ocal & Munl. (1896) Department.

PRINTED.

G.O., No. 261 M

DATED 12th February 1896

[Despatch Abstract.]

Inspection Notes.

Recording, with remarks, Deputy Sanitary Commissioner's

--------- on the Madura 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.

INDEXED.

PRESS.

LOCAL AND MUNICIPAL DEPARTMENT.
G.O., DATED 12-2-96
No. 261 m

First copy sent to Press. 12/2/96
Returned for signature. 5/3/96
Despatched in print. 6/3/96

[Despatch Abstract.]

Inspection Notes
Recording with
remarks, & Dy Sanit.
Cond'n on
the Madras Municipa-
lity

BACK PAPERS.

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

FURTHER PAPERS.

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

INDEXED.

PRESS.

LOCAL AND MUNICIPAL DEPARTMENT.
G.O., DATED 12-2-96
No. 261 M

First copy sent to Press. 12/2/96

Returned for signature. 5/3/96

Despatched in print. 6/3/96

[Despatch Abstract.]

Inspection notes

Recording with remarks, by Sanit. Cond'rs — on the Madina Municipality

BACK PAPERS.

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

CURRENT No. 9m - (in typ(e) A

STATEMENT WITH DITTO.

ORDER, &c., OF GOVERNMENT—A.

PAPERS KEPT OUT OF FILE FOR DESPATCH IN ORIGINAL (not paged).

NUMBER OF COPIES REQUIRED: Order complete. 80 / Letter only. / Order complete with Letter.

N.B.—
A = Print in full.
B = Not to be printed.
P = Print abstract only.
Q = Print heading only.
R = Print, but not for monthly volume.

Press at Shimoga to please - PR 12/2/96

Inspection Notes of the Inspector of Vaccination and Deputy Sanitary Commissioner. 18

Madura District

Madura Municipality.

Population per Census of 1891 ——— Males 43,880 — Females 43,548 — Total 87,428

Inspected on 16th August 1895.

Roads & Drainage. The roads are as a rule in good order and well swept. Many of them are provided with side drains, square in section which are in a very foul state, either from defective levels, or owing to the want of ordinary care in keeping them free from silt and rubbish. From the Vaigai 2 channels branch off acting as feeders during the rains to the Anaparadi lake. During the dry season these channels receive only such portion of the drainage of the town as may reach them this is not sufficient to cause a constant stream so that the foul water stagnates and creates a nuisance in E. Masi Street near the Elephant

BACK PAPER, No.

OF

FURTHER PAPER, No.

OF 18

READ AGAIN ORDER OF GOVERNMENT, DATED
18 , No.

ENCLOSURES.

CURRENT No. 9m - (in type) A

STATEMENT WITH DITTO.

ORDER, &c., OF GOVERNMENT—A.

PAPERS KEPT OUT OF FILE FOR DESPATCH IN ORIGINAL
(not paged).

NUMBER OF COPIES REQUIRED.
- Order complete. 80
- Letter only.
- Order complete with Letter.

N.B.—
A = Print in full.
B = Not to be printed.
P = Print abstract only.
Q = Print heading only.
R = Print, but not for monthly volume.

Press at Shaw Wallace - PR 12/2/96

Inspection Notes of the Inspector of Vaccination and Deputy Sanitary Commissioner.

18

Madura District

Madura Municipality.

	Males	Females	Total
Population first Census of 1891	43,880	43,548	87,428

Inspected 14th to 19th August 1895.

Roads & Drainage. The roads are as a rule in good order and well swept. Many of them are provided with side drains, square in section which are in a very foul state, either from defective levels, or owing to the want of ordinary care in keeping them free from silt and rubbish. From the Vaigai 2 channels branch off acting as feeders during the rains for the Anaparadi lake. During the dry season these channels receive only such portion of the drainage of the town as may reach them. This is not sufficient to cause a constant stream so that the foul water stagnates and creates a nuisance in E. Masi Street near the Elephant

Elephant stone the drains are blocked and covered with bags of grain. The majority of the drains are mere surface channels in which pullage water stagnates and soaks into the ground. The levels of the lines have been taken and audit is hoped that the new drainage scheme will shortly be taken in hand. In some of the larger streets these drains are freely used for purposes of nature, or if no drains exist the sides of the streets are resorted to. This was seen in Tailor street Nannai tharmar St; Chunam kar St. and several others. In all the filth so accumulated is removed in the rubbish carts. I saw three instances of this most objectionable practice. There are 325 dustbins of these 50 are fixtures of stone brick in chunam and

275

of works to be designed that year.

The sanction of Government is therefore requested, for the preparation of the Scheme without further delay. Until this is done the Council will take care that the drains are not allowed to lie in a foul condition

The construction of additional latrines and urinals shortly to be undertaken will it is hoped effectively put a stop to the objectionable practice. The outdoor staff has strict orders to see that night-soil is not removed along with rubbish.

Young boys and girls are in the habit of damaging and overturning these lines by upsetting their contents, hence the frequent necessity for petty repairs. The Council is also trying the experiment of basket System for the removal of rubbish from house to receptacle as a fair trial decides whether these lines can be superseded

A provision to this effect has been made in the bonds taken from Rubbish Cart Contractors.

This was put only in force as a temporary measure for a few days pending repairs to the ordinary Rubbish cart generally in use for the purpose.

275 are in use movable cages of the latter I saw no less than 109 in the Municipal yard at the old jail awaiting petty repairs. 55 double-bullock and 6 single bullock carts are provided for the removal of rubbish - they originally the property of the Municipality have been sold to the contractor who is now responsible for their repair &c. He should be compelled to supply properly constructed carts when new or extra ones are required. I saw one provided by him with sides formed of bamboo and no back board. This pattern should not be accepted. The rubbish is removed to 3 depôts 1 in the 2d ward, 1 in the 4th and 1 in the 10th and ultimately sold. It realized Rs 810 last year. The depôts in the 2d and 4th ward

boards are too close to dwelling houses, with the latter a night-soil depôt the only one for the whole town, is incorporated. The depôt in the second ward is not properly looked after. I saw the contents of a night-soil cart being emptied here. Also in the road leading into it - 2 cart loads of rubbish - 1/4 of which was night-soil - had been deposited. Here the land is given gratis by the owner for the improvement of his crops. It might be possible to obtain ground on the same terms about 1/2 a mile distant from the town and establish a second night-soil and rubbish depôt. As nothing is realized from the sale of night-soil, it would be to the advantage both of the Municipality and the

Greater attention is now being paid to the state of the depôt and the conduct of the officer who was in charge of it has been severely noticed.

Attempts are being made in the direction indicated by the Deputy Sanitary Commissioner.

This experiment will be tried as early as possible.

M

The attention of the Assistant Inspector of Schools has been drawn to this matter.

the cultivators. If an agreement could be made with the latter to trench their fields for the purpose.

Many of the buildings used as schools are unsuitable for the purpose. The R. C. school of R. Chidambaram Iyer in N. Masi Street with 56 on the roll is held in a thatched shed without proper light or ventilating the wooden posts supporting the roof are not perpendicular and appear unsafe. The R. C. school in Municipal street with 78 on the roll is a small thatched shed with katty walls, and much too small and confined for the number attending.

2 Water-supply. Drinking water is now supplied from the works recently opened near the village of Chapolin

An

An infiltration gallery across the bed of the river supplies a large well sunken in the banks from which the water is pumped through pipes into the town. The supply is uncertain. during my visit it failed and during the hot season it frequently falls short. There are 3 engines, of which only one works at a time, and then only during the day. The driver in charge informs me that the engines suffer from "the strain thrown on them in compressing the air in the pipes when work commences in the morning". Some of this air is of course sucked in from open taps, but it is not improbable that a certain amount enters through faulty joint, when the pipes are empty. The danger of an intermittent system with pipes laid through such a sewage soaked site as that of the town of Madura is manifest. Both this danger and the inconvenience of occasional failures of the supply might be obviated by the construction of a reservoir near the pumping works capable of holding one or two days' supply. By this means, when plenty of water is available in the river extra engines could be put to work and the reservoir kept full: the pipes would also be full and the danger of suction minimised. The engines would be fully utilized and relieved and there would not be any necessity for constantly refunding water-tax on account

These remarks will be referred to the Sanitary Engineer to Government for necessary action, if any, being taken.

account of failures in the supply. No doubt the opening of the Periyar scheme will ensure against failures in supply - but it will not affect the question of empty pipes at night and air suction. I am informed that the water from the taps in the town often smells badly - it would be well to have samples of water both from the well at the pumping station, and from the taps sent to the Chemical Examiner for analysis and comparison. Owing to the frequency of failure of the pipe supply private wells in the town are still resorted to for drinking purposes. A list of these wells should be prepared, and all should be properly conserved. At present there are

A sample of the water will be sent to the Chemical Examiner for analysis

M

* This is being attended to.

3 Sanitary Inspectors on Rs 25 each
3 do ——— on Rs 20 -
4 do ——— on Rs 15 -
5 Peons on Rs 6 -
5 do ——— Rs 5 -
1 Male Latrine Scavengers Rs 5 -
5 Sweepers on Rs 5 -
14 Female Scavengers on Rs 5 -
7 Hand Cart Tobies on Rs 5 -
1 do ——— on Rs 6 -
2 Slaughter House tobies on Rs 5 -
1 Market Toby on Rs 5 -
1 Depot peon on Rs 6
3 tobies on Rs 5 --
1 Sanitation Clerk on Rs 15 -

Private Scavenging

12 Scavengers on Rs 4 Each
1 do ——— on Rs 5.

inside of which persons stand to draw water, or on a plinth placed right across the mouth of the well. These stones should be removed, the parapet walls raised and cross beams and pulleys provided. Several people - chiefly Brahmins - still resort to the river, and draw their water from pits dug in its sandy bed. The bed of the Villapuram tank near the toll gate - is very largely resorted to for purposes of nature. As the water on the bund of this tank is largely used for drinking purposes efforts should be made to keep its surroundings pure and clean.

3. Conservancy. The strength and pay of the establishment is shown in the margin. The latrine accommodation is still

account of failures in the supply. No doubt the opening of the Periyar scheme will ensure against failures in supply - but it will not affect the question of empty pipes at night and air suction. I am informed that the water from the taps in the town often smells badly - it would be well to have samples of water both from the well at the pumping station and from the taps sent to the Chemical Examiner for analysis and comparison. Owing to the frequency of failure of the pipe supply private wells in the town are still resorted to for drinking purposes. A list of these wells should be prepared and all should be properly conserved. At present there are few parapet walls inside

A sample of the water will be sent to the Chemical Examiner for analysis

M

* This is being attended to.

3 Sanitary Inspectors on Rs 25 each
3 do on Rs 20
4 do on Rs 15
5 peons on Rs 6
5 do on Rs 5
1 Female Latrine Scavengers on Rs 5
56 Sweepers on Rs 5
14 Female Scavengers on Rs 4
7 Hand Cart Tohies on Rs 5
1 do on Rs 6
2 Slaughter House Tohies on Rs 5 *
1 Market Toty on Rs 5
1 Depot peon on Rs 6
3 tohies on Rs 5
1 Sanitation Clerk on Rs 15.

Private Scavenging

12 Scavengers on Rs 4 Each
1 do on Rs 5.

5P

inside of which persons stand to draw water, or in a place placed right across the mouth of the well. These stones should be removed, the parapet walls raised and crossbeams and pulleys provided. Several people - chiefly Brahmins - still resort to the river and draw their water from pits dug in its sandy bed. The bed of the Villapuram tank near the toll gate is very largely resorted to for purposes of nature. As the water on the bund of this tank is largely used for drinking purposes efforts should be made to keep its surroundings pure and clean.

3. Conservancy. The strength and pay of the establishment is shown in the margin. The latrine accommodation is still

from sufficient. There are now 4 pucka and 3 temporary latrines for a population of 87,428 in addition to the thousands of pilgrims who visit the temples. There are said to be 12,500 private latrines in the town of which only 572, or 8 less than last year are cleaned by the municipality. No attempt appears to be made to extend this system as since its introduction in 1892-93 a decrease in the number of houses served is reported instead of an increase. The sides of the public streets as well as open spaces and nullahs in the town are all freely resorted to for purposes of nature. The 4 masonry walled latrines are at the 4 angles of the town and consequently only of use

Every attempt has been made to extend the system as far as practicable and Conservancy in charge of wards are doing all in their power. Respectable people keep their premises clean by engaging private sweepers. Prosecutions for filthy Compounds are being conducted Systematically. Since the last inspection by the Deputy Sanitary Commissioner the number of houses registered have increased by 57 and no pains will be spared to popularize this System.

next to those in the outskirts - they are all of the objectionable open type with paved floors - dry earth is not used. In the W. Vali Vedi street latrine the floor has been dug up about 6 inches below its original level in the process of cleaning. There are according to the information furnished from the Municipal Office, 3 temporary latrines. I find that one small latrine in Pudur divided into 2 compartments for males and females is apparently looked upon as 2 latrines while all that remains of the 3rd in the 1st ward are 8 or 9 upright stones. Outside one latrine (Pallivasal?) the iron sheets and stone uprights said to have formed a latrine during the festival period are collected and lying useless on the ground

Have

fresh shallow trenches of the correct dimensions had been prepared at the time of my visit but were not used. Too many have been dug at one time, if only those actually required were dug daily, it would be unnecessary to leave the large vacant spaces now reserved for the carts to pass between the trenches. This has been explained to the Inspector and should be attended to. The present depôt is much too close to habitations. As the "proposed incinerators" mentioned in the Council's Remarks on the Inspector's Notes of the Sanitary Commissioner last year, have not been taken into consideration in the Budget for the current year it would be advisable it would be immediate

Noted. Instruction

Steps are being taken to Secure a Suitable Site as Suggested by the Deputy Sanitary Commissioner

This will be attended to at once.

steps for the removal of this depôt to a more suitable site. All the night-cart carts should be coated with tar to preserve the iron, and should have numbers plainly painted on them for purposes of identification. Owing to the absence of these numbers I was unable to identify the offenders in the cases mentioned in para 1 of these notes.

4 Slaughter-houses. Of these there are 3, not one of which deserves the name. In the West Market, surrounded within a few yards by stalls intended for the sale of meat, there is a small paved platform with wooden uprights and cross beam for skinning the animals. Of the latter about 40 are slaughtered daily and evidently on the ground surrounding the platform

as it is soaked with blood. Outside is a cistern for the reception of the blood, refuse water to which is in a very foul state and smells badly. It contained 3½ feet of filth overflowing into an earthen drain, at the time of my visit. A pucca so-called slaughter house is in the East Market - it is not fenced off in any way from the public market. 500 to 600 animals are slaughtered daily in a corner of the market enclosure. A portion has been walled in for the purpose of erecting a new slaughter house but the work appears to have been commenced without any fixed design - as there is now a walled compartment without any means of entrance. The third is near the South Market in

Necessary precautions are being taken to ensure the cleanliness of the Slaughter Houses and its surroundings

The work has since been completed by opening a door way.

A site for a Slaughter House near the Attumandai Pettah has already been acquired and provision will, if possible, be made in next year's Budget for the construction of a Slaughterhouse on the Standard design.

the yard intended for the municipal carts. Here there is a platform of very rough stones old pillars and carved stones from mandapams loosely put without any attempt at levelling or filling up the intervals close by are bold night-soil carts awaiting repair. Alongside is a useless hand cart with an iron receptacle never yet supposed to be used daily for collecting the gut contents. This yard is not enclosed and is alongside of dwellings. All these places are unsuitable for the purposes intended. A fourth slaughtering yard largely used but apparently unauthorised is to be found inside the west Bandy stand enclosure. There is no beef slaughter house - About 10 animals are said to be slaughtered daily. Some accommodation

shed

should be afforded for the purpose. At present they are killed at night secretly near the houses of the butchers - if detected these people are prosecuted, and ordered to kill outside municipal limits which is a great hardship.

This will receive attention

5 Markets. West market consists of a square enclosure with stalls 17 in number arranged around the interior - not one of which it is said is used. Outside there are also stalls occupied on one side as dwellings - a few being utilized for the sale of meat. All have earthen floors. Meat is hung up on cords - the stalls are very small and confined: the floors should be cemented and hooks provided for hanging meat. The sides of the

Notices have been issued for the removal of the meat Stalls objected to, and the butchers will be forced to occupy those inside the market in due course.

sides of the adjoining streets and an open space of ground closely form the meat market place - badly built mud structures with thatched roofs and rough unever earthen floors have been constructed by private owners for meat stalls. These should be removed and when the existing stalls have been repaired and rendered suitable for the purpose butchers should be induced to use them. I am informed that the meat is now taken and sold in private houses in the public streets. Several prosecutions are pending on this account. Inside the square enclosure mentioned above is a slaughter house so that if used as a market purchasers are compelled to witness the

should be afforded for the purpose. At present they are killed at night secretly near the houses of the butchers - if detected these people are prosecuted, and ordered to kill outside municipal limits which is a great hardship.

This will receive attention

5 Markets. West market consists of a square enclosure with stalls 17 in number arranged around the interior - not one of which it is paid is used. Outside there are also stalls occupied on one side as dwellings - a few being utilized for the sale of meat. All have earthen floors. Meat is hung up on cords - the stalls are very small and unfit. The floors should be cemented and hooks provided for hanging meat. The sides

the

Notices have been issued for the removal of the meat Stalls objected to, and the butchers will be forced to occupy those inside the market in due course.

108

sides of the adjoining streets and an open space of ground closely form the meat market place - badly built mud structures with thatched roofs and rough uneven earthen floors have been constructed by private owners for meat stalls. These should be removed and when the existing stalls have been repaired and rendered suitable for the purpose butchers should be induced to use them. I am informed that the meat is now taken and sold in private houses in the public streets. Several prosecutions are pending on this account. Inside the square enclosure mentioned above is a slaughter house so that if used as a market purchasers are compelled to virtue

ther

the slaughter of sheep &c.
It should be converted
into one or the other - the
combination is most
objectionable

The East Market is the
chief market of the town
and consists of a large
oblong walled enclosure
and 4 rows of stalls
used for the sale of
meat vegetable, rice
and fish. A portion of
the main enclosure
is walled off and pro-
-vided with a row of
stalls for the sale of
meat. entrance to this
part being effected by
means of 3 irregular
holes in the outer wall;
there are neither door
frames nor doors. The
main portion is an
open space with a floor
of large roughly cut
slates used for the
sale of grain. With
stalls at one side for
storing the grain one
corner

Noted.

This will be attended to.

are corner is set apart
as a slaughter house as
already described. All
the stalls require re-
-flooring some being of
earth, others of brick
and all ~~are~~ work in of
repair. Meat is hung on
ropes, the blocks for
cutting it are rough and
dirty. fish is exposed
for sale on filthy boards.
The whole place should
be taken in hand and
put in proper order.

The South Market for
meat and fish is a
walled enclosure with
36 small stalls with
earthen floors - only 4
of which are used - the
meat being sold in
private stalls in the
streets outside.

b Bandy Stands. There are
2 cart stands belonging
to the Municipality - one
close by the East Market -
and the second near
the West Market. The
former

former is fairly clean. the latter, is utilised in its greater portion as sheds for storing and cutting beams of wood - another portion is used for slaughtering sheep - and the centre as a - bandy stand. This is in a filthy condition and re - fuse is stored on the premises instead of being removed daily - the floor is a mass of filth. The refuse from the slaughtering corner runs outside into an earthen pot on the roadside from which it empties out into the earthen channel which serves as a road drain. Standing by is a hand cart with a wire - less iron receptacle with holes in the sides which is supposed to be used for removing the filth. Besides these there are numerous private cart sheds - none of which

Prosecution is resorted to in such cases. Efforts are being made to remedy the defects pointed out.

This is being done and will receive further attention.

The Council is in communication with the District Medical Officer on this subject.

are kept in a proper sanitary condition. The proprietors should be compelled to provide proper drainage and latrine accommodation and to remove all rubbish and stable refuse daily.

7. Cholera shed. Near - Pennemi village there is a temporary cholera shed - a thatched structure of bamboos and tattis. As cholera is an annual occurrence, it would be well to provide a more lasting and suitable structure. I understand that the matter is under the consideration of the Council and I would recommend that an iron skeleton framework on a permanent - raised and cemented platform be erected in a suitable locality, to be thatched and provided with -

bamboo

banks to screen wells when required for use.

8 Burial grounds. The Mahomedan burial ground in Kazimar Street still in use is surrounded with habitations and should be closed. Two large grounds on either side of the old Ramnad Road are also much too close to dwellings. The burial and burning ground at the South gate now in use should be also closed. The place is full and is on the banks of the Anapanadi channel and close to wells.

Suitable sites have been acquired for the burying and burial ground at the South gate and necessary steps will soon be taken to close the existing objectionable one by opening a new one in its place. The subject of Mahomedan burial ground is also engaging the attention of the Commit and proper sites will ere long be procured for the purpose.

9 Vaccination is superintended by the Assistant Surgeon [illegible] and is carried on by 3 vaccinators - all 2d class. and recently appointed. They are young active and intelligent men and seem to work well. I verified 33 recent cases done correctly

done by them - all correctly entered. Their records are neatly kept in English and up to date. As the annual vaccination Returns are compiled for the official year fresh yearly serial numbers should commence from April 1st and not from January 1st as is the practice at present. Their instruments are old and require renewal. Vaccination direct from the calf has been substituted since August 1st. Calves are hired from a contractor at Rs 2 each, and kept in a thatched shed in the hospital compound where there is another shed provided for carrying on vaccination as well as the inoculation and extraction operations. It is too

The District Medical and Sanitary Officer will be addressed for replacing them by new ones.

clos

close to the out-patient department and the building is unsuitable. A separate building should be provided in another part of the compound.

The annexed statement shows the results of the examination of children in the streets and schools visited.

and calf shed. Separate building will be provided on consultation with the District Medical officer.

Ward.	Total Examined	Vaccinated	Unprotected	Marked with small-pox	Percentage of unprotected
1st ward	254	181	65	8	25.6
2d —do—	99	80	17	2	17.2
3d —do—	119	78	37	4	31.1
4th & 5th ward	183	106	70	7	38.3
6th —do—	127	75	46	6	36.2
7th —do—	122	62	47	13	38.5
8th —do—	143	67	73	3	51.0
9th —do—	140	80	53	7	37.8
10th —do—	110	39	62	9	56.4
	1297	768	470	59	36.2

Name of School.		Vaccinated	Unvaccinated	Marked with small-pox	Total.
Hindu Primary School	4th ward.	35	10	2	47
Royal School	—do—	28	6	3	37
4 Royal Schools	5th —do—	59	25	21	105
American Mission R.G. School		14	9	-	23
Royal School	7th ward	10	2	1	13
R.G. School N. Wassi Street		30	7	14	51
Government Girls' School		56	11	10	77
R.G. School Vangalakala Street		12	16	5	33
—do— Wunnasala St.		14	10	14	38
—do— Municipal Elephant Stand		33	11	8	52
Royal School	8th ward	10	3	-	13
—do—	7th ward	23	6	3	32
R.G. School Chinna Kadai St.		15	7	4	26

The last return received as required by G.O. No. 1502 Mu., dated 19th Oct. 1894, Local and Municipal, for June last shows that steps have been taken to secure the vaccination of all registered births but no less than 103 cases are still "pending before magistrate." From the

numbers of children
still remaining unpro-
-tected, as shown above,
it is evident that vac-
-cination has
been very much neg-
-lected in past years
and also that the regis-
-tration of births is still
very defective. The pro-
-secuting Inspector re-
-ports that it is very
difficult to secure con-
-viction in cases re-
-ported for failure to vac-
-cinate. One reason for
this appears to be that
care is not taken by the
Municipality to see that
when such prosecutions
are instituted, sufficient
evidence is forthcoming
to prove the case and
upset the defence general
-ly put forward, which
is either a flat denial
of the parentage or
guardianship of the
child, or the substitution
of a vaccinated child

This will receive attention.

the

the prime age. To ensure the vaccination of those children now unprotected nothing will suffice except a house to house visitation as recommended by the Sanitary Commissioner in his Inspection Notes last year. The work done has not been good. a very large number of the children examined and entered above as vaccinated bore only one mark. For these results the present staff cannot be held responsible as they have only been recently appointed. In their Registers they should be compelled to enter the door number of each case vaccinated to facilitate future identification or enquiry.

	1890	1891	1892	1893	1894	1895
						31.7.95
Number vaccinated	3507	2357	4822	5114	4373	3355
—do— successfully	3357	1936	4135	4950	4153	3207
—do— from arm-to-arm	1583	228	—	1483	3152	279
—do— under 1 year of age	1695	802	1740	2322	2718	1853
Number verified by Inspecting Officer.	2015	nil	—	241	1165	1804
Births	2661	2866	2928	2910	2918	1397

Should men will be replaced by young and efficient men at an early date.

No records are kept in Hindustani.

10. Registration is in charge of 4 old men, all with a service extending over 20 years. Only one of them can keep his records in English, the result being that he is made responsible for the compilation of a general Return for the town from the records kept in Hindustani and Tamil by the other Registrars without any compensation for the extra work and responsibility thus thrown on his shoulders. The pay of each is Rs 10. monthly.

The General Register is neatly kept in English by Sawmy Iyer Registrar of the 1st Circle: the column headed "date of vaccination" is not filled in. Cases of infants stillborn are entered only as deaths and omitted from the Birth Register. Reports of domestic occurrence are made by the relations to the Registrars, whose offices are in the Municipal Hospital, Branch Dispensary, Ramayanachavady Muniapam, and Municipal office respectively. In the afternoon the Registrars are supposed to go round their circles and collect information themselves.

Deaths from	1890	1891	1892	1893	1894	1895 up to 31 July
Cholera	76	462	20	256	384	23
Small-pox	300	200	253	200	25	10
Fevers	452	353	409	381	450	236
Dysentery & diarrhœa	356	358	255	192	334	130
all other causes.	1,328	1,372	1,625	1,588	1,659	949
Total	2,512	2,745	2,562	2,617	2,852	1348
Death rate per mille	32·7	35·7	29·3	29·9	32·6	26·4
Total Births	2,715	2,866	2,928	2,910	2,918	1397
Birth rate per mille.	35·3	37·2	33·4	33·3	33·4	27·4

Fort St. George
~~25th~~ Septr 1895
10th Octr

C. Mallins.
Surgn. Major:
Ag. Inspector of Vaccination
and Dy Sanitary Commissr.

Chairman

Compd the
V. Municipal Office
Madras.
14th December 1895.

Current No. 4469 Gull of 18 95
Date 16 20 2/8

Thro' the Collector of Madura Dr

2/ 10/95 Gull

Fnl. Sec: 1997/95

188

R^o 1777/5

Forwarded to the Chairman, Muni Council, Madura.

2. Attention is requested to para 2 of G.O. of 23rd Dec 1893 R^o 1765. Dr.

Surg Lt Col,
Sanitary Commissioner
for Madras.

MADURA COLLECTOR'S OFFICE
16 OCT 95

Forbet George
25th Sept 1895
10 Oct

Despd 14 10 95

Sender

4

194

No. 81
16.12.95

Submitted to Government through the Collector of Madura.

A Copy of the resolution No. 368 dated 13th December 1895 approving of the remarks is herein enclosed.

Municipal office
Madura.
14th December 1895

R Ischer
Chairman.

Extract from the Proceedings of the Municipal Council, Madura, passed at the special meeting held on the 13th December 1895.

70 P

× × ×

368 Read Notes of the Deputy Sanitary Commissioner, Madras on the inspection of this Municipality and the draft remarks of the Chairman thereon.

Resolved that the draft remarks of the Chairman be approved.

× × ×

(Signed) R Ischer
Chairman.

(True extract)

Municipal office
Madura. 14th December 1895

R Ischer
Chairman

ENCLOSURE NO. 1

In a letter

FROM,

THE CHAIRMAN,
MUNICIPAL COUNCIL,
MADURA.

No.

Dated 16th December 1895.

No. 81

Copy of Resolution of the Municipal Council, passing the draft remarks of the Chairman on the Inspection Notes of the Deputy Sanitary Commissioner

Enl 1
cur No. 9 inst 95

5411 Conl 45
Date 17.12.95
1895.

LOCAL AND MUNICIPAL DEPARTMENT.
CURRENT No 2 of 96

FROM

THE CHAIRMAN,
MUNICIPAL COUNCIL,
MADURA.

COLLECTOR'S OFFICE 17 DEC 96 MADURA

No.

ENCLOSURE. one.

Dated 16th December 1895.
Received

No. 81

SUBJECT.

Submitting with remarks the Inspection Notes of the Deputy Sanitary Commissioner on the Madura Municipality.

Pass
To be submitted
8/1

8/1

2 1 D

E.C. 5411/95.

Submitted.

Madura Collector's Office 30th December 1895.

A. Collector.

CHIEF SECRETARY
-1. JAN. 1896
GOVERNMENT OF MADRAS

Prov

No. 261, M., 12TH FEBRUARY 1896.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper :—

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

MADURA DISTRICT.

MADURA MUNICIPALITY.

Inspected 14*th to* 19*th August* 1895.

Population per census of 1891	Males	43,880
	Females	43,548
	Total ..	87,428

Inspection Notes.

Roads, Drainage, &c.—The roads are as a rule in good order and well swept. Many of them are provided with side drains, square in section, which are in a very foul state, either from defective levels or owing to the want of ordinary care in keeping them free from silt and rubbish. From the Vaigai two channels branch off acting as feeders during the rains for the Anapanadi lake. During the dry season these channels receive only such portion of the drainage of the town as may reach them. This is not sufficient to cause a constant stream so that the foul water stagnates and creates a nuisance. In E. Masi street, near the Elephant stone, the drains are blocked and covered with bags of grain. The majority of the drains are mere surface channels in which sullage water stagnates and soaks into the ground. The levels of the town have been taken and it is hoped that the new drainage scheme will shortly be taken in hand. In some of the larger streets these drains are freely used for purposes of nature, or if no drains exist the sides of the streets are resorted to. This was seen in Tailor street, Nanmaitharwar street, Chunamkar street and several

Chairman's Remarks.

The council is fully aware that the existing drainage system (if it can be called by that name) is entirely defective owing to want of proper levels. Further, a portion of the town has no drains at all. These coupled with the want of proper outlet for the sewage water render very difficult the task of keeping these drains in good condition. With a view to remedy this defect, the levels and sections for the preparation of a drainage scheme by the Sanitary Engineer to Government were completed in January last at a cost of Rs. 2,550 (*vide* G.O., Mis. No. 234 M., dated 4th February 1892). The Sanitary Engineer who was communicated with on the subject writes as follows :—

"The design of the work may be taken in hand in 1896–97 if Government so sanction it, and if the Sanitary Commissioner thinks it should be preferentially included in the list of works to be designed that year."

The sanction of Government is therefore requested for the preparation of the scheme without further delay. Until this is done, the council will take care that the drains are not allowed to be in a foul condition as far as practicable.

Inspection Notes.

others. In all the filth so accumulated is removed in the rubbish carts. I saw three instances of this most objectionable practice. There are 325 dust-bins; of these 50 are fixtures of stone or brick in chunam and 275 are iron moveable ones. Of the latter I saw no less than 109 in the municipal yard at the old jail awaiting petty repairs. Fifty-five double-bullock and six single-bullock carts are provided for the removal of rubbish—these, originally the property of the municipality, have been sold to the contractor who is now responsible for their repair, &c. He should be compelled to supply properly-constructed carts when new or extra ones are required. I saw one provided by him with sides formed of bamboo and no back-board. This pattern should not be accepted. The rubbish is removed to three depôts—one in the second ward, one in the fourth and one in the tenth and ultimately sold. It realized Rs. 810 last year. The depôts in the second and fourth wards are too close to dwelling houses, with the latter a night-soil depôt, the only one for the whole town, is incorporated. The depôt in the second ward is not properly looked after. I saw the contents of a night-soil cart being emptied here; also on the road leading into it. Two cart-loads of rubbish, one-fourth of which was night-soil, had been deposited. Here the land is given gratis by the owner for the improvement of his crops. It might be possible to obtain ground on the same terms about half a mile distant from the town and establish a second night-soil and rubbish depôt. As nothing is realized from the sale of night-soil, it would be to the advantage both of the municipality and the cultivators if an agreement could be made with the latter to trench their fields for the purpose.

Many of the buildings used as schools are unsuitable for the purpose. The Result-grant School of N. Chidambaram Iyer in N. Masi street with 56 on the rolls is held in a thatched shed without proper light or ventilation; the wooden posts supporting the roof are not perpendicular and appear unsafe. The Result-grant School in Munisab street with 78 on the rolls is a small thatched shed with tatty walls, and much too small and confined for the number attending.

Chairman's Remarks.

The construction of additional latrines and urinals shortly to be undertaken will, it is hoped, effectively put a stop to the objectionable practice noticed. The outdoor staff has strict orders to see that night-soil is not removed along with rubbish.

Young boys and girls are in the habit of damaging and overturning these bins by upsetting their contents; hence the frequent necessity for petty repairs. The council is also trying the experiment of basket system for the removal of rubbish from houses and will, after a fair trial, decide whether these bins can be superseded or not.

A provision to this effect has been made in the bonds taken from rubbish cart contractors. This was put on by one of them as a temporary measure for a few days pending repairs to the ordinary rubbish cart generally in use for the purpose.

Greater attention is now being paid to the state of the depôt, and the conduct of the officer, who was in charge of it, has been severely noticed.

Attempts are being made in the direction indicated by the Deputy Sanitary Commissioner.

This experiment will be tried as early as possible.

The attention of the Assistant Inspector of Schools has been drawn to this matter.

Inspection Notes.

2. *Water-supply.*—Drinking water is now supplied from the works recently opened near the village of Arapaliyam. An infiltration gallery across the bed of the river Vaigai supplies a large well sunk on the banks from which the water is pumped through pipes into the town. The supply is uncertain; during my visit it failed and during the hot season it frequently falls short. There are three engines, of which only one works at a time, and then only during the day. The driver in charge informs me that the engines suffer from "the strain thrown on them in compressing the air in the pipes when work commences in the morning." Some of this air is of course sucked in from open taps, but it is not improbable that a certain amount enters through faulty joints when the pipes are empty. The danger of an intermittent system with pipes laid through such a sewage soaked site as that of the town of Madura is manifest. Both this danger and the inconvenience of occasional failures of the supply might be obviated by the construction of a reservoir near the pumping works capable of holding one or two days' supply. By this means, when plenty of water is available in the river, extra engines could be put to work and the reservoir kept full. The pipes would also be full and the danger of suction minimized. The engines would be fully utilized and relieved, and there would not be any necessity for constantly refunding water-tax on account of failures in the supply. No doubt the opening of the Periyár scheme will ensure against failures in supply, but it will not affect the question of empty pipes at nights and air suction. I am informed that the water from the taps in the town often smells badly; it would be well to have samples of water, both from the well at the pumping station and from the taps sent to the Chemical Examiner for analysis and comparison. Owing to the frequency of failure of the pipe-supply, several wells in the town are still resorted to for drinking purposes. A list of these wells should be prepared and all should be properly conserved. At present there are low parapet walls inside of which persons stand to draw water, or on a stone placed right across the mouth of the well. These stones should be removed, the parapet walls raised and cross beams and pulleys provided. Several people, chiefly Brahmins,

Chairman's Remarks.

These remarks will be referred to the Sanitary Engineer to Government for necessary action, if any, being taken.

A sample of the water will be sent to the Chemical Examiner for analysis.

Inspection Notes.

still resort to the river and draw their water from pits dug in its sandy bed. The bed of the Villapuram tank near the toll-gate is very largely resorted to for purposes of nature. As the well on the bund of this tank is largely used for drinking purposes, efforts should be made to keep its surroundings pure and clean.

3. *Conservancy.*—The strength and pay of the establishment is shown below :—

Three Sanitary Inspectors	on Rs. 25	each.
Three do.	do. on „ 20	„
Four do.	do. on „ 15	„
Five peons	on Rs. 6	each.
Do.	on „ 5	„
Eleven male latrine scavengers	on Rs. 5	each.
Fifty-six sweepers	on „ 5	„
Fourteen female scavengers	on „ 4	„
Seven hand-cart toties	on „ 5	„
One hand cart toty	on „ 6	
Two slaughter-house toties	on „ 5	each.
One market toty	on „ 5	
One depôt peon	on „ 6	
Three toties	on „ 5	each.
One Sanitation clerk	on „ 15	

Private scavenging.

Twelve scavengers	on Rs. 4	each.
One scavenger	on „ 5	

The latrine accommodation is still far from sufficient. There are now four pucka and three temporary latrines for a population of 87,428 in addition to the thousands of pilgrims who visit the temples. There are said to be 12,500 private latrines in the town, of which only 572, or eight less than last year are cleaned by the municipality. No attempt appears to be made to extend this system, as since its introduction in 1892–93 a decrease in the number of houses served is reported instead of an increase. The sides of the public streets as well as open spaces and nullahs in the town are all freely resorted to for purposes of nature. The four masonry walled latrines are at the four angles of the town and consequently only of use to those on the outskirts; they are all of the objectionable open type with sanded floors; dry-earth is not used. In the W. Vali Vedi street latrine, the floor has been dug out about six inches below its original level in the process of cleaning. There are, according to the information furnished from the municipal office, three temporary latrines. I find that one small latrine in Pudur divided into two compartments for males and females is apparently looked upon as two latrines, while all that remains of the

Chairman's Remarks.

This is being attended to.

Every attempt has been made to extend this system as far as practicable and councillors in charge of wards are doing all in their power. Respectable people keep their privies clean by engaging private toties. Prosecutions for filthy compounds are being conducted systematically. Since the last inspection by the Deputy Sanitary Commissioner, the number of houses registered has increased by 57 and no pains will be spared to popularize this system.

Inspection Notes.

third in the first ward are eight or nine upright stones. Outside one latrine (Pallivasal ?) the iron sheets and stone uprights said to have formed a latrine during the festival period are collected and lying useless on the ground. Having once been erected this might have been permitted to remain in use considering the necessity for extra accommodation of this kind in the town. Over 9,000 cases of nuisance were prosecuted during the past year; but unless suitable places are provided by the municipality for the purpose, it is difficult to see what the unfortunate people are to do. There is not a single latrine in the centre of the town, or in the heart of the most populous quarters; people must defœcate; fields are at distance; the street is handy and there they resort. Children may be seen in the act at any hour of the day in any street; schools are unprovided with latrines and the scholars step into the street to relieve themselves. Properly-constructed latrines carefully looked after should not be a nuisance; latrines of the present open pattern must always be more or less offensive and are naturally objected to in the vicinity of dwellings. This type should be abolished and others of standard plan introduced. Where space is limited galvanised iron structures on raised stone or cemented platforms should be provided.

Night-soil is collected in 24 iron single-bullock carts and removed to the depôt at a distance of two furlongs from the south-west of the town and buried in deep trenches. These are much too large; the excreta in them is not covered and consequently the stench arising from them is sickening. Fresh shallow trenches of the correct dimensions had been prepared at the time of my visit, but were not used. Too many have been dug at one time; if only those actually required were dug daily, it would be unnecessary to leave the large vacant spaces now reserved for the carts to pass between the trenches. This has been explained to the Inspector and should be attended to. The present depôt is much too close to habitations. As the "proposed cinerators" mentioned in the council's remarks on the Inspection Notes of the Sanitary Commissioner last year have not been taken into consideration in the budget for the current year, it would be advisable to take immediate steps for the removal of this depôt to a more suitable site. All the night-soil

Chairman's Remarks.

Suitable sites have at last been selected —18 for latrines and 12 for urinals and prompt measures will be taken to acquire them under the Land Acquisition Act after they are approved by the council. If need be, the District Medical and Sanitary officer will be consulted before acquiring them.

Noted.

Noted.

Steps are being taken to secure a suitable site as suggested by the Deputy Sanitary Commissioner.

Inspection Notes.

carts should be coated with tar to preserve the iron, and should have numbers plainly painted on them for purposes of identification. Owing to the absence of these numbers I was unable to identify the offenders in the cases mentioned in paragraph 1 of these notes.

4. *Slaughter-houses.*—Of these there are three, not one of which deserves the name. In the West market, surrounded within a few yards by stalls intended for the sale of meat, there is a small paved platform with wooden uprights and cross beam for skinning the animals. Of the latter, about forty are slaughtered daily and evidently on the ground surrounding this platform as it is soaked with blood. Outside is a cistern for the reception of the blood, refuse water, &c., which is in a very foul state and smells badly. It contained three and-a-half feet of filth overflowing into an earthen drain at the time of my visit. A second so-called slaughter-house is in the East market; it is not fenced off in any way from the public market. Fifty or sixty animals are slaughtered daily in a corner of the market enclosure. A portion has been walled in for the purpose of erecting a new slaughter-house, but the work appears to have been commenced without any fixed design, as there is now a four-walled compartment without any means of entrance. The third is near the South market in the yard intended for the municipal carts. Here there is a platform of very rough stones, old pillars, and carved stones from mantapams, &c., loosely set without any attempt at levelling or filling up the intervals; close by are six old night-soil carts awaiting repair. Alongside is a useless hand-cart with an iron receptacle worn out, supposed to be used daily for collecting the gut contents. This yard is not enclosed and is alongside of dwellings. All these places are unsuitable for the purposes intended. A fourth slaughtering yard, largely used but apparently unauthorized, is to be found inside the west bandy-stand enclosure. There is no beef slaughter-house. About ten animals are said to be slaughtered daily. Some accommodation should be afforded for the purpose. At present they are killed at night secretly near the houses of the butchers; if detected, these people are prosecuted and ordered to kill outside municipal limits which is a great hardship.

Chairman's Remarks.

This will be attended to at once.

Necessary precautions are being taken to ensure the cleanliness of the slaughter-house and its surroundings.

The work has since been completed by opening a door-way.

A site for a slaughter-house near the Attumandai Pottal has already been acquired and provision will, if possible, be made in next year's budget for the construction of a slaughter-house on the standard design.

This will receive attention.

Inspection Notes.

5. *Markets.*—West market consists of a square enclosure with stalls 17 in number arranged around the interior, not one of which, it is said, is used. Outside there are also stalls occupied on one side as dwellings, a few being utilized for the sale of meat. All have earthen floors. Meat is hung up on cords; the stalls are very small and confined; the floors should be cemented and hooks provided for hanging meat. The sides of the adjoining streets and an open space of ground close by form the real market place—badly built mud structures with thatched roofs and rough uneven earthen floors have been constructed by private owners for meat stalls. These should be removed and when the existing stalls have been repaired and rendered suitable for the purpose, butchers should be induced to use them. I am informed that the meat is now taken and sold in private houses in the public streets. Several prosecutions are pending on this account. Inside the square enclosure mentioned above is a slaughter-house so that, if used as a market, purchasers are compelled to witness the slaughter of sheep, &c. It should be converted into one or the other—the combination is most objectionable.

The East market is the chief market of the town and consists of a large oblong walled enclosure and four rows of stalls used for the sale of meat, vegetable, rice and fish. A portion of the main enclosure is walled off and provided with a row of stalls for the sale of meat—entrance to this part being effected by means of three irregular holes in the outer wall; there are neither door frames nor doors. The main portion is an open space with a floor of large roughly cut stones used for the sale of grain. With stalls at one side for storing the grain, one corner is set apart as a slaughter-house as already described. All the stalls require reflooring—some being of earth, others of brick, and all out of repair. Meat is hung on ropes, the blocks for cutting it are rough, and dirty fish is exposed for sale on filthy boards. The whole place should be taken in hand and put in proper order.

The South market for meat and fish is a walled enclosure with 38 small stalls with earthen floors—only four of which are used—the meat being sold in private stalls in the streets outside.

Chairman's Remarks.

Notices have been issued for the removal of the meat stalls objected to, and the butchers will be forced to occupy those inside the market in due course.

Noted.

This will be attended to.

Inspection Notes.

6. *Bandy-stands.*—There are two cart-stands belonging to the municipality—one close by the East market, and the second near the West market. The former is fairly clean: the latter is utilized in its greater portion as sheds for storing and cutting beams of wood; another portion is used for slaughtering sheep, and the centre as a bandy-stand. It is in a filthy condition and refuse is stored on the premises instead of being removed daily; the floor is a mass of filth. The refuse from the slaughtering corner runs outside into an earthen pot on the road-side, from which it empties out into the earthen channel which serves as a road drain. Standing by is a hand-cart with a useless iron receptacle with holes in the sides which is supposed to be used for removing the filth. Besides these, there are numerous private cart-stands, none of which are kept in a proper sanitary condition. The proprietors should be compelled to provide proper drainage and latrine accommodation and to remove all rubbish and stable refuse daily.

7. *Cholera-shed.*—Near Ponmeni village there is a temporary cholera-shed—a thatched structure of bamboos and tatties. As cholera is an annual occurrence, it would be well to provide a more lasting and suitable structure. I understand that the matter is under the consideration of the Council and I would recommend that an iron skeleton framework on a permanent raised and cemented platform be erected in a suitable locality, to be thatched and provided with bamboo screen walls when required for use.

8. *Burial-grounds.*—The Muhammadan burial-ground in Kazimar street still in use is surrounded with habitations and should be closed. Two large grounds on either side of the old Ramnad road are also much too close to dwellings. The burial and burning ground at the south gate now in use should be also closed. The place is full and is on the banks of the Anapanadi channel and close to wells.

9. *Vaccination*—is superintended by the Assistant Surgeon and is carried on by three vaccinators—all second-class, and recently appointed. They are young, active and intelligent men and seem to work well. I verified 33 recent cases done by them—all correctly entered.

Chairman's Remarks.

Prosecution is resorted to in such cases. Efforts are being made to remedy the defects pointed out.

This is being done and will receive further attention.

The Council is in communication with the District Medical officer on this subject.

Suitable sites have been acquired for the burning and burial ground at the south gate and necessary steps will soon be taken to close the existing objectionable one by opening a new one in its place. The subject of Muhammadan burial-ground is also engaging the attention of the Council and proper sites will ere long be procured for the purpose.

Inspection Notes.

Their records are neatly kept in English and up to date. As the annual vaccination returns are compiled for the official year, fresh yearly serial numbers should commence from April 1st, and not from January 1st as is the practice at present. Their instruments are old and require renewal. Vaccination direct from the calf has been instituted since August 1st. Calves are hired from a contractor at Rs. 2 each, and kept in a thatched shed in the hospital compound where there is another shed provided for carrying on vaccination as well as the inoculation and extraction operations. It is too close to the out-patient department and the building is unsuitable. A separate building and calf-shed should be provided in another part of the compound.

The annexed statements show the results of the examination of children in the streets and schools visited.

Chairman's Remarks.

The District Medical and Sanitary officer will be addressed for replacing them by new ones.

Separate building will be provided on consultation with the District Medical officer.

Ward.	Total examined.	Vaccinated.	Unprotected.	Marked with small-pox.	Percentage of unprotected.
First Ward	254	181	65	8	25·6
Second ,, ...	99	80	17	2	17·2
Third ,, ...	119	78	37	4	31·1
Fourth and Fifth Wards	183	106	70	7	38·3
Sixth Ward	127	75	46	6	36·2
Seventh ,, ...	122	62	47	13	38·5
Eighth ,, ...	143	67	73	3	51·0
Ninth ,, ...	140	80	53	7	37·8
Tenth ,, ...	110	39	62	9	56·4
Total ..	1,297	768	470	59	36·2

Name of school.		Vaccinated.	Unvaccinated.	Marked with small-pox.	Total.
Hindu Primary School	4th Ward	35	10	2	47
Pyal School	Do.	28	6	3	37
Four Pyal schools	5th Ward	59	25	21	105
American Mission R.G. School	..	14	9	..	23
Pyal school	7th Ward	10	2	1	13
R.G. school, N. Massi Street	..	30	7	14	51
Government Girls' School	..	56	11	10	77
R.G. School, Vangalakala Street ..	..	12	16	5	33
Do. Munisala ,, ...	..	14	10	14	38
Do. Municipal Elephant street ..	..	33	11	8	52
Pyal school	8th Ward	10	3	..	13
Do.	1st ,,	23	6	3	32
R.G. School, Chinna Kadar street ..	..	15	7	4	26

The last return received as required by G.O., No. 1502 M., dated 19th October 1894, for June last shows that steps have been taken to secure the vaccination of all *registered* births, but no less than 103 cases are still "pending before magistrate." From the number of children still remaining unprotected as shown above, it is evident that infantile vaccination has been very much neglected in past years and also that the registration of births is still very

Inspection Notes.

Chairman's Remarks.

defective. The prosecuting Inspector reports that it is very difficult to secure conviction in cases reported for failure to vaccinate. One reason for this appears to be that care is not taken by the Municipality to see that, when such prosecutions are instituted, sufficient evidence is forthcoming to prove the case and upset the defence generally put forward, which is either a flat denial of the parentage or guardianship of the child, or the substitution of a vaccinated child of the same age. To ensure the vaccination of those children now unprotected, nothing will suffice except a house-to-house visitation as recommended by the Sanitary Commissioner in his inspection notes last year. The work done has not been good; a very large number of the children examined and entered above as vaccinated bore only one mark. For these results the present staff cannot be held responsible as they have only been recently appointed. In their registers they should be compelled to enter the door number of each case vaccinated to facilitate future identification or enquiry.

This will receive attention.

—	1890.	1891.	1892.	1893.	1894.	1895 (up to 31st July 1895).
Number vaccinated	3,507	2,357	4,822	5,114	4,373	3,357
,, ,, successfully	3,357	1,936	4,135	4,950	4,153	3,207
,, ,, from arm to arm	1,583	228	..	1,483	3,152	279
,, ,, under one year of age	1,695	802	1,740	2,322	2,718	1,853
,, verified by Inspecting officer	2,015	*Nil.*	..	241	1,165	1,804
Births	2,661	2,866	2,928	2,910	2,918	1,397

10. *Registration*—is in charge of four old men, all with a service extending over twenty years. Only one of them can keep his records, &c., in English, the result being that he is made responsible for the compilation of a general return for the town from the records kept in Hindustani and Tamil by the other registrars without any compensation for the extra work and responsibility thus thrown on his shoulders. The pay of each is Rs. 10 monthly. The general register is neatly kept in English by Sawmy Iyer, registrar of the 1st Circle. The column headed "date of vaccination" is not filled in. Cases of infants still-born are entered only as deaths and omitted from the birth register. Reports of domestic occurrence are made by the relations to the registrars, whose offices are in the Municipal hospital, branch dispensary, Ramayanachavady muntapam, and Municipal office,

These old men will be replaced by young and efficient men at an early date.

No records are kept in Hindustani.

Inspection Notes.

Chairman's Remarks.

respectively. In the afternoon the registrars are supposed to go round their circles and collect information themselves.

Deaths from	1890.	1891.	1892.	1893.	1894.	1895 (up to 31st July).
Cholera	76	462	20	256	384	23
Small-pox	300	200	253	200	25	10
Fevers	452	353	409	381	450	236
Dysentery and diarrhœa	356	358	255	192	334	130
All other causes	1,328	1,372	1,625	1,588	1,659	949
Total	2,512	2,745	2,562	2,617	2,852	1,348
Death-rate per mille	32·7	35·7	29·3	29·9	32·6	26·4
Total births	2,715	2,866	2,928	2,910	2,918	1,397
Birth-rate per mille	35·3	37·2	33·4	33·3	33·4	27·4

FORT ST. GEORGE,
10*th October* 1895.

(Signed) C. MALLINS, Surgn.-Major,
Ag. Inspr. of Vaccn. and Dy. Sany. Commr.

—

No. 1777-S.

Forwarded to the Chairman, Municipal Council, Madura.

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

FORT ST. GEORGE,
10*th October* 1895.

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

—

No. 81.

Submitted to Government through the Collector of Madura.

2. A copy of the resolution No. 358, dated 13th December 1895, approving of the remarks is herein enclosed.

MADURA,
16*th December* 1895.

(Signed) R. FISCHER,
Chairman.

—

ENCLOSURE.

EXTRACT from the Proceedings of the Municipal Council, Madura, passed at the special meeting held on the 13th December 1895.

* * * * *

358. Read notes of the Deputy Sanitary Commissioner, Madras, on the inspection of this municipality and the draft remarks of the Chairman thereon.

Resolution—Resolved that the draft remarks of the Chairman be approved.

* * * * *

—

E.C. No. 5411-Gl.

Submitted.

MADURA,
30*th December* 1895.

(Signed) J. TWIGG,
Ag. Collector.

4

ORDER—No. 261 M., dated 12th February 1896.

Recorded.

2. The Sanitary Engineer will be requested to state whether it will be possible for him to undertake the preparation of a scheme for the drainage of the town at an early date.

3. The action which the municipal council proposes to take on the Deputy Sanitary Commissioner's suggestion to provide certain public wells with parapet walls, &c., has not been reported. The omission should now be supplied.

(True Extract.)

for *Chief Secretary.*

To the Chairman, Municipal Council, Madura.
" Collector of Madura.
" Sanitary Commissioner.
" Sanitary Engineer.
Editors' Table.

Exd A. Raitt

Govt. of {1896} Madras.

LOCAL AND MUNICIPAL.

A.S.

Proof for approval.

Issued

Recd.

Encl.

G.O., No. 261 M., 12th Feb. 1896.

FEBRUARY.

Inspection Notes.

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

2/3/96.

Srabrayulu

12 February

No. 261, M., JANUARY 1896.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper :—

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

Inspected 14*th to* 19*th August* 1895.

MADURA DISTRICT.

MADURA MUNICIPALITY.

Population per census of 1891	Males	43,880
	Females	43,548
	Total ..	87,428

Inspection Notes.

Roads, Drainage, &c.—The roads are as a rule in good order and well swept. Many of them are provided with side drains, square in section which are in a very foul state, either from defective levels, or owing to the want of ordinary care in keeping them free from silt and rubbish. From the Vaigai two channels branch off acting as feeders during the rains for the Anapanadi lake. During the dry season these channels receive only such portion of the drainage of the town as may reach them. This is not sufficient to cause a constant stream so that the foul water stagnates and creates a nuisance. In E. Masi street, near the Elephant stone, the drains are blocked and covered with bags of grain. The majority of the drains are mere surface channels in which sullage water stagnates and soaks into the ground. The levels of the town have been taken and it is hoped that the new drainage scheme will shortly be taken in hand. In some of the larger streets these drains are freely used for purposes of nature, or if no drains exist the sides of the streets are resorted to. This was seen in Tailor street, Nanmaitharwar street, Chunamkar street and several

Chairman's Remarks.

The council is fully aware that the existing drainage system (if it can be called by that name) is entirely defective owing to want of proper levels. Further, a portion of the town has no drains at all. These coupled with the want of proper outlet for the sewage water render very difficult the task of keeping these drains in good condition. With a view to remedy this defect, the levels and sections for the preparation of a drainage scheme by the Sanitary Engineer to Government were completed in January last at a cost of Rs. 2,550 (*vide* G.O., Mis. No. 234 M., dated 4th February 1892). The Sanitary Engineer who was communicated with on the subject writes as follows :—

"The design of the work may be taken in hand in 1896–97 if Government so sanction it, and if the Sanitary Commissioner thinks it should be preferentially included in the list of works to be designed that year."

The sanction of Government is therefore requested for the preparation of the scheme without further delay. Until this is done, the council will take care that the drains are not allowed to be in a foul condition as far as practicable.

But Madura continues in the Sanitary Engineer's proposal of 1896 and Rs. 1970 and 25-11-97

261/96

Inspection Notes.

others. In all the filth so accumulated is removed in the rubbish carts. I saw three instances of this most objectionable practice. There are 325 dust-bins; of these 50 are fixtures of stone or brick in chunam and 275 are iron moveable ones. Of the latter I saw no less than 109 in the municipal yard at the old jail awaiting petty repairs. Fifty-five double-bullock and six single-bullock carts are provided for the removal of rubbish—these, originally the property of the municipality, have been sold to the contractor who is now responsible for their repair, &c. He should be compelled to supply properly-constructed carts when new or extra ones are required. I saw one provided by him with sides formed of bamboo and no back-board. This pattern should not be accepted. The rubbish is removed to three depôts—one in the second ward, one in the fourth and one in the tenth and ultimately sold. It realized Rs. 810 last year. The depôts in the second and fourth wards are too close to dwelling houses, with the latter a night-soil depôt, the only one for the whole town, is incorporated. The depôt in the second ward is not properly looked after. I saw the contents of a night-soil cart being emptied here; also on the road leading into it. Two cart-loads of rubbish, one-fourth of which was night-soil, had been deposited. Here the land is given gratis by the owner for the improvement of his crops. It might be possible to obtain ground on the same terms about half a mile distant from the town and establish a second night-soil and rubbish depôt. As nothing is realized from the sale of night-soil, it would be to the advantage both of the municipality and the cultivators if an agreement could be made with the latter to trench their fields for the purpose.

Many of the buildings used as schools are unsuitable for the purpose. The Result-grant School of N. Chidambaram Iyer in N. Masi street with 56 on the roll is held in a thatched shed without proper light or ventilation; the wooden posts supporting the roof are not perpendicular and appear unsafe. The Result-grant School in Munisab street with 78 on the roll is a small thatched shed with tatty walls, and much too small and confined for th[illegible]mber attending.

Chairman's Remarks.

The construction of additional latrines and urinals shortly to be undertaken will, it is hoped, effectively put a stop to the objectionable practice noticed. The outdoor staff has strict orders to see that night-soil is not removed along with rubbish.

Young boys and girls are in the habit of damaging and overturning these bins by upsetting their contents; hence the frequent necessity for petty repairs. The council is also trying the experiment of basket system for the removal of rubbish from houses and will, after a fair trial, decide whether these bins can be superseded or not.

A provision to this effect has been made in the bonds taken from rubbish cart contractors.

This was put on by one of them as a temporary measure for a few days pending repairs to the ordinary rubbish cart generally in use for the purpose.

Greater attention is now being paid to the state of the depôt, and the conduct of the officer, who was in charge of it, has been severely noticed.

Attempts are being made in the direction indicated by the Deputy Sanitary Commissioner.

This experiment will be tried as early as possible.

The attention of the Assistant Inspector of Schools has been drawn to this matter.

Inspection Notes.

Chairman's Remarks.

2. *Water-supply.*—Drinking water is now supplied from the works recently opened near the village of Arapoliyam. An infiltration gallery across the bed of the river Vagai supplies a large well sunk on the banks from which the water is pumped through pipes into the town. The supply is uncertain; during my visit it failed and during the hot season it frequently falls short. There are three engines, of which only one works at a time, and then only during the day. The driver in charge informs me that the engines suffer from "the strain thrown on them in compressing the air in the pipes when work commences in the morning." Some of this air is of course sucked in from open taps, but it is not improbable that a certain amount enters through faulty joints when the pipes are empty. The danger of an intermittent system with pipes laid through such a sewage soaked site as that of the town of Madura is manifest. Both this danger and the inconvenience of occasional failures of the supply might be obviated by the construction of a reservoir near the pumping works capable of holding one or two days' supply. By this means, when plenty of water is available in the river, extra engines could be put to work and the reservoir kept full. The pipes would also be full and the danger of suction minimized. The engines would be fully utilized and relieved, and there would not be any necessity for constantly refunding water-tax on account of failures in the supply. No doubt the opening of the Periyár scheme will ensure against failures in supply, but it will not affect the question of empty pipes at nights and air suction. I am informed that the water from the taps in the town often smells badly; it would be well to have samples of water, both from the well at the pumping station and from the taps sent to the Chemical Examiner for analysis and comparison. Owing to the frequency of failure of the pipe supply, several wells in the town are still resorted to for drinking purposes. A list of these wells should be prepared and all should be properly conserved. At present there are low parapet walls inside of which persons stand to draw water, or on a stone placed right across the mouth of the well. These stones should be removed, the parapet walls raised and cross beams and pulleys provided. Several people, chiefly Brahmins,

These remarks will be referred to the Sanitary Engineer to Government for necessary action, if any, being taken.

A sample of the water will be sent to the Chemical Examiner for analysis.

Inspection Notes.

Chairman's Remarks.

still resort to the river and draw their water from pits dug in its sandy bed. The bed of the Villapuram tank near the toll-gate is very largely resorted to for purposes of nature. As the well on the bund of this tank is largely used for drinking purposes, efforts should be made to keep its surroundings pure and clean.

This is being attended to.

3. *Conservancy.*—The strength and pay of the establishment is shown below :—

Three Sanitary Inspectors	on Rs. 25	each.
Three do.	do. on „ 20	„
Four do.	do. on „ 15	„
Five peons	on Rs. 6	each.
Do.	on „ 5	„
Eleven male latrine scavengers	on Rs. 5	each.
Fifty-six sweepers	on „ 5	„
Fourteen female scavengers	on „ 4	„
Seven hand-cart toties	on „ 5	„
One hand cart toty	on „ 6	
Two slaughter-house toties	on „ 5	each.
One market toty	on „ 5	
One depôt peon	on „ 6	
Three toties	on „ 5	each.
One Sanitation clerk	on „ 15	

Private scavenging.

Twelve scavengers	on Rs. 4	each.
One scavenger	on „ 5	

The latrine accommodation is still far from sufficient. There are now four pucka and three temporary latrines for a population of 87,428 in addition to the thousands of pilgrims who visit the temples. There are said to be 12,500 private latrines in the town, of which only 572, or eight less than last year are cleaned by the municipality. No attempt appears to be made to extend this system, as since its introduction in 1892–93 a decrease in the number of houses served is reported instead of an increase. The sides of the public streets as well as open spaces and nullahs in the town are all freely resorted to for purposes of nature. The four masonry walled latrines are at the four angles of the town and consequently only of use to those on the outskirts; they are all of the objectionable open type with sanded floors; dry-earth is not used. In the W. Vali Vedi street latrine the floor has been dug out about six inches below its original level in the process of cleaning. There are, according to the information furnished from the municipal office, three temporary latrines. I find that one small latrine in Pudur divided into two compartments for males and females is apparently looked upon as two latrines, while all that remains of the

Every attempt has been made to extend this system as far as practicable and councillors in Charge of wards are doing all in their power. Respectable people keep their privies clean by engaging private toties. Prosecutions for filthy compounds are being conducted systematically. Since the last inspection by the Deputy Sanitary Commissioner, the number of houses registered have increased by 57 and no pains will be spared to popularize this system.

Inspection Notes.	Chairman's Remarks.
third in the first ward are eight or nine upright stones. Outside one latrine (Pallivasal?) the iron sheets and stone uprights said to have formed a latrine during the festival period are collected and lying useless on the ground. Having once been erected this might have been permitted to remain in use considering the necessity for extra accommodation of this kind in the town. Over 9,000 cases of nuisance were prosecuted during the past year; but unless suitable places are provided by the municipality for the purpose, it is difficult to see what the unfortunate people are to do. There is not a single latrine in the centre of the town, or in the heart of the most populous quarters; people must defœcate; fields are at distance; the street is handy and there they resort. Children may be seen in the act at any hour of the day in any street; schools are unprovided with latrines and the scholars step into the street to relieve themselves. Properly-constructed latrines carefully looked after should not be a nuisance; latrines of the present open pattern must always be more or less offensive and are naturally objected to in the vicinity of dwellings. This type should be abolished and others of standard plan introduced. Where space is limited galvanised iron structures on raised stone or cemented platforms should be provided.	Suitable sites have at last been selected —18 for latrines and 12 for urinals and prompt measures will be taken to acquire them under the Land Acquisition Act after they are approved by the council. If need be, the District Medical and Sanitary officer will be consulted before acquiring them.
Night-soil is collected in 24 iron single-bullock carts and removed to the depôt at a distance of two furlongs from the south-west of the town and buried in deep trenches. These are much too large; the excreta in them is not covered and consequently the stench arising from them is sickening. Fresh shallow trenches of the correct dimensions had been prepared at the time of my visit, but were not used. Too many have been dug at one time; if only those actually required were dug daily, it would be unnecessary to leave the large vacant spaces now reserved for the carts to pass between the trenches. This has been explained to the Inspector and should be attended to. The present depôt is much too close to habitations. As the "proposed cinerators" mentioned in the council's remarks on the Inspection Notes of the Sanitary Commissioner last year have not been taken into consideration in the budget for the current year, it would be advisable to take immediate steps for the removal of this depôt to a more suitable site. All the night-soil	Noted. Steps are being taken to secure a suitable site as suggested by the Deputy Sanitary Commissioner.

Inspection Notes.	Chairman's Remarks.
carts should be coated with tar to preserve the iron, and should have numbers plainly painted on them for purposes of identification. Owing to the absence of these numbers I was unable to identify the offenders in the cases mentioned in paragraph 1 of these notes.	**This will be attended to at once.**
4. *Slaughter-houses.*—Of these there are three, not one of which deserves the name. In the West market, surrounded within a few yards by stalls intended for the sale of meat, there is a small paved platform with wooden uprights and cross beam for skinning the animals. Of the latter, about forty are slaughtered daily and evidently on the ground surrounding this platform as it is soaked with blood. Outside is a cistern for the reception of the blood, refuse water, &c., which is in a very foul state and smells badly. It contained three and-a-half feet of filth overflowing into an earthen drain at the time of my visit. A second so-called slaughter-house is in the East market; it is not fenced off in any way from the public market. Fifty or sixty animals are slaughtered daily in a corner of the market enclosure. A portion has been walled in for the purpose of erecting a new slaughter-house, but the work appears to have been commenced without any fixed design, as there is now a four-walled compartment without any means of entrance. The third is near the South market in the yard intended for the municipal carts. Here there is a platform of very rough stones, old pillars, and carved stones from mantapams, &c., loosely set without any attempt at levelling or filling up the intervals; close by are six old night-soil carts awaiting repair. Alongside is a useless hand-cart with an iron receptacle worn out, supposed to be used daily for collecting the gut contents. This yard is not enclosed and is alongside of dwellings. All these places are unsuitable for the purposes intended. A fourth slaughtering yard, largely used but apparently unauthorized, is to be found inside the west bandy-stand enclosure. There is no beef slaughter-house. About ten animals are said to be slaughtered daily. Some accommodation should be afforded for the purpose. At present they are killed at night secretly near the houses of the butchers; if detected, these people are prosecuted and ordered to kill outside municipal limits which is a great hardship.	**Necessary precautions are being taken to ensure the cleanliness of the slaughter-house and its surroundings.** **The work has since been completed by opening a door-way.** **A site for a slaughter-house near the Attumandai Pottal has already been acquired and provision will, if possible, be made in next year's budget for the construction of a slaughter-house on the standard design.** **This will receive attention.**

Inspection Notes

5. *Markets.*—West market consists of a square enclosure with stalls 17 in number arranged around the interior, not one of which, it is said, is used. Outside there are also stalls occupied on one side as dwellings, a few being utilized for the sale of meat. All have earthen floors. Meat is hung up on cords; the stalls are very small and confined; the floors should be cemented and hooks provided for hanging meat. The sides of the adjoining streets and an open space of ground close by form the real market place—badly built mud structures with thatched roofs and rough uneven earthen floors have been constructed by private owners for meat stalls. These should be removed and when the existing stalls have been repaired and rendered suitable for the purpose, butchers should be induced to use them. I am informed that the meat is now taken and sold in private houses in the public streets. Several prosecutions are pending on this account. Inside the square enclosure mentioned above is a slaughter-house so that, if used as a market, purchasers are compelled to witness the slaughter of sheep, &c. It should be converted into one or the other—the combination is most objectionable.

Chairmans' Remarks.

Notices have been issued for the removal of the meat stalls objected to, and the butchers will be forced to occupy those inside the market in due course.

The East market is the chief market of the town and consists of a large oblong walled enclosure and four rows of stalls used for the sale of meat, vegetable, rice and fish. A portion of the main enclosure is walled off and provided with a row of stalls for the sale of meat—Entrance to this part being effected by means of three irregular holes in the outer wall; there are neither door frames nor doors. The main portion is an open space with a floor of large roughly cut stones used for the sale of grain. With stalls at one side, for storing the grain one corner is set apart as a slaughter-house as already described. All the stalls require reflooring—some being of earth, others of brick, and all out of repair. Meat is hung on ropes, the blocks for cutting it are rough, and dirty fish is exposed for sale on filthy boards. The whole place should be taken in hand and put in proper order.

Noted.

The South market for meat and fish is a walled enclosure with 38 small stalls with earthen floors—only four of which are used—the meat being sold in private stalls in the streets outside.

This will be attended to.

Inspection Notes.	Chairman's Remarks.
6. *Bandy-stands.*—There are two cart-stands belonging to the municipality—one close by the East market, and the second near the West market. The former is fairly clean: the latter is utilized in its greater portion as sheds for storing and cutting beams of wood; another portion is used for slaughtering sheep, and the centre as a bandy-stand. It is in a filthy condition and refuse is stored on the premises instead of being removed daily; the floor is a mass of filth. The refuse from the slaughtering corner runs outside into an earthen pot on the road-side, from which it empties out into the earthen channel which serves as a road drain. Standing by is a hand-cart with a useless iron receptacle with holes in the sides which is supposed to be used for removing the filth. Besides these, there are numerous private cart-stands, none of which are kept in a proper sanitary condition. The proprietors should be compelled to provide proper drainage and latrine accommodation and to remove all rubbish and stable refuse daily.	Prosecution is resorted to in such cases. Efforts are being made to remedy the defects pointed out.
7. *Cholera-shed.*—Near Ponmeni village there is a temporary cholera-shed—a thatched structure of bamboos and tatties. As cholera is an annual occurrence, it would be well to provide a more lasting and suitable structure. I understand that the matter is under the consideration of the Council and I would recommend that an iron skeleton framework on a permanent raised and cemented platform be erected in a suitable locality, to be thatched and provided with bamboo screen walls when required for use.	This is being done and will receive further attention.
8. *Burial-grounds.*—The Muhammadan burial-ground in Kazimar street still in use is surrounded with habitations and should be closed. Two large grounds on either side of the old Ramnad road are also much too close to dwellings. The burial and burning ground at the south gate now in use should be also closed. The place is full and is on the banks of the Anapanadi channel and close to wells.	The Council is in communication with the District Medical officer on this subject.
9. *Vaccination*—is superintended by the Assistant Surgeon and is carried on by three vaccinators—all second-class, and recently appointed. They are young, active and intelligent men and seem to work well. I verified 33 recent cases done by them—all correctly entered.	Suitable sites have been acquired for the burning and burial ground at the south gate and necessary steps will soon be taken to close the existing objectionable one by opening a new one in its place. The subject of Muhammadan burial-ground is also engaging the attention of the Council and proper sites will ere long be procured for the purpose.

Inspection Notes

Their records are neatly kept in English and up to date. As the annual vaccination returns are compiled for the official year fresh, yearly serial numbers should commence from April 1st, and not from January 1st as is the practice at present. Their instruments are old and require renewal. Vaccination direct from the calf has been instituted since August 1st. Calves are hired from a contractor at Rs. 2 each, and kept in a thatched shed in the hospital compound where there is another shed provided for carrying on vaccination as well as the inoculation and extraction operations. It is too close to the out-patient department and the building is unsuitable. A separate building and calf-shed should be provided in another part of the compound.

Chairman's Remarks

The District Medical and Sanitary officer will be addressed for replacing them by new ones.

Separate building will be provided on consultation with the District Medical officer.

The annexed statements show the results of the examination of children in the streets and schools visited.

Ward.	Total examined.	Vaccinated.	Unprotected.	Marked with small-pox.	Percentage of unprotected.
First Ward	254	181	65	8	25·6
Second ,, ...	99	80	17	2	17·2
Third ,, ...	119	78	37	4	31·1
Fourth and Fifth Wards	183	106	70	7	38·3
Sixth Ward	127	75	46	6	36·2
Seventh ,, ...	122	62	47	13	38·5
Eighth ,, ...	143	67	73	3	51·0
Ninth ,, ...	140	80	53	7	37·8
Tenth ,, ...	110	39	62	9	56·4
Total ..	1,297	768	470	59	36·2

Name of school.		Vaccinated.	Unvaccinated.	Marked with small-pox.	Total.
Hindu Primary School	4th Ward	35	10	2	47
Pyal School	Do.	28	6	3	37
Four Pyal schools	5th Ward	59	25	21	105
American Mission R.G. School	..	14	9	..	23
Pyal school	7th Ward	10	2	1	13
R.G. school, N. Massi Street	..	30	7	14	51
Government Girls' School	..	56	11	10	77
R.G. School, Vangalakala Street	..	12	16	5	33
Do. Munisala ,, ...	..	14	10	14	38
Do. Municipal Elephant street ..	..	33	11	8	52
Pyal school	8th Ward	10	3	..	13
Do.	1st ,,	23	6	3	32
R.G. School, Chinna Kadir street	..	15	7	4	26

The last return received as required by G.O., No. 1502 M., dated 19th October 1894, for June last shows that steps have been taken to secure the vaccination of all *registered* births, but no less than 103 cases are still "pending before magistrate." From the number of children still remaining unprotected as shown above, it is evident that infantile vaccination has been very much neglected in past years and also that the registration of births is still very

Inspection Notes.

defective. The prosecuting Inspector reports that it is very difficult to secure conviction in cases reported for failure to vaccinate. One reason for this appears to be that care is not taken by the Municipality to see that, when such prosecutions are instituted, sufficient evidence is forthcoming to prove the case and upset the defence generally put forward, which is either a flat denial of the parentage or guardianship of the child, or the substitution of a vaccinated child of the same age. To ensure the vaccination of those children now unprotected, nothing will suffice except a house-to-house visitation as recommended by the Sanitary Commissioner in his inspection notes last year. The work done has not been good; a very large number of the children examined and entered above as vaccinated bore only one mark. For these results the present staff cannot be held responsible as they have only been recently appointed. In their registers they should be compelled to enter the door number of each case vaccinated to facilitate future identification or enquiry.

Chairman's Remarks.

This will receive attention.

—	1890.	1891.	1892.	1893.	1894.	1895 (up to 31st July 1895).
Number vaccinated	3,507	2,357	4,822	5,114	4,373	3,357
,, ,, successfully	3,357	1,936	4,135	4,950	4,153	3,207
,, ,, from arm to arm	1,583	228	..	1,483	3,152	279
,, ,, under one year of age	1,695	802	1,740	2,322	2,718	1,853
,, verified by inspecting officer	2,015	*Nil.*	..	241	1,165	1,804
Births	2,661	2,866	2,928	2,910	2,918	1,397

10. *Registration* is in charge of four old men, all with a service extending over twenty years. Only one of them can keep his records, &c., in English, the result being that he is made responsible for the compilation of a general return for the town from the records kept in Hindustani and Tamil by the other registrars without any compensation for the extra work and responsibility thus thrown on his shoulders. The pay of each is Rs. 10 monthly. The general register is neatly kept in English by Sawmy Iyer, registrar of the 1st Circle. The column headed "date of vaccination" is not filled in. Cases of infants still-born are entered only as deaths and omitted from the birth register. Reports of domestic occurrence are made by the relations to the registrars, whose offices are in the Municipal hospital, branch dispensary, Ramayanachavady muntapam, and Municipal office,

These old men will be replaced by young and efficient men at an early date.

No records are kept in Hindustani.

Inspection Notes.

Chairman's Remarks.

respectively. In the afternoon the registrars are supposed to go round their circles and collect information themselves.

Deaths from	1890.	1891.	1892.	1893.	1894.	(1895 up to 31st July).
Cholera	76	462	20	256	384	23
Small-pox	300	200	253	200	25	10
Fevers	452	353	409	381	450	236
Dysentery and diarrhœa	356	358	255	192	334	130
All other causes	1,328	1,372	1,625	1,588	1,659	949
Total ..	2,512	2,745	2,562	2,617	2,852	1,348
Death-rate per mille ..	32·7	35·7	29·3	29·9	32·6	26·4
Total births ..	2,715	2,866	2,928	2,910	2,918	1,397
Birth-rate per mille ..	35·3	37·2	33·4	33·3	33·4	27·4

FORT ST. GEORGE,
10*th October* 1895.

(Signed) C. MALLINS, Surgn.-Major,
Ag. Inspr. of Vaccn. and Dy. Sany. Commr.

No. 1777-S.

Forwarded to the Chairman, Municipal Council, Madura.

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

FORT ST. GEORGE,
10*th October* 1895.

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

No. 81.

Submitted to Government through the Collector of Madura.

2. A copy of the resolution No. 358, dated 13th December 1895, approving of the remarks is herein enclosed.

MADURA,
16*th December* 1895.

(Signed) R. FISCHER,
Chairman.

ENCLOSURE.

EXTRACT from the Proceedings of the Municipal Council, Madura, passed at the special meeting held on the 13th December 1895.

* * * * *

358. Read notes of the Deputy Sanitary Commissioner, Madras, on the inspection of this municipality and the draft remarks of the Chairman thereon.

Resolution.—Resolved that the draft remarks of the Chairman be approved.

* * * * *

(Signed) R. FISCHER,
Chairman.

E.C. No. 5411-Gl.

Submitted.

MADURA,
30*th December* 1895.

(Signed) J. TWIGG,
Ag. Collector.

C.S.
P.S. Order

Recorded.

2. The Sanitary Engineer will be requested to state whether it will not be possible for him to undertake the preparation of a scheme for the drainage of the town at an early date.

3. The action which the municipal council proposes to take on the Deputy Sanitary Commissioner's suggestion to provide certain public wells with parapet walls to be has not been reported. The omission should now be supplied.

V.R
11/2/96

To The Chairman, M.C. Madura
" Collector
" Sanitary Commissioner
" Sanitary Engineer
" Editor's Table

(writte)

No. 261, M., 12TH FEBRUARY 1896.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper :—

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

MADURA DISTRICT.

MADURA MUNICIPALITY.

Inspected 14*th to* 19*th August* 1895.

Population per census of 1891	Males	.. ..	43,880
	Females	.. ..	43,548
		Total ..	87,428

Inspection Notes.

Roads, Drainage, &c.—The roads are as a rule in good order and well swept. Many of them are provided with side drains, square in section, which are in a very foul state, either from defective levels or owing to the want of ordinary care in keeping them free from silt and rubbish. From the Vaigai two channels branch off acting as feeders during the rains for the Anapanadi lake. During the dry season these channels receive only such portion of the drainage of the town as may reach them. This is not sufficient to cause a constant stream so that the foul water stagnates and creates a nuisance. In E. Masi street, near the Elephant stone, the drains are blocked and covered with bags of grain. The majority of the drains are mere surface channels in which sullage water stagnates and soaks into the ground. The levels of the town have been taken and it is hoped that the new drainage scheme will shortly be taken in hand. In some of the larger streets these drains are freely used for purposes of nature, or if no drains exist the sides of the streets are resorted to. This was seen in Tailor street, Nanmaitharwar street, Chunamkar street and several

Chairman's Remarks.

The council is fully aware that the existing drainage system (if it can be called by that name) is entirely defective owing to want of proper levels. Further, a portion of the town has no drains at all. These coupled with the want of proper outlet for the sewage water render very difficult the task of keeping these drains in good condition. With a view to remedy this defect, the levels and sections for the preparation of a drainage scheme by the Sanitary Engineer to Government were completed in January last at a cost of Rs. 2,550 (*vide* G.O., Mis. No. 234 M., dated 4th February 1892). The Sanitary Engineer who was communicated with on the subject writes as follows :—

"The design of the work may be taken in hand in 1896–97 if Government so sanction it, and if the Sanitary Commissioner thinks it should be preferentially included in the list of works to be designed that year."

The sanction of Government is therefore requested for the preparation of the scheme without further delay. Until this is done, the council will take care that the drains are not allowed to be in a foul condition as far as practicable.

Inspection Notes.

others. In all the filth so accumulated is removed in the rubbish carts. I saw three instances of this most objectionable practice. There are 325 dust-bins; of these 50 are fixtures of stone or brick in chunam and 275 are iron moveable ones. Of the latter I saw no less than 109 in the municipal yard at the old jail awaiting petty repairs. Fifty-five double-bullock and six single-bullock carts are provided for the removal of rubbish—these, originally the property of the municipality, have been sold to the contractor who is now responsible for their repair, &c. He should be compelled to supply properly-constructed carts when new or extra ones are required. I saw one provided by him with sides formed of bamboo and no back-board. This pattern should not be accepted. The rubbish is removed to three depôts—one in the second ward, one in the fourth and one in the tenth and ultimately sold. It realized Rs. 810 last year. The depôts in the second and fourth wards are too close to dwelling houses, with the latter a night-soil depôt, the only one for the whole town, is incorporated. The depôt in the second ward is not properly looked after. I saw the contents of a night-soil cart being emptied here; also on the road leading into it. Two cart-loads of rubbish, one-fourth of which was night-soil, had been deposited. Here the land is given gratis by the owner for the improvement of his crops. It might be possible to obtain ground on the same terms about half a mile distant from the town and establish a second night-soil and rubbish depôt. As nothing is realized from the sale of night-soil, it would be to the advantage both of the municipality and the cultivators if an agreement could be made with the latter to trench their fields for the purpose.

Many of the buildings used as schools are unsuitable for the purpose. The Result-grant School of N. Chidambaram Aiyar in N. Masi street with 56 on the rolls is held in a thatched shed without proper light or ventilation; the wooden posts supporting the roof are not perpendicular and appear unsafe. The Result-grant School in Munisab street with 78 on the rolls is a small thatched shed with tatty walls, and much too small and confined for the number attending.

Chairman's Remarks.

The construction of additional latrines and urinals shortly to be undertaken will, it is hoped, effectively put a stop to the objectionable practice noticed. The out-door staff has strict orders to see that night-soil is not removed along with rubbish.

Young boys and girls are in the habit of damaging and overturning these bins by upsetting their contents; hence the frequent necessity for petty repairs. The council is also trying the experiment of basket system for the removal of rubbish from houses and will, after a fair trial, decide whether these bins can be superseded or not.

A provision to this effect has been made in the bonds taken from rubbish cart contractors. This was put on by one of them as a temporary measure for a few days pending repairs to the ordinary rubbish cart generally in use for the purpose.

Greater attention is now being paid to the state of the depôt, and the conduct of the officer, who was in charge of it, has been severely noticed.

Attempts are being made in the direction indicated by the Deputy Sanitary Commissioner.

This experiment will be tried as early as possible.

The attention of the Assistant Inspector of Schools has been drawn to this matter.

Inspection Notes.

2. *Water-supply.*—Drinking water is now supplied from the works recently opened near the village of Arapalaiyam. An infiltration gallery across the bed of the river Vaigai supplies a large well sunk on the banks from which the water is pumped through pipes into the town. The supply is uncertain; during my visit it failed and during the hot season it frequently falls short. There are three engines, of which only one works at a time, and then only during the day. The driver in charge informs me that the engines suffer from "the strain thrown on them in compressing the air in the pipes when work commences in the morning." Some of this air is of course sucked in from open taps, but it is not improbable that a certain amount enters through faulty joints when the pipes are empty. The danger of an intermittent system with pipes laid through such a sewage soaked site as that of the town of Madura is manifest. Both this danger and the inconvenience of occasional failures of the supply might be obviated by the construction of a reservoir near the pumping works capable of holding one or two days' supply. By this means, when plenty of water is available in the river, extra engines could be put to work and the reservoir kept full. The pipes would also be full and the danger of suction minimized. The engines would be fully utilized and relieved, and there would not be any necessity for constantly refunding water-tax on account of failures in the supply. No doubt the opening of the Periyár scheme will ensure against failures in supply, but it will not affect the question of empty pipes at nights and air suction. I am informed that the water from the taps in the town often smells badly; it would be well to have samples of water, both from the well at the pumping station and from the taps sent to the Chemical Examiner for analysis and comparison. Owing to the frequency of failure of the pipe-supply, several wells in the town are still resorted to for drinking purposes. A list of these wells should be prepared and all should be properly conserved. At present there are low parapet walls inside of which persons stand to draw water, or on a stone placed right across the mouth of the well. These stones should be removed, the parapet walls raised and cross beams and pulleys provided. Several people, chiefly Brahmins,

Chairman's Remarks.

These remarks will be referred to the Sanitary Engineer to Government for necessary action, if any, being taken.

A sample of the water will be sent to the Chemical Examiner for analysis.

Inspection Notes.

still resort to the river and draw their water from pits dug in its sandy bed. The bed of the Villapuram tank near the toll-gate is very largely resorted to for purposes of nature. As the well on the bund of this tank is largely used for drinking purposes, efforts should be made to keep its surroundings pure and clean.

3. *Conservancy.*—The strength and pay of the establishment is shown below :—

Three Sanitary Inspectors on		Rs. 25 each.
Three do.	do. on	„ 20 „
Four do.	do. on	„ 15 „
Five peons on Rs. 6 each.		
Do.	on	„ 5 „
Eleven male latrine scavengers on		Rs. 5 each.
Fifty-six sweepers	on	„ 5 „
Fourteen female scavengers	on	„ 4 „
Seven hand-cart toties	on	„ 5 „
One hand cart toty	on	„ 6
Two slaughter-house toties	on	„ 5 each.
One market toty	on	„ 5
One depôt peon	on	„ 6
Three toties	on	„ 5 each.
One Sanitation clerk	on	„ 15

Private scavenging.

Twelve scavengers on		Rs. 4 each.
One scavenger	on	„ 5

The latrine accommodation is still far from sufficient. There are now four pucka and three temporary latrines for a population of 87,428 in addition to the thousands of pilgrims who visit the temples. There are said to be 12,500 private latrines in the town, of which only 572, or eight less than last year are cleaned by the municipality. No attempt appears to be made to extend this system, as since its introduction in 1892–93 a decrease in the number of houses served is reported instead of an increase. The sides of the public streets as well as open spaces and nullahs in the town are all freely resorted to for purposes of nature. The four masonry walled latrines are at the four angles of the town and consequently only of use to those on the outskirts; they are all of the objectionable open type with sanded floors; dry-earth is not used. In the W. Vali Vedi street latrine, the floor has been dug out about six inches below its original level in the process of cleaning. There are, according to the information furnished from the municipal office, three temporary latrines. I find that one small latrine in Pudur divided into two compartments for males and females is apparently looked upon as two latrines, while all that remains of the

Chairman's Remarks.

This is being attended to.

Every attempt has been made to extend this system as far as practicable and councillors in charge of wards are doing all in their power. Respectable people keep their privies clean by engaging private toties. Prosecutions for filthy compounds are being conducted systematically. Since the last inspection by the Deputy Sanitary Commissioner, the number of houses registered has increased by 57 and no pains will be spared to popularize this system.

Editors' Table WW/12/3/96

Inspection Notes.

third in the first ward are eight or nine upright stones. Outside one latrine (Pallivasal?) the iron sheets and stone uprights said to have formed a latrine during the festival period are collected and lying useless on the ground. Having once been erected this might have been permitted to remain in use considering the necessity for extra accommodation of this kind in the town. Over 9,000 cases of nuisance were prosecuted during the past year; but unless suitable places are provided by the municipality for the purpose, it is difficult to see what the unfortunate people are to do. There is not a single latrine in the centre of the town, or in the heart of the most populous quarters; people must defœcate; fields are at distance; the street is handy and there they resort. Children may be seen in the act at any hour of the day in any street; schools are unprovided with latrines and the scholars step into the street to relieve themselves. Properly-constructed latrines carefully looked after should not be a nuisance; latrines of the present open pattern must always be more or less offensive and are naturally objected to in the vicinity of dwellings. This type should be abolished and others of standard plan introduced. Where space is limited galvanised iron structures on raised stone or cemented platforms should be provided.

Night-soil is collected in 24 iron single-bullock carts and removed to the depôt at a distance of two furlongs from the south-west of the town and buried in deep trenches. These are much too large; the excreta in them is not covered and consequently the stench arising from them is sickening. Fresh shallow trenches of the correct dimensions had been prepared at the time of my visit, but were not used. Too many have been dug at one time; if only those actually required were dug daily, it would be unnecessary to leave the large vacant spaces now reserved for the carts to pass between the trenches. This has been explained to the Inspector and should be attended to. The present depôt is much too close to habitations. As the "proposed cinerators" mentioned in the council's remarks on the Inspection Notes of the Sanitary Commissioner last year have not been taken into consideration in the budget for the current year, it would be advisable to take immediate steps for the removal of this depôt to a more suitable site. All the night-soil

Chairman's Remarks.

Suitable sites have at last been selected —18 for latrines and 12 for urinals and prompt measures will be taken to acquire them under the Land Acquisition Act after they are approved by the council. If need be, the District Medical and Sanitary officer will be consulted before acquiring them.

Noted.

Noted.

Steps are being taken to secure a suitable site as suggested by the Deputy Sanitary Commissioner.

Inspection Notes.

carts should be coated with tar to preserve the iron, and should have numbers plainly painted on them for purposes of identification. Owing to the absence of these numbers I was unable to identify the offenders in the cases mentioned in paragraph 1 of these notes.

4. *Slaughter-houses.*—Of these there are three, not one of which deserves the name. In the West market, surrounded within a few yards by stalls intended for the sale of meat, there is a small paved platform with wooden uprights and cross beam for skinning the animals. Of the latter, about forty are slaughtered daily and evidently on the ground surrounding this platform as it is soaked with blood. Outside is a cistern for the reception of the blood, refuse water, &c., which is in a very foul state and smells badly. It contained three and-a-half feet of filth overflowing into an earthen drain at the time of my visit. A second so-called slaughter-house is in the East market; it is not fenced off in any way from the public market. Fifty or sixty animals are slaughtered daily in a corner of the market enclosure. A portion has been walled in for the purpose of erecting a new slaughter-house, but the work appears to have been commenced without any fixed design, as there is now a four-walled compartment without any means of entrance. The third is near the South market in the yard intended for the municipal carts. Here there is a platform of very rough stones, old pillars, and carved stones from mantapams, &c., loosely set without any attempt at levelling or filling up the intervals; close by are six old night-soil carts awaiting repair. Alongside is a useless hand-cart with an iron receptacle worn out, supposed to be used daily for collecting the gut contents. This yard is not enclosed and is alongside of dwellings. All these places are unsuitable for the purposes intended. A fourth slaughtering yard, largely used but apparently unauthorized, is to be found inside the west bandy-stand enclosure. There is no beef slaughter-house. About ten animals are said to be slaughtered daily. Some accommodation should be afforded for the purpose. At present they are killed at night secretly near the houses of the butchers; if detected, these people are prosecuted and ordered to kill outside municipal limits which is a great hardship.

Chairman's Remarks.

This will be attended to at once.

Necessary precautions are being taken to ensure the cleanliness of the slaughter-house and its surroundings.

The work has since been completed by opening a door-way.

A site for a slaughter-house near the Attumandai Pottal has already been acquired and provision will, if possible, be made in next year's budget for the construction of a slaughter-house on the standard design.

This will receive attention.

Inspection Notes.

5. *Markets.*—West market consists of a square enclosure with stalls 17 in number arranged around the interior, not one of which, it is said, is used. Outside there are also stalls occupied on one side as dwellings, a few being utilized for the sale of meat. All have earthen floors. Meat is hung up on cords; the stalls are very small and confined; the floors should be cemented and hooks provided for hanging meat. The sides of the adjoining streets and an open space of ground close by form the real market place—badly built mud structures with thatched roofs and rough uneven earthen floors have been constructed by private owners for meat stalls. These should be removed and when the existing stalls have been repaired and rendered suitable for the purpose, butchers should be induced to use them. I am informed that the meat is now taken and sold in private houses in the public streets. Several prosecutions are pending on this account. Inside the square enclosure mentioned above is a slaughter-house so that, if used as a market, purchasers are compelled to witness the slaughter of sheep, &c. It should be converted into one or the other—the combination is most objectionable.

Chairman's Remarks.

Notices have been issued for the removal of the meat stalls objected to, and the butchers will be forced to occupy those inside the market in due course.

The East market is the chief market of the town and consists of a large oblong walled enclosure and four rows of stalls used for the sale of meat, vegetable, rice and fish. A portion of the main enclosure is walled off and provided with a row of stalls for the sale of meat—entrance to this part being effected by means of three irregular holes in the outer wall; there are neither door frames nor doors. The main portion is an open space with a floor of large roughly cut stones used for the sale of grain. With stalls at one side for storing the grain, one corner is set apart as a slaughter-house as already described. All the stalls require reflooring—some being of earth, others of brick, and all out of repair. Meat is hung on ropes, the blocks for cutting it are rough, and dirty fish is exposed for sale on filthy boards. The whole place should be taken in hand and put in proper order.

Noted.

The South market for meat and fish is a walled enclosure with 38 small stalls with earthen floors—only four of which are used—the meat being sold in private stalls in the streets outside.

This will be attended to.

Inspection Notes.

6. *Bandy-stands.*—There are two cart-stands belonging to the municipality—one close by the East market, and the second near the West market. The former is fairly clean: the latter is utilized in its greater portion as sheds for storing and cutting beams of wood; another portion is used for slaughtering sheep, and the centre as a bandy-stand. It is in a filthy condition and refuse is stored on the premises instead of being removed daily; the floor is a mass of filth. The refuse from the slaughtering corner runs outside into an earthen pot on the road-side, from which it empties out into the earthen channel which serves as a road drain. Standing by is a hand-cart with a useless iron receptacle with holes in the sides which is supposed to be used for removing the filth. Besides these, there are numerous private cart-stands, none of which are kept in a proper sanitary condition. The proprietors should be compelled to provide proper drainage and latrine accommodation and to remove all rubbish and stable refuse daily.

7. *Cholera-shed.*—Near Ponmeni village there is a temporary cholera-shed—a thatched structure of bamboos and tatties. As cholera is an annual occurrence, it would be well to provide a more lasting and suitable structure. I understand that the matter is under the consideration of the Council and I would recommend that an iron skeleton framework on a permanent raised and cemented platform be erected in a suitable locality, to be thatched and provided with bamboo screen walls when required for use.

8. *Burial-grounds.*—The Muhammadan burial-ground in Kazimar street still in use is surrounded with habitations and should be closed. Two large grounds on either side of the old Ramnad road are also much too close to dwellings. The burial and burning ground at the south gate now in use should be also closed. The place is full and is on the banks of the Anapanadi channel and close to wells.

9. *Vaccination*—is superintended by the Assistant Surgeon and is carried on by three vaccinators—all second-class, and recently appointed. They are young, active and intelligent men and seem to work well. I verified 33 recent cases done by them—all correctly entered.

Chairman's Remarks.

Prosecution is resorted to in such cases. Efforts are being made to remedy the defects pointed out.

This is being done and will receive further attention.

The Council is in communication with the District Medical officer on this subject.

Suitable sites have been acquired for the burning and burial ground at the south gate and necessary steps will soon be taken to close the existing objectionable one by opening a new one in its place. The subject of Muhammadan burial-ground is also engaging the attention of the Council and proper sites will ere long be procured for the purpose.

Inspection Notes.

Their records are neatly kept in English and up to date. As the annual vaccination returns are compiled for the official year, fresh yearly serial numbers should commence from April 1st, and not from January 1st as is the practice at present. Their instruments are old and require renewal. Vaccination direct from the calf has been instituted since August 1st. Calves are hired from a contractor at Rs. 2 each, and kept in a thatched shed in the hospital compound where there is another shed provided for carrying on vaccination as well as the inoculation and extraction operations. It is too close to the out-patient department and the building is unsuitable. A separate building and calf-shed should be provided in another part of the compound.

The annexed statements show the results of the examination of children in the streets and schools visited.

Ward.	Total examined.	Vaccinated.	Unprotected.	Marked with small-pox.	Percentage of unprotected.
First Ward	254	181	65	8	25·6
Second ,, ...	99	80	17	2	17·2
Third ,, ...	119	78	37	4	31·1
Fourth and Fifth Wards	183	106	70	7	38·3
Sixth Ward	127	75	46	6	36·2
Seventh ,, ...	122	62	47	13	38·5
Eighth ,, ...	143	67	73	3	51·0
Ninth ,, ...	140	80	53	7	37·8
Tenth ,, ...	110	39	62	9	56·4
Total ..	1,297	768	470	59	36·2

Name of school.		Vaccinated.	Unvaccinated.	Marked with small-pox.	Total.
Hindu Primary School	4th Ward	35	10	2	47
Pyal School	Do.	28	6	3	37
Four Pyal schools	5th Ward	59	25	21	105
American Mission R.G. School	7th Ward	14	9	..	23
Pyal school	..	10	2	1	13
R.G. school, N. Massi Street	..	30	7	14	51
Government Girls' School	..	56	11	10	77
R.G. School, Vangalakala Street	..	12	16	5	33
Do. Munisala ,, ...	..	14	10	14	38
Do. Municipal Elephant street	8th Ward	33	11	8	52
Pyal school	1st ,,	10	3	..	13
Do.	..	23	6	3	32
R.G. School, Chinna Kadar street	..	15	7	4	26

Chairman's Remarks.

The District Medical and Sanitary officer will be addressed for replacing them by new ones.

Separate building will be provided on consultation with the District Medical officer.

The last return received as required by G.O., No. 1502 M., dated 19th October 1894, for June last shows that steps have been taken to secure the vaccination of all *registered* births, but no less than 103 cases are still "pending before magistrate." From the number of children still remaining unprotected as shown above, it is evident that infantile vaccination has been very much neglected in past years and also that the registration of births is still very

Inspection Notes.

defective. The prosecuting Inspector reports that it is very difficult to secure conviction in cases reported for failure to vaccinate. One reason for this appears to be that care is not taken by the Municipality to see that, when such prosecutions are instituted, sufficient evidence is forthcoming to prove the case and upset the defence generally put forward, which is either a flat denial of the parentage or guardianship of the child, or the substitution of a vaccinated child of the same age. To ensure the vaccination of those children now unprotected, nothing will suffice except a house-to-house visitation as recommended by the Sanitary Commissioner in his inspection notes last year. The work done has not been good; a very large number of the children examined and entered above as vaccinated bore only one mark. For these results the present staff cannot be held responsible as they have only been recently appointed. In their registers they should be compelled to enter the door number of each case vaccinated to facilitate future identification or enquiry.

Chairman's Remarks.

This will receive attention.

—	1890.	1891.	1892.	1893.	1894.	1895 (up to 31st July 1895).
Number vaccinated	3,507	2,357	4,822	5,114	4,373	3,357
,, ,, successfully	3,357	1,936	4,135	4,950	4,153	3,207
,, ,, from arm to arm	1,583	228	..	1,483	3,152	279
,, ,, under one year of age ..	1,695	802	1,740	2,322	2,718	1,853
,, verified by Inspecting officer	2,015	*Nil.*	..	241	1,165	1,804
Births	2,661	2,866	2,928	2,910	2,918	1,397

10. *Registration*—is in charge of four old men, all with a service extending over twenty years. Only one of them can keep his records, &c., in English, the result being that he is made responsible for the compilation of a general return for the town from the records kept in Hindustani and Tamil by the other registrars without any compensation for the extra work and responsibility thus thrown on his shoulders. The pay of each is Rs. 10 monthly. The general register is neatly kept in English by Sawmy Iyer, registrar of the 1st Circle. The column headed "date of vaccination" is not filled in. Cases of infants still-born are entered only as deaths and omitted from the birth register. Reports of domestic occurrence are made by the relations to the registrars, whose offices are in the Municipal hospital, branch dispensary, Ramayanachavady muntapam, and Municipal office,

These old men will be replaced by young and efficient men at an early date.

No records are kept in Hindustani.

Inspection Notes.

respectively. In the afternoon the registrars are supposed to go round their circles and collect information themselves.

Chairman's Remarks.

Deaths from	1890.	1891.	1892.	1893.	1894.	1895 (up to 31st July).
Cholera	76	462	20	256	384	23
Small-pox	300	200	253	200	25	10
Fevers	452	353	409	381	450	236
Dysentery and diarrhœa	356	358	255	192	334	130
All other causes	1,328	1,372	1,625	1,588	1,659	949
Total ..	2,512	2,745	2,562	2,617	2,852	1,348
Death-rate per mille ..	32·7	35·7	29·3	29·9	32·6	26·4
Total births ..	2,715	2,866	2,928	2,910	2,918	1,397
Birth-rate per mille ..	35·3	37·2	33·4	33·3	33·4	27·4

FORT ST. GEORGE,
10*th October* 1895.

(Signed) C. MALLINS, Surgn.-Major,
Ag. Inspr. of Vaccn. and Dy. Sany. Commr.

—

No. 1777-S.

Forwarded to the Chairman, Municipal Council, Madura.

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

FORT ST. GEORGE,
10*th October* 1895.

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

—

No. 81.

Submitted to Government through the Collector of Madura.

2. A copy of the resolution No. 358, dated 13th December 1895, approving of the remarks is herein enclosed.

MADURA,
16*th December* 1895.

(Signed) R. FISCHER,
Chairman.

—

ENCLOSURE.

EXTRACT from the Proceedings of the Municipal Council, Madura, passed at the special meeting held on the 13th December 1895.

* * * * * *

358. Read notes of the Deputy Sanitary Commissioner, Madras, on the inspection of this municipality and the draft remarks of the Chairman thereon.

Resolution—Resolved that the draft remarks of the Chairman be approved.

* * * * * *

—

E.C. No. 5411-Gl.

Submitted.

MADURA,
30*th December* 1895.

(Signed) J. TWIGG,
Ag. Collector.

Order—No. 261 M., dated 12th February 1896.

Recorded.

2. The Sanitary Engineer will be requested to state whether it will be possible for him to undertake the preparation of a scheme for the drainage of the town at an early date.

3. The action which the municipal council proposes to take on the Deputy Sanitary Commissioner's suggestion to provide certain public wells with parapet walls, &c., has not been reported. The omission should now be supplied.

(True Extract.)

G. S. FORBES,
for *Chief Secretary*.

To the Chairman, Municipal Council, Madura.
" Collector of Madura.
" Sanitary Commissioner.
" Sanitary Engineer.
Editors' Table.

Ed A. Raitt.