of improvement to be effected, and estimates should be really made, and the suggestions (as to the necessity for which no one can possibly entertain doubt) be disposed of otherwise than by simply concluding that loans would be necessary, and, this being so, that they would not be within the financial powers of the municipality.

(d) Not only is it necessary to combat the evil effect of existing overcrowding upon the soil, but to take care that the mistake be not allowed in respect to future building operations.

(e) A very frequent condition is the building of huts without due care as to their order and without provision for conservancy, the excuse given by the sanitary staff being that these are upon "private land." Sections 187 and 226, however, give ample power in this respect, and the provisions should be enforced.

(f) Encroachments are also by no means rare. One very marked instance is that of a new line of bazaars erected near the head of Kottapallem street in such a manner as to in great part occlude the entrance although not actually standing within the limits of that street.

(g) Another source of insanitary conditions near dwellings is the freedom with which huge pits are excavated by persons taking earth for making the mud walls of huts. These they fail to fill up, and thus stagnant pools of water are found; or, worse, they remain partially filled with rubbish. The council should insist that all such places should be filled with clean earth—vide section 227.

(2) Roads.—(a) Of a total income of Rs. 70,677 last year, Rs. 11,108 was spent upon roads, being 109 per cent. of the revenue derived from tolls. Yet Negapatam must be regarded as very badly off in this matter. Practically all but the main roads are mere sandy tracks.

(b) I laid before the council the proposal to make, as frequently and successfully pursued in America, brick pavement roads. This was promised attention, but nothing has been done in the matter. It seems to me, in consideration of the heavy expenditure of importing so unsatisfactory a material as laterite from Tanjore by rail, that the matter merits careful attention and experiment.

Action has already been taken for the removal of thatched huts on the beach road. The council would also instruct the Chairman to disallow all thatched huts on road and street sides abutting public thoroughfares and water-tanks, &c. The council notes, with approval, the action of the Chairman who has already issued orders in the matter.

The closest scrutiny will be exercised in view to the prevention of encroachments on municipal and street lands. The rules on the subject have just been revised by the council.

This point will receive close attention and prompt action will be taken to bring the offenders to justice.

An experiment on the lines indicated has made by the council under the superintendence of Colonel Creighton, but without success. Use of vitrified bricks is prohibitive in cost, and that of wooden bricks more so.

The Chairman will, however, address the Sanitary Commissioner for further particulars as regards the cost of the innovation suggested when compared with the present system of laterite roads.

taken." The council met this with the suggestion that a "special establishment to work and supervise it would be necessary." This conclusion is incorrect. I herein enclose a diagram for information, and trust this simple matter will receive attention.

(b) In the second paragraph under this head I advocated the buying up of houses and the cutting of roads as essential for perflation, and the proper sanitary condition in the over-crowded parts of the town, viz., near Karian Pillaiyar Kovil, old street—the quarter chiefly inhabited by Eurasians—and in the fishermen's hutting ground near the jetty. None of these suggestions have been attended to on the ground that the council is "not in a position to raise a loan." But, on the other hand, the council certainly made no attempt, as they were invited to do, to make estimates. It is worth remembering that, under the Land Acquisition Act, the property could be acquired at reasonable figures, and that in again disposing of the land for the erection of a better class of houses, which are urgently required, there would be a likelihood of a considerable offset. Granting it was beyond the power of the municipality to make a large expenditure under this one head, there can be no reason why, as has been actually accomplished in Adóni and in Kurnool, year by year, allotments should not be made for the purchase of houses and land and the steady improvement of localities, by the opening up of properly formed roads.

(c) That there existed the elements of success in a scheme which allowed for the buying up of land and re-selling it for erection of houses in Negapatam is sufficiently shown by the fact that the South Indian Railway contemplate making a number of houses at their own expense for the accommodation of over a 1,000 workmen employed daily by the company. On the Deputy Sanitary Commissioner again pressing the question of the condition of the fishermen's huts, I am glad to find the council has so far given some attention to the matter. But I would ask them to go further than this and proceed to action. The various localities mentioned should be carefully inspected by the council as a body, and some determination should be arrived at, in each case,

will prevent dampness and crumbling in the walls only. As regards the dampness in the floors of the dwelling-houses, which is even more serious, the council would thank the Sanitary Commissioner to offer suggestions. In such cases the council would direct the pavements of floors to be made upon a thick layer of dry sand.

This is a large scheme, and finance stands in the way. As regards the fishermen's hutting ground, action has already been taken. The sanction of Government has been received for the entertainment of a survey staff, and the Executive Engineer, who is a member of the council, has been requested to carry out the work of plotting and re-aligning the huts.

As the site of the huts is Government property, the Revenue Department will be addressed on the subject of the cost and compensation to the hut holders.

There is a group of huts at the turn to the beach road in its north end, and the council will take early steps to secure the site under the Land Acquisition Act or by private negotiation and throw it open for widening the thoroughfare.

Suraso *Suraso*

206594.
9.12.95.

7/16 29 April 1896
No. 1 M., MARCH 1896.
GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper:—

From M.R. Ry. P. RATNASABAPATHY PILLAY Avargal, Chairman, Municipal Council, Negapatam, to the Chief Secretary to Government (through the Head Assistant Collector and the Collector of Tanjore), dated Negapatam, 28th January 1896, No. 778.

I have the honour to submit, herewith, the notes of the Sanitary Commissioner, Madras, on his inspection of this municipality with replies of the council noted on the margin.

2. An extract from the proceedings of the council, dated 23rd instant, in which the inspection notes were discussed by it, is enclosed.

ENCLOSURE.

Inspection Notes of the Sanitary Commissioner for Madras.

TANJORE DISTRICT.

NEGAPATAM MUNICIPALITY.

Inspected 14th to 21st October 1895.

Population as per census of 1891

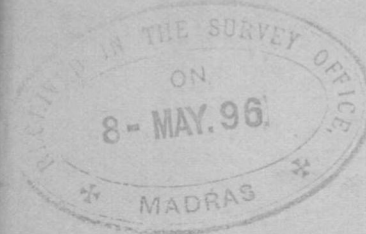
Inspection Notes.

.. .. . 59,221
Chairman's Remarks.

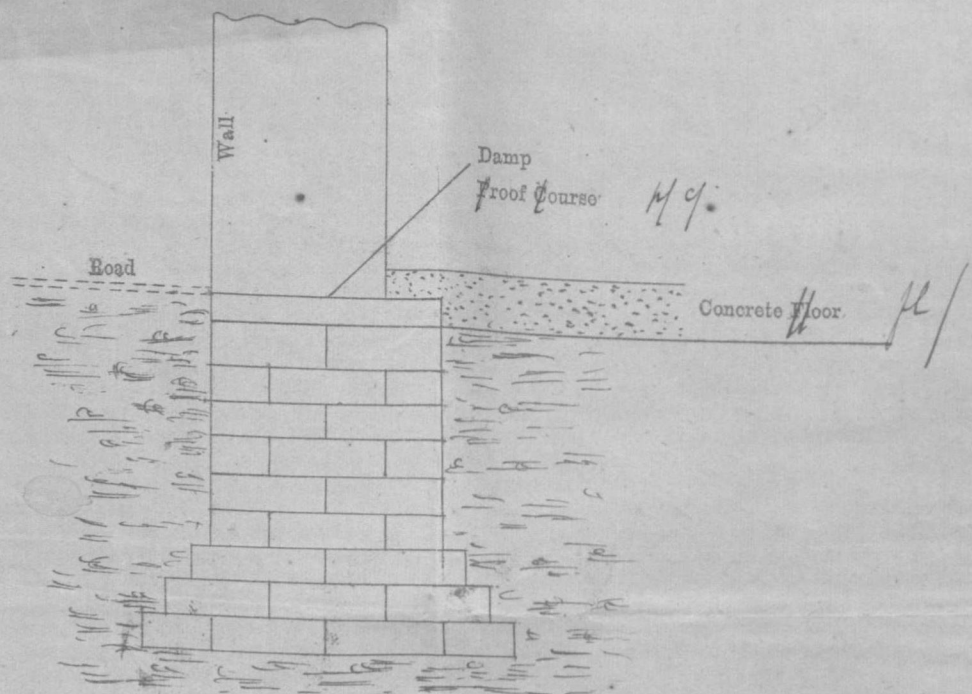
I find it necessary to again advance several of the suggestions made by me in my report of 1893. I the more willingly adopt the course of again advancing these—as I am convinced, after my personal consultation with the councillors, that several simple suggestions made were not adopted from my intentions being misunderstood. I therefore request the Chairman will place before the councillors the report referred to, as a reference in perusing the following remarks:—

(1) *Dwellings.*—(a) Under this head I pointed out the desirability of using “damp-proof courses” in houses. It was not intended that the council should proceed on a work of destruction, and pull down the houses that this single course might be inserted. On the opposite, I advised that, when the question of new buildings came before them, this should be enforced under section 180, on the ground that “in this locality” (Negapatam) “no house can be said to be sanitariously safe, unless this precaution be

The recommendation of the Sanitary Commissioner will be acted upon in the case of new buildings permitted under section 180 of the Municipal Act. A clause will be inserted in the licenses directing the use of well-burnt brick in chunam from the foundation up to a sufficient height above the street level in the building of the walls, and the plastering thereof with a thick coating of Portland cement. In the case of indifferent bricks they will be required to be plunged in boiling tar and pitch. This precaution

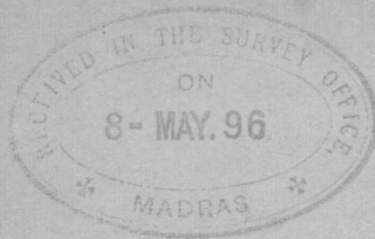


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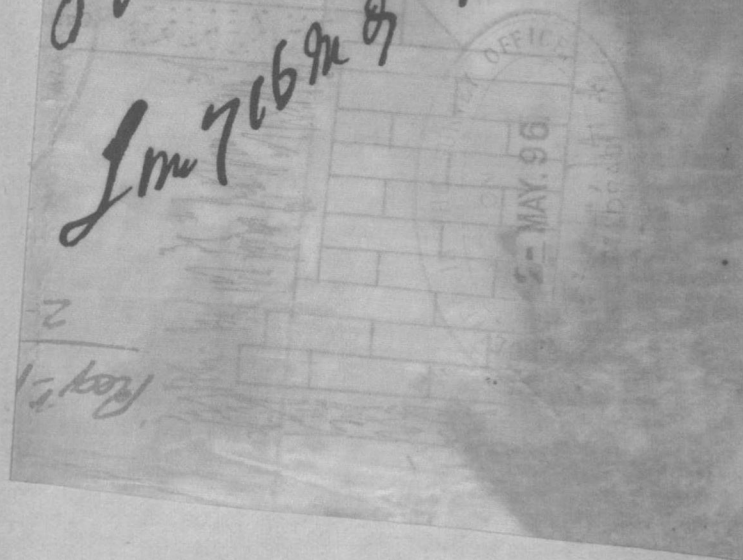


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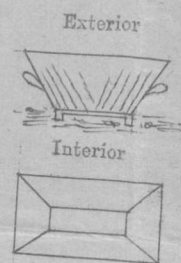
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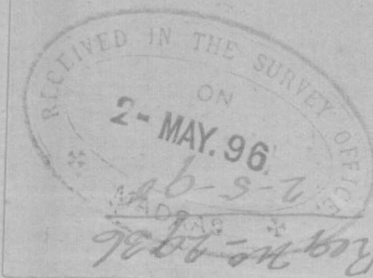


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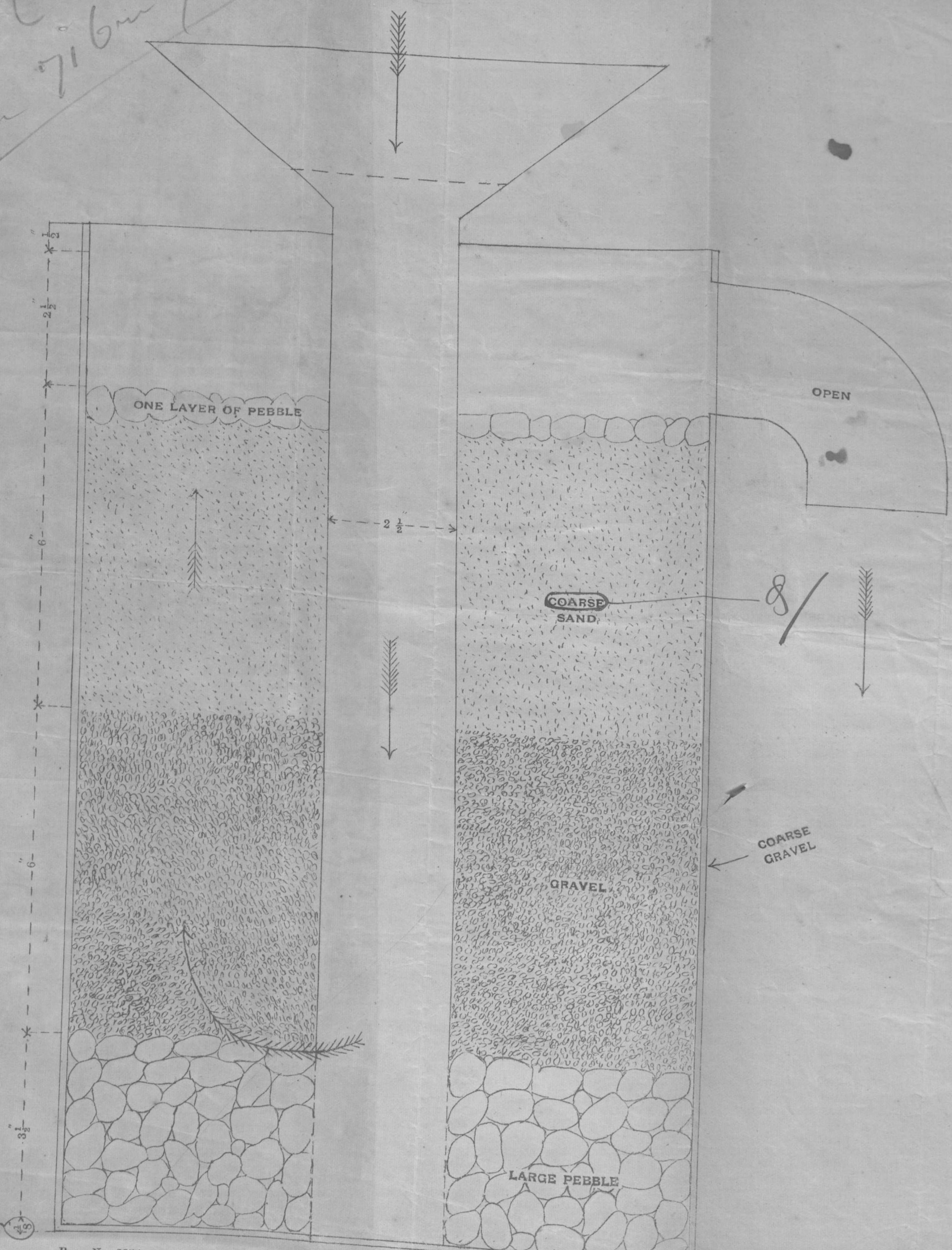
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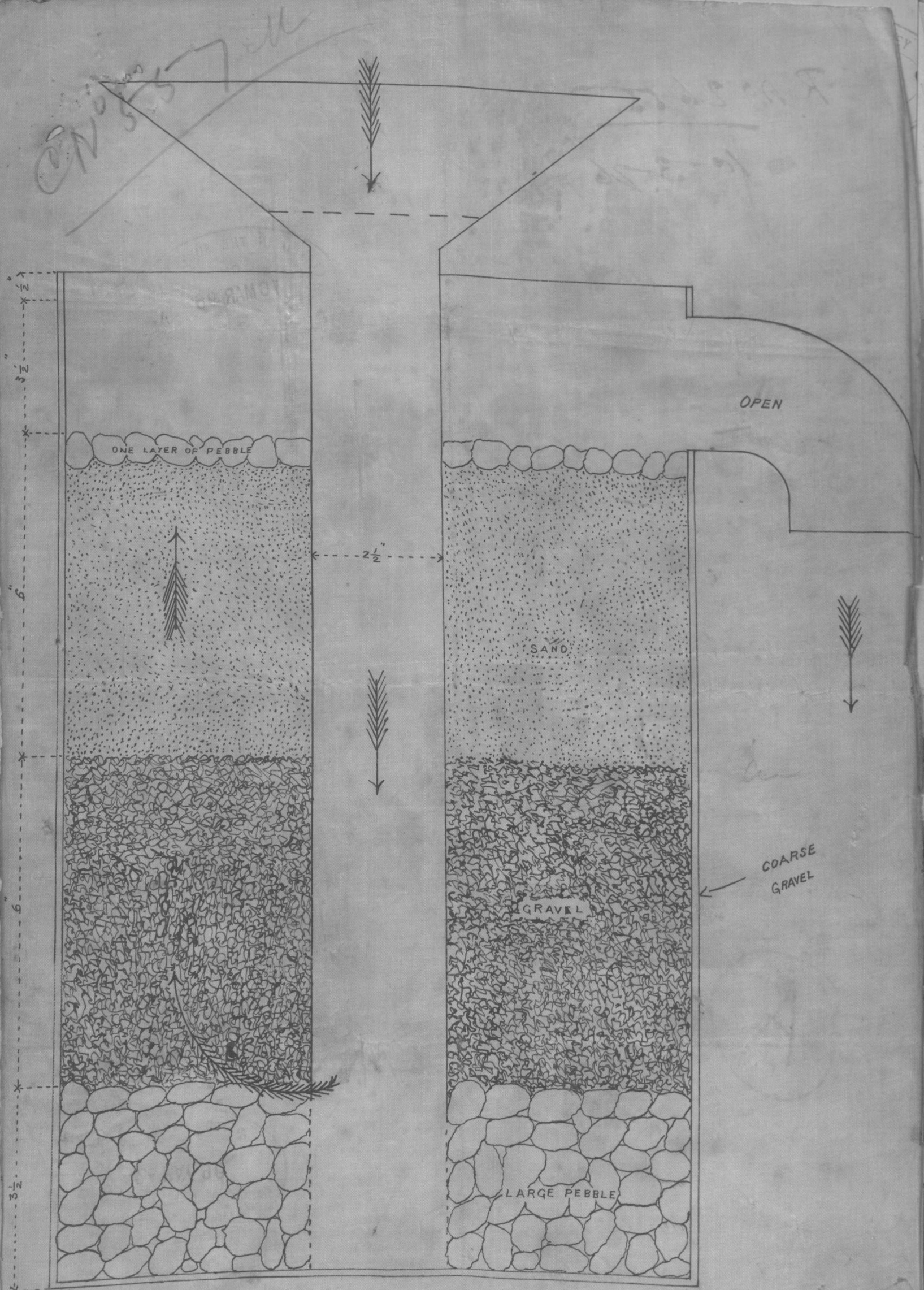
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LOCAL AND MUNICIPAL.

For approval.

15/11/96

Issued

Recd.

Encl.

G.O., No. 716 M., 29th April 1896.

Prepared

APRIL.

Please struck off
15/3/96

Inspection Notes.

Recording, with remarks, the Sanitary Commissioner's — on the Negapatam Municipality.

15/3/96