Local & Munl. (1895) Department.

PRINTED.

G.O., No. 270 m

DATED 21st February 1895.

[Despatch Abstract.]

Steam-boilers Act.-1893.

Communicating to all Municipal Councils and to the Municipal Commissioners of Madras, G.O., Judicial Department, directing that the Madras---be brought into operation in the City of Madras with effect from the 1st April 1895, and requesting the Sanitary Engineer and the Accountant-General to report the principles upon which the recoveries on account of the Boiler Inspector may best be made from the Municipal Councils concerned.

BACK PAPERS.

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

FURTHER PAPERS.

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

Read-the following papers:-

403

25TH JANUARY 1895, No. 174, JUDICIAL.

GOVERNMENT OF MADRAS.

JUDICIAL DEPARTMENT.

READ—again the following papers:—

G.O., dated 24th August 1893, Nos. 1712-1713A, Judicial.

ABSTRACT.—Drawing the attention of all District Magistrates to Act III of 1893, and requesting them to report whether it is advisable to extend it to their several districts and whether a notification under section 14 should also be issued, and directing that the Governments of Bengal and Bombay be asked to furnish copies of rules and orders made under the Acts of those Presidencies.

G.O., dated 12th March 1894, No. 610, Judicial.

ABSTRACT.—Calling for information as to the number of steam-boilers in use in certain districts and in the town of Madras, and directing, with reference to sections 9, 11 and 12 of the Madras steam-boilers and Prime-movers Act, that certain questions be considered in the Public Works Department.

READ—also the following papers:—

From the District Magistrate,	Tanjore,	dated	30th	March	1894,	No. 351.
,, ,,	Coimbatore,	,,	10th	May	,, ,,	568.
,, ,,	Salem,	,,	18th	,,	,, ,,	815.
,, ,,	Bellary,	,,	19th	,,	,, ,,	83.
,, ,,	Tinnevelly,	,,	22nd	,,	,, ,,	556.
,, ,,	,,	,,	20th	June	,, ,,	666.
,, ,,	Kistna,	,,	24th	July	,, ,,	560.

ABSTRACT.—Reporting as to the numbers of steam-boilers in their districts.

From the Commissioner of Police, Madras, dated 25th April 1894, No. 51.

ABSTRACT.—Forwarding a list of steam-boilers in use in the Madras City.

From the Under Secretary to the Government of Bombay, dated 24th May 1894, No. 1942.

ABSTRACT.—Forwarding copy of the rules under the Bombay Boiler Inspection Act, 1891, as finally approved by Government.

From the Under Secretary to the Government of Bombay, dated 8th June 1894, No. 2134.

ABSTRACT.—Inviting attention to his previous letter and stating that another set of rules under the same Act is under consideration.

From the Public Works Department, dated 18th July 1894, No. 614 D.

ABSTRACT.—Forwarding, with remarks, a form of register of boilers referred to in section 9 of Act III of 1893.

ORDER—dated 25th January 1895, No. 174, Judicial.

After a careful consideration of the correspondence read above, the Government has decided that it is not necessary at present to extend any portion of the Madras Steam-boilers and Prime-movers Act, 1893, to the mufassal; it will, however, be brought into operation in the City of Madras with effect from the 1st April 1895.

2. With regard to the appointment of Inspectors under section 3 of the Act, the Government has come to the conclusion that there will not be enough work to occupy

the full time of even one such officer and therefore considers that to the Boiler Inspector should also be entrusted the duty of the periodical inspection of the engines and boilers of the several mufassal municipal water-works. For the combined duties a salary of Rs. 250–10–300 *per mensem* (*plus* travelling allowance for journeys to inspect municipal engines and boilers) will probably suffice; and towards the expenditure on this account the municipalities benefited by the appointment will be required to contribute. On this point further orders will issue in the Local and Municipal Department. The Inspector will need a clerk on Rs. 15 and a peon on Rs. 8. Eight applications for the post of Boiler Inspector have been received. These will be transferred to the Chief Engineer who will advertize in the Gazette and in the leading newspapers stating the terms offered and will, in consultation with the Sanitary Engineer, nominate a person for appointment by Government at an early date. Inasmuch as the Inspector will have to work under the Sanitary Engineer so far as regards municipal engines and boilers, it seems to Government expedient that he should be subordinate to that officer in his position as Boiler Inspector also. The draft rules in Appendix II provide accordingly and it will be considered in the Public Works Department what reports and returns relating to the working of the Act should be submitted by the Sanitary Engineer to Government.

3. With reference to section 4 of the Act, the Government resolves to fix the 1st July 1895 as the date after which no boiler may be used unless it has been licensed.

4. Section 12 (4) of the Act provides for the summoning of assessors to assist the Chief Presidency Magistrate in the hearing of appeals, in such manner as the Government may direct. Probably the best plan will be to permit the appellant to nominate one assessor and the Inspector the other, subject to the reservation that, if either of the assessors or both of them appears or appear to the Chief Presidency Magistrate to be incompetent, he may nominate one or both himself.

The Chief Presidency Magistrate will be requested to advise on the subject.

5. The Government has resolved not at present to give the direction referred to in section 14 of the Act and so much of the Act as relates to the issue of certificates of competency will, therefore, remain in abeyance until further orders.

6. The notifications and orders which it is proposed to issue under the provisions of sections 3, 4, 9, 11, 12 and 23 of the Act are printed as Appendix II to this Proceedings and will be published in the *Fort St. George Gazette*. The Government will consider any suggestions which may be made in respect of them on or before the 1st April 1895 by any persons interested. In particular the Government desires to be favoured by the said date with the opinions of the Public Works Department, the Sanitary Engineer, the Hon'ble the Advocate-General, the Chief Presidency Magistrate, the Accountant-General, the Chamber of Commerce and the Madras Trades Association.

7. All future correspondence in connection with the working of Madras Act III of 1893 will be dealt with in the Public Works Department of the Secretariat.

(True Extract.)

for Chief Secretary.

To all District Magistrates.
„ the Commissioner of Police, Madras.
„ the Public Works Department, with applications.
„ the Local and Municipal Department.
„ the Sanitary Engineer.
„ the Chief Presidency Magistrate.
„ the Government Solicitor.
„ the Accountant-General.
„ the Chamber of Commerce.
„ the Madras Trades Association.
Gazette.
Editor's Table.

APPENDIX I.

NOTIFICATION.

Under sub-section (2) of section 1 of the Madras Steam-boilers and Prime-movers Act, 1893, the Government directs that the said Act shall come into force upon the 1st April 1895.

APPENDIX II.

PROPOSED NOTIFICATIONS.

NOTIFICATION A.

Under sub-section (2) of section 3 of the Madras Steam-boilers and Prime-movers Act, 1893, the Government directs that the Inspector shall exercise the powers and perform the duties conferred and imposed by or under this Act on an Inspector throughout the City of Madras.

NOTIFICATION B.

Under section 4 of the Madras Steam-boilers and Prime-movers Act, 1893, the Government fixes the 1st July 1895 as the date after which no boiler shall be used unless a license authorizing its use has been granted under the Act and is in force.

NOTIFICATION C.

(*a*) Under section 9 of the Madras Steam-boilers and Prime-movers Act, 1893, the Government prescribes the following form of register of boilers:—

Name of Owner.	Place where boiler is situated.	Registry number and description of boiler and age.	Nominal horse-power.	When, where and by whom made.	When and where last repaired.	Date of grant of license.	Maximum pressure at which boiler may be worked.	Remarks.

(*b*) Under the same section the Government directs that the registry number of every boiler shall be cut in the front plate thereof in such position as shall be pointed out by the Inspector. The device to be so cut shall consist of the letters "RY" above the letters "No." and divided from them by a horizontal line; the letters "No." to be followed by the registry number in figures, the letters being at least one-half of an inch, and the figures at least one-and-a quarter inch, in height; the whole to be enclosed in a rectangular figure one-sixteenth of an inch clear from the letters and figures; thus—

RY.
No. 148.

The engraving shall be not less than one-sixty-fourth of an inch deep.

NOTIFICATION D.

Under section 11 of the Madras Steam-boilers and Prime-movers Act, 1893, the Government authorizes the Sanitary Engineer to revoke and suspend licenses granted in respect of boilers, for the reasons therein given.

NOTIFICATION E.

Under sub-section (5) of section 12 of the Madras Steam-boilers and Prime-movers Act, 1893, the Government prescribes the following as the form in which licenses shall be granted by the Chief Presidency Magistrate:—

LICENSE.

Name of owner.	Description of boiler and age.	Nominal horse-power.	When and where made.	When and where last repaired.	Time for which this license is to be in force.	Maximum pressure at which the boiler may be worked.	Remarks.

Certificate.—I, the undersigned, * being assisted by A and B, two competent assessors,* am satisfied that C is entitled to the above license and have granted it to him on this date under the provisions of section 12 (5) of Madras Act III of 1893; and I hereby direct the Inspector to register the boiler specified in the above license and to allot to it a registry number in accordance with section 9 of the said Act.

(Signed) D. E.,
Chief Presidency Magistrate.

* The words between asterisks to be omitted when no assessors employed.

NOTIFICATION F.

The Government will be prepared to consider any suggestions in respect of the following draft rules under clauses (*a*), (*b*) and (*f*) of section 23 of the Madras Steam-boilers and Prime-movers Act, 1893, which are received on or before the 1st April 1895 :—

A.—*Preliminary.*

1. These rules may be called the Boiler Examination Rules.

2. In these Rules—
   (*a*) "The Act" means the Madras Steam-boilers and Prime-movers Act, 1893;
   (*b*) "Section" means a section of the said Act;
   (*c*) "Examination" means the examination of boilers under the Act, and "examination fees" means fees leviable on account of the examination of boilers.

B.—*The Inspector.*

3. The Inspector shall not undertake any professional work unconnected with his business under the Act except with the approval, or under the orders, of Government.

4. The Inspector shall receive such salary as Government may determine, all examination fees being credited to Government.

5. The Inspector shall have an office in which all records connected with the working of the Act shall be kept.

6. The Inspector shall keep the following records :—
   (*a*) a register of examination fee receipts;
   (*b*) a book containing counterfoils of licenses;
   (*c*) a register of boilers in the following form which has been prescribed under section 9 :—

Name of owner.	Place where boiler is situated.	Registry number and description of boiler and age.	Nominal horse power.	When, where and by whom made.	When and where last repaired.	Date of grant of license.	Maximum pressure at which boiler may be worked.	Remarks.

   (*d*) a book containing a detailed account of every examination made by him;
   (*e*) a diary of the work done by him from day to day;
   (*f*) a register of licenses suspended or revoked under section 11 (this register to be prepared upon information furnished to the Inspector by the suspending or revoking authority, *i.e.*, the Sanitary Engineer);
   (*g*) a register showing the result of appeals presented under section 12 (this register to be prepared upon information furnished to the Inspector by the Chief Presidency Magistrate).

7. The Inspector shall furnish to the Sanitary Engineer, on the third working day of every month, a copy of his diary for the preceding month.

8. All examination fees shall be paid into the Madras Bank by the owners of boilers and no boiler shall be examined under section 5 unless the notice sent to the Inspector under that section is accompanied by a Bank receipt for the fee; and the Inspector, if he finds that the right fee has not been paid, may decline to examine the boiler until it has been paid.

9. An extract from the register of examination fee receipts which is compiled by the Inspector from the Bank receipts referred to in Rule 8 shall be forwarded by him, monthly, to the Accountant-General who shall verify it by reference to the amount actually received on account of examination fees during the month to which the extract relates and forward it to the Sanitary Engineer for record.

10. The Inspector shall be subordinate to the Sanitary Engineer and shall obey all lawful orders issued to him by that officer.

11. The Inspector's office and the records kept therein shall be examined in January and July of each year by such officer as the Chief Engineer may depute for this purpose.

C.—*Examinations.*

12. Examination fees shall be paid in accordance with the following scale :—

									Rs.
(i)	For the examination of each boiler not exceeding					10	N.H.P.	..	12
(ii)	,,	,,	,,	,,	,,	20	,,	..	16
(iii)	,,	,,	,,	,,	,,	30	,,	..	24
(iv)	,,	,,	,,	,,	,,	50	,,	..	32
(v)	,,	,,	,,	boiler	exceeding	50	,,	..	40

Iron Boilers.

13. The Inspector is required by the Act to fix the pressure to be allowed on boilers. In performing this very responsible and onerous duty he must be very careful, as in the event of accident it will be necessary for him to prove clearly that he used due caution. On the one hand he must be careful as regards safety, and on the other hand he must not unduly reduce the pressure on a boiler.

14. The Inspector should fix the working pressure for boilers by a series of calculations of the strength of the various parts, and according to the workmanship and material.

In the case of boilers made in India, the Inspector may receive and examine plans and particulars of boilers before the commencement of manufacture with the object of preventing questions arising after the boilers are finished.

When the Inspector has received plans and tracings of new boilers, or of alterations of boilers, and has approved of them, he will of course be careful in making his examination, when the boiler is ready for work, to see that they have been followed out. When he has not had the plans submitted, but is called in to inspect a boiler, he will of course measure the parts, note the details of construction, and, if necessary, bore the plates to ascertain their thickness, &c., before he gives his certificate.

The Inspector shall not declare a boiler to be safe unless (*a*) he is fully informed as to its construction, material and workmanship, or unless (*b*) he is furnished with a certificate from a Chief Engineer of a recognised boiler insurance company. He should therefore be very careful how he ventures to give a certificate.

15. In the case of new boilers the Inspector may allow a stress not exceeding 7,000 lb. per square inch of net section on solid iron screwed stays supporting flat surfaces, but the stress should not exceed 5,000 lb. when the stays have been welded or worked in the fire.

The areas of diagonal stays are found in the following way: Find the area of a direct stay needed to support the surface, multiply this area by the length of the diagonal stay, and divide the product by the length of a line drawn at right angles to the surface supported to the end of the diagonal stay; the quotient will be the area of the diagonal stay required.

When gusset stays are used, their area should be in excess of that found in the above way.

16. When the tops of combustion boxes or other parts of a boiler are supported by solid rectangular girders the following formula should be used for finding the working pressure to be allowed on the girders, assuming that they are not subjected to a greater temperature than the ordinary heat of steam, and in the case of combustion chambers that the ends are fitted to the edges of the tube plate and the back plate of the combustion box.

$$\frac{C \times d^2 \times T}{(W-P)\ D \times L} = \text{Working Pressure.}$$

W = Width of combustion box in inches.
P = Pitch of supporting bolts in inches.
D = Distance between the girders from centre to centre in inches.
L = Length of girder in feet.
D = Depth of girder in inches.
T = Thickness of girder in inches.
C = 500 when the girder is fitted with one supporting bolt.
C = 750 when the girder is fitted with two or three supporting bolts.
C = 850 when the girder is fitted with four supporting bolts.

The working pressure for the supporting bolts and for the plate between them should be determined by the rule for ordinary stays.

17. The pressure on plates forming flat surfaces is found by the following formula :—

$$\frac{C \times (T+1)^2}{S-6} = \text{Working Pressure.}$$

T = Thickness of the plate in sixteenths of an inch.
S = Surface supported in square inches.
C = Constant according to the following circumstances.

C = 100 when the plates are not exposed to the impact of heat or flame, and the stays are fitted with nuts and washers, the latter being at least three times the diameter of the stay and two-thirds the thickness of the plates they cover.*

C = 90 when the plates are not exposed to the impact of heat or flame, and the stays are fitted with nuts only.

C = 60 when the plates are exposed to the impact of heat or flame, and steam in contact with the plates, and the stays fitted with nuts and washers, the latter being at least three times the diameter of the stay and two-thirds the thickness of the plates they cover.

C = 54 when the plates are exposed to the impact of heat or flame, and steam in contact with the plates, and the stays fitted with nuts only.

C = 80 when the plates are exposed to the impact of heat or flame with water in contact with the plates, and the stays screwed into the plates and fitted with nuts.

C = 60 when the plates are exposed to the impact of heat or flame, with water in contact with the plates, and the stays screwed into the plates, having the ends riveted over to form substantial heads.

C = 36 when the plates are exposed to the impact of heat or flame, and steam in contact with the plates, with the stays screwed into the plates, and having the ends riveted over to form substantial heads.

In cases where plates are stiffened by T or L irons, and a greater pressure is required for the plates than is allowed by the use of the above constants, the case should be submitted for the consideration of the Sanitary Engineer.

When the riveted ends of screwed stays are much worn or when the nuts are burned, the constants should be reduced, but the Inspector must act according to the circumstances that present themselves at the time of inspection, and it is expected that in cases where the riveted ends of screwed stays in the combustion boxes and furnaces are found in this state, it will be often necessary to reduce the constant 60 to about 36.

The Inspector should not in any case allow a greater compressive stress on the edge of the tube plates than 7,500 lb. per square inch, which is that used in the following formula :—

$$\frac{(D-d)\ T \times 15{,}000}{W \times D} = \text{Working Pressure.}$$

D = least horizontal distance between centres of tubes in inches.
d = inside diameter of ordinary tubes in inches.
T = thickness of tube plate in inches.

* If the diameter of riveted washers be at least two-thirds the pitch of the stays, and the thickness not less than the plates they cover, the constant may be increased to 150.

When doubling plates are fitted of the same thickness as the plates they cover and not less in width than two-thirds the pitch of the stays, the constant may be increased to 160.

W = extreme width of combustion box in inches from front of tube plate to back of fire-box, or distance between combustion box tube plates when boiler is double ended and the box common to the furnaces at both ends.

18. The Inspector should take care that boilers, the outside of which cannot be seen, are cleared of all covering and fittings for inspection whenever the Inspector considers it necessary. It will often be found necessary to reduce the pressure, unless the boilers are partially cleared from their seats to enable the Inspector to judge of their condition. If the owners in any special case have any good reasons for not wishing to clear them when the Inspector requires it, the Inspector should submit the whole case in detail to the Sanitary Engineer for his consideration. The Inspector must recollect that he is not to certify as sufficient any boiler respecting which he cannot thoroughly satisfy himself.

The Inspector should record in his inspection book the dates on which boilers are inspected, when and to what extent cleared from brick work, and whether the boilers were set or not when examined, and if not set, where they were examined. Boilers which have been cleared should in all cases be subjected to the hydraulic test before the brick work is rebuilt.

19. Boilers well constructed, well designed, and made of good material should have an advantage in the matter of working pressure over boilers inferior in any of the above respects, as unless this is done the superior boiler is placed at a disadvantage, and good workmanship and material will be discouraged. The following rules are therefore prescribed.

When cylindrical boilers are made of the best material with all the rivet holes drilled in place and all the seams fitted with double butt straps each of at least five-eighths the thickness of the plates they cover, and all the seams at least double riveted with rivets having an allowance of not more than 75 per cent. over the single shear and provided that the boilers have been open to inspection during the whole period of construction, then 5 may be used as the factor of safety. The tensile strength of the iron is to be taken as equal to 47,000 lb. per square inch with the grain, and 40,000 lb. across the grain. But when the above conditions are not complied with, the additions in the following scale must be added to the factor 5, according to the circumstances of each case :—

A †	·15	To be added when all the holes are fair and good in the longitudinal seams, but drilled out of place after bending.
B †	·3	To be added when all the holes are fair and good in the longitudinal seams, but drilled out of place before bending.
C	·3	To be added when all the holes are fair and good in the longitudinal seams, but punched after bending instead of drilled.
D	·5	To be added when all the holes are fair and good in the longitudinal seams, but punched before bending.
E *	·75	To be added when all the holes are not fair and good in the longitudinal seams.
F	·1	To be added if the holes are all fair and good in the circumferential seams, but drilled out of place after bending.
G †	·15	To be added if the holes are fair and good in the circumferential seams, but drilled before bending.
H	·15	To be added if the holes are fair and good in the circumferential seams, but punched after bending.
I †	·2	To be added if the holes are fair and good in the circumferential seams, but punched before bending.
J *	·2	To be added if the holes are not fair and good in the circumferential seams.
K	·2	To be added if double butt straps are not fitted to the longitudinal seams, and the said seams are lap and double riveted.
L	·1	To be added if double butt straps are not fitted to the longitudinal seams, and the said seams are lap and treble riveted.
M	·3	To be added if only single butt straps are fitted to the longitudinal seams and the said seams are double riveted.
N	·15	To be added if only single butt straps are fitted to the longitudinal seams and the said seams are treble riveted.
O	·1	To be added when any description of joint in the longitudinal seams is single riveted.
P	·1	To be added if the circumferential seams are fitted with single butt straps and are double riveted.
Q	·2	To be added if the circumferential seams are fitted with single butt straps and are single riveted.
R	·1	To be added if the circumferential seams are fitted with double butt straps and are single riveted.
S	·1	To be added if the circumferential seams are lap joints and are double riveted.
T	·2	To be added if the circumferential seams are lap joints and are single riveted.
U	·25	To be added when the circumferential seams are lap, and the stakes of plates are not entirely under or over.

When gusset stays are used, their area should be in excess of that found in the above way.

16. When the tops of combustion boxes or other parts of a boiler are supported by solid rectangular girders the following formula should be used for finding the working pressure to be allowed on the girders, assuming that they are not subjected to a greater temperature than the ordinary heat of steam, and in the case of combustion chambers that the ends are fitted to the edges of the tube plate and the back plate of the combustion box.

$$\frac{C \times d^2 \times T}{(W-P)\ D \times L} = \text{Working Pressure.}$$

W = Width of combustion box in inches.
P = Pitch of supporting bolts in inches.
D = Distance between the girders from centre to centre in inches.
L = Length of girder in feet.
D = Depth of girder in inches.
T = Thickness of girder in inches.
C = 500 when the girder is fitted with one supporting bolt.
C = 750 when the girder is fitted with two or three supporting bolts.
C = 850 when the girder is fitted with four supporting bolts.

The working pressure for the supporting bolts and for the plate between them should be determined by the rule for ordinary stays.

17. The pressure on plates forming flat surfaces is found by the following formula :—

$$\frac{C \times (T+1)^2}{S-6} = \text{Working Pressure.}$$

T = Thickness of the plate in sixteenths of an inch.
S = Surface supported in square inches.
C = Constant according to the following circumstances.

C = 100 when the plates are not exposed to the impact of heat or flame, and the stays are fitted with nuts and washers, the latter being at least three times the diameter of the stay and two-thirds the thickness of the plates they cover.*

C = 90 when the plates are not exposed to the impact of heat or flame, and the stays are fitted with nuts only.

C = 60 when the plates are exposed to the impact of heat or flame, and steam in contact with the plates, and the stays fitted with nuts and washers, the latter being at least three times the diameter of the stay and two-thirds the thickness of the plates they cover.

C = 54 when the plates are exposed to the impact of heat or flame, and steam in contact with the plates, and the stays fitted with nuts only.

C = 80 when the plates are exposed to the impact of heat or flame with water in contact with the plates, and the stays screwed into the plates and fitted with nuts.

C = 60 when the plates are exposed to the impact of heat or flame, with water in contact with the plates, and the stays screwed into the plates, having the ends riveted over to form substantial heads.

C = 36 when the plates are exposed to the impact of heat or flame, and steam in contact with the plates, with the stays screwed into the plates, and having the ends riveted over to form substantial heads.

In cases where plates are stiffened by T or L irons, and a greater pressure is required for the plates than is allowed by the use of the above constants, the case should be submitted for the consideration of the Sanitary Engineer.

When the riveted ends of screwed stays are much worn or when the nuts are burned, the constants should be reduced, but the Inspector must act according to the circumstances that present themselves at the time of inspection, and it is expected that in cases where the riveted ends of screwed stays in the combustion boxes and furnaces are found in this state, it will be often necessary to reduce the constant 60 to about 36.

The Inspector should not in any case allow a greater compressive stress on the edge of the tube plates than 7,500 lb. per square inch, which is that used in the following formula :—

$$\frac{(D-d)\ T \times 15{,}000}{W \times D} = \text{Working Pressure.}$$

D = least horizontal distance between centres of tubes in inches.
d = inside diameter of ordinary tubes in inches.
T = thickness of tube plate in inches.

* If the diameter of riveted washers be at least two-thirds the pitch of the stays, and the thickness not less than the plates they cover, the constant may be increased to 150.

When doubling plates are fitted of the same thickness as the plates they cover and not less in width than two-thirds the pitch of the stays, the constant may be increased to 160.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

Read—the following papers :—

From M.R.Ry. S. T. RUNGASWAMI AIYAR, Avargal, B.A.,B.L., Rao Bahadur, Chairman, Municipal Council, Trichinopoly, to the Chief Secretary to Government (through the Deputy Collector of Trichinopoly), dated Trichinopoly, 22nd December 1894, No. 35.

I have the honour to submit, for sanction of Government, the budget estimates of this municipality for the next official year 1895–96 and the revised estimates for the current year. These were sanctioned by the municipal council at their meeting held on the 21st instant. An extract of the council's resolution is herein enclosed, together with the prescribed statements.

Revised Estimates.

2. *Receipts.*—The total receipts as now revised amount to Rs. 2,23,590 against Rs. 1,34,320 anticipated in the budget and thus show an increase of Rs. 89,270 over the original estimates.

3. *Tax on Buildings and Lands.*—The receipts under these items show an increase of Rs. 5,500 and Rs. 600, respectively. This increase represents the arrears of taxes of previous years which are expected to be realized wholly within the current year.

4. *Water-supply.*—The sum of Rs. 6,920 is the provincial share of the Government contribution received from the Public Works Department on account of the water works.

5. *Private scavenging fees.*—The increase of Rs. 2,000 over the original estimates is due to the levy of fees in the fifth ward to which the system was extended in the year and to the realization of the arrears of fees.

6. *Loan.*—There is here an increase by Rs. 70,000. This sum which was promised to be paid last year was received only in April 1894.

7. *Expenditure.*—The revised estimates amount to Rs. 1,95,240 against Rupees 1,95,830 provided in the budget. The decrease is mainly caused by the instalment not having to be paid in the year on account of the debt taken for the water works.

8. *Repair of water-supply works.*—A sum of Rs. 1,350 has to be expended urgently for reconstructing the western retaining wall of the Shanian tank which fell down lately. The wall forms the side of an important street and must be rebuilt in order to avert danger to persons and property. An application was submitted for the required allotment in my letter No. 32, dated 14th December 1894.

9. *School establishment.*—The increase of Rs. 100 over the budget figures against this item is provided for the pay of the additional assistant master for the Muhammadan school, which appointment was sanctioned in G.O., Mis. No. 832 M., dated 2nd July 1894.

10. *Hospital establishment.*—The increase in the allotment represents the pay of the additional hospital assistant for the main hospital sanctioned in G.O., Mis No. 526 M., dated 24th April 1894. The provision for the hospital contingencies has been raised by Rs. 494 to meet the increased demand for the bedding and clothing of patients.

11. *Contribution to Provincial funds.*—The contributions for the medical college, sanitary inspection and the medical reserve staff have been raised to the rates paid in the last year. These seem to become fluctuating items.

Budget Estimates.

12. *Receipts—Tax on Arts.*—This tax is levied on all the classes of the schedule from the current year. The sum of Rs. 10,500 is the utmost which can be raised from this source.

13. *Tax on Buildings and Lands.*—The income from these taxes is put down at Rs. 27,000 and Rs. 2,900, respectively. These figures represent the fixed demands under these items excluding the arrears of taxes which go to swell the figures for the current year. I intend to have these taxes completely revised in the next year, and if this is done a slight increase may be expected under both the heads.

14. *Sale-proceeds of sweepings and night-soil and fees from the cart-stand.*—The revenues under these items are set down less than the figures of the current year, as the present renters are reported to be losers and the leases cannot consequently be expected to run so high as in the last two years.

15. *School fees.*—The fee receipts are set down at Rs. 250 against an estimate of Rs. 120 for the current year and the actuals of Rs. 176-7-0 for the past year. For the current year a low rate of fees is levied in the Muhammadan school only, the boys of the Pallah schools being charged no fees at all. For the ensuing year, fees will be collected in all the schools in accordance with the recommendation of the Inspector of Schools that "these low rates are recommended in view of the encouragement to be given to these classes consistently at the same time with the principle that what is not paid for though ever so little is not valued."

16. *Normal stipends.*—The sum of Rs. 130 is the Government grant towards the stipends of three Muhammadan pupils who are to be sent up for training.

17. *Other grants.*—The grant of Rs. 450 consists of the provincial grant towards the pay of the two gymnastic instructors, the Devadanam school-house, and the purchase of furniture for the municipal schools and of four sets of gymnastic apparatus which are to be provided at common centres for the use of the results system schools.

18. *Loan from Government.*—The council has already taken a loan of Rs. 1,00,000 from Government for the water-supply scheme. A further loan of Rs. 80,000 only is required to complete the works in the ensuing year. The council request the Government will be pleased to sanction the loan.

19. *Expenditure—Grant I, New Works.*—The sum of Rs. 5,350 is provided for the construction of new buildings, of which the more important ones are two pairs of latrines at Rs. 1,500, a new burial ground for the Muhammadans at Rs. 1,000 and a new rubbish depôt for Rs. 1,000. The two latrines will be built in Chintamon and the other two in Varaganeri in the ensuing year, the current year's provision being utilized for Woraiyur.

A new site has been selected by the Sanitary Commissioner for Madras for the burial ground for the Muhammadans to the east of the town. The provision of Rs. 1,000 is for acquiring the required lands and enclosing the same with walls. This subject has been dealt with separately in my letter to Government No. 34, dated 19th December 1894.

The rubbish depôts, which are four in number, are all situated within the town and are objected to by the Sanitary Commissioner. I propose to open a depôt on the Tanjore road to the east of the town with the approval of the District Medical and Sanitary officer. This will enable us to give up two of the existing objectionable depots. The required lands will cost about Rs. 1,000. Any savings from this sum will be utilized in improving and extending the night-soil depôt which lies at a safe distance from the town.

Besides these, provision has been made for a school-house for the Pallah school in Devadanam at Rs. 50, a flight of steps for the office at Rs. 700 to replace the present narrow and tortuous staircase and a small corrugated iron shelter for the

Hindu burning ground for affording protection from sun and rain to the persons assembled for the funerals. This is recommended by the Sanitary Commissioner.

Provision has also been made for the construction of a lying-in hospital at Rs. 500 and the improvement of the European kitchen at Rs. 100. This hospital is recommended by the Surgeon-General with the Government and will be built behind the main hospital.

20. *Drains.*—Two drains are proposed to be constructed, one for an important street in Varaganeri for Rs. 500 and the other for the Chinna Kammala street for Rs. 300. The former has been strongly recommended by the Superintendent of Police and the District Magistrate, while the latter can be easily connected with the existing Peria Chetty street drain and will considerably improve the sanitation of the over-crowded part of the ward.

21. *Water-supply.*—The water works have been in progress during the current year also. The Acting Sanitary Engineer to Government informs me in his letter No. 2480, dated the 5th November 1894, that "Trichinopoly could not be supplied with water from the new works until April 1896, as two dry seasons would be required for the completion of the works. No provision need therefore be made for establishment during 1895-96." I have therefore provided Rs. 90,650 only for the ensuing year being the balance remaining to be spent on the works out of the estimated cost of the whole scheme.

22. The following allotments are also necessary to meet the wants of the second and third wards to which the water works do not extend—a bathing ghaut for the Kodamuruti river at Rs. 1,000 and two revetments for the channel feeding the drinking water tanks at Rs. 330. The bathing ghaut is an absolute necessity for the present one is too narrow and a little too far away from the actual current of water. How much this want is felt by the people can be understood from the circumstance that the one thousand proposed to be given by the municipality represents but one-third of the actual cost. The other two thousands will be raised by the people by voluntary contribution.

The revetment is no new thing. It was already sanctioned by Government in a previous year, but was not utilized.

23. *Repairs.*—The repair of the several roads, buildings and drains enumerated in statement II-A are all necessary and urgently required.

24. *Water-supply.*—The Ghulam Allikhan tank is an important tank in Woraiyur. The walls have fallen on two sides and the tank is half filled with silt. The provision of Rs. 1,250 is made for clearing the silt and reconstructing the walls. This work is most desirable from every point of view. The proposed water scheme is not to be extended to Woraiyur; and this tank supplies drinking water to 75 per cent. of the rate-payers of the place. The Sanitary Commissioner when recently here inspected the tank and has strongly advised the repairs above recommended. Provision is also made for repairing the Anaikulam for Rs. 100, and the bathing ghats of the Varaganeri and Palakarai channels for Rs. 250.

25. *Water-supply establishment.*—The existing establishment will be maintained for flushing the tanks and for guarding them from pollution. No establishment or working charges are provided for the new water works during the coming year for the reasons given in paragraph 21 *supra*.

26. *Grant II, Education—Normal students.*—Provision of Rs. 280 has been made under this head for the training of three Muhammadan students, two of the lower secondary and one of the primary grade in the school at Madras. This is made in compliance with the recommendations of the Director of Public Instruction who has further remarked that "Trichinopoly being a large Muhammadan centre, the inspecting officers should find no difficulty in selecting students to be sent to Madras." The council desire to observe that there is really no difficulty whatever in selecting students, but there is no probability of such students being employed within the municipality. Already there are two students trained, of whom only one has been able to find work in our Muhammadan school. The other has gone out of the municipality in search of employment.

27. *Salary-result schools.*—The council consider it sufficient if the four existing schools—one of which is for the Muhammadan boys and the other three for Pallahs and Pariahs—are kept up in their present state. The Inspector of Schools has advised that the staff should be properly graded and proposed a new scale of pay. Accordingly the council suggest that the pay of the Muhammadan headmaster should be raised from Rs. 20 to Rs. 25, that of the Hindustani munshi from Rs. 8 to Rs. 10, and that of the two teachers of each of the three Pallah schools be raised from Rs. 7, 5, and 3 to Rs. 8 and 6, respectively. The other teachers of the Muhammadan school will be graded in the coming years, as necessity arises. The provision under results grants has also been raised from Rs. 400 to Rs. 600.

28. *Results grants.*—The schools of this class are working satisfactorily and an allotment of Rs. 6,000 is made against Rs. 5,700 of the current year. The conversion of any of these into salary-results schools is considered undesirable.

29. *Municipal Inspectors.*—The two inspectors will be maintained for the next year. The Inspector of Schools recommends that the pay of the junior may be raised to Rs. 20 from Rs. 14; the council believe that an increase of Rs. 2 is sufficient for the present.

30. *Common gymnasium.*—The present establishment will be kept up without any changes. The results schools in which the two instructors have to teach are located in the busiest parts of the town where ground for physical exercise is not available. It is therefore desirable to open central gymnasia in suitable places for the benefit of all the schools. A sum of Rs. 420 has been provided under contingencies for the purchase of apparatus for the purpose.

31. *Drawing.*—No provision is made for the instruction in drawing which is more of a technical character. I believe that the view of Government is that technical instruction is no concern of ours. There is a technical institute in the town and if Government advises, the council will give a grant to the institute.

32. *Grant III, Medical.*—The two hospitals will be maintained in their present condition. The District Medical and Sanitary officer recommends and the council approves that the pay of the washerman be raised to Rs. 7 from Rs. 6, that a masalchi be newly entertained for the main hospital on Rs. 5 per mensem, and that a male and a female attendants on Rs. 6 and 5, respectively, be entertained for Jubilee dispensary in lieu of the servants on Rs. 5 and 4-8-0.

33. *Lying-in hospital.*—The Surgeon-General with the Government has made the following recommendation: "That the present system of using the so-called lying-in wards for general cases and using them indiscriminately for Europeans and Natives is most objectionable from a sanitary point of view. It is most desirable that a special lying-in hospital should be provided in a site convenient to the majority of the people who are likely to use it. It should be constructed on the standard plan to be obtained from the sanitary board. Its staff should be caste females with the exception of a male peon. It should be in sub-charge of a lady possessing a qualification not less than a female apothecary and the midwives should be attached to it." Accordingly Rs. 500 has been provided under Grant I for the construction of a separate ward in the compound of the hospital. A matron on Rs. 40 is proposed to be entertained for the lying-in hospital which will be built in six months and Rs. 240 is provided for her pay for six months. The midwives and the newly appointed masalchi will be attached to this institution.

34. *Registration of vital statistics.*—The proposals contained in my letter No. 26, dated the 26th November 1894, to improve the registration of births and deaths which the Sanitary Commissioner has condemned to be very defective are embodied in the budget agreeably to G.O., Mis., No. 1949 M., dated the 14th December 1894. The municipality is divided into seven wards and our proposal is to entertain seven assistant registrars on Rs. 10 each, whose duty it will be to collect information, to keep a register and to submit returns daily to the office, and another one on Rs. 15. This man will have to supervise their work, to maintain the death and birth registers in the office, to furnish the vaccinators with lists of births, to watch the vaccination of the infants under one year of age and to submit the several returns to the Sanitary Commissioner.

35. *Conservancy establishment.*—The present staff of seven nuisance inspectors is not sufficient for this large municipality and should be strengthened. For this purpose, the five registrars on Rs. 14 each, who were hitherto doing duty as nuisance inspectors in addition to the registration work have been transferred to this head. It is also proposed to give an increase of Rs. 2 and Re. 1 to two old inspectors whose present pay is Rs. 20 each.

36. *Private scavenging establishment.*—There is no alteration proposed in this establishment, except that the pay of the six bill-collectors is raised to Rs. 8 from Rs. 7 each, as an encouragement for their heavy work.

37. *Market establishment.*—The gumastah in charge of the grain market has heavy and responsible work to do. His pay being low should be raised to Rs. 9 at least from Rs. 7. He superintends the conservancy arrangements in the grain market and the cart-stand and collects the rents of the stalls in these two and in the China bazaars which amounts to Rs. 2,000 in the year.

38. *Slaughter-house establishment.*—The appointment of one food inspector on Rs. 25 to Rs. 30 was sanctioned in G.O., Mis. No. 1127 M., dated the 25th August 1893, and as one is unequal to the work of supervising the slaughter-houses and the meat markets which are scattered all over the town, the council propose to entertain two inspectors on Rs. 15 each. This has the approval of the Sanitary Commissioner. A sweeper on Rs. 4 is to be newly entertained for the Marsackpett slaughter-house which has hitherto been cleaned by the renters themselves, but very indifferently.

39. *Traveller's bungalow.*—It is proposed to raise the pay of the maty from Rs. 6 to Rs. 7 for the next year. A sum of Rs. 100 is allotted under contingencies and will be expended in providing the bungalow with furniture and utensils.

40. *Public garden.*—The present establishment consists of two men on Rs. 5 each and two boys on Rs. 3 each. The boys are unequal to the work and are useless. It is therefore proposed to have four men on Rs. 5 each from the next year. These will be engaged in tending the cocoanut trees planted along the channel in the second ward and in improving and extending the Boulevard garden in the fourth ward.

41. *Grant V.*—The present allotments are repeated under all the heads of this grant and require no comment.

42. *Payment of interest.*—A sum of Rs. 4,250 only is provided for the payment of the interest on the loan of one lakh of rupees already taken. Any further loan will be taken only when required. I have not deemed it necessary to make any provision for the payment of any instalments towards the repayment of our debt, as the water works will not be completed till the end of the year.

No. 2612-Eng.

Submitted.

(Signed) KHADER NAVAZ KHAN,
Deputy Collector.

Endorsement on C. No. 6670-Rev.

Submitted.

2. *Paragraphs* 14 *and* 36.—As less receipts are expected than in the current year, and as private scavengering has hitherto not been quite satisfactory (*vide* G.O., dated 31st August 1894, No. 1180), I think this is scarcely a good time for increasing the men's pay.

3. *Paragraph* 35.—I approve of the proposed increase of establishment.

4. *Paragraph* 31.—If the rules and Act allow of it and Government sees no objection, I would recommend a grant to the technical institute which is in its infancy and deserves support.

5. *Paragraph* 19.—The letter is kept back pending receipt of some information which the chairman was asked to supply, but which he omitted to do. Probably more than Rs. 1,000 may be required for the new burial ground, but the figure may stand.

12*th January* 1895. (Signed) J. ANDREW,
Acting Collector.

From the Hon'ble Mr. D. DUNCAN, M.A., D.Sc., Director of Public Instruction, to the Chief Secretary to Government, dated Madras, 12th January 1895, No. 272.

I have the honour to submit the following remarks on the educational portion of the budget estimate of the Trichinopoly municipality for 1895–96.

2. Provision has been made for the training of three Muhammadan students in the Muhammadan Branch Training school, Madras, but as the chairman reports that it will not be possible to provide all these men with appointments, it will suffice if two students be sent for training. The allotment under this head may be reduced to Rs. 180, for one lower secondary and one primary grade student, the provincial grant on that account being also correspondingly reduced to Rs. 80. Uncertificated teachers employed in municipal and aided Muhammadan schools should be selected for training or the trained men should be required to open results schools in the localities to be specified by the municipality.

3. As strongly recommended by the Assistant Inspector, some of the well conducted schools which are now aided on the results system may be aided on the salary grant system. Pending further consideration, a sum of Rs. 1,200 may be provided under "salary grants," the provision for results grants being diminished by an equal amount.

4. The municipal council's objection that Drawing is more of a technical character is based on a misapprehension. Drawing is one of the optional subjects of the curriculum prescribed in the Educational rules for the primary and lower secondary standards. I would recommend that an allotment of Rs. 250 be made (Rs. 220 for the drawing master's salary for eleven months at Rs. 20 and Rs. 40 for materials) for a drawing master for the schools in the town. Credit may be taken for a half grant from provincial funds subject to the code provisions.

5. Should these modifications be approved, the net expenditure under Grant II will be Rs. 9,510 (10,430—920) or about 12 per cent. of the estimated income of the municipality from taxation, markets and rents.

From R. E. ELLIS, Esq., ASSOC. M. INST. C.E., Acting Sanitary Engineer to Government, to the Chief Secretary to Government, dated Fort St. George, 17th January 1895, No. 114.

With reference to the budget estimate of the Trichinopoly municipality for 1895–96, of which extract was sent to me, I have the honour to state that the municipal council has taken no credit for the increased grant from Government sanctioned in G.O., dated 15th December 1894, No. 1107, Financial, for the water-supply scheme nor for the increased shares payable by the railway, military and jail authorities in consequence of the revision of the estimate which now amounts to Rs. 5,02,050.

2. The council has provided for an entire loan of Rs. 1,80,000 — 1,00,000 in 1894–95 and Rs. 80,000 in 1895–96. All that they need raise is Rs. 1,32,000 as sanctioned in Government Order already quoted.

3. The allotment of Rs. 90,650 on the expenditure side of the budget for new water-supply scheme has been correctly made.

From Surgeon-Major-General C. SIBTHORPE, F.R.C.P.I., Surgeon-General with the Government of Madras, to the Chief Secretary to Government, dated Madras, 29th January 1895, No. 65.

I have the honour to state that the provision made in Grant III of the budget estimate of the Trichinopoly municipality for the year 1895–96 is sufficient with the exception of compensation for quarters to the medical subordinates, for which a sum of Rs. 180 should now be provided.

2. The proposal of the municipality (1) to raise the pay of the washerman by Re. 1, (2) to entertain a masalchi for the main hospital on Rs. 5, (3) to appoint a male and a female attendants on Rs. 6 and 5, respectively, for the jubilee dispensary has my approval.

3. The provision for the construction of a special lying-in hospital with a matron on Rs. 40 is gratifying.

From Surgeon-Lieutenant-Colonel W. G. KING, M.B.C.M., D.P.H., Acting Sanitary Commissioner for Madras, to the Chief Secretary to Government, dated Fort St. George, 11th February 1895, No. 272-S.

I have the honour to state that the Trichinopoly municipal council has, in its budget for 1895–96, repeated the current year's grant for vaccination, and allotted Rs. 37,220 for conservancy, or Rs. 1,710 more than the figure entered in the sanctioned budget.

2. In their resolution upon paragraph 27 of my inspection notes, dated 14th September 1894, embodied in G.O., dated 22nd December 1894, No. 2021 M., Local and Municipal, the council determined to provide a covered latrine for the Rock Fort—this being an urgent sanitary matter, having regard to the fact that the existing latrine being open, the washings from it during rainfall are carried into inhabited areas. Again, the council determined to secure four new night-soil carts (paragraph 27 of the same report) which it was advised should be of Richardson and Cruddas' pattern. Under paragraph 33 it was also promised by the council that a special watchman on Rs. 10 should be placed at the night-soil depôt in lieu of the uneducated peon on Rs. 6. No provision for these items appear in the present budget. None are prohibitive as to cost even having regard to other demands.

3. Under paragraph 15 of the same report it is stated that "the council resolve to appoint three toties to keep the drinking-water channels clean and to watch." No provision has apparently been made on this head, and, in any case, I consider it inappropriate. No toty would have any influence with a native in protecting the channels from defilement. On the opposite, the inhabitants would consider their presence a direct invitation for them to go to the channels. It will be noted that the Chairman professed himself willing to pay for the services of two policemen if detached for this duty. Under these circumstances I advise that four peons on Rs. 7 each be employed for the purpose of watching the drinking channel.

4. In paragraph 38 of his budget covering letter, No. 35, dated 22nd December 1894, the Chairman assumes that this office approves of the recommendation to employ two food inspectors on Rs. 15 each per mensem. If the Chairman refers to me personally, I can only state that I not only do not approve but that I have placed on record at paragraph 66 of my inspection notes above referred to, that a class of men receiving a low salary would be unfit to undertake the duty of food inspectors. I consider that the so-called food inspectors should be termed superintendents of slaughter-houses, and receive Rs. 10 per mensem. Where inspection of meat is concerned, long practice and skill is requisite, and this certainly cannot be expected at the cost of either Rs. 10 or Rs. 15. In this connection I would call attention to the omission from the budget of any allotment for a Health officer, although Government in their Order, No. 2021 M., dated 22nd December 1894, Local and Municipal, paragraph 1 (6), desired that the proposal to entertain a Health officer should be embodied in the budget for next year. It is out of the question for the sanitary

supervision of the large population of 90,609 to be correctly effected in the absence of a "whole time" Chairman, unless there be present a fairly well-educated Health officer. I therefore would respectfully advise that an allotment of Rs. 990 be entered for the entertainment of a Health officer holding the L.M. and S. of the Madras University, on a salary of Rs. 75 *plus* horse allowance of Rs. 15 per mensem, rising by yearly increments of Rs. 15 to Rs. 150.

5. In regard to provision for the above purpose I would point out that it might be possible for the municipality to submit to the difficulty as to the "tortuous stairs" of their office (proposed to be improved at a cost of Rs. 700) provided they cannot show they are absolutely dangerous; and, in view of the expenditure upon water works which will enable the people to bathe without the use of a special ghât at the river side, I think the Rs. 1,000 it is proposed to spend upon the Kodamurutty ghât should be struck out, and the sum be allotted towards the abovementioned objects.

Order—dated 22nd February 1895, No. 273 M., Local and Municipal.

The estimated receipts and charges of the Trichinopoly municipality for 1895–96, as passed by Government, are compared below with the budget and revised estimates for the year 1894–95, and the actuals of 1893–94:—

—	Actuals, 1893–94.	Budget estimate, 1894–95.	Revised estimate, 1894–95.	Budget estimate, 1895–96.
Receipts.	Rs.	Rs.	Rs.	Rs.
Balance brought forward	1,90,993	66,150	7,670	68,460
Tax on Arts	8,133	10,550	10,556	10,550
„ Buildings and Lands	30,053	27,420	33,520	29,920
„ Vehicles and Animals	6,445	6,120	6,120	6,120
„ Carts	5,011	5,210	5,210	5,210
Tolls	11,861	11,000	11,000	11,000
Rent of Lands, Buildings, &c., and Sale-proceeds of Lands, &c.	1,735	1,320	1,240	1,240
Conservancy Receipts	6,550	6,550	6,550	6,000
Fees and Revenue from Educational Institutions	177	120	130	260
„ „ from Medical Institutions	598	570	570	570
Income from Markets and Slaughter-houses	17,810	17,200	16,360	16,200
License Fees	1,320	1,500	1,500	1,500
Other Fees	4,420	4,810	4,810	4,110
Fines under Municipal and other Acts	2,713	1,200	2,500	2,000
Interest on Investments and premium on Loans	479	480	480	480
Grants and Contributions from Government	33,624	1,570	40,930	19,360
„ „ from Local Boards	4,673	4,650	4,650	4,650
Recoveries for Services to Private Individuals	3,471	4,010	6,010	6,010
Miscellaneous	47	40	30	40
Loans	..	30,000	1,00,000	32,000
Advances recovered	2,364	..	3,870	..
Total ..	3,32,477	2,00,470	2,63,700	2,25,680
Charges.				
Grant I—				
New Works—				
Communications	..	2,000	..	..
Buildings	390	1,000	1,000	5,750
Drainage	..	..	..	800
Water-supply	2,20,370	86,600	86,600	91,980
Repairs—				
Communications	14,985	13,000	13,000	13,000
Buildings	4,111	4,000	4,000	6,000
Drainage	7	1,000	3,000	500
Water-supply	1,161	1,420	2,480	2,630
Establishment	1,018	1,030	1,030	1,030
Tools and Plant and other Stores	214	300	300	300
Total ..	2,42,256	1,10,350	1,11,410	1,21,990
Grant II—				
Training Schools	48	260	260	180
Municipal Schools—				
On the Salary-results System	1,826	1,660	1,760	2,200
Salary Grants	..	..	..	1,200
Results Grants	5,679	5,700	5,700	4,800
Inspection	485	520	520	530
Miscellaneous	535	910	910	1,260
Total ..	8,573	9,050	9,150	10,170

—	Actuals, 1893–94.	Budget estimate, 1894–95.	Revised estimate, 1894–95.	Budget estimate, 1895–96.
Charges—cont.	Rs.	Rs.	Rs.	Rs.
Grant III—				
Hospitals and Dispensaries	14,371	13,740	14,660	15,460
Contributions	2,075	390	2,080	2,060
Vaccination	1,085	1,100	1,100	1,100
Registration of Births and Deaths	867	940	940	940
Conservancy, Road-cleaning and Road-watering	33,670	35,510	35,560	37,110
Total ..	52,068	51,680	54,340	56,670
Grant IV—				
Lighting	5,233	5,010	5,020	5,010
Markets and Slaughter-houses	1,399	1,630	1,580	1,600
Travellers' bungalows	123	150	230	240
Avenues	252	..	..	..
Public Garden, Survey of Land, Fire and other charges	1,505	2,130	2,130	2,170
Total ..	8,512	8,920	8,960	9,020
Grant V—				
Supervision and Management	7,389	8,770	8,770	7,790
Repayment of Debt	..	6,560	2,010	5,960
Interest on Loan	..			
Advances Recoverable	5,909	..	100	..
Refunds	98	500	500	100
Balance	7,672	4,640	68,460	13,980
Total ..	3,32,477	2,00,470	2,63,700	2,25,680

Revised Estimate for 1894–95.

2. The current receipts and charges are now estimated at Rs. 2,23,590 and Rs. 1,95,240, respectively, against Rs. 1,34,320 and Rs. 1,95,830 anticipated in the sanctioned budget, the increase in the receipts occurring chiefly under the tax on buildings and lands, grants from Government and loans. Credit will now be taken for additional contributions of Rs. 29,030 from Provincial funds and Rs. 3,410 from Imperial (Military Works) funds on account of the water-supply scheme. The Chairman should see that these sums, as well as the balance amounting to Rs. 30,000 of the loan of Rs. 1,00,000 sanctioned by Government, are all drawn before the close of the current official year. It is presumed that the contribution of Rs. 6,920, referred to in paragraph 4 of the Chairman's letter, represents the share payable by the Jail Department on account of the water-supply scheme. If so, the Public Works Department should state whether a sum of Rs. 5,883 has not already been paid to the municipality for this purpose in 1893–94, and whether there has not thus been a double payment of the latter amount. The balance to be carried forward to the ensuing year's budget will be Rs. 68,460.

Budget Estimate for 1895–96.

3. *Receipts.*—The receipts for the ensuing year are set down at Rs. 1,87,800 against Rs. 2,56,030 in the revised estimate, the decrease being chiefly under the tax on buildings and lands, grants from Government and loans. The estimate under Government grant for education will be reduced by Rs. 50, as recommended by the Director of Public Instruction in paragraph 2 of his letter read above, and credit will be taken for a grant of Rs. 17,470, being the balance of the contributions payable by Government and the South Indian Railway Company, on account of the water-supply project. The amount of the loan required by the municipal council will at the same time be reduced from Rs. 80,000 to Rs. 32,000. An application for this loan in the prescribed form should be submitted without delay.

	Rs.
Government	8,700
South Indian Railway	8,770
Total	17,470

4. *Charges.*—(1) The probable charges are entered as Rs. 2,10,910 against the revised estimate of Rs. 1,95,240, the increase appearing chiefly under Grants I, II and III and repayment of loans.

(2) *Grant I.*—The Collector will be requested to report upon the necessity of building the new flight of steps proposed for the municipal office at a cost of Rs. 700. The allotment under new works—buildings will be raised by Rs. 400, in order to enable the municipal council to provide a covered latrine for the Rock Fort. The Sanitary Commissioner's suggestion in paragraph 3 of his letter, and his remarks in paragraph 5 regarding the necessity for the construction of the bathing ghât, will be referred to the municipal council for consideration and report. The drains referred to in paragraph 20 of the Chairman's letter should not be constructed until the plans, estimates and levels for them have been approved by competent authority.

(3) *Grant II.*—The allotment under training schools will be reduced by Rs. 100, as recommended by the Director, and the attention of the municipal council will be drawn to Dr. Duncan's remarks in the concluding portion of paragraph 2 of his letter. The alterations in the educational establishments proposed in paragraphs 27 and 29 of the Chairman's letter are sanctioned. As suggested by the Director in paragraph 3 of his letter, a sum of Rs. 1,200 will be provided for salary-grants, a corresponding reduction being made in the allotment for results grants. The question of employing a drawing master should be reconsidered by the municipal council with reference to Dr. Duncan's remarks in paragraph 4.

(4) *Grant III.*—The proposals of the municipal council (1) to raise the pay of the hospital washerman by Re. 1, (2) to entertain a masalchi on Rs. 5, (3) to employ a male and a female attendant on Rs. 6 and Rs. 5 respectively, instead of the two servants on Rs. 5 and Rs. 4-8-0, in the jubilee dispensary, and (4) to entertain a matron on Rs. 40 for the lying-in hospital, are sanctioned. The allotment for hospitals and dispensaries will be raised by Rs. 180 with reference to paragraph 1 of the Surgeon-General's letter read above. The provision of Rs. 20 for contribution on account of the cutlers' establishment will, with reference to G.O., dated 18th January 1895, No. 97 L., be struck out. The entertainment of five additional nuisance inspectors on Rs. 14 each is sanctioned, but the increases proposed to be given to the two old inspectors and the six private scavenging bill-collectors will be disallowed, as the Government is not satisfied of their necessity. The question of the entertainment of a Health officer may stand over pending orders upon the appointment of a paid official Chairman. The registration of vital statistics should, for the present, continue to be undertaken by the same agency as heretofore, but the council should exercise far greater strictness in prosecuting those who omit to register. In the opinion of the Government, a few prosecutions would effect a greater improvement in registration than a large sum spent upon additional registrars. The Chairman will be requested to explain why no provision was made for the purchase of the additional night-soil carts and the entertainment of the night-soil depôt inspector on Rs. 10 referred to in paragraph 2 of the Sanitary Commissioner's letter.

(5) *Grant IV.*—The proposed changes in the market, travellers' bungalow and public garden establishments referred to in paragraphs 37, 39 and 40 of the Chairman's letter are sanctioned, but the allotment under slaughter-houses—establishment will be reduced by Rs. 110 with reference to paragraph 4 of the Sanitary Commissioner's letter.

(6) *Grant V.*—The contribution for the central office establishments will, with reference to G.O., dated 4th December 1894, No. 2527 L., be reduced from Rs. 1,810 to Rs. 830. As it is proposed to take the whole of the loan of one lakh of rupees in the current year, a sum of Rs. 5,960 will be provided for its repayment. The recovery on account of the capital cannot be postponed until the water-works are completed.

5. The budget, as revised by Government, closes with a balance of Rs. 13,980, or 13·0 per cent. of the estimated ordinary receipts.

(True Extract.)

for *Chief Secretary.*

To the Chairman, Municipal Council, Trichinopoly.
" Collector of Trichinopoly.
" President, District Board, Trichinopoly.
" Accountant-General.
" Director of Public Instruction.
" Surgeon-General.
" Sanitary Commissioner.
" Sanitary Engineer.
" Public Works Department (Roads and Buildings Branch).
" " " (Railway Branch).
" Financial Department.
" Military Department.
Editors' Table.

Exd. C. M. Brisson.

Govt. of {1895} Madras.

LOCAL AND MUNICIPAL.

Final proof for approval.

Issued

Recd. Encl.

G.O., 22nd Feb. 1895, No. 273 M.

FEBRUARY.

Municipal Budget.

Reviewing the Trichinopoly for 1895-96.

1 & 2

Proof 9/3

22ND FEBRUARY 1895, No. 273 M., LOCAL AND MUNICIPAL.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following papers:—

From M.R.Ry. S. T. RUNGASWAMI AIYER, Avargal, B.A.,B.L., Rao Bahadur, Chairman, Municipal Council, Trichinopoly, to the Chief Secretary to Government (through the Deputy Collector of Trichinopoly), dated Trichinopoly, 22nd December 1894, No. 35.

a/

I have the honour to submit, for sanction of Government, the budget estimates of this municipality for the next official year 1895–96 and the revised estimates for the current year. These were sanctioned by the municipal council at their meeting held on the 21st instant. An extract of the council's resolution is herein enclosed, together with the prescribed statements.

REVISED ESTIMATES.

2. *Receipts.*—The total receipts as now revised amount to Rs. 2,23,590 against Rs. 1,34,320 anticipated in the budget and thus show an increase of Rs. 89,270 over the original estimates.

3. *Tax on Buildings and Lands.*—The receipts under these items show an increase of Rs. 5,500 and Rs. 600, respectively. This increase represents the arrears of taxes of previous years which are expected to be realized wholly within the current year.

4. *Water-supply.*—The sum of Rs. 6,920 is the provincial share of the Government contribution received from the Public Works Department on account of the water works.

5. *Private scavenging fees.*—The increase of Rs. 2,000 over the original estimates is due to the levy of fees in the fifth ward to which the system was extended in the year and to the realization of the arrears of fees.

6. *Loan.*—There is here an increase by Rs. 70,000. This sum which was promised to be paid last year was received only in April 1894.

7. *Expenditure.*—The revised estimates amount to Rs. 1,95,240 against Rupees 1,95,830 provided in the budget. The decrease is mainly caused by the instalment not having to be paid in the year on account of the debt taken for the water works.

8. *Repair of water-supply works.*—A sum of Rs. 1,350 has to be expended urgently for reconstructing the western retaining wall of the Shanian tank which fell down lately. The wall forms the side of an important street and must be rebuilt in order to avert danger to persons and property. An application was submitted for the required allotment in my letter No. 32, dated 14th December 1894.

9. *School establishment.*—The increase of Rs. 100 over the budget figures against this item is provided for the pay of the additional assistant master for the Muhammadan school, which appointment was sanctioned in G.O., Mis. No. 832 M., dated 2nd July 1894.

10. *Hospital establishment.*—The increase in the allotment represents the pay of the additional hospital assistant for the main hospital sanctioned in G.O., Mis No. 526 M., dated 24th April 1894. The provision for the hospital contingencies has been raised by Rs. 494 to meet the increased demand for the bedding and clothing of patients.

11. *Contribution to Provincial funds.*—The contributions for the medical college, sanitary inspection and the medical reserve staff have been raised to the rates paid in the last year. These seem to become fluctuating items.

Budget Estimates.

12. *Receipts—Tax on Arts.*—This tax is levied on all the classes of the schedule from the current year. The sum of Rs. 10,500 is the utmost which can be raised from this source.

13. *Tax on Buildings and Lands.*—The income from these taxes is put down at Rs. 27,000 and Rs. 2,900, respectively. These figures represent the fixed demands under these items excluding the arrears of taxes which go to swell the figures for the current year. I intend to have these taxes completely revised in the next year, and if this is done a slight increase may be expected under both the heads.

14. *Sale-proceeds of sweepings and night-soil and fees from the cart-stand.*—The revenues under these items are set down less than the figures of the current year, as the present renters are reported to be losers and the leases cannot consequently be expected to run so high as in the last two years.

15. *School fees.*—The fee receipts are set down at Rs. 250 against an estimate of Rs. 120 for the current year and the actuals of Rs. 176-7-0 for the past year. For the current year a low rate of fees is levied in the Muhammadan school only, the boys of the Pallah schools being charged no fees at all. For the ensuing year, fees will be collected in all the schools in accordance with the recommendation of the Inspector of Schools that "these low rates are recommended in view of the encouragement to be given to these classes consistently at the same time with the principle that what is not paid for though ever so little is not valued."

16. *Normal stipends.*—The sum of Rs. 130 is the Government grant towards the stipends of three Muhammadan pupils who are to be sent up for training.

17. *Other grants.*—The grant of Rs. 450 consists of the provincial grant towards the pay of the two gymnastic instructors, the Devadanam school-house, and the purchase of furniture for the municipal schools and of four sets of gymnastic apparatus which are to be provided at common centres for the use of the results system schools.

18. *Loan from Government.*—The council has already taken a loan of Rs. 1,00,000 from Government for the water-supply scheme. A further loan of Rs. 80,000 only is required to complete the works in the ensuing year. The council request the Government will be pleased to sanction the loan.

19. *Expenditure—Grant I, New Works.*—The sum of Rs. 5,350 is provided for the construction of new buildings, of which the more important ones are two pairs of latrines at Rs. 1,500, a new burial ground for the Muhammadans at Rs. 1,000 and a new rubbish depôt for Rs. 1,000. The two latrines will be built in Chintamon and the other two in Varaganeri in the ensuing year, the current year's provision being utilized for Woraiyur.

A new site has been selected by the Sanitary Commissioner for Madras for the burial ground for the Muhammadans to the east of the town. The provision of Rs. 1,000 is for acquiring the required lands and enclosing the same with walls. This subject has been dealt with separately in my letter to Government No. 34, dated 19th December 1894.

The rubbish depôts, which are four in number, are all situated within the town and are objected to by the Sanitary Commissioner. I propose to open a depôt on the Tanjore road to the east of the town with the approval of the District Medical and Sanitary officer. This will enable us to give up two of the existing objectionable depots. The required lands will cost about Rs. 1,000. Any savings from this sum will be utilized in improving and extending the night-soil depôt which lies at a safe distance from the town.

Besides these, provision has been made for a school-house for the Pallah school in Devadanam at Rs. 50, a flight of steps for the office at Rs. 700 to replace the present narrow and tortuous staircase and a small corrugated iron shelter for the

Hindu burning ground for affording protection from sun and rain to the persons assembled for the funerals. This is recommended by the Sanitary Commissioner.

Provision has also been made for the construction of a lying-in hospital at Rs. 500 and the improvement of the European kitchen at Rs. 100. This hospital is recommended by the Surgeon-General with the Government and will be built behind the main hospital.

20. *Drains.*—Two drains are proposed to be constructed, one for an important street in Varaganeri for Rs. 500 and the other for the Chinna Kammala street for Rs. 300. The former has been strongly recommended by the Superintendent of Police and the District Magistrate, while the latter can be easily connected with the existing Peria Chetty street drain and will considerably improve the sanitation of the over-crowded part of the ward.

21. *Water-supply.*—The water works have been in progress during the current year also. The Acting Sanitary Engineer to Government informs me in his letter No. 2480, dated the 5th November 1894, that "Trichinopoly could not be supplied with water from the new works until April 1896, as two dry seasons would be required for the completion of the works. No provision need therefore be made for establishment during 1895-96." I have therefore provided Rs. 90,650 only for the ensuing year being the balance remaining to be spent on the works out of the estimated cost of the whole scheme.

22. The following allotments are also necessary to meet the wants of the second and third wards to which the water works do not extend—a bathing ghaut for the Kodamuruti river at Rs. ,000 and two revetments for the channel feeding the drinking water tanks at Rs. 330. The bathing ghaut is an absolute necessity for the present one is too narrow and a little too far away from the actual current of water. How much this want is felt by the people can be understood from the circumstance that the one thousand proposed to be given by the municipality represents but one-third of the actual cost. The other two thousands will be raised by the people by voluntary contribution.

The revetment is no new thing. It was already sanctioned by Government in a previous year, but was not utilized.

23. *Repairs.*—The repair of the several roads, buildings and drains enumerated in statement II-A are all necessary and urgently required.

24. *Water-supply.*—The Ghulam Allikhan tank is an important tank in Woraiyur. The walls have fallen on two sides and the tank is half filled with silt. The provision of Rs. 1,250 is made for clearing the silt and reconstructing the walls. This work is most desirable from every point of view. The proposed water scheme is not to be extended to Woraiyur; and this tank supplies drinking water to 75 per cent. of the rate-payers of the place. The Sanitary Commissioner when recently here inspected the tank and has strongly advised the repairs above recommended. Provision is also made for repairing the Anaikulam for Rs. 100, and the bathing ghats of the Varaganeri and Palakarai channels for Rs. 250.

25. *Water-supply establishment.*—The existing establishment will be maintained for flushing the tanks and for guarding them from pollution. No establishment or working charges are provided for the new water works during the coming year for the reasons given in paragraph 21 *supra*.

26. *Grant II, Education—Normal students.*—Provision of Rs. 280 has been made under this head for the training of three Muhammadan students, two of the lower secondary and one of the primary grade in the school at Madras. This is made in compliance with the recommendations of the Director of Public Instruction who has further remarked that "Trichinopoly being a large Muhammadan centre, the inspecting officers should find no difficulty in selecting students to be sent to Madras." The council desire to observe that there is really no difficulty whatever in selecting students, but there is no probability of such students being employed within the municipality. Already there are two students trained, of whom only one has been able to find work in our Muhammadan school. The other has gone out of the municipality in search of employment.

27. *Salary-result schools.*—The council consider it sufficient if the four existing schools—one of which is for the Muhammadan boys and the other three for Pallahs and Pariahs—are kept up in their present state. The Inspector of Schools has advised that the staff should be properly graded and proposed a new scale of pay. Accordingly the council suggest that the pay of the Muhammadan headmaster should be raised from Rs. 20 to Rs. 25, that of the Hindustani munshi from Rs. 8 to Rs. 10, and that of the two teachers of each of the three Pallah schools be raised from Rs. 7, 5, and 3 to Rs. 8 and 6, respectively. The other teachers of the Muhammadan school will be graded in the coming years, as necessity arises. The provision under results grants has also been raised from Rs. 400 to Rs. 600.

28. *Results grants.*—The schools of this class are working satisfactorily and an allotment of Rs. 6,000 is made against Rs. 5,700 of the current year. The conversion of any of these into salary-results schools is considered undesirable.

29. *Municipal Inspectors.*—The two inspectors will be maintained for the next year. The Inspector of Schools recommends that the pay of the junior may be raised to Rs. 20 from Rs. 14; the council believe that an increase of Rs. 2 is sufficient for the present.

30. *Common gymnasium.*—The present establishment will be kept up without any changes. The results schools in which the two instructors have to teach are located in the busiest parts of the town where ground for physical exercise is not available. It is therefore desirable to open central gymnasia in suitable places for the benefit of all the schools. A sum of Rs. 420 has been provided under contingencies for the purchase of apparatus for the purpose.

31. *Drawing.*—No provision is made for the instruction in drawing which is more of a technical character. I believe that the view of Government is that technical instruction is no concern of ours. There is a technical institute in the town and if Government advises, the council will give a grant to the institute.

32. *Grant III, Medical.*—The two hospitals will be maintained in their present condition. The District Medical and Sanitary officer recommends and the council approves that the pay of the washerman be raised to Rs. 7 from Rs. 6, that a masalchi be newly entertained for the main hospital on Rs. 5 per mensem, and that a male and a female attendants on Rs. 6 and 5, respectively, be entertained for Jubilee dispensary in lieu of the servants on Rs. 5 and 4-8-0.

33. *Lying-in hospital.*—The Surgeon-General with the Government has made the following recommendation: "That the present system of using the so-called lying-in wards for general cases and using them indiscriminately for Europeans and Natives is most objectionable from a sanitary point of view. It is most desirable that a special lying-in hospital should be provided in a site convenient to the majority of the people who are likely to use it. It should be constructed on the standard plan to be obtained from the sanitary board. Its staff should be caste females with the exception of a male peon. It should be in sub-charge of a lady possessing a qualification not less than a female apothecary and the midwives should be attached to it." Accordingly Rs. 500 has been provided under Grant I for the construction of a separate ward in the compound of the hospital. A matron on Rs. 40 is proposed to be entertained for the lying-in hospital which will be built in six months and Rs. 240 is provided for her pay for six months. The midwives and the newly appointed masalchi will be attached to this institution.

34. *Registration of vital statistics.*—The proposals contained in my letter No. 26, dated the 26th November 1894, to improve the registration of births and deaths which the Sanitary Commissioner has condemned to be very defective are embodied in the budget agreeably to G.O., Mis., No. 1949 M., dated the 14th December 1894. The municipality is divided into seven wards and our proposal is to entertain seven assistant registrars on Rs. 10 each, whose duty it will be to collect information, to keep a register and to submit returns daily to the office, and another one on Rs. 15. This man will have to supervise their work, to maintain the death and birth registers in the office, to furnish the vaccinators with lists of births, to watch the vaccination of the infants under one year of age and to submit the several returns to the Sanitary Commissioner.

supervision of the large population of 90,609 to be correctly effected in the absence of a "whole time" Chairman, unless there be present a fairly well-educated Health officer. I therefore would respectfully advise that an allotment of Rs. 990 be entered for the entertainment of a Health officer holding the L.M. and S. of the Madras University, on a salary of Rs. 75 *plus* horse allowance of Rs. 15 per mensem, rising by yearly increments of Rs. 15 to Rs. 150.

5. In regard to provision for the above purpose I would point out that it might be possible for the municipality to submit to the difficulty as to the "tortuous stairs" of their office (proposed to be improved at a cost of Rs. 700) provided they cannot show they are absolutely dangerous; and, in view of the expenditure upon water works which will enable the people to bathe without the use of a special ghât at the river side, I think the Rs. 1,000 it is proposed to spend upon the Kodamurutty ghât should be struck out, and the sum be allotted towards the abovementioned objects.

Order—dated 22nd February 1895, No. 273 M., Local and Municipal.

The estimated receipts and charges of the Trichinopoly municipality for 1895-96, as passed by Government, are compared below with the budget and revised estimates for the year 1894-95, and the actuals of 1893-94:—

—	Actuals, 1893-94.	Budget estimate, 1894-95.	Revised estimate, 1894-95.	Budget estimate, 1895-96.
Receipts.	Rs.	Rs.	Rs.	Rs.
Balance brought forward	1,90,993	66,150	7,670	68,460
Tax on Arts	8,133	10,550	10,556	10,550
" Buildings and Lands	30,053	27,420	33,520	29,920
" Vehicles and Animals	6,445	6,120	6,120	6,120
" Carts	5,011	5,210	5,210	5,210
Tolls	11,861	11,000	11,000	11,000
Rent of Lands, Buildings, &c., and Sale-proceeds of Lands, &c.	1,735	1,320	1,240	1,240
Conservancy Receipts	6,550	6,550	6,550	6,000
Fees and Revenue from Educational Institutions	177	120	130	260
" from Medical Institutions	598	570	570	570
Income from Markets and Slaughter-houses	17,810	17,200	16,360	16,200
License Fees	1,320	1,500	1,500	1,500
Other Fees	4,420	4,810	4,810	4,110
Fines under Municipal and other Acts	2,713	1,200	2,500	2,000
Interest on Investments and premium on Loans	479	480	480	480
Grants and Contributions from Government	33,624	1,570	40,930	19,360
" from Local Boards	4,673	4,650	4,650	4,650
Recoveries for Services to Private Individuals	3,471	4,010	6,010	6,010
Miscellaneous	47	40	30	40
Loans	..	30,000	1,00,000	32,000
Advances recovered	2,364	..	3,870	..
Total	3,32,477	2,00,470	2,63,700	2,25,680
Charges.				
Grant I—				
New Works—				
Communications	..	2,000	..	..
Buildings	390	1,000	1,000	5,750
Drainage	..	..	..	800
Water-supply	2,20,370	86,600	86,600	91,980
Repairs—				
Communications	14,985	13,000	13,000	13,000
Buildings	4,111	4,000	4,000	6,000
Drainage	7	1,000	3,000	500
Water-supply	1,161	1,420	2,480	2,630
Establishment	1,018	1,030	1,030	1,030
Tools and Plant and other Stores	214	300	300	300
Total	2,42,256	1,10,350	1,11,410	1,21,990
Grant II—				
Training Schools	48	260	260	180
Municipal Schools—	1,826	1,660	1,760	2,200
On the Salary-results System	..	..	..	1,200
Salary Grants	5,679	5,700	5,700	4,800
Results Grants	485	520	520	530
Inspection	535	910	910	1,260
Miscellaneous	..	..	..	..
Total	8,573	9,050	9,150	10,170

27. *Salary-result schools.*—The council consider it sufficient if the four existing schools—one of which is for the Muhammadan boys and the other three for Pallahs and Pariahs—are kept up in their present state. The Inspector of Schools has advised that the staff should be properly graded and proposed a new scale of pay. Accordingly the council suggest that the pay of the Muhammadan headmaster should be raised from Rs. 20 to Rs. 25, that of the Hindustani munshi from Rs. 8 to Rs. 10, and that of the two teachers of each of the three Pallah schools be raised from Rs. 7, 5, and 3 to Rs. 8 and 6, respectively. The other teachers of the Muhammadan school will be graded in the coming years, as necessity arises. The provision under results grants has also been raised from Rs. 400 to Rs. 600.

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33. *Lying-in hospital.*—The Surgeon-General with the Government has made the following recommendation: "That the present system of using the so-called lying-in wards for general cases and using them indiscriminately for Europeans and Natives is most objectionable from a sanitary point of view. It is most desirable that a special lying-in hospital should be provided in a site convenient to the majority of the people who are likely to use it. It should be constructed on the standard plan to be obtained from the sanitary board. Its staff should be caste females with the exception of a male peon. It should be in sub-charge of a lady possessing a qualification not less than a female apothecary and the midwives should be attached to it." Accordingly Rs. 500 has been provided under Grant I for the construction of a separate ward in the compound of the hospital. A matron on Rs. 40 is proposed to be entertained for the lying-in hospital which will be built in six months and Rs. 240 is provided for her pay for six months. The midwives and the newly appointed masalchi will be attached to this institution.

34. *Registration of vital statistics.*—The proposals contained in my letter No. 26, dated the 26th November 1894, to improve the registration of births and deaths which the Sanitary Commissioner has condemned to be very defective are embodied in the budget agreeably to G.O., Mis., No. 1949 M., dated the 14th December 1894. The municipality is divided into seven wards and our proposal is to entertain seven assistant registrars on Rs. 10 each, whose duty it will be to collect information, to keep a register and to submit returns daily to the office, and another one on Rs. 15. This man will have to supervise their work, to maintain the death and birth registers in the office, to furnish the vaccinators with lists of births, to watch the vaccination of the infants under one year of age and to submit the several returns to the Sanitary Commissioner.

35. *Conservancy establishment.*—The present staff of seven nuisance inspectors is not sufficient for this large municipality and should be strengthened. For this purpose, the five registrars on Rs. 14 each, who were hitherto doing duty as nuisance inspectors in addition to the registration work have been transferred to this head. It is also proposed to give an increase of Rs. 2 and Re. 1 to two old inspectors whose present pay is Rs. 20 each.

36. *Private scavenging establishment.*—There is no alteration proposed in this establishment, except that the pay of the six bill-collectors is raised to Rs. 8 from Rs. 7 each, as an encouragement for their heavy work.

37. *Market establishment.*—The gumastah in charge of the grain market has heavy and responsible work to do. His pay being low should be raised to Rs. 9 at least from Rs. 7. He superintends the conservancy arrangements in the grain market and the cart-stand and collects the rents of the stalls in these two and in the China bazaars which amounts to Rs. 2,000 in the year.

38. *Slaughter-house establishment.*—The appointment of one food inspector on Rs. 25 to Rs. 30 was sanctioned in G.O., Mis. No. 1127 M., dated the 25th August 1893, and as one is unequal to the work of supervising the slaughter-houses and the meat markets which are scattered all over the town, the council propose to entertain two inspectors on Rs. 15 each. This has the approval of the Sanitary Commissioner. A sweeper on Rs. 4 is to be newly entertained for the Marsackpett slaughter-house which has hitherto been cleaned by the renters themselves, but very indifferently.

39. *Traveller's bungalow.*—It is proposed to raise the pay of the maty from Rs. 6 to Rs. 7 for the next year. A sum of Rs. 100 is allotted under contingencies and will be expended in providing the bungalow with furniture and utensils.

40. *Public garden.*—The present establishment consists of two men on Rs. 5 each and two boys on Rs. 3 each. The boys are unequal to the work and are useless. It is therefore proposed to have four men on Rs. 5 each from the next year. These will be engaged in tending the cocoanut trees planted along the channel in the second ward and in improving and extending the Boulevard garden in the fourth ward.

41. *Grant V.*—The present allotments are repeated under all the heads of this grant and require no comment.

42. *Payment of interest.*—A sum of Rs. 4,250 only is provided for the payment of the interest on the loan of one lakh of rupees already taken. Any further loan will be taken only when required. I have not deemed it necessary to make any provision for the payment of any instalments towards the repayment of our debt, as the water works will not be completed till the end of the year.

No. 2612-Eng.

Submitted.

(Signed) KHADER NAVAZ KHAN,
Deputy Collector.

Endorsement on C. No. 6670-Rev.

Submitted.

2. *Paragraphs* 14 *and* 36.—As less receipts are expected than in the current year, and as private scavengering has hitherto not been quite satisfactory (*vide* G.O., dated 31st August 1894, No. 1180), I think this is scarcely a good time for increasing the men's pay.

3. *Paragraph* 35.—I approve of the proposed increase of establishment.

4. *Paragraph* 31.—If the rules and Act allow of it and Government sees no objection, I would recommend a grant to the technical institute which is in its infancy and deserves support.

5. *Paragraph* 19.—The letter is kept back pending receipt of some information which the chairman was asked to supply, but which he omitted to do. Probably more than Rs. 1,000 may be required for the new burial ground, but the figure may stand.

(Signed) J. ANDREW,
Acting Collector.

12*th January* 1895.

From the Hon'ble Mr. D. DUNCAN, M.A., D.Sc., Director of Public Instruction, to the Chief Secretary to Government, dated Madras, 12th January 1895, No. 272.

I have the honour to submit the following remarks on the educational portion of the budget estimate of the Trichinopoly municipality for 1895–96.

2. Provision has been made for the training of three Muhammadan students in the Muhammadan Branch Training school, Madras, but as the chairman reports that it will not be possible to provide all these men with appointments, it will suffice if two students be sent for training. The allotment under this head may be reduced to Rs. 180, for one lower secondary and one primary grade student, the provincial grant on that account being also correspondingly reduced to Rs. 80. Uncertificated teachers employed in municipal and aided Muhammadan schools should be selected for training or the trained men should be required to open results schools in the localities to be specified by the municipality.

3. As strongly recommended by the Assistant Inspector, some of the well conducted schools which are now aided on the results system may be aided on the salary grant system. Pending further consideration, a sum of Rs. 1,200 may be provided under "salary grants," the provision for results grants being diminished by an equal amount.

4. The municipal council's objection that Drawing is more of a technical character is based on a misapprehension. Drawing is one of the optional subjects of the curriculum prescribed in the Educational rules for the primary and lower secondary standards. I would recommend that an allotment of Rs. 260 be made (Rs. 220 for the drawing master's salary for eleven months at Rs. 20 and Rs. 40 for materials) for a drawing master for the schools in the town. Credit may be taken for a half grant from provincial funds subject to the code provisions.

5. Should these modifications be approved, the net expenditure under Grant II will be Rs. 9,510 (10,430—920 or about 12 per cent. of the estimated income of the municipality from taxation, markets and rents.

From R. E. ELLIS, Esq., ASSOC. M. INST. C.E., Acting Sanitary Engineer to Government, to the Chief Secretary to Government, dated Fort St. George, 17th January 1895, No. 114.

With reference to the budget estimate of the Trichinopoly municipality for 1895–96, of which extract was sent to me, I have the honour to state that the municipal council has taken no credit for the increased grant from Government sanctioned in G.O., dated 15th December 1894, No. 1107, Financial, for the water-supply scheme nor for the increased shares payable by the railway, military and jail authorities in consequence of the revision of the estimate which now amounts to Rs. 5,02,050.

2. The council has provided for an entire loan of Rs. 1,80,000 — 1,00,000 in 1894–95 and Rs. 80,000 in 1895–96. All that they need raise is Rs. 1,32,000 as sanctioned in Government Order already quoted.

3. The allotment of Rs. 90,650 on the expenditure side of the budget for new water-supply scheme has been correctly made.

From Surgeon-Major-General C. SIBTHORPE, F.R.C.P.I., Surgeon-General with the Government of Madras, to the Chief Secretary to Government, dated Madras, 29th January 1895, No. 65.

I have the honour to state that the provision made in Grant III of the budget estimate of the Trichinopoly municipality for the year 1895–96 is sufficient with the exception of compensation for quarters to the medical subordinates, for which a sum of Rs. 180 should now be provided.

2. The proposal of the municipality (1) to raise the pay of the washerman by Re. 1, (2) to entertain a masalchi for the main hospital on Rs. 5, (3) to appoint a male and a female attendants on Rs. 6 and 5, respectively, for the jubilee dispensary has my approval.

3. The provision for the construction of a special lying-in hospital with a matron on Rs. 40 is gratifying.

From Surgeon-Lieutenant-Colonel W. G. KING, M.B.C.M., D.P.H., Acting Sanitary Commissioner for Madras, to the Chief Secretary to Government, dated Fort St. George, 11th February 1895, No. 272-S.

I have the honour to state that the Trichinopoly municipal council has, in its budget for 1895–96, repeated the current year's grant for vaccination, and allotted Rs. 37,220 for conservancy, or Rs. 1,710 more than the figure entered in the sanctioned budget.

2. In their resolution upon paragraph 27 of my inspection notes, dated 14th September 1894, embodied in G.O., dated 22nd December 1894, No. 2021 M., Local and Municipal, the council determined to provide a covered latrine for the Rock Fort—this being an urgent sanitary matter, having regard to the fact that the existing latrine being open, the washings from it during rainfall are carried into inhabited areas. Again, the council determined to secure four new night-soil carts (paragraph 27 of the same report) which it was advised should be of Richardson and Cruddas' pattern. Under paragraph 33 it was also promised by the council that a special watchman on Rs. 10 should be placed at the night-soil depôt in lieu of the uneducated peon on Rs. 6. No provision for these items appear in the present budget. None are prohibitive as to cost even having regard to other demands.

3. Under paragraph 15 of the same report it is stated that "the council resolve to appoint three toties to keep the drinking-water channels clean and to watch." No provision has apparently been made on this head, and, in any case, I consider it inappropriate. No toty would have any influence with a native in protecting the channels from defilement. On the opposite, the inhabitants would consider their presence a direct invitation for them to go to the channels. It will be noted that the Chairman professed himself willing to pay for the services of two policemen if detached for this duty. Under these circumstances I advise that four peons on Rs. 7 each be employed for the purpose of watching the drinking channel.

4. In paragraph 38 of his budget covering letter, No. 35, dated 22nd December 1894, the Chairman assumes that this office approves of the recommendation to employ two food inspectors on Rs. 15 each per mensem. If the Chairman refers to me personally, I can only state that I not only do not approve but that I have placed on record at paragraph 66 of my inspection notes above referred to, that a class of men receiving a low salary would be unfit to undertake the duty of food inspectors. I consider that the so-called food inspectors should be termed superintendents of slaughter-houses, and receive Rs. 10 per mensem. Where inspection of meat is concerned, long practice and skill is requisite, and this certainly cannot be expected at the cost of either Rs. 10 or Rs. 15. In this connection I would call attention to the omission from the budget of any allotment for a Health officer, although Government in their Order, No. 2021 M., dated 22nd December 1894, Local and Municipal, paragraph 1 (6), desired that the proposal to entertain a Health officer should be embodied in the budget for next year. It is out of the question for the sanitary

supervision of the large population of 90,609 to be correctly effected in the absence of a "whole time" Chairman, unless there be present a fairly well-educated Health officer. I therefore would respectfully advise that an allotment of Rs. 990 be entered for the entertainment of a Health officer holding the L.M. and S. of the Madras University, on a salary of Rs. 75 *plus* horse allowance of Rs. 15 per mensem, rising by yearly increments of Rs. 15 to Rs. 150.

5. In regard to provision for the above purpose I would point out that it might be possible for the municipality to submit to the difficulty as to the "tortuous stairs" of their office (proposed to be improved at a cost of Rs. 700) provided they cannot show they are absolutely dangerous; and, in view of the expenditure upon water works which will enable the people to bathe without the use of a special ghât at the river side, I think the Rs. 1,000 it is proposed to spend upon the Kodamurutty ghât should be struck out, and the sum be allotted towards the abovementioned objects.

ORDER—dated 22nd February 1895, No. 273 M., Local and Municipal.

The estimated receipts and charges of the Trichinopoly municipality for 1895–96, as passed by Government, are compared below with the budget and revised estimates for the year 1894–95, and the actuals of 1893–94:—

—	Actuals, 1893–94.	Budget estimate, 1894–95.	Revised estimate, 1894–95.	Budget estimate, 1895–96.
Receipts.	RS.	RS.	RS.	RS.
Balance brought forward	1,90,993	66,150	7,670	68,460
Tax on Arts	8,133	10,550	10,550	10,550
" Buildings and Lands	30,053	27,420	33,520	29,920
" Vehicles and Animals	6,445	6,120	6,120	6,120
" Carts	5,011	5,210	5,210	5,210
Tolls	11,861	11,000	11,000	11,000
Rent of Lands, Buildings, &c., and Sale-proceeds of Lands, &c.	1,735	1,320	1,240	1,240
Conservancy Receipts	6,550	6,550	6,550	6,000
Fees and Revenue from Educational Institutions	177	120	130	260
" " from Medical Institutions	598	570	570	570
Income from Markets and Slaughter-houses	17,810	17,200	16,360	16,200
License Fees	1,320	1,500	1,500	1,500
Other Fees	4,420	4,810	4,810	4,110
Fines under Municipal and other Acts	2,713	1,200	2,500	2,000
Interest on Investments and premium on Loans	479	480	480	480
Grants and Contributions from Government	33,624	1,570	40,930	19,360
" " from Local Boards	4,673	4,650	4,650	4,650
Recoveries for Services to Private Individuals	3,471	4,010	6,010	6,010
Miscellaneous	47	40	30	40
Loans	..	30,000	1,00,000	32,000
Advances recovered	2,364	..	3,870	..
Total	3,32,477	2,00,470	2,63,700	2,25,680
Charges.				
GRANT I—				
New Works—				
Communications	..	2,000	..	..
Buildings	390	1,000	1,000	5,750
Drainage	..	..	..	800
Water-supply	2,20,370	86,600	86,600	91,980
Repairs—				
Communications	14,985	13,000	13,000	13,000
Buildings	4,111	4,000	4,000	6,000
Drainage	7	1,000	3,000	500
Water-supply	1,161	1,420	2,480	2,630
Establishment	1,018	1,030	1,030	1,030
Tools and Plant and other Stores	214	300	300	300
Total	2,42,256	1,10,350	1,11,410	1,21,990
GRANT II—				
Training Schools	48	260	260	180
Municipal Schools—				
On the Salary-results System	1,826	1,660	1,760	2,200
Salary Grants	..	..	..	1,200
Results Grants	5,679	5,700	5,700	4,800
Inspection	485	520	520	530
Miscellaneous	535	910	910	1,260
Total	8,573	9,050	9,150	10,170

—	Actuals, 1893–94.	Budget estimate, 1894–95.	Revised estimate, 1894–95.	Budget estimate, 1895–96.
Charges—cont.	RS.	RS.	RS.	RS.
GRANT III—				
Hospitals and Dispensaries	14,371	13,740	14,660	15,460
Contributions	2,075	390	2,080	2,060
Vaccination	1,085	1,100	1,100	1,100
Registration of Births and Deaths	867	940	940	1,120
Conservancy, Road-cleaning and Road-watering	33,670	35,510	35,560	37,720
Total	52,068	51,680	54,340	57,460
GRANT IV—				
Lighting	5,233	5,010	5,020	5,010
Markets and Slaughter-houses	1,399	1,630	1,580	1,600
Travellers' bungalows	123	150	230	240
Avenues	252	..	..	..
Public Garden, Survey of Land, Fire and other charges	1,505	2,130	2,130	2,170
Total	8,512	8,920	8,960	9,020
GRANT V—				
Supervision and Management	7,389	8,770	8,770	7,790
Repayment of Debt	..	6,560	..	..
Interest on Loan	..	..	2,010	5,960
Advances Recoverable	5,909	..	100	..
Refunds	98	500	500	100
Balance	7,672	4,640	68,460	13,190
Total	3,32,477	2,00,470	2,63,700	2,25,680

REVISED ESTIMATE FOR 1894–95.

2. The current receipts and charges are now estimated at Rs. 2,23,590 and Rs. 1,95,240, respectively, against Rs. 1,34,320 and Rs. 1,95,830 anticipated in the sanctioned budget, the increase in the receipts occurring chiefly under the tax on buildings and lands, grants from Government and loans. Credit will now be taken for additional contributions of Rs. 29,030 from Provincial funds and Rs. 3,410 from Imperial (Military Works) funds on account of the water-supply scheme. The Chairman should see that these sums, as well as the balance amounting to Rs. 30,000 of the loan of Rs. 1,00,000 sanctioned by Government, are all drawn before the close of the current official year. It is presumed that the contribution of Rs. 6,920, referred to in paragraph 4 of the Chairman's letter, represents the share payable by the jail department on account of the water-supply scheme. If so, the Public Works Department should state whether a sum of Rs. 5,883 has not already been paid to the municipality for this purpose in 1893–94, and whether there has not thus been a double payment of the latter amount. The balance to be carried forward to the ensuing year's budget will be Rs. 68,460.

BUDGET ESTIMATE FOR 1895–96.

3. *Receipts.*—The receipts for the ensuing year are set down at Rs. 1,87,800 against Rs. 2,56,030 in the revised estimate, the decrease being chiefly under the tax on buildings and lands, grants from Government and loans. The estimate under Government grant for education will be reduced by Rs. 50, as recommended by the Director of Public Instruction in paragraph 2 of his letter read above, and credit will be taken for a grant of Rs. 17,470, being the balance of the contributions payable by Government, and the South Indian Railway Company, on account of the water-supply project. The amount of the loan required by the municipal council will, at the same time, be reduced from Rs. 80,000 to Rs. 32,000. An application for this loan in the prescribed form should be submitted without delay.

	RS.
Government	8,700
South Indian Railway	8,770
Total	17,470

4. *Charges.*—(1) The probable charges are entered as Rs. 2,10,910 against the revised estimate of Rs. 1,95,240, the increase appearing chiefly under Grants I, II and III and repayment of loans.

(2) *Grant I.*—The Collector will be requested to report upon the necessity of building the new flight of steps proposed for the municipal office at a cost of Rs. 700. The allotment under new works—buildings will be raised by Rs. 400, in order to enable the municipal council to provide a covered latrine for the Rock Fort. The Sanitary Commissioner's suggestion in paragraph 3 of his letter, and his remarks in paragraph 5 regarding the necessity for the construction of the bathing ghât, will be referred to the municipal council for consideration and report. The drains referred to in paragraph 20 of the Chairman's letter should not be constructed until the plans, estimates and levels for them have been approved by competent authority.

(3) *Grant II.*—The allotment under training schools will be reduced by Rs. 100, as recommended by the Director, and the attention of the municipal council will be drawn to Dr. Duncan's remarks in the concluding portion of paragraph 2 of his letter. The alterations in the educational establishments proposed in paragraphs 27 and 29 of the Chairman's letter are sanctioned. As suggested by the Director in paragraph 3 of his letter, a sum of Rs. 1,200 will be provided for salary-grants, a corresponding reduction being made in the allotment for results grants. The question of employing a drawing master should be reconsidered by the municipal council with reference to Dr. Duncan's remarks in paragraph 4.

(4) *Grant III.*—The proposals of the municipal council (1) to raise the pay of the hospital washerman by Re. 1, (2) to entertain a masalchi on Rs. 5, (3) to employ a male and a female attendants on Rs. 6 and Rs. 5 respectively, instead of the servants on Rs. 5 and Rs. 4-8-0, in the jubilee dispensary, and (4) to entertain a matron on Rs. 40 for the lying-in hospital, are sanctioned. The allotment for hospitals and dispensaries will be raised by Rs. 180 with reference to paragraph 1 of the Surgeon-General's letter read above. The provision of Rs. 20 for contribution on account of the cutlers' establishment will, with reference to G.O., dated 18th January 1895, No. 97 L., be struck out. ~~The reorganization of the establishment for registering vital statistics, proposed in paragraph 34 of the Chairman's letter, and~~ The entertainment of five additional nuisance inspectors on Rs. 14 each ~~are~~ is sanctioned, but the increases proposed to be given to the two old inspectors, and the six private scavenging bill-collectors will be disallowed, as the Government is not satisfied of their necessity. ~~With reference to paragraph 1 (6) of G.O., dated 22nd December 1894, No. 2021 M., provision will be made for the entertainment of a duly qualified Health officer on a salary of Rs. 40 with a horse allowance of Rs. 15.~~ The Chairman will be requested to explain why no provision was made for the purchase of the additional night-soil carts, and the entertainment of the night-soil depôt inspector on Rs. 10, referred to in paragraph 2 of the Sanitary Commissioner's letter.

(5) *Grant IV.*—The proposed changes in the market, travellers' bungalow and public garden establishments referred to in paragraphs 37, 39 and 40 of the Chairman's letter are sanctioned, but the allotment under slaughter-houses—establishment will be reduced by Rs. 110 with reference to paragraph 4 of the Sanitary Commissioner's letter.

(6) *Grant V.*—The contribution for the central office establishments will, with reference to G.O., dated 4th December 1894, No. 2527 L., be reduced from Rs. 1,810 to Rs. 830. As it is proposed to take the whole of the loan of one lakh of rupees in the current year, a sum of Rs. 5,960 will be provided for its repayment. The recovery on account of the capital cannot be postponed until the water-works are completed.

5. The budget, as revised by Government, closes with a balance of Rs. ~~13,190~~, or ~~12·2~~ per cent. of the estimated ordinary receipts.

(True Extract.)

Chief Secretary.

To the Chairman, Municipal Council, Trichinopoly.
" Collector of Trichinopoly.
" President, District Board, Trichinopoly.
" Accountant-General.
" Director of Public Instruction.
" Surgeon-General.
" Sanitary Commissioner.
" Sanitary Engineer.
" Public Works Department.
" Financial Department.
" Military Department.
Editors' Table.

Exd. C. M. Brisson.

Govt. of {1895} Madras.

LOCAL AND MUNICIPAL.

Proof for approval.

Please return proof

Issued

Recd. *Encl.*

G.O., 22nd Feb. 1895, No. 273 M.

FEBRUARY.

Municipal Budget.

Reviewing the Trichinopoly — for 1895-96.

Proof 28/1-

22 February / 273

TH JANUARY 1895, No. / M., LOCAL AND MUNICIPAL.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following papers:—

From M.R Ry. S. T. RUNGASWAMI AIYER, Avargal, B.A.,B.L., Rao Bahadur, Chairman, Municipal Council, Trichinopoly, to the Chief Secretary to Government (through the Deputy Collector of Trichinopoly), dated Trichinopoly, 22nd December 1894, No. 35.

I have the honour to submit, for sanction of Government, the budget estimates of this municipality for the next official year 1895–96 and the revised estimates for the current year. These were sanctioned by the municipal council at their meeting held on the 21st instant. An extract of the council's resolution is herein enclosed, together with the prescribed statements.

REVISED ESTIMATES.

2. *Receipts.*—The total receipts as now revised amount to Rs. 2,23,590 against Rs. 1,34,320 anticipated in the budget and thus show an increase of Rs. 89,270 over the original estimates.

3. *Tax on Buildings and Lands.*—The receipts under these items show an increase of Rs. 5,500 and Rs. 600, respectively. This increase represents the arrears of taxes of previous years which are expected to be realized wholly within the current year.

4. *Water-supply.*—The sum of Rs. 6,920 is the provincial share of the Government contribution received from the Public Works Department on account of the water works.

5. *Private scavenging fees.*—The increase of Rs. 2,000 over the original estimates is due to the levy of fees in the fifth ward to which the system was extended in the year and to the realization of the arrears of fees.

6. *Loan.*—There is here an increase by Rs. 70,000. This sum which was promised to be paid last year was received only in April 1894.

7. *Expenditure.*—The revised estimates amount to Rs. 1,95,240 against Rupees 1,95,830 provided in the budget. The decrease is mainly caused by the instalment not having to be paid in the year on account of the debt taken for the water works.

8. *Repair of water-supply works.*—A sum of Rs. 1,350 has to be expended urgently for reconstructing the western retaining wall of the Shanian tank which fell down lately. The wall form the side of an important street and must be rebuilt in order to avert danger to persons and property. An application was submitted for the required allotment in my letter No. 32, dated 14th December 1894.

9. *School establishment.*—The increase of Rs. 100 over the budget figures against this item is provided for the pay of the additional assistant master for the Muhammadan school, which appointment was sanctioned in G.O., Mis. No. 832 M., dated 2nd July 1894.

10. *Hospital establishment.*—The increase in the allotment represents the pay of the additional hospital assistant for the main hospital sanctioned in G.O., Mis No. 526 M., dated 24th April 1891. The provision for the hospital contingencies has been raised by Rs. 494 to meet the increased demand for the bedding and clothing of patients.

11. *Contribution to Provincial funds.*—The contributions for the medical college, sanitary inspection and the medical reserve staff have been raised to the rates paid in the last year. These seem to become fluctuating items.

Budget Estimates.

12. *Receipts—Tax on Arts.*—This tax is levied on all the classes of the schedule from the current year. The sum of Rs. 10,500 is the utmost which can be raised from this source.

13. *Tax on Buildings and Lands.*—The income from these taxes is put down at Rs. 27,000 and Rs. 2,900, respectively. These figures represent the fixed demands under these items excluding the arrears of taxes which go to swell the figures for the current year. I intend to have these taxes completely revised in the next year, and if this is done a slight increase may be expected under both the heads.

14. *Sale-proceeds of sweepings and night-soil and fees from the cart-stand.*—The revenues under these items are set down less than the figures of the current year, as the present renters are reported to be losers and the leases cannot consequently be expected to run so high as in the last two years.

15. *School fees.*—The fee receipts are set down at Rs. 250 against an estimate of Rs. 120 for the current year and the actuals of Rs. 176-7-0 for the past year. For the current year a low rate of fees is levied in the Muhammadan school only, the boys of the Pallah schools being charged no fees at all. For the ensuing year, fees will be collected in all the schools in accordance with the recommendation of the Inspector of Schools that "these low rates are recommended in view of the encouragement to be given to these classes consistently at the same time with the principle that what is not paid for though ever so little is not valued."

16. *Normal stipends.*—The sum of Rs. 130 is the Government grant towards the stipends of three Muhammadan pupils who are to be sent up for training.

17. *Other grants.*—The grant of Rs. 450 consists of the provincial grant towards the pay of the two gymnastic instructors, the Devadanam school-house, and the purchase of furniture for the municipal schools and of four sets of gymnastic apparatus which are to be provided at common centres for the use of the results system schools.

18. *Loan from Government.*—The council has already taken a loan of Rs. 1,00,000 from Government for the water-supply scheme. A further loan of Rs. 80,000 only is required to complete the works in the ensuing year. The council request the Government will be pleased to sanction the loan.

19. *Expenditure—Grant I, New Works.*—The sum of Rs. 5,350 is provided for the construction of new buildings, of which the more important ones are two pairs of latrines at Rs. 1,500, a new burial ground for the Muhammadans at Rs. 1,000 and a new rubbish depôt for Rs. 1,000. The two latrines will be built in Chintamon and the other two in Varaganeri in the ensuing year, the current year's provision being utilized for Woraiyur.

A new site has been selected by the Sanitary Commissioner for Madras for the burial ground for the Muhammadans to the east of the town. The provision of Rs. 1,000 is for acquiring the required lands and enclosing the same with walls. This subject has been dealt with separately in my letter to Government No. 34, dated 19th December 1894.

The rubbish depôts, which are four in number, are all situated within the town and are objected to by the Sanitary Commissioner. I propose to open a depôt on the Tanjore road to the east of the town with the approval of the District Medical and Sanitary officer. This will enable us to give up two of the existing objectionable depots. The required lands will cost about Rs. 1,000. Any savings from this sum will be utilized in improving and extending the night-soil depôt which lies at a safe distance from the town.

Besides these, provision has been made for a school-house for the Pallah school in Devadanam at Rs. 50, a flight of steps for the office at Rs. 700 to replace the present narrow and tortuous staircase and a small corrugated iron shelter for the

Hindu burning ground for affording protection from sun and rain to the persons assembled for the funerals. This is recommended by the Sanitary Commissioner.

Provision has also been made for the construction of a lying-in hospital at Rs. 500 and the improvement of the European kitchen at Rs. 100. This hospital is recommended by the Surgeon-General with the Government and will be built behind the main hospital.

20. *Drains.*—Two drains are proposed to be constructed, one for an important street in Varaganeri for Rs. 500 and the other for the Chinna Kammala street for Rs. 300. The former has been strongly recommended by the Superintendent of Police and the District Magistrate, while the latter can be easily connected with the existing Peria Chetty street drain and will considerably improve the sanitation of the over-crowded part of the ward.

21. *Water-supply.*—The water works have been in progress during the current year also. The Acting Sanitary Engineer to Government informs me in his letter No. 2480, dated the 5th November 1894, that "Trichinopoly could not be supplied with water from the new works until April 1896, as two dry seasons would be required for the completion of the works. No provision need therefore be made for establishment during 1895-96." I have therefore provided Rs. 90,650 only for the ensuing year being the balance remaining to be spent on the works out of the estimated cost of the whole scheme.

22. The following allotments are also necessary to meet the wants of the second and third wards to which the water works do not extend—a bathing ghaut for the Kodamuruti river at Rs. 1,000 and two revetments for the channel feeding the drinking water tanks at Rs. 330. The bathing ghaut is an absolute necessity for the present one is too narrow and a little too far away from the actual current of water. How much this want is felt by the people can be understood from the circumstance that the one thousand proposed to be given by the municipality represents but one-third of the actual cost. The other two thousands will be raised by the people by voluntary contribution.

The revetment is no new thing. It was already sanctioned by Government in a previous year, but was not utilized.

23. *Repairs.*—The repair of the several roads, buildings and drains enumerated in statement II-A are all necessary and urgently required.

24. *Water-supply.*—The Ghulam Allikhan tank is an important tank in Woraiyur. The walls have fallen on two sides and the tank is half filled with silt. The provision of Rs. 1,250 is made for clearing the silt and reconstructing the walls. This work is most desirable from every point of view. The proposed water scheme is not to be extended to Woraiyur; and this tank supplies drinking water to 75 per cent. of the rate-payers of the place. The Sanitary Commissioner when recently here inspected the tank and has strongly advised the repairs above recommended. Provision is also made for repairing the Anaikulam for Rs. 100, and the bathing ghauts of the Varaganeri and Palakarai channels for Rs. 250.

25. *Water-supply establishment.*—The existing establishment will be maintained for flushing the tanks and for guarding them from pollution. No establishment or working charges are provided for the new water works during the coming year for the reasons given in paragraph 21 *supra*.

26. *Grant II, Education—Normal students.*—Provision of Rs. 280 has been made under this head for the training of three Muhammadan students, two of the lower secondary and one of the primary grade in the school at Madras. This is made in compliance with the recommendations of the Director of Public Instruction who has further remarked that "Trichinopoly being a large Muhammadan centre, the inspecting officers should find no difficulty in selecting students to be sent to Madras." The council desire to observe that there is really no difficulty whatever in selecting students, but there is no probability of such students being employed within the municipality. Already there are two students trained, of whom only one has been able to find work in our Muhammadan school. The other has gone out of the municipality in search of employment.

27. *Salary-result schools.*—The council consider it sufficient if the four existing schools—one of which is for the Muhammadan boys and the other three for Pallahs and Pariahs—are kept up in their present state. The Inspector of Schools has advised that the staff should be properly graded and proposed a new scale of pay. Accordingly the council suggest that the pay of the Muhammadan headmaster should be raised from Rs. 20 to Rs. 25, that of the Hindustani munshi from Rs. 8 to Rs. 10, and that of the two teachers of each of the three Pallah schools be raised from Rs. 7, 5, and 3 to Rs. 8 and 6, respectively. The other teachers of the Muhammadan school will be graded in the coming years, as necessity arises. The provision under results grants has also been raised from Rs. 400 to Rs. 600.

28. *Results grants.*—The schools of this class are working satisfactorily and an allotment of Rs. 6,000 is made against Rs. 5,700 of the current year. The conversion of any of these into salary-results schools is considered undesirable.

29. *Municipal Inspectors.*—The two inspectors will be maintained for the next year. The Inspector of Schools recommends that the pay of the junior may be raised to Rs. 20 from Rs. 14; the council believe that an increase of Rs. 2 is sufficient for the present.

30. *Common gymnasium.*—The present establishment will be kept up without any changes. The results schools in which the two instructors have to teach are located in the busiest parts of the town where ground for physical exercise is not available. It is therefore desirable to open central gymnasia in suitable places for the benefit of all the schools. A sum of Rs. 420 has been provided under contingencies for the purchase of apparatus for the purpose.

31. *Drawing.*—No provision is made for the instruction in drawing which is more of a technical character. I believe that the view of Government is that technical instruction is no concern of ours. There is a technical institute in the town and if Government advises, the council will give a grant to the institute.

32. *Grant III, Medical.*—The two hospitals will be maintained in their present condition. The District Medical and Sanitary officer recommends and the council approves that the pay of the washerman be raised to Rs. 7 from Rs. 6, that a masalchi be newly entertained for the main hospital on Rs. 5 per mensem, and that a male and a female attendants on Rs. 6 and 5, respectively, be entertained for Jubilee dispensary in lieu of the servants on Rs. 5 and 4-8-0.

33. *Lying-in hospital.*—The Surgeon-General with the Government has made the following recommendation: "That the present system of using the so-called lying-in wards for general cases and using them indiscriminately for Europeans and Natives is most objectionable from a sanitary point of view. It is most desirable that a special lying-in hospital should be provided in a site convenient to the majority of the people who are likely to use it. It should be constructed on the standard plan to be obtained from the sanitary board. Its staff should be caste females with the exception of a male peon. It should be in sub-charge of a lady possessing a qualification not less than a female apothecary and the midwives should be attached to it." Accordingly Rs. 500 has been provided under Grant I for the construction of a separate ward in the compound of the hospital. A matron on Rs. 40 is proposed to be entertained for the lying-in hospital which will be built in six months and Rs. 240 is provided for her pay for six months. The midwives and the newly appointed masalchi will be attached to this institution.

34. *Registration of vital statistics.*—The proposals contained in my letter No. 26, dated the 26th November 1894, to improve the registration of births and deaths which the Sanitary Commissioner has condemned to be very defective are embodied in the budget agreeably to G.O., Mis., No. 1949 M., dated the 14th December 1894. The municipality is divided into seven wards and our proposal is to entertain seven assistant registrars on Rs. 10 each, whose duty it will be to collect information, to keep a register and to submit returns daily to the office, and another one on Rs. 15. This man will have to supervise their work, to maintain the death and birth registers in the office, to furnish the vaccinators with lists of births, to watch the vaccination of the infants under one year of age and to submit the several returns to the Sanitary Commissioner.

35. *Conservancy establishment.*—The present staff of seven nuisance inspectors is not sufficient for this large municipality and should be strengthened. For this purpose, the five registrars on Rs. 14 each, who were hitherto doing duty as nuisance inspectors in addition to the registration work have been transferred to this head. It is also proposed to give an increase of Rs. 2 and Re. 1 to two old inspectors whose present pay is Rs. 20 each.

36. *Private scavenging establishment.*—There is no alteration proposed in this establishment, except that the pay of the six bill-collectors is raised to Rs. 8 from Rs. 7 each, as an encouragement for their heavy work.

37. *Market establishment.*—The gumastah in charge of the grain market has heavy and responsible work to do. His pay being low should be raised to Rs. 9 at least from Rs. 7. He superintends the conservancy arrangements in the grain market and the cart-stand and collects the rents of the stalls in these two and in the China bazaars which amounts to Rs. 2,000 in the year.

38. *Slaughter-house establishment.*—The appointment of one food inspector on Rs. 25 to Rs. 30 was sanctioned in G.O., Mis. No. 1127 M., dated the 25th August 1893, and as one is unequal to the work of supervising the slaughter-houses and the meat markets which are scattered all over the town, the council propose to entertain two inspectors on Rs. 15 each. This has the approval of the Sanitary Commissioner. A sweeper on Rs. 4 is to be newly entertained for the Marsackpett slaughter-house which has hitherto been cleaned by the renters themselves, but very indifferently.

39. *Traveller's bungalow.*—It is proposed to raise the pay of the maty from Rs. 6 to Rs. 7 for the next year. A sum of Rs. 100 is allotted under contingencies and will be expended in providing the bungalow with furniture and utensils.

40. *Public garden.*—The present establishment consists of two men on Rs. 5 each and two boys on Rs. 3 each. The boys are unequal to the work and are useless. It is therefore proposed to have four men on Rs. 5 each from the next year. These will be engaged in tending the cocoanut trees planted along the channel in the second ward and in improving and extending the Boulevard garden in the fourth ward.

41. *Grant V.*—The present allotments are repeated under all the heads of this grant and require no comment.

42. *Payment of interest.*—A sum of Rs. 4,250 only is provided for the payment of the interest on the ~~town~~ of one lakh of rupees already taken. Any further loan will be taken only when required. I have not deemed it necessary to make any provision for the payment of any instalments towards the repayment of our debt, as the water works will not be completed till the end of the year.

EXTRACT from the Proceedings of the Municipal Council, Trichinopoly, passed at the meeting held on the 21st December 1894.

* * * * * *

Paragraph 1.—Read Chairman's draft letter to Government submitting the budget for 1895-96.

* * * * * *

Approved with the following remarks.

The appointment of a matron passed by a majority; five dissenting on the ground it is not necessary; that a non-caste matron's services will not be much useful in the caste wards; and that even outside people would better appreciate the services of a caste midwife.

A further technical objection is taken on the ground that under paragraph 5, section 30, the matter having been decided only in a meeting of the 13th instant should not now be brought up again, three months not having elapsed. The reply is made that on the former occasion the matter was not specially dealt with. The said resolution being in these words:

"Read recommendations of the hospital sub-committee with reference to an extract from the visitor's book by the Surgeon-General making certain suggestions.

Resolved as follows:—All the recommendations are approved excepting 8 and 9."

Note 8 is with regard to the appointment of a trained European or Eurasian midwife and nurse.

Messrs. T. S. Umamaheswara Aiyar Avargal and W. Sivasami Pillai Avargal dissent in the matter of the proposed increase of pay to two sanitary inspectors of Re. 1 and Rs. 2, respectively.

Mr. T. A. Soosai Pillai Avargal dissents to the whole proceedings on the ground that the papers were not circulated to him.

* * * * *

(True Extract.)

(Signed) S. T. RUNGASWAMI,
Chairman.

No. 2612-Eng.

Submitted.

(Signed) KHADER NAVAZ KHAN,
Deputy Collector.

Endorsement on C. No. 6670-Rev.

Submitted.

2. *Paragraphs* 14 *and* 36.—As less receipts are expected than in the current year, and as private scavengering has hitherto not been quite satisfactory (*vide* G.O., dated 31st August 1894, No. 1180), I think this is scarcely a good time for increasing the men's pay.

3. *Paragraph* 35.—I approve of the proposed increase of establishment.

4. *Paragraph* 31.—If the rules and Act allow of it and Government sees no objection, I would recommend a grant to the technical institute which is in its infancy and deserves support.

5. *Paragraph* 19.—The letter is kept back pending receipt of some information which the chairman was asked to supply, but which he omitted to do. Probably more than Rs. 1,000 may be required for the new burial ground, but the figure may stand.

(Signed) J. ANDREW,
Acting Collector.

12*th January* 1895.

From the Hon'ble Mr. D. DUNCAN, M.A., D.Sc., Director of Public Instruction, to the Chief Secretary to Government, dated Madras, 12th January 1895, No. 272.

I have the honour to submit the following remarks on the educational portion of the budget estimate of the Trichinopoly municipality for 1895–96.

2. Provision has been made for the training of three Muhammadan students in the Muhammadan Branch Training school, Madras, but as the chairman reports that it will not be possible to provide all these men with appointments, it will suffice if two students be sent for training. The allotment under this head may be reduced to Rs. 180, for one lower secondary and one primary grade student, the provincial grant on that account being also correspondingly reduced to Rs. 80. Uncertificated teachers employed in municipal and aided Muhammadan schools should be selected for training or the trained men should be required to open results schools in the localities to be specified by the municipality.

3. As strongly recommended by the Assistant Inspector, some of the well conducted schools which are now aided on the results system may be aided on the salary grant system. Pending further consideration, a sum of Rs. 1,200 may be provided under "salary grants," the provision for results grants being diminished by an equal amount.

4. The municipal council's objection that Drawing is more of a technical character is based on a misapprehension. Drawing is one of the optional subjects of the curriculum prescribed in the Educational rules for the primary and lower secondary standards. I would recommend that an allotment of Rs. 260 be made (Rs. 220 for the drawing master's salary for eleven months at Rs. 20 and Rs. 40 for materials) for a drawing master for the schools in the town. Credit may be taken for a half grant from provincial funds subject to the code provisions.

5. Should these modifications be approved, the net expenditure under Grant II will be Rs. 9,510 (10,430—920) or about 12 per cent. of the estimated income of the municipality from taxation, markets and rents.

CRC 151 1094 m

Trichinopoly

Revised Estimate for 1894-95.

78

LOCAL AND MUNICIPAL DEPARTMENT.

Papers to be read in Proceedings:—

Current No. 151 M of 1895, dated 22nd Dec 94 from the Chairman, M.C. Trichinopoly.

Current No. 1094 M of 1895, dated 12th Jan 95 from the Director of Public Instn.

Current No. 1460 M of 1895, dated 17th January from the Sanitary Engineer.

Current No. 3246 of 1895, dated 29th January from the Surgeon General.

" 499 M " " 11th Feb " " Sanl. Commr.

Order— 22nd Feb 1895 No. 273 M

e/ The Estimated receipts and charges of the Trichinopoly Municipality for 1895-96, as passed by Government, are compared below with the budget and revised estimates for the year 1894-95 and the actuals of 1893-94:—

	Actuals, 1893-94	Budget Estimate, 1894-95.	Revised Estimate, 1894-95.	Budget Estimate 1895-96.
	Rs.	Rs.	Rs.	Rs.
Receipts.				
Balance brought forward	190993	66150	7670	36220 (68460 66050)
Tax on Arts	8133	10550	10550	10550
Tax on Buildings and Lands	30053	27420	33580	29920
Water-tax on Buildings and Lands	"	"	"	"
Tax on Vehicles and Animals	6445	6120	6120	6120
Tax on Carts	5011	5210	5210	5210
Tolls	11861	11000	11000	11000
Realizations under Special Acts	"	"	"	"
Rent of Lands, Buildings, &c., and sale-proceeds of Lands, &c.	1735	1320	1240	1240
Conservancy receipts	6560	6550	6550	6000
Fees and Revenue from Educational Institutions ..	177	120	130	260
Fees and Revenue from Medical Institutions	598	570	570	570
Income from Markets and Slaughter-houses.	17810	17200	16360	16200
License fees	1320	1500	1500	1500
Other fees	4420	4810	4810	4110
Fines under Municipal and other Acts	2713	1200	2500	2000
Interest on Investments and premium on Loans ..	479	480	480	480 (19360 22770)
Grants and Contributions from Government	33624	1370 (40930)	8490	1940
Do. from Local Boards	4673	4650	4650	4650
Do. from other bodies				
Recoveries for services to private individuals	3471	4010	6010	6010
Miscellaneous	47	40	30	40
Loans	"	30000	100000	80000 (32000)
Sale-proceeds of Government Securities, &c., and Realizations of Sinking Fund.	2364	"	3870	"
Advances Recovered			(263700)	
Total ..	332477	200470 (66150)	231260 (3870)	223820 (36020) (225680)

(134320 224890 187800 190030)

Charges.	Actuals, 1893–94.	Budget Estimate, 1894–95.	Revised Estimate, 1894–95.	Budget Estimate, 1895–96.	
	Rs.	Rs.	Rs.	Rs.	
Grant I.					
New Works—					
Communications	–	2000	–	–	
Buildings	390	1000	1000	5350	
Drainage	–	–	–	800	
Water-supply	220370	86600	86600	91980	
Repairs—					
Communications	14985	13000	13000	13000	
Buildings	4111	4000	4000	6000	
Drainage	7	1000	3000	500	
Water-supply	1161	1420	2480	2630	
Establishment	1018	1030	1030	1030	
Tools and Plant and other Stores	214	300	300	300	
Contributions for Public Works					
Total	242256	110350	111410	121590	121970
Grant II.					
Training Schools	48	260	260	290	180
Municipal Schools—					
(*a*) On the Salary System					
(*b*) On the Salary Results System	1826	1660	1760	2200	
Salary Grants				1200	
Results Grants	5679	5700	5700	6000	
Combined Grants				4000	
Inspection	485	520	520	530	
Miscellaneous	535	910	910	1260	
Total	8573	9050	9150	10270	
Grant III.					
Hospital and Dispensaries	14371	13740	14660	15280	15460
Contributions	2075	390	2080	2080	2080
Vaccination	1085	1100	1100	1100	
Registration of Births and Deaths	867	940	940	1120	940
Conservancy, Road cleaning and Road watering	33670	35540	35560	37220	37110
Total	52068	51680	54340	56800	57460 56670
Grant IV.					
Lighting	5233	5010	5020	5010	
Markets and Slaughter-houses	1399	1630	1580	1710	1660
Choultries					
Travellers' Bungalows	123	150	230	240	
Avenues	252	"	"	"	
Public Garden, Survey of Land, Fire and other charges.	1505	2130	2130	2170	
Total	8512	8920	8960	9130	9020
Grant V.					
Supervision and Management	7389	8770	8770	8770	7790
Repayment of Debt	"	6560	–	–	
Interest on loan	"	"	2010	4260	5960
Advances Recoverable	5709	"	100	"	
Refunds	98	500	500	100	
Discount					
Pensions and Gratuities					
Investments			68460		13190
Balance	7672	4640	36020	12910	14110
Total	332477	200470	231260	228820	225680

195830 192240 209910

Court- No. 661-M.

From

Revised Estimate for [illegible]

[illegible] Department.

Dated 189 .

FOR ORDERS.

In the Current Mo Trichy Municl Council demurs to the appointment of a Health Officer on financial grounds The Budget order (please see proof put up) ~~Appointed~~ provides for one on Rs 40 + Rs 15 horse allowance, which was the figure quoted by the Council on page 28 of G.O. 2021-M. 22.12.94

The Surgeon General now says that no one can be procured on less than Rs 75.

There will in all probability be a paid Chairman in the course of the next year, as the present Chairman has been asked to resign, & the Council to nominate an official for the post. With a paid Chairman (whole time) there should be no pressing need for a health officer.

The registration Clerks have been appointed in the Budget G.O., but it seems very doubtful whether so much money should be spent upon such an unimportant part of the administration. Registration now is to cost Rs 1120 per annum. It is probable that the prosecutions which the Council would institute now, but which a paid Chairman will start would do more to improve Registration than any number of Clerks. The Council ~~do~~ not

Trichy Munl. Budget

really well off although Govt. grants & loans have temporarily swollen the balance, & economy is important.

The draft g.o. has therefore been altered deferring the appointment of the Health officer and telling the Council to prosecute rather than increase the registration staff any more & is resubmitted to C.S. for approval.

W. R. 3.95

I have passed the alteration

12/3/95

C.S. (for orders)

(Note for C.S.)

Revised Estimate for 1894-95.

2. The current receipts and charges are now estimated at Rs 223.590 and Rs 195.240 respectively, against Rs 134.320 and Rs 195.830 anticipated in the Sanctioned budget, the increase in the receipts occurring chiefly under the tax on buildings and lands, grants from Government, and loans. Credit will now be taken for ~~an~~ additional contributions of Rs 29.030 from Provincial funds, on account of the water supply scheme. The chairman should see that these sums, as well as the balance amounting to Rs 30.000 of the loan of Rs 100.000 sanctioned by Government, are ~~both~~ all drawn before the close of the current official year. It is presumed that the contribution of Rs 6.920, referred to in paragraph 4 of the chairman's letter, represents the share payable by the Jail Department on account of the water supply scheme. If so, the Public Works Department should state whether a sum of Rs 5.883 has not already been paid to the municipality for this purpose in 1893-94 and whether there has not thus been a double payment of the latter amount. The balance to be carried forward to the ensuing year's budget will be Rs ~~65.030~~ 68460.

Budget Estimate for 1895-96

* Provided in the Provincial Budget.
† vide f.p. 14-2-95 No 3874 W (jointly?).

* Vide f.o. 960 M 25-6-91 — Rs 70.000 was sanctioned for payment in f.o. 223 M 23-2-94 — Government promised to lend half the cost, so 1.32.000 was entered in the Provincial Budget on the advice of the Sanitary Engineer, though the other Rs 32000 has not yet been applied for.

* Vide paragraph 21 of the chairman's report in f.o. 31-8-94 No 1180 M.

† and Rs 3410 from Imperial (Military works) funds

195830 195240 223590

Budget Estimate for 1895-96.

3. Receipts. The receipts for the ensuing year are set down at Rs 187800 against Rs 252620 in the revised estimate, the decrease being chiefly under the tax on buildings and lands, grants from Government, and Loans. The estimate under Government grant for education will be reduced by Rs 50, as recommended by the Director of Public Instruction in paragraph 2 of his letter read above, and credit will be taken for a grant of Rs 20880, being the balance of the contributions payable by Government,

	Rs	
Government	8700	(a)
South Indian Ry	8770	
Military Dept	3410	(c)
	20880	

the South Indian Railway Company, and the Military Department, on account of the water supply project. The amount of the loan required by the Municipal Council will, at the same time be reduced from Rs 80000 to Rs 32000. An application for this loan in the prescribed form should be submitted without delay.

4. Charges (1). The probable charges are entered as Rs 210910 against the revised estimate of Rs 195240, the increase appearing chiefly under grants I, II & III and Repayment of loans.

(2) Grant I. The Collector will be requested to report upon the necessity

		Rs
(a)	The total grant promised by Govt is	251030
	Of this the Council drew in 1892-93	213300
	It is proposed to give in 1894-95	29030
	Balance still due	8700

This amount is not provided in the Provincial Budget for 1895-96, but could easily be met by a re-appropriation of the grants.

		Rs
(b)	Total Contribution due	68340
	Amount received in 1892-93	49570
	Balance due	8770
(c)	Total Contribution due	22670
	Amount received in 1893-94	19260
	Balance due	3410

+ provided in the Provincial Budget.

necessity of building the new flight of steps proposed for the Municipal office at a cost of Rs 700. The allotment under New works - buildings will be raised by Rs 400, in order to enable the Municipal Council to provide a covered latrine for the Rock fort. The Sanitary Commissioner's suggestion in paragraph 3 of his letter, and his remarks in paragraph 5 regarding the necessity for the construction of the bathing ghat, will be referred to the Municipal Council for consideration and report. The drains referred to in paragraph 20 of the Chairman's letter should not be constructed until the plans, estimates, and levels for them, have been approved by competent authority.

(3) Grant II. The allotment under Training Schools will be reduced by Rs 100, as recommended by the Director, and the attention of the Municipal Council will be drawn to Dr. Duncan's remarks in the concluding portion of paragraph 2 of his letter. The alterations in the educational establishments proposed in paragraphs 27 & 29 of the Chairman's letter are sanctioned. As suggested by the Director in paragraph 3 of his letter

a

a sum of Rs 1200 will be provided for salary Grants, a corresponding reduction being made in the allotment for results grants. The question of employing a drawing master should be reconsidered by the municipal Council with reference to Dr. Duncan's remarks in paragraph 4.

(4) Grant III. The proposals of the municipal Council (1) to raise the pay of the hospital washerman by Re 1, (2) to Entertain a Masalchi on Rs 5, (3) to employ a male and a female attendant on Rs 6 + 5 respectively, instead of the two Servants on Rs 5 + Rs 4-8-0, in the Jubilee dispensary, (4) to Entertain a matron on Rs 40 for the Lying in hospital, are sanctioned. The ~~provision~~ allotment for hospitals and dispensaries will be raised by Rs 180 with reference to paragraph 1 of the Surgeon General's letter read above. The provision of Rs 20 for contribution on account of the Cutler's Establishment, will, with reference to f.o. dated 18th January 1895 No. 974, be struck out. The reorganization of the Establishment for registering vital statistics, proposed in paragraph 34 of the chairman's letter, and the Entertainment of five additional nuisance inspectors on Rs 14 each are sanctioned, but the increases proposed to be given to the two old inspectors, and the Six private Scavenging billcollectors, will be disallowed, as the Government is not satisfied of their necessity. With reference to paragraph 16 of f.o. dated 22nd Dec. 1894 No. 2021 M, provision will be made for the entertainment of a duly qualified health officer on a salary of Rs 40 with a house allowance of Rs 15. The chairman will be requested to Explain why no provision was made for the purchase of the additional nightsoil carts, and the entertainment of the nightsoil depôt inspector on Rs 10, referred to in paragraph 2 of the Sanitary Commissioner's letter.

(5) Grant IV. The proposed changes in the market, travellers' Bungalow and Public Garden Establishments referred to in paragraphs 37, 39 + 40 of the chairman's letter are sanctioned, but the allotment under Slaughterhouses - Establishment will be reduced by Rs 110 with reference to paragraph 4 of the Sanitary Commissioner's letter.

(6) Grant V. The contribution for the Central office Establishment

will, with reference to f.o. dated 4th Decr 1894 No 2527 L, be reduced from Rs 1810 to Rs 820. As it is proposed to take the whole of the loan of one lakh of rupees in the current year, a sum of Rs 5760 will be provided for its repayment. The recovery on account of the Capital cannot be postponed until the waterworks are completed

5. The budget, as revised by Government, closes with a balance of Rs 13190, or 12.2 per cent of the estimated ordinary receipts—

W 16.2.95 21/2/95

V.R. 16/2/95

Note x of this sum Rs 5,883 will very probably have to be refunded to the Public works Dept. Vide para. 2 supra.

Resubmitted to C.S. with reference to the additions made in consequence of the San. Commrs remarks, which are ||| marked with pencil

W 16.2.95

Note for A.S.

Please to write alterations made in paras 2 & 3 of the review, with Refce to f.o. 14-2-95 No 287 W - just received -

affdt - W 25.2.95 W 25/2/95

To
The Chairman m.c. Trichinopoly
" Collector of Trichinopoly
" President D.B. Trichinopoly
" Accountant General
" Director of Public Instruction
" Surgeon General
" Sanitary Commissioner
" Sanitary Engineer
" Public Works Dept (Roads & Buildings Branch)
" Superintending Engineer (Railway Branch)

Despd 23/2/95

W = extreme width of combustion box in inches from front of tube plate to back of fire-box, or distance between combustion box tube plates when boiler is double ended and the box common to the furnaces at both ends.

18. The Inspector should take care that boilers, the outside of which cannot be seen, are cleared of all covering and fittings for inspection whenever the Inspector considers it necessary. It will often be found necessary to reduce the pressure, unless the boilers are partially cleared from their seats to enable the Inspector to judge of their condition. If the owners in any special case have any good reasons for not wishing to clear them when the Inspector requires it, the Inspector should submit the whole case in detail to the Sanitary Engineer for his consideration. The Inspector must recollect that he is not to certify as sufficient any boiler respecting which he cannot thoroughly satisfy himself.

The Inspector should record in his inspection book the dates on which boilers are inspected, when and to what extent cleared from brick work, and whether the boilers were set or not when examined, and if not set, where they were examined. Boilers which have been cleared should in all cases be subjected to the hydraulic test before the brick work is rebuilt.

19. Boilers well constructed, well designed, and made of good material should have an advantage in the matter of working pressure over boilers inferior in any of the above respects, as unless this is done the superior boiler is placed at a disadvantage, and good workmanship and material will be discouraged. The following rules are therefore prescribed.

When cylindrical boilers are made of the best material with all the rivet holes drilled in place and all the seams fitted with double butt straps each of at least five-eighths the thickness of the plates they cover, and all the seams at least double riveted with rivets having an allowance of not more than 75 per cent. over the single shear and provided that the boilers have been open to inspection during the whole period of construction, then 5 may be used as the factor of safety. The tensile strength of the iron is to be taken as equal to 47,000 lb. per square inch with the grain, and 40,000 lb. across the grain. But when the above conditions are not complied with, the additions in the following scale must be added to the factor 5, according to the circumstances of each case:—

A †	·15	To be added when all the holes are fair and good in the longitudinal seams, but drilled out of place after bending.
B †	·3	To be added when all the holes are fair and good in the longitudinal seams, but drilled out of place before bending.
C	·3	To be added when all the holes are fair and good in the longitudinal seams, but punched after bending instead of drilled.
D	·5	To be added when all the holes are fair and good in the longitudinal seams, but punched before bending.
E *	·75	To be added when all the holes are not fair and good in the longitudinal seams.
F	·1	To be added if the holes are all fair and good in the circumferential seams, but drilled out of place after bending.
G †	·15	To be added if the holes are fair and good in the circumferential seams, but drilled before bending.
H	·15	To be added if the holes are fair and good in the circumferential seams, but punched after bending.
I †	·2	To be added if the holes are fair and good in the circumferential seams, but punched before bending.
J *	·2	To be added if the holes are not fair and good in the circumferential seams.
K	·2	To be added if double butt straps are not fitted to the longitudinal seams, and the said seams are lap and double riveted.
L	·1	To be added if double butt straps are not fitted to the longitudinal seams, and the said seams are lap and treble riveted.
M	·3	To be added if only single butt straps are fitted to the longitudinal seams and the said seams are double riveted.
N	·15	To be added if only single butt straps are fitted to the longitudinal seams and the said seams are treble riveted.
O	·1	To be added when any description of joint in the longitudinal seams is single riveted.
P	·1	To be added if the circumferential seams are fitted with single butt straps and are double riveted.
Q	·2	To be added if the circumferential seams are fitted with single butt straps and are single riveted.
R	·1	To be added if the circumferential seams are fitted with double butt straps and are single riveted.
S	·1	To be added if the circumferential seams are lap joints and are double riveted.
T	·2	To be added if the circumferential seams are lap joints and are single riveted.
U	·25	To be added when the circumferential seams are lap, and the stakes of plates are not entirely under or over.

V ‡	·3	To be added when the boiler is of such a length as to fire from both ends, or is of unusual length, as in the case of flue boilers; and the circumferential seams fitted as described opposite P, R, and S, but of course when the circumferential seams are as described opposite Q and T, V ·3 will become V ·4.
W *	·4	To be added if the seams are not properly crossed.
X *	·4	To be added when the iron is in any way doubtful, and the Inspector is not satisfied that it is of the best quality.
Y ††	1·65	To be added if no certificate is produced from a Chief Engineer of a recognized Boiler Insurance Company or if the boiler was not open to inspection during the whole period of its construction by the Inspectors of any recognized Boiler Insurance Company.

Where marked * the factor of safety should be increased still further if the workmanship or material is very doubtful or is very unsatisfactory.

† When the holes are to be rimered, or bored out in place, the case should be submitted to the Sanitary Engineer as to the reduction or omission of A, B, G, and I as heretofore.

‡ When boilers are comparatively short, the cases should be submitted to the Sanitary Engineer for consideration as to the omission of V as heretofore.

When the circumferential seams are double strapped and double riveted or lapped and treble riveted, and the calculated strength not less than 65 per cent. of the solid plate V, ·3 may be omitted as heretofore.

The strength of ordinary joints is found by the following method :—

$$\frac{(\text{Pitch} - \text{Diameter of rivet}) \times 100}{\text{Pitch}} = \left.\right\} \text{Percentage of strength of plate at joint as compared with the solid plate.}$$

$$\frac{(\text{Area of rivet} \times \text{No. of rows of rivets}) \times 100}{\text{Pitch} \times \text{thickness of plate}} = \left.\right\} \text{Percentage of strength of rivets as compared with the solid plate.}\ \S$$

Then take iron as equal to 47,000 lb. per square inch and use the smaller of the two percentages as the strength of the joint, and adopt the factor of safety as found from the preceding scale.

$$\frac{(47{,}000 \times \text{percentage of strength of joint}) \times \text{twice the thickness of the plate in inches.}}{\text{Inside diameter of the boiler in inches} \times \text{factor of safety}} = \text{Pressure to be allowed per square inch on the safety-valves.}$$

In the case of ordinary zigzag riveting the strength through the plate diagonally between the rivets, when diagonal pitch $= \frac{6}{10}$ horizontal pitch $+ \frac{4}{10}$ diameter of rivet.

Plates that are drilled in place must have been taken apart and the burr taken off and the holes slightly countersunk from the outsides.

Butt straps must have been cut from plates and not from bars, and must be of as good a quality as the shell plates, and for the longitudinal seams must be cut across the fibre. The rivet holes may have been punched or drilled when the plates are punched or drilled out of place, but when drilled in place must have been taken apart and the burr taken off and slightly countersunk from the outside.

When single butt straps are used and the rivet holes in them punched, they must be one-eighth thicker than the plates they cover.

The diameter of the rivets must not be less than the thickness of the plates of which the shell is made, but it will be found when the plates are thin, or when lap joints or single butt straps are adopted, that the diameter of the rivets should be in excess of the thickness of the plates.

Dished ends must be stayed as flat surfaces; but when they are theoretically equal to the pressure needed, when considered as portions of spheres, the stays when solid may have a stress of 14,000 lb. per square inch of net section, but the stress should not exceed 10,000 lb. when the stays have been welded or worked in the fire.

Truly hemispherical ends subjected to internal pressure may be allowed double the pressure that is suitable for a cylinder of the same diameter and thickness.

All man-holes and openings must be stiffened with compensating rings of at least the same effective sectional area as the plates cut out, and in no case should the plate rings be less in thickness than the plates to which they are attached. The openings in the shells of cylindrical boilers should have their shorter axes placed longitudinally. It is very desirable that the compensating rings round openings in flat surfaces be made of L or T iron. Cast-iron doors are not to be passed.

The neutral part of boiler shells under steam domes must be efficiently stiffened and stayed, as serious accidents have arisen from the want of such precautions.

20. New boilers are to be tested by hydraulic pressure according to the following scale :—

§ If the rivets are exposed to double shear, multiply the percentage as found by 1·75.

Boilers intended to work up to 100 lb. pressure per square inch or any pressure below that are to be tested to double the working pressure.

Above lb.	100	up to lb.	125	to be tested to lb.	200.
,,	125	,,	150	,,	230.
,,	150	,,	175	,,	250.
,,	175	,,	200	,,	270.
,,	200	,,	225	,,	290.
,,	225	,,	250	,,	310.
,,	250	,,	275	,,	330.
,,	275	,,	300	,,	350.

Any boilers intended for working pressure above these to be tested to not less than 50 lb. above such working pressure.

In the case of old boilers the Inspector must use his own judgment as to the necessary pressure to be applied.

21. Circular furnaces with the longitudinal joints welded or made with a butt strap.

$$\frac{90{,}000 \times \text{the square of the thickness of the plate in inches}}{(\text{Length in feet} + 1) \times \text{diameter in inches}}$$

= working pressure per square inch, provided it does not exceed that found by the following formula :—

$$\frac{8{,}000 \times \text{thickness in inches}}{\text{diameter in inches.}} = \left.\right\} \text{Working pressure per square inch.}$$

The second formula limits the crushing stress on the material to 4,000 lb. per square inch.

The length is to be measured between the rings if the furnace is made with rings.

If the longitudinal joints instead of being butted are lap-jointed in the ordinary way, then 75,000 is to be used instead of 90,000, excepting only where the lap is bevelled and so made as to give the flues the form of a *true* circle, when 80,000 may be used.

When the material or the workmanship is not of the best quality, the constants given above must be reduced, that is to say, the 90,000 will become 80,000, the 80,000 will become 70,000, the 70,000 will become 60,000; when neither the material nor the workmanship is of the best quality, such constants will require to be further reduced, according to circumstances and the judgment of the Inspector, as in the case of old boilers. One of the conditions of best workmanship is that the joints are double riveted with double butt straps, or single riveted with double butt straps, and the holes drilled after the bending is done and when in place and the plates afterwards taken apart, the burr on the holes taken off and the holes slightly countersunk from the outside.*

The working pressure for corrugated furnaces, practically circular and machine made, provided the plane parts at the ends do not exceed 6 inches in length, and the plates are not less than $\frac{5}{6}$ inch thick, should not be greater than found by the following formula :—

$$\frac{9{,}000 \times \text{thickness in inches}}{\text{Mean diameter in inches}} = \left.\right\} \text{Working pressure per square inch.}$$

Steel Boilers.

22. For steel boilers the rules for iron boilers may be increased as follows :—

The constants for flat surfaces when they are supported by stays screwed into the plate and

* The following examples will serve to show the application of the constants for the different cases that may arise :—

Furnaces with butt joints and drilled rivet holes—

90,000 where the longitudinal seams are welded.
90,000 ,, ,, ,, double riveted and fitted with single butt straps.
80,000 ,, ,, ,, single ,, single ,,
90,000 ,, ,, ,, ,, double ,,

Furnaces with butt joints and punched rivet holes—

85,000 where the longitudinal seams are double riveted and fitted with single butt straps.
75,000 ,, ,, ,, single ,, single ,,
85,000 ,, ,, ,, ,, double ,,

Furnaces with lapped joints and drilled rivet holes—

80,000 where the longitudinal seams are double riveted and bevelled.
70,000 ,, ,, ,, ,, and not bevelled.
70,000 ,, ,, ,, single ,, and bevelled.
65,000 ,, ,, ,, ,, and not bevelled.

Furnaces with lapped joints and punched rivet holes—

75,000 where the longitudinal seams are double riveted and bevelled.
70,000 ,, ,, ,, ,, and not bevelled.
65,000 ,, ,, ,, single ,, and bevelled.
60,000 ,, ,, ,, ,, and not bevelled.

In the case of upright fireboxes of donkey or similar boilers, 10 per cent. should be deducted from the constants given above, applicable to the respective classes of work.

riveted, 10 per cent. The constants for flat surfaces when they are supported by stays screwed into the plate and nutted, or when the stays are nutted in the steam space, 25 per cent. This is also applicable to the constants for flat surfaces stiffened by riveted washers or doubling strips, and supported by nutted stays.

The constants for combustion box girders, 10 per cent.

Boilers—General.

23. Small boilers must be surveyed and be fitted the same way as the main boilers, and have a water and steam gauge, and all other fittings complete, and as regards safety valves, must comply with the same regulations as the main boilers.

24. No boilers or steam chamber is to be so constructed, fitted, or arranged so that the escape of steam from it through the safety-valve can be wholly, or partially, intercepted by the action of any other valve.

A stop valve must always be fitted between the boiler and the steam pipe, and, where two or more boilers are connected with a steam receiver or superheater, between each boiler and the superheater or steam receiver. The object of this is obvious, viz., to avoid the failure of all the boilers through the failure of one. The necks of stop valves should be as short as practicable.

25. Each boiler must be fitted with a glass water-gauge, at least two test cocks, and steam-gauge, that is to say, each boiler must be fitted with all fittings as complete as if there were only one boiler. When a factory has more than one boiler, and these boilers are fitted with stop-valves, each boiler must be treated as a separate one, and have all the requisite fittings.

26. On every inspection of a steam boiler the Inspector shall, if the boiler is large enough, go inside it, and make a thorough examination of it.

When the boilers are not large enough for the Inspector to get into, he should see them tested by hydraulic pressure at every annual inspection at least. The hydraulic test should also be applied at every inspection if the Inspector consider it necessary.

Whenever it is only removable stays that prevent getting in, he must order their removal, and he must see them properly replaced before granting his declaration.

If any part of a main boiler near the uptake fireboxes or furnaces is so constructed that the Inspector cannot examine it, he is not to give a declaration, but shall report the case to the Sanitary Engineer.

If for special reasons, and for special reasons only, the Inspector cannot go inside a small boiler, he must distinctly state on the face of his declaration his reasons for not being able to do so.

27. If the boiler is too hot for the Inspector to examine the inside efficiently, and with safety and convenience, he should decline to examine the boiler, and absolutely refuse to grant a certificate, until he can make an efficient internal examination.

28. Before testing a boiler the Inspector shall examine it, take the necessary measurements, and calculate what the working pressure should be in accordance with the regulations, and only test it with reference to that pressure in accordance with Rule 8. If the test is not satisfactory, the pressure must be proportionately reduced.

This course will enable any necessary alterations to be made by the owners and prevent delay or disappointment. The Inspector who grants the certificate should not increase the working pressure without first consulting the Sanitary Engineer.

The Inspector who grants the certificate must examine the boilers thoroughly, and in the absence of special instructions from the Sanitary Engineer, will be held responsible for the pressure allowed.

29. The Inspector shall see all new boilers, and boilers that have been cleaned for a thorough repair, tested by hydraulic pressure, in accordance with Rule 8 previous to the boilers being set, and before they are covered in, to test the workmanship, &c.; but the working pressure is to be determined by the strength of stays, thickness of plates, and strength of riveting, &c., and not by the hydraulic test.

The hydraulic test should in no case exceed twice the calculated working pressure of the boiler, and it is never to be applied until the boiler has been examined and until the strength has been calculated, from the necessary measurements taken from the boiler itself.

When the boilers are set the Inspector may, at any time he thinks it necessary, before he gives a certificate, have them tested by hydraulic pressure to satisfy himself as to any doubtful part, or of places not easy of access, care being taken in the case of old boilers not to overstrain them; but the test must always exceed the working pressure.

The hydraulic test should before a certificate is granted be applied to all boilers that have not previously had a working certificate.

When a boiler is partially inspected by one Inspector, and the inspection is completed and a certificate granted by another, if the Inspector who witnesses the test of the boiler by hydraulic pressure has an opportunity of examining it inside and outside after the test, such Inspector should determine the pressure to be allowed on the boiler in question, taking care to inform the makers, owners, or agents, and the Inspector who is ultimately to grant a certificate, what pressure should in his opinion be allowed on it. In the event of the original Inspectors having no opportunity to examine the boiler inside and out after the hydrostatic test, the Inspector must re-test the boiler by water and examine the boiler inside and out before determining the working pressure and granting a certificate.

The amount of the hydraulic pressure test, and the date on which it was last applied to the boiler, should be inserted in the Inspector's certificate, and recorded in the dimension sheet of that boiler.

Inspectors should pay particular attention to the examination and testing of steam pipes and economisers.

In all cases in which a socket expansion joint is fitted to a bent steam pipe, the Inspector should require a fixed gland and bolts to be fitted, in order to prevent the end of the pipe being forced out of the socket. This regulation should be complied with in all cases of bent pipes fitted with socket expansion joints. Fixed glands and bolts should be fitted to the expansion joints of straight steam pipes, as cases have occurred, particularly with small straight pipes, in which the ends of the pipes have been forced out of the sockets.

30. In all boilers in which the Inspector finds that cast iron is employed in such a manner as to be subject to the pressure of steam or water, he shall report the circumstances to the Sanitary Engineer, in order that he may obtain instructions how to act. Cast iron must not be used for stays, and the Inspector should discourage the use of cast iron saddles for boilers.

31. A pressure once allowed on a boiler is not, *under any circumstances whatever*, to be increased unless the Inspector has previously written for and obtained the sanction of the Sanitary Engineer.

In case the Inspector is of opinion that an increased pressure may with safety be allowed, he shall communicate with the Inspector who last inspected the boiler; and if on learning the reasons why the existing pressure was formerly allowed, the Inspector is still of opinion that it may be increased, he should communicate all the facts of the case to the Sanitary Engineer; but, as above stated, the pressure shall not in any case be increased until the question has been decided by him.

Safety-valves.

32. The Inspector is instructed that in all *new boilers*, and whenever *alterations can be easily made*, the safety-valve and stop valve should be placed directly on the boiler; and the neck, or part between the valve and the flange which is bolted on to the boiler, should be as short as possible.

The Inspector should note that it is not intended by this instruction that old boilers which have been previously passed with such an arrangement should be thrown out of work for the alterations to be carried out.

Of course in any case in which the Inspector is of opinion that it is positively dangerous to have a length of pipe between the boilers and the safety-valve, it is his duty at once to insist on the requisite alterations being made before granting a declaration.

The Inspector shall declare, amongst other things, the limits of the weight to be placed on the safety-valves, and that the safety-valves are such and in such condition as the circumstances of the case demand.

33. The area per square foot of fire grate surface of safety-valves, or (when there is more than one safety-valve on the boiler) the combined area of the safety-valves should be not less than that given in the following tables opposite the boiler pressure intended, provided the valves are not less than two inches in diameter. This applies to new boilers which have not received a working certificate.

In ascertaining the fire grate area, the length of the grate should be measured from the inner edge of the dead plate to the front of the bridge, and the width from side to side of the furnace on the top of the bars at the middle of their length.

If there is only one safety-valve on a *main* boiler the Inspector should not grant a certificate without first referring the case to the Sanitary Engineer for special instructions.

In the case of small boilers, if it is wished to fit valves smaller than two inches diameter, the case should be submitted for the consideration of the Sanitary Engineer.

Safety-Valve Areas.

Boiler Pressure.	Area of Valve per square foot of Fire grate.	Boiler Pressure.	Area of Valve per square foot of Fire grate.	Boiler Pressure.	Area of Valve per square foot of Fire grate.
LB.	SQ. INCH.	LB.	SQ. INCH.	LB.	SQ. INCH.
15	1·250	77	·407	139	·243
16	1·209	78	·403	140	·241
17	1·171	79	·398	141	·240
18	1·136	80	·394	142	·238
19	1·102	81	·390	143	·237
20	1·071	82	·386	144	·235
21	1·041	83	·382	145	·234
22	1·013	84	·378	146	·232
23	·986	85	·375	147	·231
24	·961	86	·371	148	·230
25	·937	87	·367	149	·228
26	·914	88	·364	150	·227
27	·892	89	·360	151	·225
28	.872	90	·357	152	·224
29	·852	91	·353	153	·223
30	·833	92	·350	154	·221
31	·815	93	·347	155	·220
32	·797	94	·344	156	·219
33	·781	95	·340	157	·218
34	·765	96	·337	158	·216
35	·750	97	·334	159	.215
36	·735	98	·331	160	·214
37	·721	99	·328	161	·213
38	·707	100	·326	162	·211
39	·694	101	·323	163	·210
40	·681	102	·320	164	·209
41	·669	103	·317	165	·208
42	·657	104	·315	166	·207
43	·646	105	·312	167	·206
44	·635	106	·309	168	·204
45	·625	107	·307	169	·203
46	·614	108	·304	170	·202
47	·604	109	·302	171	·201
48	·595	110	·300	172	·200
49	·585	111	·297	173	·199
50	·576	112	·295	174	·198
51	·568	113	·292	175	·197
52	·559	114	·290	176	·196
53	·551	115	·288	177	·195
54	·543	116	·286	178	·194
55	·535	117	·284	179	·193
56	·528	118	·281	180	·192
57	·520	119	·279	181	·191
58	·513	120	·277	182	·190
59	·506	121	·275	183	·189
60	·500	122	·273	184	·188
61	·493	123	·271	185	·187
62	·487	124	·269	186	·186
63	·480	125	·267	187	·185
64	·474	126	·265	188	·184
65	·468	127	·264	189	.183
66	·462	128	.262	190	·182
67	·457	129	·260	191	·181
68	·451	130	·258	192	·181
69	·446	131	·256	193	·180
70	·441	132	·255	194	·179
71	·436	133	·253	195	·178
72	·431	134	·251	196	·177
73	·426	135	·250	197	·176
74	·421	136	·248	198	·176
75	·416	137	·246	199	·175
76	·412	138	·245	200	·174

34. The Inspector in his examination of the boilers and appurtenances is particularly to direct his attention to the safety-valves, and whenever he considers it necessary, he is to satisfy himself as to the pressure on the boiler by actual trial.

The Inspector is to fix the limits of the weight to be placed on the safety-valves, and the responsibility of issuing a certificate before he is fully satisfied on the point is very grave. The Inspector is to examine the whole of the valves, weights, and springs at every inspection.

The responsibility of seeing to the efficiency of the mode by which the valves are fitted so as to be as much as practicable under the control of the Engineer when steam is up, rests with the Inspector.

The safety-valve should be fitted with lifting gear, which should in all cases be arranged so that it can be worked by hand.

Care should be taken that the safety-valves have a lift equal to at least one-fourth their diameter; that the openings for the passage of steam to and from the valves, including the waste steam pipe, should each have an area not less than the area of valves required, and that each valve-box has a drain pipe fitted at its lower part. In the case of lever valves, if the lever is not bushed with brass, the pins must be of brass; iron and iron working together must not be passed. Too much care cannot be devoted to seeing that there is proper lift, and free means of escape of waste steam, as it is obvious that unless the lift and means for escape of waste steam are ample, the effect is the same as reducing the area of the valve or putting on an extra load. The valve seats should be secured by studs and nuts.

The Inspector shall, as far as is in his power, make these points generally known to the owners of steam boilers.

35. When the Inspector has determined the amount of pressure, he is to see the valves weighted accordingly and the weights or springs fixed in such a manner as to preclude the possibility of their shifting or in any way increasing the pressure. The limits of the weight on the valves is to be inserted in the declaration, and should it at any time come to the Inspector's knowledge that the weights or the loading of the valves have been shifted, or otherwise altered, or that the valves have been in any way interfered with, so as to increase the pressure, without the sanction of the Sanitary Engineer, he is at once to report the facts.

Local & Municipal Dept.
PR CURRENT No. 484 M

Govt. of {1895} Madras.

JUDICIAL.

Issued

Recd. *Encl.*

G.O., 25th January 1895, No. 174.

JANUARY.

Steam-boilers Act, 1893.

Directing that the Madras — be brought into operation in the City of Madras with effect from the 1st April 1895, and passing certain other orders in connection with the same.

Cl/ps. order. 21-2-95 No 270 M.

Communicated to all municipal Councils and the municipal Commissioner of Madras.

2. The Sanitary Engineer & the Accountant General will be requested to report how the principles upon which the recoveries on account of the Boiler Inspector may be made from the municipal Councils concerned.

V.S. 1572/95. W 16-2-95 25/2/95

Would it be expedient for us to wait the G.I's proposals?

To all Chairmen of Mun. Councils / Collectors / The Superintendent Police Madras / The Sanitary Engineer / Accountant General / 11

Despd. 6/3/95

/with order/ 13/3/95

2?ST FEBRUARY 1895, No. 270 M., LOCAL AND MUNICIPAL.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper:—

G.O., dated 25th January 1895, No. 174, Judicial.

Read—again the following papers:—

G.O., dated 24th August 1893, Nos. 1712-1713A, Judicial.

ABSTRACT.—Drawing the attention of all District Magistrates to Act III of 1893, and requesting them to report whether it is advisable to extend it to their several districts and whether a notification under section 14 should also be issued, and directing that the Governments of Bengal and Bombay be asked to furnish copies of rules and orders made under the Acts of those Presidencies.

G.O., dated 12th March 1894, No. 610, Judicial.

ABSTRACT.—Calling for information as to the number of steam-boilers in use in certain districts and in the town of Madras, and directing, with reference to sections 9, 11 and 12 of the Madras steam-boilers and Prime-movers Act, that certain questions be considered in the Public Works Department.

Read—also the following papers:—

From the District Magistrate,	Tanjore,	dated	30th	March	1894, No.	351.
,, ,,	Coimbatore,	,,	10th	May	,, ,,	568.
,, ,,	Salem,	,,	18th	,,	,, ,,	815.
,, ,,	Bellary,	,,	19th	,,	,, ,,	83.
,, ,,	Tinnevelly,	,,	22nd	,,	,, ,,	556.
,, ,,	,,	,,	20th	June	,, ,,	666.
,, ,,	Kistna,	,,	24th	July	,, ,,	560.

ABSTRACT.—Reporting as to the numbers of steam-boilers in their districts.

From the Commissioner of Police, Madras, dated 25th April 1894, No. 51.

ABSTRACT.—Forwarding a list of steam-boilers in use in the Madras City.

From the Under Secretary to the Government of Bombay, dated 24th May 1894, No. 1942.

ABSTRACT.—Forwarding copy of the rules under the Bombay Boiler Inspection Act, 1891, as finally approved by Government.

From the Under Secretary to the Government of Bombay, dated 8th June 1894, No. 2134.

Abstract.—Inviting attention to his previous letter and stating that another set of rules under the same Act is under consideration.

From the Public Works Department, dated 18th July 1894, No. 614 D.

Abstract.—Forwarding, with remarks, a form of register of boilers referred to in section 9 of Act III of 1893.

Order—dated 25th January 1895, No. 174, Judicial.

After a careful consideration of the correspondence read above, the Government has decided that it is not necessary at present to extend any portion of the Madras Steam-boilers and Prime-movers Act, 1893, to the mufassal; it will, however, be brought into operation in the City of Madras with effect from the 1st April 1895.

2. With regard to the appointment of Inspectors under section 3 of the Act, the Government has come to the conclusion that there will not be enough work to occupy the full time of even one such officer and therefore considers that to the Boiler Inspector should also be entrusted the duty of the periodical inspection of the engines and boilers of the several mufassal municipal water-works. For the combined duties a salary of Rs. 250–10–300 *per mensem* (*plus* travelling allowance for journeys to inspect municipal engines and boilers) will probably suffice; and towards the expenditure on this account the municipalities benefited by the appointment will be required to contribute. On this point further orders will issue in the Local and Municipal Department. The Inspector will need a clerk on Rs. 15 and a peon on Rs. 8. Eight applications for the post of Boiler Inspector have been received. These will be transferred to the Chief Engineer who will advertize in the Gazette and in the leading newspapers stating the terms offered and will, in consultation with the Sanitary Engineer, nominate a person for appointment by Government at an early date. Inasmuch as the Inspector will have to work under the Sanitary Engineer so far as regards municipal engines and boilers, it seems to Government expedient that he should be subordinate to that officer in his position as Boiler Inspector also. The draft rules in Appendix II provide accordingly and it will be considered in the Public Works Department what reports and returns relating to the working of the Act should be submitted by the Sanitary Engineer to Government.

3. With reference to section 4 of the Act, the Government resolves to fix the 1st July 1895 as the date after which no boiler may be used unless it has been licensed.

4. Section 12 (4) of the Act provides for the summoning of assessors to assist the Chief Presidency Magistrate in the hearing of appeals, in such manner as the Government may direct. Probably the best plan will be to permit the appellant to nominate one assessor and the Inspector the other, subject to the reservation that, if either of the assessors or both of them appears or appear to the Chief Presidency Magistrate to be incompetent, he may nominate one or both himself.

The Chief Presidency Magistrate will be requested to advise on the subject.

5. The Government has resolved not at present to give the direction referred to in section 14 of the Act and so much of the Act as relates to the issue of certificates of competency will, therefore, remain in abeyance until further orders.

6. The notifications and orders which it is proposed to issue under the provisions of sections 3, 4, 9, 11, 12 and 23 of the Act are printed as Appendix II to this Proceedings and will be published in the *Fort St. George Gazette*. The Government will consider any suggestions which may be made in respect of them on or before the 1st April 1895 by any persons interested. In particular the Government desires to be favoured by the said date with the opinions of the Public Works Department, the Sanitary Engineer, the Hon'ble the Advocate-General, the Chief Presidency Magistrate, the Accountant-General, the Chamber of Commerce and the Madras Trades Association.

7. All future correspondence in connection with the working of Madras Act III of 1893 will be dealt with in the Public Works Department of the Secretariat.

(True Extract.)

[Signed) J. F. PRICE,
Chief Secretary.

To all District Magistrates.
„ the Commissioner of Police, Madras.
„ the Public Works Department, with applications.
„ the Local and Municipal Department.
„ the Sanitary Engineer.
„ the Chief Presidency Magistrate.
„ the Government Solicitor.
„ the Accountant-General.
„ the Chamber of Commerce.
„ the Madras Trades Association.

Gazette.
Editors' Table.

Order—dated 21st February 1895, No. 270 M., Local and Municipal.

Communicated to all Municipal Councils and to the Municipal Commissioners of Madras.

2. The Sanitary Engineer and the Accountant-General will be requested to report the principles upon which the recoveries on account of the Boiler Inspector may best be made from the Municipal Councils concerned.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To all Chairmen of Municipal Councils.
„ all Collectors.
„ the President, Municipal Commission, Madras.
„ the Sanitary Engineer.
„ the Accountant-General.

Exd. T. K. Narayana Aiyangar.

Govt. of {1895} Madras.

LOCAL AND MUNICIPAL.

Issued

Read. *Encl.*

G.O., 21st Feb. 1895, No. 270 M.

FEBRUARY.

Steam Boilers Act, 1893.

Communicating to all Municipal Councils and to the Municipal Commissioners of Madras, G.O., Judicial Department, directing that the Madras — be brought into operation in the city of Madras with effect from the 1st April 1895, and requesting the Sanitary Engineer and the Accountant-General to report the principles upon which the recoveries on account of the Boiler Inspector may best be made from the Municipal Councils concerned.

BACK PAPER, No. OF 18 .

READ AGAIN ORDER OF GOVERNMENT, DATED 18 , No.

FURTHER PAPER, No. Ceo 2089 OF 18
8331
15-5-95

ENCLOSURES.

CURRENT No. { Gr. No 174 Jud d/25-1-95 — A
without appendix

STATEMENT WITH DITTO.

ORDER, &c., OF GOVERNMENT— A.

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

Pass
Show proof please
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20/2/95

NUMBER OF COPIES REQUIRED. { Order complete. 270 / 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.

INDEXED.

PRESS.

LOCAL AND MUNICIPAL DEPARTMENT.
G.O., DATED 21. 2. 1895
No. 270 m
X

First copy sent to Press. 21/2/95

Returned for signature. 4/3/95

Despatched in print. 6/3/95

[Despatch Abstract.]

Steam-boilers Act, 1893

Communicating to all Munl: Councils and to the Munl: Commissioners of Madras, G.O. J.D. directing that the Madras _____ be brought into operation in the city of Madras with effect from the 1st. April 1895, and requesting the Sanitary Engineer and the Accountant-General to report the principles upon which the recoveries on account of the Boiler Inspector may best be made from the Munl: Councils Concerned.

First copy sent to Press.

Returned for signature.

Despatched in print.

NUMBER OF COPIES REQUIRED. { Order complete. / Letter only. / Order complete with Letter.

READ AGAIN G.O., No. 189 , DATED

CURRENT No.

ENCLOSURES TO C. No.

ORDER OF GOVERNMENT

LETTER OF GOVERNMENT.

STATEMENT WITH RITTO.

PAPERS NOT FILED UP BEING MEANT FOR DESPATCH IN ORIGINAL.

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