

Local & Munl. (1898) Department.

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G.O., No. 24. *m*

DATED 5. 1. 98

DESPATCHED

[Despatch Abstract.]

Inspection notes. — Recording with
remarks the Dr. Santh. Cant's
— on the Manipalain Municipality

BACK PAPERS.

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

FURTHER PAPERS.

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

Government {1898} of Madras. LOCAL AND MUNICIPAL.

Recd.

Regd.

} 1898.

Enclosures

Spare copies

G.O., No. 24 M., 5th January 1898.

JANUARY.

Inspection Notes.

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

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper :—

From J. W. MAIDEN, Esq., Chairman, Municipal Council, Masulipatam, to the Collector, Kistna District, dated 29th October 1897, No. 893.

I have the honour to forward herewith inspection notes of the Masulipatam Municipality for 1896, with the Chairman's replies thereon, and to request that you will be good enough to transmit the same to the Secretary to Government, Local and Municipal Department, Madras.

A copy of the proceedings of the municipal council, passed at their meeting held on the 11th instant, approving the same, is herein enclosed.

ENCLOSURES.

INSPECTION Notes of the Inspector of Vaccination and Deputy Sanitary Commissioner, Madras.

KISTNA DISTRICT.

MASULIPATAM MUNICIPALITY.

Inspected 21st and 22nd December 1896.

Population as per census	1881	..	..	..	..	..	35,056
	1891	..	..	..	..	..	38,809
Estimated population	1896	..	..	..	..	..	41,181

Inspection Notes.

Chairman's Remarks.

The town is situated on the flats formed by the Kistna river and is about three miles from the sea. The sub-soil water is very close to the surface varying, as a rule, from three to six feet, and portions of the town are frequently under water owing to the proximity to undrained marsh land. As these marshes are not within the control of the municipality, it is to be hoped that Government may see its way to afford some relief by draining these by works of a character similar to those used in Holland for a like purpose. With a site of this description it is only natural to find diseases such as beri-beri and rheumatism prevailing largely, and no hope can be entertained of a diminution until the cause, *i.e.*, dampness of the site, be remedied.

The question of draining the town is under consideration of Government. In the Public Works Department a surveyor on Rs. 60 is entertained to survey the town for a period of six months.

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2. *Dwellings*.—On all hands one sees evidence of damp walls in crumbling bricks and discoloured walls, and it is therefore very necessary that the council should exercise their powers to improve matters in this respect by insisting on the insertion of damp-proof courses in all new houses for which licenses are sought. The people themselves try to improve matters by plastering with cement outside, but do not seem to be aware that a horizontal layer laid on the foundation walls six inches above the level of the ground would prevent all the damp from below rising up into the walls above. Choultry Makerla Venkatasawmi is in a dilapidated state and should be closed, as being dangerous to live in.

This is kept in view. Several new houses are now built on raised foundations and the floor is cemented.

Notice has been issued to the party to repair the building.

3. *Drainage*.—There are several large drains throughout the town for the removal of surface water. These, as noticed above, are largely rendered inoperative by the high level of the water in the swamps outside, but since last inspection they have been broadened and consequently act more rapidly than before.

Yes.

4. *Sewage removal*.—There is no system of sewers in the town, and the only attempt at removal of slop water out of the inhabited area is the daily emptying of 25 cesspools. It is hardly necessary to remark that this is utterly inadequate for a town of this size; if the council really wishes to grapple with this vital question of how to keep the town clean, they could not do better than by seeing that each householder provides a proper water-tight cesspool at his own expense, and that this is daily cleansed for him by the municipal sewage-carts, a small fee being charged for the service rendered. Small portable pumps, with suction hose attached, are now procurable from various dealers in Madras at a cost of about Rs. 70 and with these the work of emptying cesspools can be easily and pleasantly done at the minimum of cost both of time and labour.

Several houses have got large compounds attached to them. Sewage of these houses is let into the compounds where trees are raised. In case of houses having no compounds, cesspools are invariably constructed and the municipality undertakes to clean them at a nominal fee.

This will be obtained this year.

5. *Conservancy*.—(a) There are 90 corrugated-iron dust-bins, being an increase of 17 since last inspection. As this number is quite insufficient, it would be interesting to know why the 50 bins for which provision was said to have been made in last year's budget have not been procured. The rubbish is removed by means of 31

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(b) *Latrines*.—The number of public latrines still remains at 13, though the Chairman remarked in last inspection notes that "this year four latrines will be constructed as provided in the budget and provision is also made for four more latrines during the next official year." The Horbury's latrines are still without buckets and the masonry ones are not yet converted to the standard plan, though both these recommendations were made in last inspection notes (and also received the approval of Government—*vide* paragraph 2 of G.O., No. 671 M., dated 17th April 1895) and would not cost much. It is very desirable that these suggestions be carried out, as in no other way can the soil of the latrines be kept free from contamination. As already pointed out repeatedly in successive inspection notes, the number of latrines is not nearly sufficient and should be increased with all speed. The council would do well to consult the District Medical and Sanitary Officer on this point. Night-soil is removed in five iron carts drawn by bullocks and buried in trenches in the Razupeta swamp. The amount of faecal matter removed from the town is quite remarkably small, and is largely accounted for by the fewness of the latrines and the habit of the people of frequenting the waste places to be found throughout the town.

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The latrine will be put up this year. Dust-bins will also be obtained.

Ten rubbish carts of an improved pattern were made last year under my supervision and five more will be added this year. The conservancy establishment will be reorganised this year.

This will be attended to.

Two sweepers will be posted at each depôt to burn rubbish daily as suggested, but in the rainy season this becomes impracticable.

For want of funds the council were unable to give effect to these recommendations. No opportunity will be lost to carry out these suggestions in course of time.

But the latrines were not freely used by the people, as the town is a straggling one and as there are gardens attached to a great many houses.

The council hope that matters will improve and night-soil will be more properly collected as a trained sanitary inspector is now entertained.

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(c) *Private Scavenging*.—It is estimated that there are 1,000 privies in the town; but of this number the municipality cleans only 326—a very small proportion. The trained sanitary inspector about to be entertained by the municipality should be able to increase this number with ease. His attention should also be directed to the filthy condition of many of the backyards and, by systematically prosecuting, should enforce improvement in this matter.

6. *Water-supply*.—Kistna water brought to the town by canal is largely used throughout the town and, as many times pointed out, is liable to gross pollution from many sources. The wells also throughout the town are shallow and in most cases not above suspicion; so it is to be hoped that the municipality will face the problem of introducing a proper piped supply at no distant date. The pump at the well at the Munsif's Court has not yet been provided though promised.

7. *Market*.—The market in Robinson's Square is still in the same unsatisfactory state as when last reported on, though some small repairs have been carried out at one of the sheds. The whole question of markets should be thoroughly gone into and sufficient land acquired for the erection of one central place built on sanitary principles. The meat market is still in the same building as the fish bazaar, though the disadvantage of this arrangement was pointed out last year. The butchers have been supplied with slabs, but they also retain the use of the wooden boxes objected to last year; these should now be removed. I was informed that steps had been taken to acquire land for the erection of a new meat market; it would be well to acquire the whole of the adjacent side of Robinson Square and to make a proper market once for all. Behind the market are two defective cesspits, the contents of which appear to be baled out on to the ground from whence they find their way into a tank ten yards distant. This should at once be remedied by reconstruction of the cesspools on the standard plan and the daily removal of the contents by carts.

Every effort is made to increase the number of privies under municipal management. The council expect the trained sanitary inspector to improve private scavenging.

The Director of the Geological Survey of India has given his opinion that an artesian well may not be a success at Masulipatam and that Kistna canal should be looked upon as source of water-supply. The Sanitary Engineer says it is of no use to draw up a scheme till the council is prepared to meet half the cost of the water-supply scheme calculated at Rs. 7 per head of population, provided Government promise to give a loan of the other half to the council. I believe the water-supply scheme is attended with many difficulties and cannot be carried out successfully in Masulipatam.

A pump has been obtained from Calcutta. It is to be put up.

The council are of the same opinion as the Deputy Sanitary Commissioner. If possible, a loan will be raised in the local market, with the approval of Government, to construct a market on an approved plan.

The council consider the separation of the meat and fish markets is a desirable one, and they are trying their best to give effect to these proposals.

These are wooden pieces, not boxes. They are required for cutting meat on them.

This will be attended to.

Inspection Notes.

8. *Slaughter-houses*.—The sheep slaughter-house is constructed on old-fashioned lines, and is now also too small for present requirements, so I would suggest that a new one be built on the standard plan, instead of trying to patch the present structure. Cattle are killed close by on an enclosed piece of ground, but there is no house for the purpose; one should be erected. The offal is buried in the swamp close by and is utilised afterwards for manuring the avenue trees.

9. *Vaccination*.—Two vaccinators are employed. First-class vaccinator C. H. Brahmayya has 25 years' service; pay Rs. 18 plus Rs. 7 for looking after the vaccine depôt. He seems to do his work fairly well. The depôt belongs to the district board. Second-class vaccinator N. Narasimhulu, has 1½ years' service; pay Rs. 10. He appears to do most of the writing, very few entries in the register being made by the other man. Registers well kept and instruments in good order.

Vaccination has greatly improved since last inspection, most of the available births being overtaken. The whole of the juvenile population is not by any means protected, for out of 105 children examined 72 were found protected, 16 unprotected and 17 with marks of small-pox. A house-to-house visitation should be instituted so as to discover and operate on all unprotected children below ten years of age.

The following table shows the working of the staff and results obtained during the last five years:—

	1892.	1893.	1894.	1895.	1896.
Number vaccinated	3,946	2,806	2,466	2,720	2,263
" " " " " " " "	3,784	2,705	2,339	2,624	2,185
" " " " " " " "	905	921	837	1,183	1,124
" " " " " " " "	1,083	311	152	232	637
Births	1,111	1,005	1,071	1,294	1,203

It will be seen that a very small number of cases are verified by the inspecting officer, which means, of course, that all parents are not obliged to bring their children to the hospital for verification, which is not as it should be.

The following table shows the working of G.O., No. 1502, for the six months ending 31st December 1896.

Chairman's Remarks.

An estimate prepared for the extension of the slaughter-house has been disapproved by the Sanitary Board. Provision will be made in the budget next time for the construction of a slaughter-house on an approved plan.

Only one cow or bullock is killed daily. The council is averse to incur a large expenditure for the paltry sum of Rs. 180 realised on this account.

Yes.

This will be attended to.

Inspection Notes.

Chairman's Remarks.

Total births during preceding six months, i.e., from 1st January to 30th June 1896.	Number vaccinated		Number vaccinated a second time because first operation proved unsuccessful.		Number postponed under medical certificate at the end of six months.	Number died.	Number left the town.	Number unaccounted for.	Ratio of successful vaccinations to total births per cent.
	Successfully in the first instance.	Unsuccessfully in the first instance.	Successfully.	Unsuccessfully.					
514	331	..	..	..	22	93	68	..	64.39

10. *Registration*.—Two registrars are employed and they go out to collect information on alternate days. Information is also furnished by the sanitary inspectors and midwives, but the licensed vettyians, who might give valuable information as to deaths, do not do so. I would suggest that as one of the terms of their license this should be insisted on. It is noted that beri-beri is a very frequent entry in the death register. The following shows the results obtained, which must be considered as capable of improvement:—

Grave-diggers are licensed by the municipality and they give information to the registrars of all deaths.

No pains are spared to improve vital statistics. But two registrars are not sufficient as they are to attend the Magistrate's Court for conducting prosecutions and making inquiries in case of children to be vaccinated. The council will be moved to sanction the entertainment of an extra clerk on Rs. 10 to carry out the work more efficiently as contemplated in G.O., No. 2132 L., dated 12th November 1896 (Vital Statistics).

	1892.	1893.	1894.	1895.	1896.
Deaths from—					
Cholera	3	79	62	..	1
Small-pox	2	2	6	254	239
Fevers	247	206	34	79	64
Dysentery and diarrhoea	77	70	832	731	619
All other causes	710	759	..	..	..
Total	1,039	1,116	1,171	1,064	923
Death-rate per mille of the estimated population ..	26.3	27.9	29.0	26.1	22.4
Births	1,111	1,005	1,071	1,294	1,203
Birth-rate per mille of the estimated population ..	28.1	25.4	26.5	31.7	29.2

FORT ST. GEORGE,
8th April 1897.

(Signed)

W. B. BANNERMAN, Surgn.-Major,
Insp. of Vacc. and Dy. San'y. Commr.

No. 948-S.

Forwarded to the Chairman, Municipal Council, Masulipatam.

2. Attention is requested to paragraph 2 of G.O., No. 1765 M., dated 23rd December 1893.

FORT ST. GEORGE,
22nd April 1897.

(Signed)

W. G. KING, Surgn.-Lieut.-Col.,
Sanitary Commissioner for Madras.

14/1/98

Government {1898} of Madras.
LOCAL AND MUNICIPAL.

Proof for approval.

KR
15/1/98

Pass
Strike off amended
14/1/98

Recd.

Enclosures

Regd.

1898.

Spare copies

G.O., No. 24 M., 5th January 1898.

JANUARY.

Inspection Notes.

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

8 No. 24 M., 5TH JANUARY 1898.

No. 109 M.—Eng.

Forwarded.

29th April 1897.

(Signed) J. K. BATTEN,
Acting Collector.

PROCEEDINGS of the Masulipatam Municipal Council passed at a meeting held on Monday, the 11th October 1897.

* * * * *

(19) Read Inspection notes of the Inspector of Vaccination and Deputy Sanitary Commissioner, Madras.

Resolution.—Chairman's replies are approved.

* * * * *

Dis. No. 332 M.

Forwarded.

15th November 1897.

(Signed) R. MORRIS,
Collector.

ORDER—No. 24 M., dated 5th January 1898.

Recorded with the following remarks:—

(1) The remarks of the Deputy Sanitary Commissioner in paragraph 5 (b) of his notes regarding the inadequacy of latrine accommodation in the town should receive careful consideration.

(2) The delay of nearly six months each in the Sanitary Commissioner's and the municipal offices in forwarding these notes is unsatisfactory and should have been explained.

(True Extract.)

H. TREMENHEERE,
Ag. Secretary to Government.

To the Chairman, Municipal Council, Masulipatam.

„ Collector of Kistna.

„ Sanitary Board.

„ „ Commissioner.

„ „ Engineer.

Editors' Table.

Exd. W. D'Moss.

GOVERNMENT OF MADRAS.

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READ—the following paper :—

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Notice has been issued to the party to repair the building.

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Yes.

4. *Sewage removal*.—There is no system of sewers in the town, and the only attempt at removal of slop water out of the inhabited area is the daily emptying of 25 cesspools. It is hardly necessary to remark that this is utterly inadequate for a town of this size; if the council really wishes to grapple with this vital question of how to keep the town clean, they could not do better than by seeing that each householder provides a proper water-tight cesspool at his own expense, and that this is daily cleansed for him by the municipal sewage-carts, a small fee being charged for the service rendered. Small portable pumps, with suction hose attached, are now procurable from various dealers in Madras at a cost of about Rs. 70 and with these the work of emptying cesspools can be easily and pleasantly done at the minimum of cost both of time and labour.

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Chairman's Remarks.

An estimate prepared for the extension of the slaughter-house has been disapproved by the Sanitary Board. Provision will be made in the budget next time for the construction of a slaughter-house on an approved plan.

Only one cow or bullock is killed daily. The council is averse to incur a large expenditure for the paltry sum of Rs. 180 realised on this account.

Yes.

This will be attended to.

Inspection Notes.

Chairman's Remarks.

Total births during preceding six months, i.e., from 1st January to 30th June 1896.	Number vaccinated		Number vaccinated a second time because first operation proved unsuccessful.		Number postponed under medical certificate at the end of six months.	Number died.	Number left the town.	Number unaccounted for.	Ratio of successful vaccinations to total births per cent.
	Successfully in the first instance.	Unsuccessfully in the first instance.	Successfully.	Unsuccessfully.					
514	331	..	..	..	22	93	6	..	64.39

10. *Registration*.—Two registrars are employed and they go out to collect information on alternate days. Information is also furnished by the sanitary inspectors and midwives, but the licensed vettyians, who might give valuable information as to deaths, do not do so. I would suggest that as one of the terms of their license this should be insisted on. It is noted that beri-beri is a very frequent entry in the death register. The following shows the results obtained, which must be considered as capable of improvement:—

Grave-diggers are licensed by the municipality and they give information to the registrars of all deaths.

No pains are spared to improve vital statistics. But two registrars are not sufficient as they are to attend the Magistrate's Court for conducting prosecutions and making inquiries in case of children to be vaccinated. The council will be moved to sanction the entertainment of an extra clerk on Rs. 10 to carry out the work more efficiently as contemplated in G.O., No. 2132 L., dated 12th November 1896 (Vital Statistics).

	1892.	1893.	1894.	1895.	1896.
Deaths from—					
Cholera	3	79	62	..	..
Small-pox	2	2	6	..	1
Fevers	247	206	237	254	239
Dysentery and diarrhoea	77	70	34	79	64
All other causes	710	759	832	731	619
Total	1,039	1,116	1,171	1,064	923
Death-rate per mille of the estimated population	26.3	27.9	29.0	26.1	22.4
Births	1,111	1,005	1,071	1,294	1,203
Birth-rate per mille of the estimated population	28.1	25.4	26.5	31.7	29.2

FORT ST. GEORGE,
8th April 1897.

(Signed)

W. B. BANNERMAN, Surgn.-Major,
Insp. of Vaccn. and Dy. Sany. Commr.

No. 948-S.

Forwarded to the Chairman, Municipal Council, Masulipatam.

2. Attention is requested to paragraph 2 of G.O., No. 1765 M., dated 23rd December 1893.

FORT ST. GEORGE,
22nd April 1897.

(Signed)

W. G. KING, Surgn.-Lieut.-Col.,
Sanitary Commissioner for Madras.

A registrar on Rs. 12 is deputed to make inquiries in case of children who are reported to have left the place or died.

No. 24 M., 5TH JANUARY 1898.

PROCEEDINGS of the Masulipatam Municipal Council passed at a meeting held on Monday, the 11th October 1897.

(19) Read Inspection notes of the Inspector of Vaccination and Deputy Sanitary Commissioner, Madras.

Resolution.—Chairman's replies are approved.

No. 109 M.—Eng.

Forwarded.

29th April 1897.

(Signed) J. K. BATTEN,
Acting Collector.

Dis. No. 332 M.

Forwarded.

15th November 1897.

(Signed) R. MORRIS,
Collector.

ORDER—No. 24 M., dated 5th January 1898.

Recorded with the following remarks:—

(1) The remarks of the Deputy Sanitary Commissioner in paragraph 5 (b) of his notes regarding the inadequacy of latrine accommodation in the town should receive careful consideration.

(2) The delay of nearly six months each in the Sanitary Commissioner's and the municipal offices in forwarding these notes is unsatisfactory and should have been explained.

(True Extract.)

Ag. Secretary to Government.

To the Chairman, Municipal Council, Masulipatam.

„ Collector of Kistna.

„ Sanitary Board.

„ „ Commissioner.

„ „ Engineer.

Editors' Table.

Exd. W. D' Moss.

No. M., 24th DECEMBER 1897.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper:—

From J. W. MAIDEN, Esq., Chairman, Municipal Council, Masulipatam, to the Collector, Kistna District, dated 29th October 1897, No. 893.

I have the honour to forward herewith inspection notes of the Masulipatam Municipality for 1896, with the Chairman's replies thereon, and to request that you will be good enough to transmit the same to the Secretary to Government, Local and Municipal Department, Madras.

A copy of the proceedings of the municipal council, passed at their meeting held on the 11th instant, approving the same, is herein enclosed.

ENCLOSURES.

INSPECTION Notes of the Inspector of Vaccination and Deputy Sanitary Commissioner, Madras.

KISTNA DISTRICT.

MASULIPATAM MUNICIPALITY.

Inspected 21st and 22nd December 1896.

Population as per census	1881	..	..	..	..	..	35,056
	1891	..	..	..	..	..	38,809
Estimated population	1896	..	..	..	..	..	41,181

Inspection Notes.

Chairman's Remarks.

The town is situated on the flats formed by the Kistna river and is about three miles from the sea. The sub-soil water is very close to the surface varying, as a rule, from three to six feet, and portions of the town are frequently under water owing to the proximity to undrained marsh land. As these marshes are not within the control of the municipality, it is to be hoped that Government may see its way to afford some relief by draining these by works of a character similar to those used in Holland for a like purpose. With a site of this description it is only natural to find diseases such as beri-beri and rheumatism prevailing largely, and no hope can be entertained of a diminution until the cause, *i.e.*, dampness of the site, be remedied.

The question of draining the town is under consideration of Government. In the Public Works Department a surveyor on Rs. 60 is entertained to survey the town for a period of six months.

Chairman

Inspection Notes.

Chairman's Remarks.

2. *Dwellings*.—On all hands one sees evidence of damp walls in crumbling bricks and discoloured walls, and it is therefore very necessary that the council should exercise their powers to improve matters in this respect by insisting on the insertion of damp-proof courses in all new houses for which licenses are sought. The people themselves try to improve matters by plastering with cement outside, but do not seem to be aware that a horizontal layer laid on the foundation walls six inches above the level of the ground would prevent all the damp from below rising up into the walls above. Choultry Makerla Venkatasawmy is in a dilapidated state and should be closed, as being dangerous to live in.

This is kept in view. Several new houses are now built on raised foundations and the floor is cemented.

Notice has been issued to the party to repair the building.

3. *Drainage*.—There are several large drains throughout the town for the removal of surface water. These, as noticed above, are largely rendered inoperative by the high level of the water in the swamps outside, but since last inspection they have been broadened and consequently act more rapidly than before.

Yes.

4. *Sewage removal*.—There is no system of sewers in the town, and the only attempt at removal of slop water out of the inhabited area is the daily emptying of 25 cesspools. It is hardly necessary to remark that this is utterly inadequate for a town of this size; if the council really wishes to grapple with this vital question of how to keep the town clean, they could not do better than by seeing that each householder provides a proper water tight cesspool at his own expense, and that this is daily cleansed for him by the municipal sewage-carts, a small fee being charged for the service rendered. Small portable pumps, with suction hose attached, are now procurable from various dealers in Madras at a cost of about Rs. 70 and with these the work of emptying cesspools can be easily and pleasantly done at the minimum of cost both of time and labour.

This will be obtained this year.

5. *Conservancy*.—(a) There are 90 corrugated iron dust-bins, being an increase of 17 since last inspection. As this number is quite insufficient, it would be interesting to know why the 50 bins for which provision was said to have been made in last year's budget have not been procured. The rubbish is removed by means of 31 basket carts to six depôts; the carts are of very bad design and hold very little;

In the budget for 1894-95, Rs. 1,000 were provided for four latrines and fifty dust-bins. But the estimate for one double iron latrine of 24 seats, as approved by the Sanitary Board, came up to Rs. 1,060. The iron work for the latrine was purchased at Madras at a cost of Rs. 600. The latrine will be put up this year. Dust-bins will also be obtained.

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This is kept in view. Several new houses are now built on raised foundations and the floor is cemented.

Notice has been issued to the party to repair the building.

Several houses have got large compounds attached to them. Sewage of these houses is let into the compounds where trees are raised. In case of houses having no compounds, cesspools are invariably constructed and the municipality undertakes to clean them at a nominal fee.

This will be obtained this year.

In the budget for 1894-95, Rs. 1,000 were provided for four latrines and fifty dust-bins. But the estimate for one double iron latrine of 24 seats, as approved by the Sanitary Board, came up to Rs. 1,060. The iron work for the latrine was purchased at Madras at a cost of Rs. 600. The latrine will be put up this year. Dust-bins will also be obtained.

Inspection Notes.

Chairman's Remarks.

and the bullocks, which belong to a contractor, are quite unfit for the work. It would probably be true economy for the municipality to take the management of this department into their own hands and to own both carts and bullocks. The Silchar cinerator erected since last inspection seems to work well, but the smoke being a great nuisance to the workers, I would recommend that a chimney of corrugated iron be placed on the top to make a better draught and to remove the smoke from the neighbourhood. A special staff should be employed to attend to the cinerator and be provided with long-pronged rakes, so that the rubbish of each cart may be dealt with at once, and not as at present only once a week or so. At present much of the combustible matter gets buried and then has to be dug up again before it can be placed in the cinerator, whereas if a permanent staff were at hand each cart could be dealt with as it arrived.

(b) Latrines.—The number of public latrines still remains at 13, though the Chairman remarked in last inspection notes that "this year four latrines will be constructed as provided in the budget and provision is also made for four more latrines during the next official year." The Horbury's latrines are still without buckets and the masonry ones are not yet converted to the standard plan, though both these recommendations were made in last inspection notes (and also received the approval of Government—*vide* paragraph 2 of G.O., No. 671 M., dated 17th April 1895) and would not cost much. It is very desirable that these suggestions be carried out, as in no other way can the soil of the latrines be kept free from contamination. As already pointed out repeatedly in successive inspection notes, the number of latrines is not nearly sufficient and should be increased with all speed. The council would do well to consult the District Medical and Sanitary Officer on this point. Night-soil is removed in five iron carts drawn by bullocks and buried in trenches in the Razupeta swamp. The amount of faecal matter removed from the town is quite remarkably small, and is largely accounted for by the fewness of the latrines and the habit of the people of frequenting the waste places to be found throughout the town.

Ten rubbish carts of an improved pattern were made last year under my supervision and five more will be added this year. The conservancy establishment will be reorganised this year.

This will be attended to.

Two sweepers will be posted at each depôt to burn rubbish daily as suggested, but in the rainy season this becomes impracticable.

For want of funds the council were unable to give effect to these recommendations. No opportunity will be lost to carry out these suggestions in course of time.

But the latrines were not freely used by the people, as the town is a straggling one and as there are gardens attached to a great many houses.

The council hope that matters will improve and night-soil will be more properly collected as a trained sanitary inspector is now entertained.

and the bullocks which belong to a contractor are quite unfit for the work. It would probably be true economy for the municipality to take the management of this department into their own hands and to own both carts and bullocks. The Silchar cinerator erected since last inspection seems to work well, but the smoke being a great nuisance to the workers, I would recommend that a chimney of corrugated iron be placed on the top to make a better draught and to remove the smoke from the neighbourhood. A special staff should be employed to attend to the cinerator and be provided with long-pronged rakes, so that the rubbish of each cart may be dealt with at once, and not as at present only once a week or so. At present much of the combustible matter gets buried and then has to be dug up again before it can be placed in the cinerator, whereas if a permanent staff were at hand each cart could be dealt with as it arrived.

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(c) *Private Scavenging.*—It is estimated that there are 1,000 privies in the town; but of this number the municipality cleans only 326—a very small proportion. The trained sanitary inspector about to be entertained by the municipality should be able to increase this number with ease. His attention should also be directed to the filthy condition of many of the backyards and, by systematically prosecuting, should enforce improvement in this matter.

6. *Water-supply.*—Kistna water brought to the town by canal is largely used throughout the town and, as many times pointed out, is liable to gross pollution from many sources. The wells also throughout the town are shallow and in most cases not above suspicion; so it is to be hoped that the municipality will face the problem of introducing a proper piped supply at no distant date. The pump at the well at the Munsif's Court has not yet been provided though promised.

7. *Market.*—The market in Robinson's Square is still in the same unsatisfactory state as when last reported on, though some small repairs have been carried out at one of the sheds. The whole question of markets should be thoroughly gone into and sufficient land acquired for the erection of one central place built on sanitary principles. The meat market is still in the same building as the fish bazaar, though the disadvantage of this arrangement was pointed out last year. The butchers have been supplied with slabs, but they also retain the use of the wooden boxes objected to last year; these should now be removed. I was informed that steps had been taken to acquire land for the erection of a new meat market; it would be well to acquire the whole of the adjacent side of Robinson Square and to make a proper market once for all. Behind the market are two defective cesspits, the contents of which appear to be baled out on to the ground from whence they find their way into a tank ten yards distant. This should at once be remedied by reconstruction of the cesspools on the standard plan and the daily removal of the contents by carts.

8. *Slaughter-houses.*—The sheep slaughter-house is constructed on old-fashioned lines, and is now also too small for present requirements, so I would suggest that a new one be built on the standard plan, instead of trying to patch the present

Every effort is made to increase the number of privies under municipal management. The council expect the trained sanitary inspector to improve private scavenging.

The Director of the Geological Survey of India has given his opinion that an artesian well may not be a success at Masulipatam and that Kistna canal should be looked upon as source of water-supply. The Sanitary Engineer says it is of no use to draw up a scheme till the council is prepared to meet half the cost of the water-supply scheme calculated at Rs. 7 per head of population, provided Government promise to give a loan of the other half to the council. I believe the water-supply scheme is attended with many difficulties and cannot be carried out successfully in Masulipatam.

A pump has been obtained from Calcutta. It is to be put up.

The council are of the same opinion as the Deputy Sanitary Commissioner. If possible, a loan will be raised in the local market, with the approval of Government, to construct a market on an approved plan.

The council consider the separation of the meat and fish markets is a desirable one, and they are trying their best to give effect to these proposals.

These are wooden pieces, not boxes. They are required for cutting meat on them.

This will be attended to.

An estimate prepared for the extension of the slaughter-house has been disapproved by the Sanitary Board. Provision will be made in the budget next time for the construction of a slaughter-house on an approved plan.

Inspection Notes.

structure. Cattle are killed close by on an enclosed piece of ground, but there is no house for the purpose; one should be erected. The offal is buried in the swamp close by and is utilised afterwards for manuring the avenue trees.

9. *Vaccination*.—Two vaccinators are employed. First-class vaccinator C. H. Brahmayya has 25 years' service; pay Rs. 18 plus Rs. 7 for looking after the vaccine depôt. He seems to do his work fairly well. The depôt belongs to the district board. Second-class vaccinator N. Narasimhulu, has 1½ years' service; pay Rs. 10. He appears to do most of the writing, very few entries in the register being made by the other man. Registers well kept and instruments in good order.

Vaccination has greatly improved since last inspection, most of the available births being overtaken. The whole of the juvenile population is not by any means protected, for out of 105 children examined 72 were found protected, 16 unprotected and 17 with marks of small-pox. A house-to-house visitation should be instituted so as to discover and operate on all unprotected children below ten years of age.

The following table shows the working of the staff and results obtained during the last five years:—

	1892.	1893.	1894.	1895.	1896.
Number vaccinated	3,946	2,806	2,466	2,720	2,263
" " " " " " "	3,784	2,705	2,339	2,624	2,185
" " " " " " "	905	921	837	1,183	1,124
" " " " " " "	1,083	311	152	232	637
Births	1,111	1,005	1,071	1,294	1,203

It will be seen that a very small number of cases are verified by the inspecting officer, which means, of course, that all parents are not obliged to bring their children to the hospital for verification, which is not as it should be.

The following table shows the working of G.O., No. 1502, for the six months ending 31st December 1896:—

Total births during preceding six months, i.e., from 1st January to 30th June 1896.	Number vaccinated		Number vaccinated a second time because first operation proved unsuccessful.		Number postponed under medical certificate at the end of six months.	Number died.	Number left the town.	Number unaccounted for.	Ratio of successful vaccinations to total births per cent.
	Successfully in the first instance.	Unsuccessfully in the first instance.	Successfully.	Unsuccessfully.					
514	331	..	..	..	23	93	6	..	64.39

Chairman's Remarks.

Only one cow or bullock is killed daily. The council is averse to incur a large expenditure for the paltry sum of Rs. 180 realised on this account.

Yes.

This will be attended to.

A registrar on Rs. 12 is deputed to make inquiries in case of children who are reported to have left the place or died.

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Grave-diggers are licensed by the municipality and they give information to the registrars of all deaths.

No pains are spared to improve vital statistics. But two registrars are not sufficient as they are to attend the Magistrate's Court for conducting prosecutions and making inquiries in case of children to be vaccinated. The council will be moved to sanction the entertainment of an extra clerk on Rs. 10 to carry out the work more efficiently as contemplated in G.O., No. 2132 L., dated 12th November 1896 (Vital Statistics).

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Deaths from—					
Cholera	3	79	62	..	..
Small-pox	2	2	6	..	1
Fevers	247	206	237	254	239
Dysentery and diarrhoea	77	70	34	79	64
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Total	1,039	1,116	1,171	1,064	923
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Birth-rate per mille of the estimated population	28.1	25.4	26.5	31.7	29.2

FORT ST. GEORGE, (Signed) W. B. BANNERMAN, Surgn.-Major,
8th April 1897. *Insp. of Vacc. and Dy. Sany. Commr.*

PROCEEDINGS of the Masulipatam Municipal Council passed at a meeting held on Monday, the 11th October 1897.

(19) Read Inspection notes of the Inspector of Vaccination and Deputy Sanitary Commissioner, Madras.

Resolution.—Chairman's replies are approved.

No. 948-S.

Forwarded to the Chairman, Municipal Council, Masulipatam.

2. Attention is requested to paragraph 2 of G.O., No. 1765 M., dated 23rd December 1893.

FORT ST. GEORGE, (Signed) W. G. KING, Surgn.-Lieut.-Col.,
22nd April 1897. *Sanitary Commissioner for Madras.*

No. 109 M.—Eng.

Forwarded.

(Signed) J. K. BATTEN,
Acting Collector.

29th April 1897.

Dis. No. 332 M.

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(Signed) R. MORRIS,
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15th November 1897.

Cuo 3982.m.

Cuo 3982m

P.S.

order No 24 M 8 5-1-98

masulipatam Insprmt

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(2) The delay of nearly six months each in the Sanitary Commissioner's and the municipal offices in forwarding these notes is unsatisfactory and should have been explained.

P.S.
26/12/97

1 4 198

To the Chairman, M.S. Masulipatam
Collector of Kistna
Sanitary Board
Commr.
Engr.
Editors' Table.

recd 21/1/98

14/12

First copy sent to Press. 5-1-98

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READ AGAIN H.O. No. 189

CURRENT No.

3982. Cnt type

ENCLOSURES TO C. No.

ORDER OF GOVERNMENT

LETTERS OF GOVERNMENT

STATEMENT WITH DITTO.

PAPERS NOT FILED UP BEING MEANT FOR DESPATCH IN ORIGINAL.

N.B. —

A = Print in full.
B = Not to be printed.
P = Print abstract only.
Q = Print heading only.