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Annual Report of Health  
Dept. Corporation of Madras  
1933

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# Annual Report

of the

Health Department  
Corporation of Madras

## For the Year 1933

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MADRAS :  
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பித்திரம்  
வதங்காக எடுத்தக்  
கொள்ளப்பட்ட  
மாதம் திசம்பர் வருடம் 1991  
பிப்பனீரு முடித்த  
மாதம் திசம்பர் வருடம் 1991  
ஆராய்ச்சி உதவியாளரின்  
கையொப்பம்.  
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## INTRODUCTION.

COMMISSIONER,

Sir,

I submit herewith the annual report relating to the health of the City of Madras during the year 1933.

I desire to acknowledge figures and information for inclusion in the report from the Lady Superintendent, Child Welfare Scheme, Public Analyst to the Corporation of Madras, Water Analyst, School Medical Inspectors, Veterinary Officer and Medical Officers in charge of Malaria and Infectious Diseases Hospitals. I am grateful to the Heads of several voluntary hospitals and dispensaries and other charitable institutions who have sent information for inclusion in the report.

A perusal of the information scattered throughout the following pages embodying the activities of the several branches of the Public Health Administration in the City affords a good indication of the development and co-operation that exists amongst them.

A review of the health of Madras during any particular period should contain a discussion of the population, birth-rate and death-rate as they form a true index of the extent of public health and other activities.

*Population.*—The estimated mid-year population for 1933 was 6,78,500 as compared with 6,64,900 for 1932 giving an increase of 13,600. The several rates of vital statistics have been prepared for the purpose of comparison on the basis of the estimated population.

*Births.*—The total number of births, 28,533 shows an excess of 537 as compared with the births in 1932. The birth-rate was 42.1, the same as that of the previous year. The Mussalman community records the highest birth-rate.

*Deaths.*—The total number of deaths 24,500 shows an increase of 2,210 as compared with the deaths in 1932. Death rate for the year was 36.1 as compared with 33.5 in 1932 giving an increase of 2.6 per mille as against an increase of 1.7 per mille for the Presidency. In spite of the increase in the number of deaths during the year under report over that of the previous year, a "natural increase" of 4,033 *i. e.*, excess of births over deaths, is recorded.

*Divisional deaths.*—Highest mortality (48.2) was recorded in Mirsahibpet division while the lowest was recorded in Esplanade Division. 12 areas viz., Tondiarpet, Washermanpet, Korukupet, Harbour, Ammenkoil, Seven Wells, Peddunaikenpet, Choolai, Chintadripet, Tiruvateeswaranpet, Amir Mahal and Mirsahibpet returned rates above the annual death-rate for the whole city. These divisions are inhabited by poorer labouring classes without satisfactory housing accommodation. A very large percentage of houses are of the back to back pattern without free ventilation. The worst forms of over-crowding can be seen in as many as 40 per cent of the houses in these areas. A substantial reduction in mortality cannot be expected without relieving congestion.

*Infantile Mortality.*—7,540 infants died under one year of age giving an infantile mortality rate of 264.3 as against 236.5 in 1932. Infantile mortality is always high in a community with a very high birth-rate. The problem is complicated by two factors in Madras viz., the utter poverty and the consequent low standard of living of a very large section of the population and the extremely unsatisfactory housing conditions of the poor classes. No where is the evil effect of an insanitary dwelling more keenly felt than in the case of a newly born baby. A reference had been made in my last report about the high infantile mortality in Madras in spite of the good work done by the Corporation Child Welfare Scheme. A large proportion of the infants die of respiratory and intestinal disorders. It is probable that the high infantile mortality is partly due to bad feeding. There is therefore a great need to improve the milk supply in the city. The Scheme drawn up two years ago to open a Corporation dairy farm could not be brought into a reality owing to financial stringency. The fundamental point to grasp is that far more children are born in the city year after year than can be warranted by the economic condition of the majority of parents. The result is an appalling wastage

of infant life which accounts for more than a quarter of the total number of deaths in the city. I should like to commend this aspect of the prevention of infant wastage to the various social and allied services. It is doubtful in the present state of things whether the masses are in a position to understand and practise some of the methods advocated for contraception.

**Infectious diseases.**—The year under report saw one of the worst epidemics of small-pox, Madras has witnessed since 1922 accounting for 0.9 per mille of the increase in the death rate. The disease was prevailing in an epidemic form in almost all the large cities of India and in several parts of the Presidency. 90 per cent of the total cases were segregated at the Isolation Hospitals and a vigorous vaccination campaign was conducted. 1,99,452 vaccinations were done of which 30,850 were primary vaccinations. This is the highest figure on record in the city. The fact that a very large percentage of the cases occurred amongst persons above 7 years of age shows that small-pox has become more a disease of the adults. The immunity conferred by vaccination in infancy appears to wear off within a period of 5 to 7 years. Unless the community as a whole takes to regular re-vaccinations once in 7 years, the incidence of the disease cannot be controlled. A change in the vaccination bylaws making re-vaccination compulsory, once in seven years, and reducing the minimum age for primary vaccination, has been proposed. The operation of the revised bylaws, when they come into force, is bound to reduce the incidence of small-pox. Mortality from Malaria and Typhoid shows a further decline as compared with that of last year. While the incidence of small-pox was declining during the last quarter there was a sudden outbreak of cholera in Peddunaikenpet and the neighbouring parts a few days before the date fixed for the visit of His Excellency the Viceroy to the City giving considerable anxiety to every one concerned. Effective measures were promptly taken to put down the epidemic with the least possible delay. House to house inoculation in infected areas was speedily arranged and all cases were sent to the Isolation Hospitals for segregation and treatment. A ruthless campaign against street vendors of articles of food was conducted and immense quantity of noxious food was destroyed every day. It is very gratifying to note that what threatened to be a very serious outbreak of cholera was nipped in the bud before His Excellency's visit.

**School Medical Service.**—The work of this section shows increased activity. 2,531 under-nourished children improved after treatment. 1012 cases of chronic stomatitis were treated successfully. 133 pupils underwent operation for the removal of enlarged tonsils while in 2,004 pupils relief was obtained by medical treatment. A scientific survey of all school children for the detection of leprosy in its early stages was organised and conducted with the co-operation of the Skin Department, Government General Hospital. 324 children were declared positive for Hansen infection. 274 children underwent treatment of which 54 showed slight improvement. These figures show that leprosy has become a very serious problem in the Corporation Schools and the present methods of control are not giving very encouraging results. The poverty of the parents is such that they cannot afford the expense of taking their children to the clinics regularly. In many cases they could not spare the time. It will be an excellent arrangement if two schools are opened exclusively for these unfortunate children, one in the Northern and the other in the Southern portion of the City with free boarding and lodging and with facilities for recreation and exercise. The patients will then be under thorough control, their nutrition can be maintained at a very high level and the treatment can be effected without hindrance or delay. The scheme may be expensive but its urgency cannot be questioned.

**Food Inspection.**—A Food Analysis Laboratory was established towards the end of May in Kilpauk. The work noted in the report of the Public Analyst relates to a period of 8 months only. The rules relating to labels came into force during the year under report. It should be noticed that in spite of the operation of the Food Adulteration Act for over 3 years, the sale of adulterated ghee still continues in the City without abatement. Further, many vendors now put absurdly low percentage of ghee on the labels to escape prosecution and explain to the customers that the label is there only to protect them, and the articles are in reality superior. The statement may be true to some extent. Nevertheless the object of the Food Adulteration Act is frustrated. The Act should be amend-

ed introducing a provision to check this sort of fraud by preventing the sale of adulterated ghee containing less than a prescribed minimum of ghee.

**Sanitary Improvements.**—The scheme of compulsory introduction of water carriage system for the removal of night soil from dwelling houses continued to be in force during the year. 1976 flush-out latrines were installed. 3576 dwelling houses were rendered fit for human habitation as a result of the action taken by the House Inspection staff. 2 new public markets were opened during the year under report, one at Esplanade for the sale of fruits and the other at Mambalam. 71 additional stalls were put up at the Moore Market. All the private markets in the City received the vigilant attention of the staff. The scheme for the reclamation of lowlands continued and 5 ponds, 4 pits and 22 low-lying areas were filled up. The water supplied was free from sulphureted hydrogen for the first time during the last many years.

Despite the work done by the Corporation it has to be admitted that there is a good deal of insanitation in the City owing to the apathy and lack of co-operation on the part of the masses. Added to this, the fines imposed in Municipal cases are generally too low to have any deterrent effect. For instance, the dirty cattle yards not only disfigure the city but are a source of positive nuisance and danger to public health. The owners prefer to pay a small fine twice or three times a year instead of spending Rs. 200 or 300 required for making these places sanitary. The same is the case with the committal of street nuisance. The money spent on special constables will not yield permanent results unless the fines are made deterrent.

**Conservancy.**—The scheme for the introduction of more public flush-out latrines continued to be in progress. 28 new public flush-out latrines were installed and 7 latrines were converted into flush-out latrines. The work of this section continued to be satisfactory throughout the year.

**Housing.**—It was noted in the report of 1932 that the population of Madras had increased by 22.8 per cent during the last decennium without a corresponding increase in the number of sanitary houses. During the last two years the population has further increased as already noted. A comparison of the mortality rates shows that deaths from tuberculosis rose from 0.9 per mille in 1913 to 1.6 in 1933 while that under respiratory diseases rose from 4.2 in 1913 to 9.2 in 1933. The striking increase in the above death rates points to the fact that congestion and overcrowding have increased rapidly. Further more, Madras is rendered insanitary owing to the existence of so many slums and cherries which are usually the hot beds of infectious diseases. No doubt a large number of houses have come into existence during the last few years, but they are quite inadequate especially for the needs of the working classes. A comprehensive programme for slum clearance and eradication of overcrowding in dwelling houses is a paramount need.

In conclusion, I desire to record my appreciation of the work done by the Corporation Health Services. The amount of work noted here could never have been possible, but for the high sense of duty of the clerical and outdoor staff of the department.

Madras,  
Dated 21-8-34. }

C. S. GOVINDA PILLAI,  
M. B. Ch. B., L. R. C. P. & S., D. P. H. (Edin.)

Health Officer.

Forwarded to the Council.

J. HUSSAIN,

21-8-34.

Commissioner.

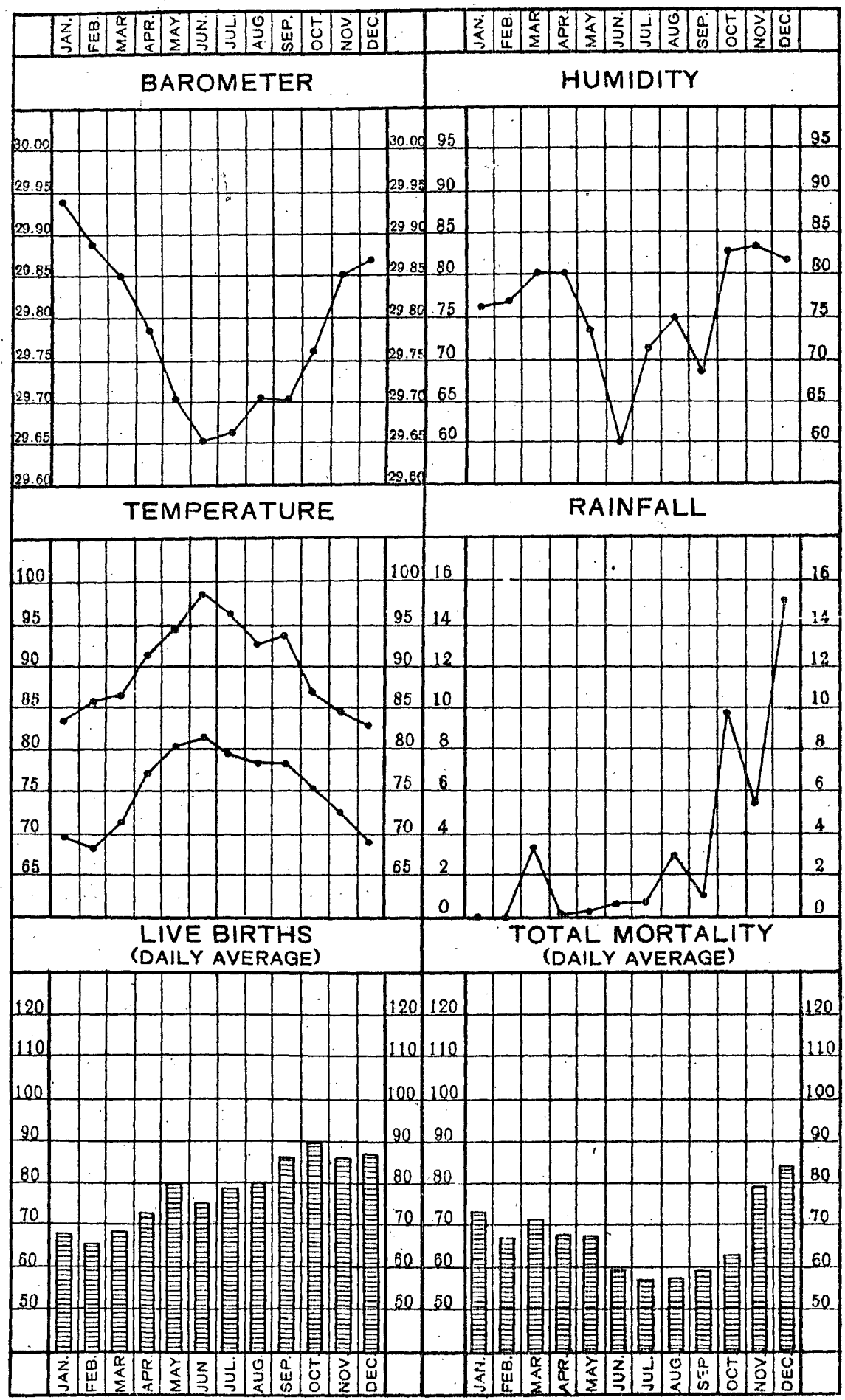
Summary of Vital Statistics for 1933.

|                                         |     |                                                           |
|-----------------------------------------|-----|-----------------------------------------------------------|
| Area                                    | ... | 19,728 acres.                                             |
| Estimated population (Middle of 1933)   | ... | 6,78,500                                                  |
| Census Population (1931)                | ... | 6,47,230                                                  |
| Average density per acre                | ... | 34.4                                                      |
| Inhabited houses (Census 1931)          | ... | 73,845                                                    |
| Births                                  | ... | 28,533 Birth rate ... 42.1 per 1000 estimated population. |
| Deaths                                  | ... | 24,500 Death rate ... 36.1 do.                            |
| Natural increase                        | ... | 4,033 Rate of increase ... 6.0 do.                        |
| Deaths of infants under one year of age | ... | 7,540 Infantile death rate... 264.3 per 1000 births..     |
| Deaths from child birth                 | ... | 331 Maternal death rate. 11.6 do.                         |

Deaths from Principal Diseases.

|                         | No. | Rate per 1000 estimated Population. |
|-------------------------|-----|-------------------------------------|
| Cholera                 | ... | 62 0.09                             |
| Diarrhoea and Dysentery | ... | 2670 3.9                            |
| Small-pox               | ... | 837 1.2                             |
| Measles                 | ... | 44 0.06                             |
| Malaria                 | ... | 140 0.2                             |
| Enteric Fever           | ... | 90 0.1                              |
| Phthisis                | ... | 855 1.3                             |
| Respiratory diseases    | ... | 5967 8.8                            |

DIAGRAM  
DAILY MEAN BIRTHS DEATHS AND CLIMATIC  
CONDITIONS IN MADRAS  
IN 1933.



## Vital Statistics.

*Area and Population.*—The area of the City is 19,728 acres. The estimated population in the middle of 1933 was 6,78,500. The general birth and death rates in this report are based on the estimated population. The statistical statements appended to this report have been worked out as usual on the census population of 1931. The average density based on the estimated population is 34.4 per acre.

*Meteorology.*—The atmospheric conditions recorded during 1933 are given in the statement in the Annual Form A. There were 40.18 inches of rain during the year as against 46.59 inches in 1932. It is the lowest on record for the past 5 years. The highest rainfall was in the month of December (15.0 inches) and the lowest in April (0.03 inches). January and February had no rainfall. The last quarter recorded the highest rainfall of 30.58 inches. There was rainfall on 90 days in the year.

*Births and Birth rates.*—The number of births registered during the year was 28,533 which was 537 in excess of the number for 1932 and 3283 in excess of the average for the quinquennium 1928–32.

The birth rate calculated on the estimated population was 42.1 per mille, the same as for 1932. Of the births registered, 14,627 were males and 13,906 females, the proportion of males to females being 105 to 100. In 27 divisions male births were in excess of female births.

*Illegitimate births.*—The number of illegitimate births registered was 368 or 1.2 per cent of the total births in 1933 as compared with 432 or 1.6 per cent in 1932.

*Births in different quarters of the year.*—A comparative statement of births registered in each quarter of 1932, 1933, and quarterly average during the quinquennium 1928–32 is furnished below.

| Year.       | 1st quarter. | 2nd quarter. | 3rd quarter. | 4th quarter. |
|-------------|--------------|--------------|--------------|--------------|
| 1928–32 ... | 5455         | 6178         | 6698         | 6919         |
| 1932 ...    | 5503         | 7138         | 7624         | 7731         |
| 1933 ...    | 6067         | 6896         | 7510         | 8060         |

*Birth rates in Divisions.*—Egmore recorded the highest birth rate of 55 per mille. The Government Hospital for Women and Children in this division accounts for this high rate. The Kothawal Bazaar division which is a business centre registered the lowest rate of 26.7 per mille. (Annual Form No. 1)

*Birth rates in Communities.*—The birth rates for the year for the principal communities are furnished below.

| Communities.          | Rate per 1000 estimated population in each community. |
|-----------------------|-------------------------------------------------------|
| Europeans ...         | 7.2                                                   |
| Anglo-Indians ...     | 35.3                                                  |
| Indian Christians ... | 35.1                                                  |
| Hindus ...            | 43.0                                                  |
| Muhammadans ...       | 43.2                                                  |
| All Communities       | 42.1                                                  |

The highest rate was recorded by the Muhammadan community and the lowest by the Europeans.

**Still Births.**—The number of still births during the year was 1380 as against 1326 in 1932. It represented 48.4 per 1000 live births as compared with 47.3 in 1932.

**Deaths and Death rates.**—24,500 deaths occurred during the year as against 22,290 in 1932 and 23,483 the average number for the quinquennium 1928–32. Of these, 23,057 deaths were among the residents of the City and 1443 among non-residents.

Calculated on the estimated population, the annual death rate was 36.1 per mille as compared with 33.5 per mille in 1932. Excluding the cases of non residents referred to above, the death rate for the year was 34.0 per mille.

In spite of the increase in the number of deaths during the year under report over that of the previous year, an excess of 4033 births over deaths i.e. natural increase was recorded. The rate of natural increase was 6.0 per mille of estimated population against 8.6 in 1932.

24 municipal divisions recorded natural increase during the year. The rate was the largest for Egmore division (21.6 per mille), and the lowest for Peddunaickenpet division (2.7 per mille). The birth and death rates for one division viz., Seven Wells were equal.

Of the total deaths registered, 12,713 were among males and 11,787 among females, the ratio being 108 to 100. The increase in male deaths over female deaths occurred in 23 divisions.

**Deaths in different quarters of the year.**—The following statement furnishes the number of deaths registered in the different quarters of 1932, 1933 and the average during the quinquennium 1928–32.

| Year.   | 1st quarter. | 2nd quarter. | 3rd quarter. | 4th quarter. |
|---------|--------------|--------------|--------------|--------------|
| 1928–32 | 5978         | 5473         | 5625         | 6408         |
| 1932    | 5574         | 5145         | 5047         | 6524         |
| 1933    | 6387         | 5868         | 5313         | 6932         |

**Death rates in divisions.**—Annual Form II gives in detail the death rates in all the municipal divisions. Mirsaibpet claimed the highest rate of 48.2 per mille. The lowest rate was returned by the Esplanade division (20.0 per mille). Twelve divisions, viz., Tondiarpet, Washermanpet, Korukkupet, Harbour, Ammenkoil, Seven Wells, Peddunaickenpet, Choolai, Chintadripet, Tiruvatteeswaranpet, Amir Mahal, and Mirsaibpet returned rates above the annual death rate for the whole city. These divisions contain a large proportion of poorer classes among whom the death rate is generally high.

**Death rates in communities.**—The death rates among the different communities during the year are furnished below.

| Communities.      | Rate per 1000 estimated population in each community. |
|-------------------|-------------------------------------------------------|
| Europeans         | 10.7                                                  |
| Anglo-Indians     | 20.8                                                  |
| Indian Christians | 25.5                                                  |
| Hindus            | 36.9                                                  |
| Muhammadans       | 41.5                                                  |
| Others            | 0.3                                                   |
| All communities   | 36.1                                                  |

**Mortality by age.**—The following table shows the number of deaths and percentage to the total deaths in each age group in different quarters of the year:

| Age Periods.  | Quarter ending |       |            |           | Year 1933. | Percentage to total deaths. |
|---------------|----------------|-------|------------|-----------|------------|-----------------------------|
|               | March.         | June. | September. | December. |            |                             |
| Under 1 Year. | 1903           | 1707  | 1672       | 2258      | 7540       | 30.8                        |
| 1 to 5 Years. | 1106           | 1033  | 861        | 1154      | 4154       | 17.0                        |
| 5 to 10 "     | 308            | 229   | 177        | 214       | 928        | 3.8                         |
| 10 to 15 "    | 120            | 104   | 103        | 102       | 429        | 1.8                         |
| 15 to 20 "    | 205            | 201   | 167        | 175       | 748        | 3.1                         |
| 20 to 30 "    | 534            | 532   | 422        | 487       | 1975       | 8.2                         |
| 30 to 40 "    | 461            | 481   | 387        | 504       | 1833       | 7.5                         |
| 40 to 50 "    | 378            | 383   | 351        | 440       | 1552       | 6.3                         |
| 50 to 60 "    | 374            | 383   | 335        | 460       | 1552       | 6.3                         |
| 60 and above. | 998            | 815   | 838        | 1138      | 3789       | 15.2                        |
| Total ..      | 6387           | 5868  | 5313       | 6932      | 24,500     | 100.0                       |

It will be observed from the above table that the percentage of deaths of infants under one year of age is the highest (30.8) followed by the age groups of 1–5 (17.0) and 60 years and above (15.2).

**Mortality rates by age and sex.**—A comparative statement of death rates for the year in the different age periods and according to sex is furnished below.

| Age periods.        | Death-rate in 1933 per 1000 estimated population in each age group. |         |             |
|---------------------|---------------------------------------------------------------------|---------|-------------|
|                     | Male.                                                               | Female. | Both Sexes. |
| Under 1 Year.       | 277.6*                                                              | 250.3*  | 264.3*      |
| 1 to 5 Years.       | 59.8                                                                | 63.4    | 61.7        |
| 5 to 10 "           | 13.4                                                                | 12.0    | 12.7        |
| 10 to 15 "          | 5.8                                                                 | 6.5     | 6.1         |
| 15 to 20 "          | 8.6                                                                 | 12.1    | 10.3        |
| 20 to 30 "          | 11.7                                                                | 15.1    | 13.4        |
| 30 to 40 "          | 15.6                                                                | 17.6    | 16.5        |
| 40 to 50 "          | 23.5                                                                | 22.1    | 22.9        |
| 50 to 60 "          | 45.2                                                                | 41.4    | 43.5        |
| 60 and above.       | 166.6                                                               | 198.3   | 180.8       |
| All age periods ... | 35.5                                                                | 36.8    | 36.1        |

\*Calculated on 1000 births registered during the year.

**Infant mortality.**—During the year under report, there were 7540 deaths among infants under one year of age. Of these, 6214 deaths occurred among infants who were born in the city, and 1326 deaths among infants born in the mofussil.

The infantile mortality rate per 1000 live births registered during the year was 264.3 as against 236.5 in 1932. Excluding 1326 deaths of infants born in the mofussil the infantile mortality rate was 217.8.

*Age and cause of death.*—The following statement furnishes the principal causes of infantile deaths under different age periods :—

| Age Periods.                     | Small-pox. | Measles. | Malaria. | Other fevers. | Dysentery and Diarrhoea. | Premature Birth. | Debility. | Convulsion. | Respiratory Diseases. | Other causes. | Total. | Percentage of deaths to total deaths. |
|----------------------------------|------------|----------|----------|---------------|--------------------------|------------------|-----------|-------------|-----------------------|---------------|--------|---------------------------------------|
| Under 7 days ...                 | ...        | ...      | 1        | 24            | 16                       | 1172             | 7         | 77          | 53                    | 187           | 1537   | 20.4                                  |
| 7 days and under 1 month ...     | 7          | ...      | ...      | 49            | 50                       | 570              | 13        | 81          | 96                    | 165           | 1031   | 13.7                                  |
| 1 month and under 4 months ...   | 19         | 4        | 2        | 69            | 117                      | 179              | 22        | 142         | 390                   | 365           | 1309   | 17.4                                  |
| 4 months and under 7 months ...  | 42         | 4        | ...      | 110           | 249                      | 29               | 9         | 90          | 711                   | 151           | 1595   | 18.5                                  |
| 7 months and under 10 months ... | 52         | 4        | 2        | 165           | 242                      | 6                | 2         | 73          | 783                   | 312           | 1641   | 21.7                                  |
| 10 months and under 1 year ...   | 23         | ...      | 1        | 64            | 108                      | 2                | 3         | 26          | 329                   | 70            | 627    | 8.3                                   |
| Total ...                        | 143        | 12       | 6        | 481           | 782                      | 1959             | 56        | 489         | 2362                  | 1250          | 7540   | 100.0                                 |

3,877 deaths or 51.5 per cent of the total deaths among infants took place within the first four months of their life. Of these, 2568 deaths or 34.1 per cent occurred during the first month.

The Child Welfare work done by the Corporation of Madras is given in a separate report of the Superintendent, Child Welfare Scheme.

*Infant deaths by months.*—The number of infant deaths in the several months of the year is compared below with the total monthly deaths.

|                                                 | No. of deaths in |           |        |        |      |       |       |         |            |          |           |           | Total. |
|-------------------------------------------------|------------------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
|                                                 | January.         | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |        |
| Under 1 year ...                                | 688              | 564       | 651    | 625    | 584  | 498   | 549   | 549     | 574        | 615      | 818       | 825       | 7540   |
| Total of all ages.                              | 2272             | 1917      | 2198   | 2039   | 2069 | 1760  | 1780  | 1775    | 1758       | 1949     | 2376      | 2607      | 24,500 |
| Percentage of infant deaths to total deaths ... | 30.3             | 29.4      | 29.6   | 30.7   | 28.2 | 28.3  | 30.8  | 30.9    | 32.7       | 31.6     | 34.4      | 31.6      | 30.8   |

*Infant mortality rates in divisions.*—The highest rate was recorded by the Mirsaibpet division (343.2) which also returned the highest general death rate during the year under report. The lowest rate was returned by the Kilpauk division (185.5).

*Infantile mortality rates in communities.*—The infantile mortality rates in different communities are given below :—

| Community.        | Rate per 1000 births in each community. |
|-------------------|-----------------------------------------|
| Europeans         | 74.1                                    |
| Anglo-Indians     | 120.2                                   |
| Indian Christians | 151.0                                   |
| Hindus            | 273.8                                   |
| Muhammadans       | 265.9                                   |
| All Communities   | 264.3                                   |

The births, infant deaths and death rates in the principal sub-castes of the Hindu Community for 1933 are furnished below :—

| Caste.                         | Births in each caste. | Infant deaths in each caste. | Rate per 1000 births in each caste. |
|--------------------------------|-----------------------|------------------------------|-------------------------------------|
| Brahmin                        | 1726                  | 399                          | 224.8                               |
| Chetty                         | 1655                  | 459                          | 224.8                               |
| Vellala or Mudaliar            | 4273                  | 1052                         | 246.2                               |
| Baliya or Naidu                | 1973                  | 597                          | 302.6                               |
| Vannia or Naicker              | 3464                  | 1019                         | 294.2                               |
| Adi Dravida                    | 2966                  | 855                          | 288.3                               |
| Patnavar                       | 446                   | 169                          | 378.9                               |
| Yadavas or Edayar              | 800                   | 204                          | 256.3                               |
| Visvakarma Brahmin or Eammalar | 709                   | 177                          | 249.6                               |
| Others                         | 5407                  | 1481                         | 273.9                               |
| All Hindus                     | 23419                 | 6412                         | 273.8                               |

Patnavar community recorded the highest infantile death rate. Of the 169 deaths which occurred in that community, 100 were in Royapuram division in which the majority of these people reside. The infantile death rate for this community in Royapuram division was 429.2 per 1000 births. 60 per cent of these infants died within the first four months of life, of whom 33 per cent died within the 1st week. Premature births and respiratory diseases accounted for 31 per cent and 27 per cent respectively of these deaths.

*Principal causes of deaths.*—A comparative table of the principal causes of deaths in 1932, 1933 and the average for the quinquennial period of 1928–32 is set forth below :—

| Cause of death.              | Deaths in |        | Average of years 1928–32. |
|------------------------------|-----------|--------|---------------------------|
|                              | 1932.     | 1933.  |                           |
| Cholera                      | 5         | 62     | 185                       |
| Dysentery and diarrhoea      | 2644      | 2670   | 3101                      |
| Plague                       | 1         | ...    | 0.2                       |
| Small-pox                    | 176       | 837    | 229                       |
| Measles                      | 16        | 44     | 32                        |
| Malaria                      | 165       | 140    | 601                       |
| Enteric fever                | 101       | 90     | 140                       |
| Other fevers                 | 1646      | 2095   | 1728                      |
| General respiratory diseases | 5509      | 5967   | 5742                      |
| Tuberculosis                 | 917       | 1011   | 1239                      |
| Deaths from child-birth      | 279       | 331    | 315                       |
| All other causes             | 10831     | 11253  | 10171                     |
| Total                        | 22,290    | 24,500 | 23,483                    |

Deaths under various causes during the year show increase over the figures of 1932 except under enteric fever and malaria. Small-pox was prevalent throughout the year and there was cholera during the last quarter of the year. Compared with the averages of the quinquennium 1928–32 shown in the above table, reduction is observed under bowel diseases including cholera, enteric fever, diarrhoea and dysentery, and also under tuberculosis and malaria.

*Cholera.*—133 attacks and 62 deaths from cholera occurred during the year as against 9 attacks and 5 deaths in 1932. The annual death rate was 0.09 per mille of estimated population against 0.01 per mille in 1932.

The statistics of deaths from cholera for the past 10 years are given below :

| Year. | Deaths. | Year. | Deaths. |
|-------|---------|-------|---------|
| 1924  | 97      | 1929  | 16      |
| 1925  | 203     | 1930  | 43      |
| 1926  | 98      | 1931  | 153     |
| 1927  | 512     | 1932  | 5       |
| 1928  | 708     | 1933  | 62      |

The outbreak during the year under report was sudden and occurred during the last quarter, the previous three quarters having been entirely free from the disease. There were 5 attacks and 2 deaths in October, 45 attacks and 18 deaths in November, and 83 attacks and 42 deaths in December. Of these, three cases were imported.

19 municipal divisions were affected with cholera and the remaining 11 divisions were free. The highest number of attacks was in Peddunaikenpet division (24).

Effective preventive measures were adopted to check the prevalence of the disease. 23,730 inoculations were performed and 1,849 immediate contacts were administered with cholera bacteriophage. 1,795 wells in affected areas were chlorinated. The City water supply was under careful watch and was found to be absolutely free from infection. An elaborate campaign was conducted against articles of food exposed for sale on road sides and unauthorised places. Rotten fish brought into the City from neighbouring places were seized at the railway stations with the co-operation of the Railway Authorities and destroyed. Extra special staff for the preventive campaign and for the special cleaning of the infected areas was employed and the disease was speedily brought under control.

Of the 133 cases of cholera that occurred during the year, 130 cases were treated in the two Isolation Hospitals maintained by the Corporation. The prompt removal of these cases to the hospitals minimised the chances for the spread of infection. The hospital staff was suitably augmented to meet the emergency. The number of cholera cases treated in each hospital and the result of treatment is given in the reports of the infectious diseases hospitals.

*Diarrhoea and Dysentery.*—Dysentery and diarrhoea accounted for 2,670 deaths with a death rate of 3.9 per mille of the estimated population as against 4.0 per mille in 1932.

The mortality from diarrhoea and dysentery from 1924 to 1933 is shown below :—

| Year. | Deaths. | Year. | Deaths. |
|-------|---------|-------|---------|
| 1924  | 3700    | 1929  | 3127    |
| 1925  | 4031    | 1930  | 3056    |
| 1926  | 3867    | 1931  | 2746    |
| 1927  | 3263    | 1932  | 2644    |
| 1928  | 3931    | 1933  | 2670    |

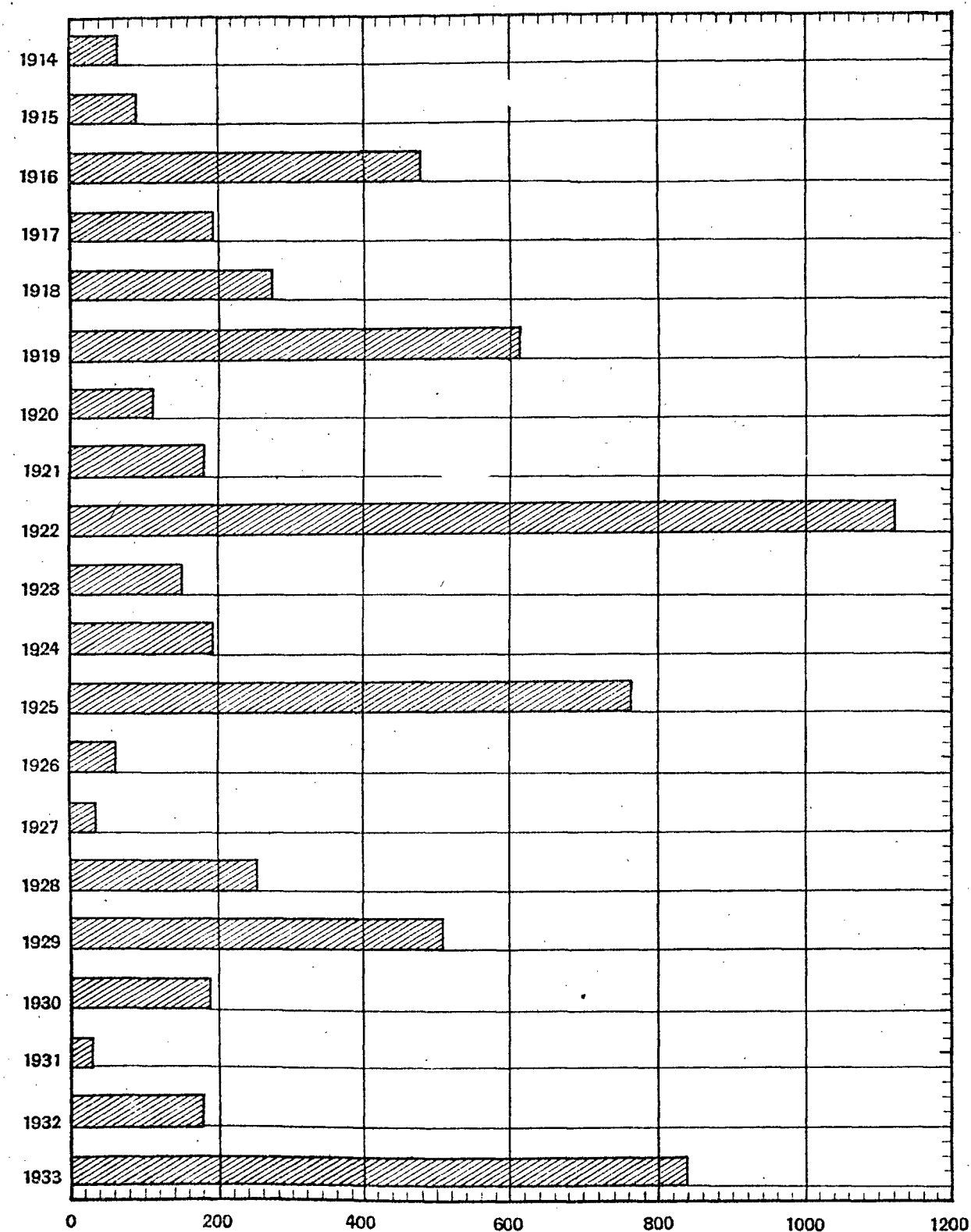
The occurrence of deaths in the different quarters of the year is as follows :—

| Quarters.   | Deaths.    |
|-------------|------------|
| 1st quarter | 752        |
| 2nd quarter | 711        |
| 3rd quarter | 619        |
| 4th quarter | 588        |
|             | <hr/> 2670 |

The Annual Form No. XIII furnishes the number of deaths and death rates in the various municipal divisions under diarrhoea and dysentery. The death rate was the highest in Mirsahibpet (7.0 per mille) and Choolai came next (6.0 per mille). The lowest rate was returned by the Sowcarpet division (1.8 per mille).

*Small-pox.*—The infection that was present in the last quarter of the previous year continued throughout the year under report and caused much anxiety. The disease was raging virulently in almost all parts of India and

## DEATHS FROM SMALL-POX 1914-33.



particularly in the several districts of the Madras Presidency and the City had its own share.

During the year, 3,503 attacks and 837 deaths occurred, as against 842 attacks and 176 deaths in 1932, the fatality rate being 23.9 per cent and 20.9 per cent in 1933 and 1932 respectively.

The annual death rate in 1933 increased to 1.2 per mille of estimated population from 0.3 per mille in 1932, thus accounting for an increase of 0.9 per mille in the general death rate for the year.

The incidence from small pox for the past 20 years is furnished below for reference.

| Year. | Attacks. | Deaths. |
|-------|----------|---------|
| 1914  | 146      | 66      |
| 1915  | 314      | 92      |
| 1916  | 1489     | 476     |
| 1917  | 582      | 195     |
| 1918  | 677      | 272     |
| 1919  | 1227     | 611     |
| 1920  | 315      | 109     |
| 1921  | 569      | 180     |
| 1922  | 2727     | 1121    |
| 1923  | 481      | 151     |
| 1924  | 665      | 197     |
| 1925  | 1807     | 763     |
| 1926  | 300      | 60      |
| 1927  | 385      | 32      |
| 1928  | 1066     | 251     |
| 1929  | 2019     | 506     |
| 1930  | 877      | 188     |
| 1931  | 109      | 24      |
| 1932  | 842      | 176     |
| 1933  | 3503     | 837     |

A reference to the above figures reveals that the year saw one of the severest epidemics of small-pox for the past 20 years, which nearly resembled the epidemic of 1922 when there were 2727 attacks and 1121 deaths.

No division was free from the infection. Mirsahibpet returned the highest number of 372 attacks and 100 deaths. Sowcarpet and Esplanade divisions recorded the lowest incidence with 35 and 34 attacks, and 6 and 7 deaths respectively.

With reference to the population, the highest death rate was recorded by the Mirsahibpet division (3.7 per mille) which was followed by Mylapore (2.9 per mille) and Katchaleswaranpet (2.6 per mille). The rates in other divisions were below 1.8 per mille, the lowest of 0.4 per mille having been returned by the Kilpauk division. (Annual Form No. VII.)

Information regarding the vaccinal condition of patients and its relation to the mortality will be found in the reports of the Medical Officers of Infectious Diseases Hospitals, Tondiarpet and Krishnampet.

Additional staff was employed for epidemic and vaccination work and effective preventive measures were carried out. A vigorous vaccination campaign was conducted and 30,851 primary vaccinations and 1,68,601 revaccinations were performed during the year, the highest figures ever recorded in the history of the Corporation.

Out of 3,503 cases that occurred during the year, 3,156 cases or 90.1 per cent of the total cases were removed to the isolation hospitals for isolation and treatment. 265 persons were prosecuted and convicted for failure to report the incidence to the Health authorities as required by section 345 of the City Municipal Act. On the whole, the co-operation from the public in the matter of notifying cases was fair. It was also gratifying that there were several voluntary admissions at both the infectious diseases hospitals.

*Measles.*—Measles was the cause of 44 deaths giving an annual death rate of 0.06 per mille against 0.02 in 1932.

*Malaria.*—140 deaths occurred from malaria during the year as against 165 in 1932 and 601, the average of the quinquennium 1928–32. The annual death rate was 0.2 per mille as against 0.3 in 1932.

The mortality from malaria from 1924 to 1933 is furnished below.

| Year. | Deaths. | Year. | Deaths. |
|-------|---------|-------|---------|
| 1924  | 971     | 1929  | 681     |
| 1925  | 1298    | 1930  | 283     |
| 1926  | 1342    | 1931  | 277     |
| 1927  | 1367    | 1932  | 165     |
| 1928  | 1599    | 1933  | 140     |

The highest death rate under malaria (0.8 per mile) was returned by the Washermanpet division. The lowest rate was 0.03 per mille returned by the Egmore division. (Annual Form No. X.)

*Enteric fever.*—Enteric fever was the cause of 90 deaths—11 deaths less than in 1932 and 50 deaths less than the average of the past 5 years. The annual death rate worked out to 0.1 per mille of estimated population, the rate for the previous year being 0.2 per mille.

Mortality from enteric fever for the past 10 years is shown below:—

| Year. | Deaths. | Year. | Deaths. |
|-------|---------|-------|---------|
| 1924  | 65      | 1929  | 130     |
| 1925  | 99      | 1930  | 126     |
| 1926  | 152     | 1931  | 166     |
| 1927  | 164     | 1932  | 101     |
| 1928  | 177     | 1933  | 90      |

Deaths from enteric fever were reported in all the months of the year; the largest number was in November (12) and the lowest in January and April (4). The distribution of deaths in the several quarters of the year is as follows:—

| Quarters.   | Deaths. |
|-------------|---------|
| 1st quarter | 18      |
| 2nd quarter | 21      |
| 3rd quarter | 22      |
| 4th quarter | 29      |
| Total       | 90      |

Failure of timely notification of typhoid fever is a great handicap in the preventive work of the department.

Apart from the usual preventive measures carried out in infected houses, 523 contacts were inoculated.

*Other fevers.*—Under this heading are included cases of deaths other than from malaria, tuberculosis, enteric fever and respiratory diseases, with fever as the predominant symptom. 2,095 deaths from these causes occurred in 1933 as against 1,646 in 1932 and 1,728 the mean of the past 5 years. The annual death rate was 3.1 per mille of estimated population against 2.5 in 1932.

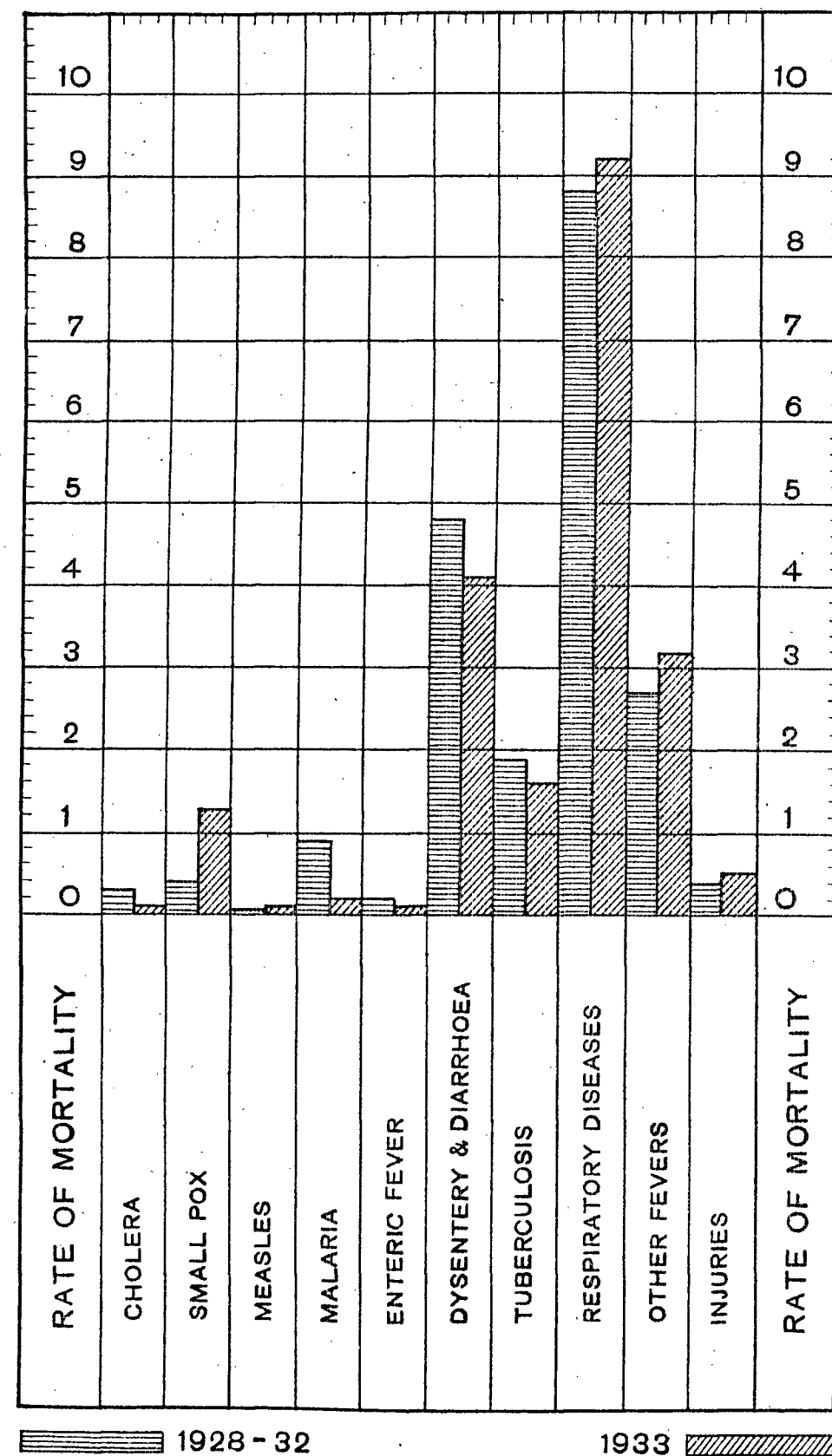
*General Respiratory Diseases*—5,967 deaths were registered under this group during the year as against 5,509 in 1932 and against 5,742 the average number for the period 1928-32. The annual death rate was 8.8 per mille of estimated population as against 8.3 per mille in 1932.

The following statement furnishes the mortality statistics for the past 10 years:—

| Year. | Deaths. | Year. | Deaths. |
|-------|---------|-------|---------|
| 1924  | 4183    | 1929  | 5324    |
| 1925  | 4712    | 1930  | 5256    |
| 1926  | 4947    | 1931  | 5743    |
| 1927  | 5035    | 1932  | 5509    |
| 1928  | 6879    | 1933  | 5967    |

*Tuberculosis.*—1,011 deaths were registered from tuberculosis in 1933 against 917 deaths in 1932 and against 1,239 the average of the quinquennium 1928-32. The annual death rate was 1.5 per mille of the estimated population as compared with 1.4 per mille in 1932. The number of deaths due to tuberculosis of the lungs was 855 or 1.3 per mille compared with 747 deaths or 1.1 per mille in 1932.

## DEATH RATES FROM PRINCIPAL CAUSES IN 1933 AND THE QUINQUENNIAL AVERAGES IN 1928-32.



The mortality from tuberculosis for the past 10 years is enumerated below :—

| Year. | Deaths. | Year. | Deaths. |
|-------|---------|-------|---------|
| 1924  | 1468    | 1929  | 1371    |
| 1925  | 1604    | 1930  | 1075    |
| 1926  | 1538    | 1931  | 1020    |
| 1927  | 1781    | 1932  | 917     |
| 1928  | 1812    | 1933  | 1011    |

*Deaths from Child-birth.*—331 women died from causes connected with child-bearing during the year as against 299 in 1932. The maternal mortality rate was 11.6 per 1000 live births as compared with 10.0 in the previous year.

The maternal mortality rates from 1925 to 1933 are as follows:—

| Year. | Rate per 1000 births. |
|-------|-----------------------|
| 1925  | 14.9                  |
| 1926  | 16.0                  |
| 1927  | 11.8                  |
| 1928  | 15.4                  |
| 1929  | 13.1                  |
| 1930  | 12.7                  |
| 1931  | 11.6                  |
| 1932  | 10.0                  |
| 1933  | 11.6                  |

Among 331 deaths, 178 or 53.8 per cent of the total deaths were due to puerperal sepsis. Calculated with reference to births, the death rate from puerperal sepsis was 6.2 per 1000 births in 1933 compared with 6.5 in 1932.

*Deaths from "Other Causes"* :—10,950 deaths were registered under this group during the year against 10,564 in 1932 and 9,912 being the quinquennial average. Under this heading are included deaths due to circulatory, digestive, nervous, genito-urinary and other systems except respiratory system. The annual death rate was 16.1 per mille of estimated population as compared with 15.9 in 1932 (Annual Form XVIII).

*Certified deaths.*—4,525 deaths were certified by the various hospitals in the city and 854 by private medical practitioners. The certified deaths represented 22 per cent of the total deaths in 1933 compared with 15 per cent in 1932.

During the year under report special cards were printed and distributed to all the medical practitioners in the City to report without delay the occurrence of dangerous diseases coming to their notice as required under section 330 (1) & (2) of the Madras City Municipal Act IV of 1919 and also to give information to the Health Officer and to the Registrar of Births and Deaths in the division about the deaths of persons, within 3 days of their becoming aware of such deaths as required in G.O. No. 5714 L. & M., dated 19-12-1929. Printed forms in duplicate were distributed to the medical institutions in the City for reporting dangerous diseases admitted by them for treatment. There was an appreciable response from the hospitals and medical practitioners.

*Burial and Burning grounds.*—The Sanitary Inspectors supervised the burial and burning grounds in the City. Out of 24,500 deaths in 1933, 4,865 corpses were burnt and 19,635 corpses buried. A new site measuring cw. 3-5-376 was acquired at a cost of Rs. 15,000 in R.S. No. 3532 of Tondiarpet for use as a burial ground for the Sunni and Bhora communities.

#### Vaccination.

16 Sub-Assistant Surgeons and 37 vaccinators of whom 2 were females, were in charge of the work of vaccination in the City during the year under report. The epidemic of small-pox which was very severe during the year necessitated the employment of additional staff for performing vaccinations in a large scale among the masses.

*Operations* :—On the advice of the Director of Public Health the number of insertions for each infant was reduced to two on one arm only. The total number of vaccinations performed during the year was 1,99,452 of which 30,851 were primary vaccinations and 1,68,601 revaccinations. The comparative

table below gives the figures for the last three years. The number of vaccinations during 1933 was the highest on record in the history of the Corporation.

|                          | 1931   | 1932   | 1933     |
|--------------------------|--------|--------|----------|
| Primary Vaccinations ... | 27,260 | 27,076 | 30,851   |
| Re-Vaccinations ...      | 9,377  | 21,757 | 1,68,601 |
| Total ...                | 36,637 | 48,833 | 1,99,452 |

30,692 primary vaccinations and 29,591 re-vaccinations were successful during the year as against 27,011 and 4,610 respectively in 1932. The percentage of success under primary vaccinations and re-vaccinations for the past 5 years is furnished in the statement below :—

|                          | 1929 | 1930 | 1931 | 1932 | 1933 |
|--------------------------|------|------|------|------|------|
| Primary vaccinations ... | 98.5 | 99.0 | 99.6 | 99.9 | 99.7 |
| Re-vaccinations ...      | 30.1 | 23.6 | 26.7 | 26.2 | 22.4 |

The percentage of success in primary vaccinations was slightly lower in 1933 than in 1932 but was high enough compared with the rates for the past five years. The low percentage of success in re-vaccinations is due to the unusually large number of persons re-vaccinated most of whom must have been immune at the time. 93.1 per mille of the population of the City were successfully vaccinated during the year as against 48.9 in 1932.

**Infantile Vaccination :—**22,105 infants under one year of age were vaccinated during 1933 as against 18,976 in 1932. Of these, 22,012 were successful operations compared with 18,940 in 1932. Of the 22,015 infantile vaccinations, 16,291 were performed on infants born in Madras, the rest being moffusil children.

**Verification of Births :—**During the year 1933, 28,479 births were verified for purposes of vaccination compared with 26,298 births verified in 1932. 4,973 children died before attaining the age of one year and without being vaccinated. 5263 children were removed from the City without being vaccinated. The number available for vaccination was 18,243. Of these, 13,616 or 74.6 per cent were vaccinated against 71.7 per cent in the previous year. An increase of 2.9 per cent over the preceding year was obtained.

**Postponement of Vaccination in children :—**The vaccination of 1315 children was postponed during the year for medical reasons.

**Inspection of Vaccinated persons :—**The results of vaccinated persons were verified by the Health Officer, Assistant Health Officers and the Medical Vaccinators. The results of 30,795 or 99.8 per cent of the total primary vaccinations and 1,32,263 or 78.4 per cent of the total re-vaccinations, were verified by them during the year under report.

**Lymph :—**Lymph for 1,47,020 cases was supplied by the King Institute of Preventive Medicine at Guindy during the year and the total number of persons vaccinated was 1,99,452.

**Prosecutions :—**The parents of 43 children were prosecuted for failure to vaccinate their children. 29 prosecutions were withdrawn as the parents got the children vaccinated subsequently. 14 parents were convicted and a sum of Rs. 11 was realised as fines.

Rewards amounting to Rs. 249 were paid for re-vaccination in Kuppams and backward areas on account of the epidemic of small-pox.

**Cost of Vaccination :—**The cost of each successful vaccination in 1933 was Rs. 0-11-3 against Rs. 1-2-2 in 1932.

#### Sanitation.

The Health administration was carried on during the year as before under the immediate supervision of two Assistant Health Officers. Dr. A. Muthukrishna Reddiar, B.A., M.B. & C.M., Assistant Health Officer, North Range, retired from service on 20-5-1933 and was succeeded by Dr. S. E. D. Masilamany, M.B.B.S., B.S.Sc.

**Water supply :—**The quality of pipe water supplied to the City was being tested as usual at the Water Analysis Laboratory at Kilpauk. Details of the work done in this direction will be found in the report of the Water Analyst which forms part of this Annual Report. 8 bathing fountains were constructed by the Corporation during the year.

**Sewerage :—**43,940 ft., of sewers were laid during the year, the total length covered up to 31-12-1933 being 11,31,515 ft. 1,976 flush-out latrines were constructed in the City during the year.

**Slums and housing :—**The problem of housing and improvement of slums in the City is engaging the serious attention of the Corporation. A special Housing Committee was appointed by the Council during 1933 to go into this question in detail with a view to evolve a comprehensive housing policy for the City.

The Sanitary Inspectors systematically conducted house to house inspections with a view to remedy sanitary defects. 13,286 houses were so inspected during the year of which 4,390 were found defective—1031 for want of proper drainage, 617 for lack of proper latrine accommodation, 94 for defective water supply, 864 for bad ventilation and 1784 for miscellaneous defects. As a result of the action taken by the Health Department improvements were effected in 3,576 houses. During the year, 3156 plans for construction and re-construction of houses were received in this Department for scrutiny.

In connection with the detection of epidemic diseases 50,924 houses were inspected during the year. 265 cases in which parties failed to notify occurrence of small-pox in their residences were prosecuted and convicted and a sum of Rs. 629-4-0 was collected as fines. 5067 premises were disinfected during the year and 178 gallons of hycol, 156½ gallons of phenyle and 82 gallons of Newcol were used for the purpose.

**Factories :—**All the factories in the City were inspected during the year by the Health Officer and by the two Assistant Health Officers who continued to be Additional Inspectors of Factories and the reports of inspection were forwarded to the Chief Inspector of Factories. In one factory flush-out latrine was introduced, while in another, the existing flush-out accommodation was extended.

**Offensive and dangerous Trades :—**During the year under report 5,577 applications were received for licenses for these trades. Licenses were granted in 4,824 cases and refused in 176 cases. The rest were pending at the end of the year. Prosecutions were instituted in 1463 cases before and after licenses were issued to enforce the sanitary regulations for the control of these trades.

The Corporation maintained three model cattle yards, one at Basin Road, another in Purasawalkam and a third in Chintadripet. The total number of animals housed in these yards was 338. There were 1474 licensed private cattle yards in the City during the year.

The Elephant Gate cart stand was under the control of the Health Department. It was leased out on contract for Rs. 7,400 for the official year 1933-34.

**Meat Supply :—**The Corporation maintains the Slaughter Houses at Perambur where sheep, cattle and pigs are slaughtered for consumption in the City. Animals brought for slaughter and the carcasses of slaughtered animals are inspected by the Superintendent in charge, who is a Veterinary graduate, with a view to ensure the quality of meat supplied to the City. A statement of the animals and carcasses inspected, those that were rejected and the carcasses or parts condemned as unfit for human consumption and destroyed is furnished hereunder.

|            | No. of animals brought for slaughter and inspected. | No. of animals rejected. | No. of carcasses inspected. | No. of carcasses condemned. | No. of diseased parts condemned. |
|------------|-----------------------------------------------------|--------------------------|-----------------------------|-----------------------------|----------------------------------|
| Sheep ...  | 4,80,431                                            | 6,665                    | 4,73,766                    | 22                          | 5,932                            |
| Cattle ... | 17,120                                              | 692                      | 16,428                      | 2                           | 3,944                            |
| Pigs ...   | 1,614                                               | 167                      | 1,447                       | 11                          | 342                              |

The rights of collecting rents and fees from the Cattle and Sheep slaughter houses were let on contract for Rs. 19,600 and Rs. 65,300 respectively for 1933-34.

Slaughter of animals in places other than the Slaughter Houses was permitted on payment of fees during festival occasions. The income for the year from this source was Rs. 98-4-0. Free permits were issued for slaughter of animals for Hakika and Bakrid.

**Food control.**—The Fruit Market at Esplanade and the Vegetable Market at Mambalam which were under construction last year were completed during the year under report and opened for use in April and May 1933 respectively. 71 additional stalls were constructed in the Moore Market Evening Bazaar.

A regular and systematic inspection of the articles of food exposed for sale was conducted during the year. A list of unwholesome articles of food destroyed and the number of prosecutions instituted under Section 310 of the Act to prevent the sale of food stuffs on the road sides, over side drains etc., will be found elsewhere.

**Weights and Measures.**—During the year under report the two Inspectors of Weights and Measures continued to carry out regular inspection of weights and measures used in markets, bazaars and shops and by milk-sellers and hawkers. It is gratifying to note that non-standard weights and measures have almost disappeared from use. The few defective weights still in use in the City are those that are generally brought in from the moffusil. In 528 cases, weights, measures and scales found defective were seized and confiscated. Prosecutions were launched in 59 cases of which 51 cases resulted in conviction. It has been found impossible to stop completely the use of false weights in the absence of any legislation penalising the very possession of such weights.

**Medical Relief.**—The Corporation continued to maintain two infectious diseases hospitals, 19 allopathic dispensaries and 4 dispensaries of the indigenous system of medicine. Skin clinics were opened in all the dispensaries for the treatment of skin affections including non-infectious cases of leprosy, and Dr. P. Parthasarathy Naidu was appointed as the Honorary Leprosy Officer of the Corporation for this purpose. A statement of cases treated in these institutions is furnished elsewhere.

The Leprosy clinic attached to Vyasarpady Dispensary continued to do very useful work during the year and was very popular. During the year, 2049 cases of skin diseases were registered at the dispensary, of which 274 were for leprosy—124 infective and 150 non-infective. Of these, 114 infective and 135 non-infective cases received injections and the remaining 25 cases did not attend the clinic to receive treatment. Improvement was noticed in 43 non-infective cases and 19 infective cases and in 2 non-infective cases the symptoms of the disease disappeared after treatment.

**The Corporation Poor House.**—There were 162 inmates at the beginning of the year. 195 persons were admitted during the year, 132 were discharged for various reasons, 47 died in the Poor House and 4 absconded. The number remaining in the House at the end of the year was 174. All the necessary comforts were provided for the inmates. They were given wholesome food, clothing and medical help. Two separate medical wards with 48 beds were maintained in the House. A few of the inmates who were able to do light work maintained a small vegetable garden. An endowment of Rs. 50 was made by the Corporation Officials' Association for giving religious 'Kalakshepams' in the House. Another amount of Rs. 50 was given by the Corporation Officials' Restaurant to be utilised towards the feeding of the inmates. Besides these, endowments of Rs. 500 and Rs. 100 were given by Mr. C. Krishnaswami Naidu, Proprietor, Madras Radio Company and from an anonymous donor through Dr. U. Krishna Rao, Councillor, respectively.

**Anti-Rabic Measures.**—The electrocuting chamber at Basin Road continued to work throughout the year. 7933 dogs were caught and taken to the lethal chamber of which 221 were claimed back by the owners. 6871 were electrocuted. The remaining dogs were awaiting disposal at the end of the year.

**Zoological Gardens.**—The Corporation Zoological Gardens are in charge of a Zoology graduate. There is a small lake situated in the gardens where pleasure boats are plied. Visitors to the gardens are charged at 1 anna per head.

and the right of collecting the entrance fee from 1-4-1933 to 31-3-1934 was let out on contract for Rs. 21,500. During the year under report there were several additions to the livestock.

**Publicity and Health Education.**—This department continued to carry on a systematic campaign to dispel ignorance and superstition among the masses and instil in them knowledge about the prevention of communicable diseases, personal hygiene and healthy living. This was conducted by means of posters, hand bills, leaflets, lectures, magic lantern demonstrations, cinema shows etc. Three films prepared by the Public Health Department, Madras, with the title 'Saving of the Race' on maternity and child welfare, 'Lost and Found' relating to venereal diseases and 'The Man who was afraid' on cholera were purchased during the year at a cost of Rs. 1270. 1767 open air lectures, 2215 talks, 1050 demonstrations with the aid of magic lanterns and 150 cinema shows on health subjects were arranged. Besides the above, two divisional health exhibitions were conducted, one at the Corporation Boys School, Strahans Road, Perambore, for 3 days from the 15th July 1933 and the other in Triplicane at the Corporation Boys School, Venkatarangam Pillai Street for 5 days from the 27th September 1933. They attracted a large number of visitors from the neighbouring areas. During these exhibitions special conservancy arrangements were made and house to house propaganda was conducted to educate the residents in prevention of disease, observance of sanitary rules etc.

#### Prevention of Food Adulteration.

Mr. V. Venkatachallam, Public Analyst for the Corporation, continued to work under the Government Analyst, King Institute, Guindy, till 31st January 1933, after which date steps were taken to start the Corporation Food Analysis Laboratory, in the buildings of the Water Analysis Laboratory, Kilpauk. The apparatus and chemicals required for the work were purchased at a cost of Rs. 7,500 and the Laboratory commenced its work on the 27th May 1933. In G. O. No. Mis. 1089 P. H., dated 19th May 1933, the Government approved the appointment of Mr. V. Venkatachallam as the Public Analyst of the City of Madras, under Section 4 (1) of the Madras Prevention of Adulteration Act.

The report for the year includes the work carried out on behalf of the Corporation by the Government Analyst, Guindy, till 31-1-1933 and continued by the Corporation Public Analyst from 27-5-1933 after the Kilpauk Laboratory was fitted up.

During the year ending 31st December 1933, 697 samples were sent for analysis, out of which 52 samples were sent to the Government Analyst, Guindy, and the remaining to the Corporation Laboratory, Kilpauk. Of the 697 samples, 667 samples were analysed and reported on during the year. Report on 30 samples was pending on 31st December 1933. Out of 667 samples analysed, 425 were found to be genuine and 242 to be adulterated. The percentage of samples found to be adulterated during the year was 36.3.

The samples consisted of ghee, butter, milk, gingelly oil, coffee powder and tea. A tabular statement of the samples analysed is given below.

| Nature of samples. | No. of samples analysed in 1933. | No. of adulterated samples in 1933. | Percentage of adulterated samples in 1933. | No. of samples analysed in 1932. | Percentage of adulterated samples in 1932. |
|--------------------|----------------------------------|-------------------------------------|--------------------------------------------|----------------------------------|--------------------------------------------|
| Ghee ...           | 368                              | 175                                 | 47.6                                       | 431                              | 46.6                                       |
| Butter ...         | 63                               | 7                                   | 11.1                                       | 71                               | 22.5                                       |
| Milk ...           | 63                               | 29                                  | 46.0                                       | 157                              | 38.2                                       |
| Gingelly Oil ...   | 155                              | 31                                  | 20.0                                       | 225                              | 35.1                                       |
| Coffee Powder ...  | 5                                | Nil.                                | Nil.                                       | 128                              | 14.1                                       |
| Tea ...            | 13                               | Nil.                                | Nil.                                       | 135                              | 4.5                                        |
| Cocoonut Oil ...   | Nil.                             | Nil.                                | Nil.                                       | 13                               | Nil.                                       |
| Total ...          | 667                              | 242                                 | 36.3                                       | 1160                             | 32.8                                       |

In comparing the percentage of adulteration in 1933 with that of the previous year, the following points should be borne in mind.

(1) Ghee in which adulteration is more pronounced than in the other articles formed 55 per cent of the total samples in 1933, whereas it formed only 37 per cent of the total samples in the previous year.

(2) The Prevention of Adulteration Rules published in G.O. No. 1867, P.H., dated 1st September 1932 came into active operation only towards the close of 1932. In the year under report a very large proportion (about 65 per cent) of the adulterated ghee samples had been orally declared as such by the vendors but after confirmation by analysis, the vendors were prosecuted for infringing the labelling regulations. In the previous year vendors could escape by such oral declarations alone. When these samples where there was only infringement of labelling regulation are left out of the calculation, the actual percentage of adulteration of the samples during the year works out at a comparatively low figure of 23.5 as against 32.5 in the previous year. This shows that the working of the Act has definitely improved the quality of food-stuffs sold in the city. It may be mentioned that the gross adulteration of coffee powder and tea noticed in previous years has been effectively stopped, as even casual sampling of these two articles at long intervals could not detect any adulteration in the same. Butter and gingelly oil have also improved in quality considerably. In the case of milk alone a higher percentage of adulteration was noticed.

The question of the sale of ghee in the city calls for special attention. The vendors of this article are permitted to sell mixtures of ghee with other fat, if they give the minimum percentage of ghee, the mixture contains, on a label affixed to the vessel containing the article, so long as the admixed fat is not derived from the carcasses of animals. As the labelling regulations came into active operation during 1933, a number of prosecutions were conducted for infringing these regulations alone during the year under report. The situation has improved considerably during the year, as most of the vendors of adulterated ghee labelled their articles correctly during the latter part of the year. It may be mentioned in this connection that many vendors give a ridiculously low percentage of ghee on the label, say 1 to 5 per cent. They always escape prosecution this way but it is reported by the Food Inspectors that the same vendors explain to their customers that the label is always there to protect themselves against the Act in case of emergency and that the articles are really genuine or of superior quality. The absurdly low figure on the labels gives a favourable impression to the customers about the *bona fides* of the vendors concerned. It is highly desirable that the Act should have a provision to check this sort of fraud by preventing the sale of adulterated ghee containing less than a prescribed proportion of ghee, say 50 per cent. It is also desirable that there should be labelling regulations for other articles of food stuffs such as coffee powder, gingelly oil etc., where vendors have freely begun to declare the articles as mixed or adulterated in order to escape prosecutions.

The nature and extent of adulteration of the various articles are given below :—

**Ghee.**—368 samples were analysed during the year of which 30 had been analysed by the Government Analyst in January 1933 who reported 15 samples as genuine and 15 as adulterated. Of the remaining 338 samples analysed by the Public Analyst 152 samples had been sold as 'Ghee' by vendors out of which 45 were admixed with foreign fat. 63 samples had been labelled according to regulations and of these two samples alone contained a less proportion of ghee than that declared on the labels. 123 samples had been orally declared by vendors to be of low quality or adulterated but had not been labelled properly. Of these, 113 samples were found to be adulterated, the remaining 9 samples being genuine. In the case of the ghee samples analysed, foreign fat mostly of vegetable origin ranging from 10 per cent to 100 per cent was found.

**Butter.**—63 samples were analysed. Water in excess of the prescribed limit of 20 per cent was found in six samples ranging from 5 per cent to 47 per cent. Fat other than milk-fat was found in one sample to the extent of 25 per cent.

**Milk.**—63 samples were analysed of which 42 were sold as milk or cow's milk, 20 as buffalo's milk and one as mixture of cow's and buffalo's milk. Extraneous water ranging from 5 to 54 per cent was found in 29 samples.

**Gingelly Oil.**—155 samples were analysed. The only adulterant detected was ground-nut oil and the degree of adulteration varied from 20 to 85 per cent in 31 of the samples.

**Coffee Powder.**—5 samples were analysed. 3 samples were genuine and the remaining two were found to contain chicory. In the latter 2 samples the proportion of chicory had been correctly indicated on the label by the vendors and hence certified as genuine.

**Tea.**—13 samples were analysed and all were found to be genuine.

The total number of adulterated samples in the year 1933 was 242, out of which in the case of 201, prosecutions were successfully launched and convictions obtained during the year. 32 samples were pending disposal on 31st December 1933 and 9 ended in either acquittals or withdrawals of prosecutions. Of the 144 adulterated samples which had been taken during 1932 but not disposed of during that year, 140 were finally disposed of during 1933 resulting in 134 convictions, 6 cases being either acquitted or withdrawn. In the case of the remaining 4 samples of 1932, the cases were finally adjourned *sine die* since the vendors could not be traced.

Among the adulterated samples of 1933 there was one acquittal on the ground of insufficient evidence of sale. In the case of 4 samples action was dropped as the vendors either absconded or could not be traced. In the case of 2 samples, no action was taken on the advice of the Corporation Legal Adviser, and another case was let off with a warning. One adulterated sample of butter was from a Co-operative Society, but on production of a certificate of warranty from their wholesaler, the Society was warned and let off.

Details of the action taken in the case of the adulterated samples are given below :—

| Nature of samples. | No. of adulterated samples in 1933. | No. of adulterated samples of 1932 disposed of in 1933. | Total No. of adulterated samples. | No. of adulterated samples pending disposal on 31-12-1933. | No. of samples which ended in acquittals, withdrawals, 'No prosecutions' etc. | No. of convictions. | Total fines. | Average fine per conviction. | No. of convictions in 1932. | Average fine per conviction in 1932. |
|--------------------|-------------------------------------|---------------------------------------------------------|-----------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------|--------------|------------------------------|-----------------------------|--------------------------------------|
| Ghee               | 175                                 | 93                                                      | 268                               | 28                                                         | 11                                                                            | 229                 | Rs. 5,792    | Rs. 25                       | 161                         | Rs. 20                               |
| Butter             | 7                                   | 2                                                       | 9                                 | ...                                                        | 1                                                                             | 8                   | 171          | 21                           | 5                           | 16                                   |
| Milk               | 29                                  | 26                                                      | 55                                | 6                                                          | 1                                                                             | 48                  | 817          | 17                           | 39                          | 14                                   |
| Gingelly Oil       | 31                                  | 23                                                      | 54                                | 2                                                          | 2                                                                             | 50                  | 1,189        | 24                           | 46                          | 17                                   |
| Coffee Powder.     | Nil.                                | ...                                                     | ...                               | ...                                                        | ...                                                                           | ...                 | ...          | ...                          | 10                          | 13                                   |
| Tea                | Nil.                                | ...                                                     | ...                               | ...                                                        | ...                                                                           | ...                 | ...          | ...                          | 6                           | 14                                   |
| Total              | 242                                 | 144                                                     | 386                               | 36                                                         | 15                                                                            | 335                 | 7,969        | 24                           | 276                         | 18                                   |

The above statement shows that the total number of convictions obtained during the year was 335 and the total fines amounted to Rs. 7,969 as against 276 convictions and Rs. 4,922 by way of total fines in the previous year. The average fine per conviction during the year under report works out at Rs. 24 against Rs. 18 in the previous year. It may be emphasised here that for deriving the full advantage of the working of the Prevention of Adulteration Act, the fines ought to be sufficiently high to make adulteration unprofitable for the vendors even if they are caught only occasionally. If the fines are small, the vendors can pay them from a small portion of their illegitimate profits and still continue with adulteration as they would soon begin to realise that the fines would only be a small tax on their illegitimate profits, which they could well afford to pay.

If this is borne in mind, the average fine of Rs. 24, though better than the previous year's figure, is inadequate for the purposes of the Act. The Act has now been in force for a sufficiently long time and there is no meaning in inflicting small fines hereafter. It may also be mentioned in this connection that

the fines were somewhat high during the earlier part of the year but fell off considerably during the latter part. A statement of the number of convictions for each month during the last quarter of 1933 is given below :—

| Month.   | No. of convictions. | Total fines. | Average fine per conviction. |
|----------|---------------------|--------------|------------------------------|
|          |                     | Rs.          | Rs.                          |
| October  | 35                  | 842          | 24                           |
| November | 50                  | 1,046        | 21                           |
| December | 41                  | 606          | 15                           |

This statement shows that there was a considerable fall in the fines during December. One would naturally expect an increase in fines as vendors would come in for second and subsequent convictions more and more. Unless the fines become sufficiently deterrent the full effect of the working of the Act cannot be realised.

It is hoped that in future this situation will improve considerably so that the vendors of adulterated food-stuffs may finally realise that even from the point of view of profit and loss it is not worth while adulterating their articles.

#### Infectious Diseases Hospitals.

The two infectious diseases hospitals at Tondiarpet and Krishnampet continued to give efficient service during the year. Owing to the rush of small-pox cases, the accommodation in both the hospitals was found inadequate and as an emergency measure, temporary sheds were constructed and additional cots were provided at a cost of Rs. 4367. A brief report about the work done in these Hospitals is given below.

*Infectious Diseases Hospital, Tondiarpet.*—The hospital was in charge of a medical graduate who was assisted by a Sub-Assistant Surgeon and a staff of sick nurses, compounder and menials. Extra staff was also appointed to cope with the increased work during the epidemic of small-pox and cholera.

2688 cases of infectious diseases were admitted to this hospital during the year as compared with 1482 in 1932. Cases of small-pox which numbered 1993 formed nearly 3/4 of the total admissions. The next largest number of admissions was for chicken-pox—399, which was as usual characterised by no mortality. Cholera contributed to the third largest number of admissions, viz., 97. The daily average number of cases in the hospital was 132. The mortality rate for all diseases was 16.7 while for the year 1932 it was 7.4. The increase in the mortality rate was due to the epidemics of small-pox and cholera.

*Krishnampet Isolation Hospital.*—This hospital continued to be in charge of a medical graduate assisted by a staff of nurses, compounder and menials. Additional staff was entertained during the epidemics of small-pox and cholera. 1339 cases of infectious diseases were admitted into the hospital during the year as against 617 cases in 1932. The largest number of admissions was for small-pox, viz., 1189. The admissions for chicken-pox and cholera were 74 and 33 respectively. The daily average number of patients in the hospital was 75. The mortality rate for all diseases was 17.3 as compared with 7.5 of the previous year. The increase in the death rate was due to the epidemics of small-pox and cholera.

Details of the cases treated in the two hospitals and the vaccinal condition of the small-pox patients are furnished in the statements appended hereto.

#### Aided Institutions.

A brief account of the Public health work done by various institutions in the City is furnished below.

*The Buckingham and Carnatic Mills Welfare Committee.*—During the year under review, the Welfare Department organised in the Mill villages and neighbouring localities a series of magic lantern lectures and cinema shows on health matters for the benefit of the workmen of the mills who live there. A

Young Men's Association, started in the Buckingham Village, launched a vigorous campaign against the drink evil. Lectures to the women in the Mill villages on 'Maternity and Child Welfare' were also organised by the Village Associations.

*The Chengalvaraya Naicker's Free Ayurvedic Dispensary, Vepery.*—This dispensary rendered medical aid to 2,15,831 patients during 1933 as against 2,22,787 patients in 1932.

*The Chennampuri Annadana Samajam.*—During the calendar year 1933 the Samajam fed 65,148 poor men and supplied clothing to 600 persons. In addition to the feeding of the poor at the Samajam premises, the institution provided midday meals for 120 poor pupils of the Brahmo Ragged School and 120 of V. Subramaniam Free School at the respective School premises.

*The Friend-in-need Society.*—With a view to relieve the deserving poor and to suppress mendicancy among Europeans and Anglo-Indians, this Society runs a Home, for the infirm and destitute, in which they are lodged and supplied with the necessities of life. During the year under report there were 80 permanent inmates. The total amount spent by the Society towards the various kinds of relief afforded by it, was Rs. 36,842-14-7.

*The Government Victoria Caste and Gosha Hospital.*—The number of out-patients who attended the hospital during 1933 was 75,354. The work at the hospital has increased enormously during recent years.

*The Kalyani Hospital.*—During the year, the total number of out-patients treated in the hospital and its two dispensaries was 13,191. Besides 2,200 in-patients were treated. The number of maternity cases was about 750. Preventive inoculations against cholera were given to 600 people, mostly College students and School girls.

*The Ramakrishna Mission Students' Home.*—The strength of the Home during the year was 138 students. There is a medical ward for the inmates with a visiting doctor in charge. The Home continued to be a very useful institution for the advancement of education of poor and deserving students.

*San Thome Dispensary.*—The out-patient dispensary rendered treatment to 12,680 patients during the year.

*Sree Kanyaka Parameswari Devasthanam Dispensary.*—The total number of patients treated during the year was 92,122 as against 90,977 patients in the previous year.

*The San Thome Convent Dispensary.*—The number of patients treated in this dispensary during 1933 was 36603. The dispensary continued to do good work and rendered help to all communities of people in and around San Thome and Mylapore.

*The Madras Children's Aid Society.*—Periodical health lectures illustrated by magic lantern slides or cinema films were given by the National health Association, and instructions were often given to the inmates on health subjects by the members of the staff and outsiders.

#### Report of the Port Health Officer on the working of the Plague Regulations at the Port of Madras for the Calendar Year 1933.

*Incoming vessels.*—623 vessels arrived here during the year from different ports with 58,475 crew and 55,596 passengers as against 671 vessels with 61,408 crew and 89,977 passengers in the previous year.

*Outgoing vessels.*—548 vessels with 49,108 crew and 37,310 passengers were inspected and granted Bills of Health during the year as against 270 vessels with 29,448 crew and 12,369 passengers in the previous year.

*Epidemic and Infectious Diseases.*—4 cases of chicken-pox, 2 cases of small-pox and 1 case of cholera were landed from ships and sent to the Infectious Diseases Hospital, Tondiarpet.

Disinfection of bedding and clothing of deck passengers and crew landing and embarking here is carried on at the discretion of the Port Health

Officer as usual. The disinfection shed is in charge of a Sub-Assistant Surgeon and a nurse is employed to assist in examining the female passengers.

**Rats on Steamers:**—No deaths among rats were found on any of the vessels that entered the harbour during the year under report.

#### Conservancy.

The conservancy of the City continued to be under the direct supervision of Mr. W. L. Edwards, the Drainage Superintendent who was assisted by two Supervisors. There were 20 Sanitary Inspectors, 17 Process Servers and 161 conservancy peons in charge of the conservancy of the city. The sewer and main drain cleaning staff continued to be under the Drainage Superintendent as before. The Veterinary Officer was in charge of the veterinary work at the Cattle Depots.

**Cleaning Staff.**—During the year 1933, 2234 men, 184 women and 234 boys were employed for the cleaning of streets, drains and latrines in the City. Details of carts employed for the removal of rubbish and filth during 1933 are furnished below.

|                                                                       |     |     |
|-----------------------------------------------------------------------|-----|-----|
| Trollies, double and single draught carts, for the removal of rubbish | ... | 400 |
| Night soil carts                                                      | ... | 90  |
| Sewage and silt carts                                                 | ... | 50  |

**Animals.**—The number of bullocks on hand on 1-1-1933 was 713 as against 688 on 1-1-1932. 138 bullocks were purchased during the year making up a total of 851. 113 animals died during the year as against 119 in the previous year. Of these 58 died of old age and general debility, 3 of anthrax, 10 of tuberculosis, 2 of trypanosomiasis, 2 of foot and mouth disease, 4 of piroplasmiasis and 34 of natural causes leaving a balance of 738 at the end of the year. The health of the conservancy bullocks was on the whole fair. 344 animals were treated in the Corporation Veterinary Hospital at Hope Lodge. There was no rinderpest in the depots during the year.

**Conservancy Carts, etc.**—During the year under report 56 rubbish and 26 box carts and 2002 dust bins and 290 night soil buckets were manufactured.

**Motor Lorries.**—36 motor lorries were employed for the removal of rubbish, filth and sewage. 1 Federal and 2 New Ford lorries were purchased during the year.

**Tipping Platforms.**—The two model tipping platforms constructed at Basin Bridge and Langs Garden Pumping Station continued to serve very satisfactorily. The platform at Triplicane was abolished as per resolution of the Council dated 8-8-1933. In its place a new tipping platform was opened at the Krishnampet Incinerator.

**Removal of rubbish.**—About 5,45,087 cart loads of rubbish were removed from the City during the year as against 4,78,750 cart loads in the previous year.

84,744 cart-loads were disposed of at the Incinerator by separation and incineration, 2,98,238 cart loads of rubbish were used in reclamation works, at the Choolai Burning Ground, Railway land at Korukkupet, Salt Cottars and the People's Park moat and ponds. The balance was deposited in the dumping grounds at Korukkupet, Ottery, Rifle Range and Mylapore.

The Incinerator at Krishnampet continued to function throughout the year. The Incinerator at Basin Road was closed for repairs from 17-8-1933. Permits for the removal of 1,04,115 cart loads of incinerator ash and screened earth were granted to private parties free of charge for purposes of reclamation.

**Disposal of filth.**—The three pail depots at Ice House Road, DeMellow's Road and Langs Garden worked throughout the year. About 1,06,198 cart loads of filth were removed from the city, of which 8,2248 cart loads were flushed into sewers at the Pail Depots. The balance was trenched at the Ottery and Korukkupet Night Soil Depots. The amount realised by the sale of manure from the trenching grounds during the year 1933-34 was Rs. 6100.

**Public Latrines.**—The number of public latrines in the city during the year was 253 of which 210 were flushout, 36 masonry, and 22 sanded latrines. 28

new flushout latrines were constructed. 3 sanded and 4 masonry latrines were converted into flushout ones and 4 flushout latrines were extended by the provision of additional seats. Sand was renewed in all the sanded latrines. 1063 gallons of Hycol, and other disinfectants, 4204 parabs of chunam and 119 lbs. of bleaching powder were used for the disinfection of drains, street corners, dust bins and night soil buckets. 4 public latrines at the following places were demolished as their existence were objected to by the public.

1. China Bazaar Road.
2. Alangatha Pillai Street.
3. Khana Bagh Street.
4. Bandy Venkatesa Naick Street.

During the year under report 40 zinc enclosures were constructed at a cost of Rs. 5000 for keeping the night soil buckets.

**Private scavenging.**—Under Section 197 of Act IV of 1919 the Corporation undertook the conservancy of some private institutions and the amount realised thereby was Rs. 22,719-11-11 against Rs. 23,739-5-2 in the previous year. As usual special arrangements were made for efficient conservancy during all the important festivals in the City. The conservancy of South Indian Athletic Association Grounds was attended to departmentally during the Park Fair 1933-34 on payment of fees.

**Labour.**—There was no trouble from labourers during the year. Bonus was granted to the coolies who retired on account of old age or infirmity as per regulations issued in G.O. No. 4942 L. & M. dated 22-12-1931. 301 conservancy coolies are occupying houses in model lines and 193 live in huts on Corporation land. No additional lines could be constructed for want of funds though the demand for them is increasing year after year.

**General.**—The total expenditure on conservancy for the financial year 1933-34 was Rs. 9,30,655-9-6 (Rs. 55,081-1-5 Capital and Rs. 8,75,574-8-1 ordinary) against Rs. 9,23,639 for 1932-33 (Rs. 51,665 Capital and Rs. 8,71,974 ordinary). The amount spent on wages of conservancy coolies was Rs. 5,82,560.

#### Anti-Malarial Measures.

During the year 1933 Anti-Malarial measures were carried out by a staff consisting of 2 Supervisors, 6 Maistries and 68 coolies under the direct control of the Medical Officer.

**Control of Tanks and Ponds:**—502 tanks and ponds existed in the City at the beginning of the year under report. These were responsible chiefly for the breeding of Anopheles mosquitoes. The methods of control adopted were to keep those used for irrigation and garden purposes free from weeds, moss, floating matter and rank vegetation all round with the sole object of enabling the larvicidal fish to feed on the mosquito larvae, and to petrolise unused ponds weekly or to fill them up.

As a result of the action taken by the Health Department, 320 private tanks and ponds were cleaned and petrolised and 7 private tanks filled up. The Malaria staff cleaned 176 tanks and ponds on payment of charges by the owners, and 144 tanks were attended to by the owners themselves. The amount collected for services rendered in this connection during the year was Rs. 1926-1-0.

The public ponds and tanks belonging to the Corporation were also attended to by the staff. 8 such tanks were cleaned periodically during the year. The Corporation staff cleaned 5 private tanks free of charge on account of their receiving the storm water of the surrounding area.

9 ponds were reclaimed during the year, of which 2 belonged to the Corporation. Out of the 7 private ponds reclaimed, 4 were done by the private owners and 3 by the Corporation at the cost of the owners after notification.

**Control of Wells:**—Wells form the chief breeding places for mosquitoes (culex and anopheles) especially in central and overcrowded divisions. The severe mosquito nuisance and malarial incidence in such divisions are from wells in a neglected condition.

2 fishermen and 4 fishing coolies introduced larvicidal fish into private and public wells in the City as in previous years. During the year 14,476 wells were inspected for the introduction of fish. Of these, 2086 wells were inspected

twice during the same year. A detailed statement of the wells examined during the year is furnished below :

|                                                                                   | 1st inspection. | 2nd inspection (after 10 months). | Total. |
|-----------------------------------------------------------------------------------|-----------------|-----------------------------------|--------|
| No. of wells found filled up ...                                                  | 407             | 19                                | 426    |
| No. of wells found covered with Cuddapah slabs ...                                | 225             | 7                                 | 232    |
| No. of wells examined ...                                                         | 11,758          | 2,060                             | 13,818 |
| No. of wells with fish alive ...                                                  | 4,230           | 1,162                             | 5,392  |
| No. of wells with fish dead ...                                                   | 7,528           | 898                               | 8,426  |
| Percentage of wells with fish dead to total wells examined ...                    | 64              | 43.6                              | 61     |
| No. of wells breeding Culex and Anopheles mosquitoes either alone or together ... | 2,218           | 189                               | 2,407  |
| Percentage of wells breeding mosquitoes to the total wells examined.              | 18.9            | 9.2                               | 17.5   |
| No. of wells breeding Anopheline larvae ...                                       | 801             | 56                                | 857    |
| Percentage of wells breeding Anopheline larvae to total wells examined.           | 6.8             | 2.7                               | 6.2    |
| No. of bad wells petrolised by the staff during the inspection ...                | 269             | 28                                | 297    |
| No. of wells in which larvicidal fish was introduced ...                          | 11,102          | 1,972                             | 13,074 |

The results of wells inspected twice during the year unmistakably establish the need for re-stocking fish at shorter intervals. Once in 3 months all the wells should be inspected and re-stocked with fish. The fish die within 3 months for lack of food or for some other reason. Unless they are always in sufficient numbers and the wells are kept constantly free from all floating matter, no effective and proper control can be established. The present staff is inadequate for the purpose and requires to be augmented.

744 bad wells were reported to the divisional Sanitary Inspectors and fish were introduced into them soon after report from the Inspectors that they had been cleaned and cleared of silt.

The introduction of trap-doors for unused wells was insisted upon as an alternative to filling or covering with cuddapah slabs with the double object of preventing ingress of mosquitoes and keeping away all objectionable materials from falling into the wells which would otherwise be harmful to the life and usefulness of the larvicidal fish in them.

The larvicidal fish are obtained from local tanks and ponds lying on the out-skirts of the City. They are Haplochilus Melanostigma (Mundaikannoo), Panchax (Pachai Mundaikannu or Nama Kandai), Chela (Vellichai Kundai) and Barbus (Chinna Kullai Kandai).

The fish gangs inspected the premises and compounds during the introduction of fish into wells and destroyed mosquito larvae found in tins, pots, broken vessels, cisterns, blocked-up drains, etc. The inmates were shown the larvae and were instructed to prevent such breeding in future.

*Control of Public Drains, Cesspools, etc.:*—The Corporation maintains 2 maistries and 14 coolies for oiling work. There are about 90 covered drains, 220 open drains, 100 ditch drains, 1290 cesspools and 466 gulley traps. These were petrolised once a week. Stagnant pools, pits and low-lying lands were also attended to.

Inspection doors were constructed over some of the covered drains during the year to facilitate easy cleaning and oiling. In some of the surface drains which are covered and buried underground, thus making difficult frequent

and proper attention by the staff, mosquitoes breed freely. Special attention was paid to them by cleaning and oiling them once a week, and thus nuisance was kept under control.

A mixture of liquid fuel and kerosene oil was used for petrolising. Saw dust or used cotton waste soaked in the mixture was used wherever necessary to give a continuous film of oil. Oil balls were used for some of the big drains.

*Control of the River Cooum, Buckingham Canal and Otary Nulla:*—Mosquito breeding is not uncommon along the edges of the Cooum river and Buckingham Canal and in Otary Nulla and accounts for the nuisance in the localities concerned. The present oiling staff is too inadequate to attend to these places systematically. Sufficient number of gangs are therefore required to keep the situation under control.

*Control of Lowlands:*—In addition to 9 ponds reclaimed during the year, 4 pits and 22 lowlying lands were reclaimed including those in DeMellows Road, Peoples' Park, portions of the Perambur tank, lands near Kodambakam High Road and near Chetpet. The Malaria lorry with a gang of 12 coolies was employed in the reclamation of the Choolai Burial Ground in DeMellows Road and Perambur Tank during the year.

*Control of Mosquito Breeding in Private Premises:*—Due to inadequacy of the staff a regular inspection of all houses and compounds for detection and destruction of breeding places of mosquitoes was not possible. The Medical Officer investigated into all complaints received about mosquito nuisance and took immediate steps to mitigate it. The breeding of mosquitoes inside private premises was brought to the notice of the persons concerned and the work of destruction was carried out in their presence. Proper instructions were given to them to prevent such happenings in future. It is regrettable to note that in several instances the instructions issued to them in person or through correspondence were not carried out systematically, and in such instances breeding re-appeared and the nuisance consequently continued to exist.

*Mosquito Survey:*—A special feature of this report is the survey of anopheles mosquitoes in the City carried out during the year. Spleen survey and examination of blood slides were done in a selected area and the report on these is given elsewhere. The previous survey was conducted prior to 1921 by a special staff which was disbanded about the end of 1921. Since then there has been no further survey. The present staff was organised in 1927 and continued to carry out only anti-mosquito measures.

Anopheles breeding in tanks, ponds, wells, cisterns, the river Cooum and the Buckingham Canal, came under survey. The larvae were collected during inspections and bred out for adult identification. Larval identification was not undertaken for want of time and assistance.

(a) *Survey of tanks and ponds:*—Anopheles Fuliginosus and Anopheles Culicifacies were found to breed in some of the tanks in the divisions of Tondiarpet, Korukupet, Perambur, Vepery, Kilpauk, Nungambakkam, Royapettah and Mylapore. Of these, A. Culicifacies is reckoned to be the most dangerous malaria-carrier. Anopheles Minimus var Varuna considered as a probable dangerous malaria-carrier was found to breed in some tanks in Perambur, Kilpauk, Nungambakkam and Royapettah divisions. There were also other anopheline species prevalent in the City but of no malarial importance.

The prevalence of anopheles including malaria-carrying species demands specific measures to be adopted. The dusting of Paris green mixture—the best known anopheline larvicide—should be widely used for all tanks, ponds, irrigation fields, etc. The present method of clearing weeds, moss, and rank vegetation does not satisfactorily help to control the breeding as the tanks revert to their original condition a few days after cleaning. Nor is it possible to make the owners clean them once a week or at short intervals. Breeding starts as soon as weeds or moss begin to grow in them. A separate gang for dusting of Paris green is, therefore, suggested, so that the anopheles population may be kept under control.

(b) *Survey of Wells:*—As stated elsewhere 857 wells were found to breed anopheles. With the facilities available, it was found possible to identify the larvae from 506 wells as Anopheles Stephensi. It is very probable that the larvae found breeding in the remaining wells or at least in a great majority of them were those of the A. Stephensi. This species breeds too largely in wells.

and is considered to be the most dangerous malaria-carrier. All unused and consequently neglected domestic wells form the favourite resort of this mosquito. *A. Stephensi* was found to breed in the wells of all the municipal divisions particularly Korukupet, Kothwal Bazar, Mofuskhan, Seven Wells, Sowcarpet, Pedunaikenpet, Trevelyan Basin, Park Town, Choolai and Purasawalkam. The existence of this species should be viewed with anxiety for the prevalence and spread of malaria.

The need for inspection and introduction of larvicidal fish into wells at least once in 3 months has been emphasised elsewhere. The suggestion to fill up wells or cover them with cuddapah slabs is generally objected to by the citizens on religious grounds. The control of general mosquito nuisance including malaria demands therefore fish introduction at shorter intervals as explained already.

(c) *Survey of the Cooum River and the Buckingham Canal*.—During the year under report the Medical Officer inspected the banks of the river and the canal and found the larvae of both *Culex* and *Anopheles* mosquitoes breeding along the weedy margins. *Anopheles Subpictus* (Rossi) was the only species prevalent in the entire extent of the river and the canal. The foul condition is responsible for the breeding of *Culex* and Rossi group of *Anopheles* and does not favour breeding of other anopheline species. But *A. Fuliginosus* was noted to breed in the portion of the river to the west of the Munro Bridge where the water is fairly clean.

Since the river and the canal are responsible for mosquito nuisance in the localities through which they pass, a separate gang for each is necessary to clean and oil the edges regularly.

*Blood Slides*.—During the year 92 blood slides were examined microscopically for malarial parasites. 50 or 54 per cent of the slides were positive. As the Seven Wells and Peddunaikenpet divisions showed a large number of wells breeding *A. Stephensi*, blood films were called for from the Medical Officer in charge of the Corporation Mint Street Dispensary to which the residents of the divisions referred to resorted for treatment. 74 blood films of the total examined were received from this dispensary and 43 or 58 per cent of them were positive. Examination of blood slides from all dispensaries could not be undertaken for want of a separate staff. In addition to these slides, the smears taken from children during the spleen survey were also examined and the results are given below.

*Spleen Survey*.—During the year 425 children in Seven Wells division (10th division) were examined by the Medical Officer for spleen enlargement. Blood smears were taken from them at the same time. 90 or 21 per cent of the children showed enlarged spleen. 23 or 5.4 per cent of them had malarial parasites in their peripheral blood. The children included those living in dwelling houses in 1st Narayanan Street, Theagaroya Pillai Street, and Veerangavadu Murugesu Mudali Street, and also those reading in the three Corporation Schools in Seven Wells division. The details of the survey are given below according to the different places at which the survey was conducted.

|                                                  | No. of children examined. | No. of children with enlarged spleen. | Percentage to total. | No. of children with parasites. | Percentage to total. |
|--------------------------------------------------|---------------------------|---------------------------------------|----------------------|---------------------------------|----------------------|
| House to house visits ...                        | 89                        | 18                                    | 20                   | 3                               | 3.4                  |
| Corporation Boys' School, Seven Wells Street ... | 97                        | 24                                    | 25                   | 10                              | 10.3                 |
| Do. Malayappen Street...                         | 151                       | 20                                    | 13                   | 6                               | 3.9                  |
| Do. Somasundara Mudaly Street ...                | 88                        | 28                                    | 32                   | 4                               | 4.5                  |
| Total ...                                        | 425                       | 90                                    | 21                   | 23                              | 5.4                  |

The cost of quinine purchased during 1933 for use in Corporation Hospitals and Dispensaries was Rs. 3,600.

*Conclusion*.—Mosquitoes are beyond doubt a grave menace to public health. The diseases borne by them such as malaria and filariasis are having a baneful influence on the health of the City. So long as there is the risk of infection these diseases are certain to make headway and devitalise the citizens rendering them susceptible to other diseases. The risk should be removed by adequate anti-mosquito measures. The present staff is not sufficient for the entire City and needs reorganisation in the light of facts and information given in this report. The staff was organised in 1927 and it cannot be expected to cope with the needs of the City as they stand at present. An investigation staff is necessary to find out the extent of malaria incidence in all its aspects in the different parts of the City. All tanks and ponds should be Paris-greened; all wells should be inspected and restocked with fish once in 3 months instead of once in 10 to 11 months; and the Cooum river, the Buckingham Canal and the Otary Nulla should be cleaned and oiled regularly. An adequate staff is, therefore, necessary to control the general mosquito nuisance and malaria in the City.

#### Report on the Medical Inspection of Corporation Schools for the year 1933-1934.

*Staff*.—As in previous years the work of medical inspection was carried on by four Medical Inspectors and two Medical Inspectresses.

*Findings of Medical Inspection*.—There has been an increase in the strength of all the schools during the year under report. The total number on the rolls was 20587 boys and 12706 girls. 18363 boys and 10215 girls were subjected to medical inspection as against 17297 boys and 10209 girls in the previous year. The average attendance in all the schools was 16605 in the case of boys and 9823 in the case of girls. The percentage of boys examined to the total number on rolls was 89.20 in boys and 80.40 in girls, the corresponding percentages for the previous year being 88.55 and 81.29 respectively. Due to the inadequacy of staff, girls reading in boys schools could not be examined.

Out of the total number examined 11220 boys (61.10 per cent) and 4926 girls (48.22 per cent) were defective and required treatment. The percentage of defectives for the previous year was 58.91 in boys and 53.02 in girls. The slight increase in the percentage of defectives in boys was mainly contributed by figures under malnutrition and infectious diseases. A reduction was noticed in the incidence of the diseases of the nose and throat. A very large number of entrants had enlarged spleen due to Malaria. The anti-malaria staff concentrated its attention in and around schools where the incidence was high.

*Cleanliness, Condition of the skin, of scalp, body, and nails*.—Personal cleanliness was wanting in 2504 boys (13.64 per cent) 528 girls (5.17 per cent) as against 14.31 per cent and 5.90 per cent respectively in the previous year. Wherever bath rooms were available in the schools the children made use of them. In other schools dirty children had their baths in the school taps during the recess hour. In schools where midday meals were distributed, the school staff was advised to insist on the children bathing before sitting for meals. Instructions in personal hygiene were also given to the staff and the children.

*Malnutrition*.—4301 boys (23.42 per cent) and 198 girls (1.94 per cent) were ill-nourished, the percentages for the previous year being 22.69 and 3.19 respectively. There has been a rise in the percentage this year which is mainly due to entrants of the previous year whose general condition was bad. Most of the children reading in the Corporation elementary schools are drawn from the poorer classes and improvement in general health will mainly depend upon the success of the measures taken to improve the economic condition and to provide them with better housing accommodation and food. It is only then that permanent benefit can be expected. Cod liver oil was stocked in large quantities in one of the dispensaries and was given to undernourished children.

**Teeth and Mouth.**—2962 boys (16.13 per cent) and 1143 girls (11.19 per cent) had complaints pertaining to the teeth and the mouth as against 16.73 per cent and 12.81 per cent respectively in the previous year. Stomatitis formed the major portion of defects (1980). On careful investigation into the habits and diet of these children it was found that their food mainly consisted of starch (boiled rice) with an excess of spices and without any other nutritious elements such as proteins or vitamins. Nourishing articles of food such as milk, butter-milk, ghee, fruits etc., were absent in their daily diet. The Medical Inspectors pointed out to the parents this deficiency and persuaded them to improve the dietary of their children.

Dental caries was found in 1298 children. Where the decay was not advanced, treatment at Corporation dispensaries was resorted to. In others, cleaning and filling of caries teeth were advised. In badly decayed cases extraction of the offending teeth was suggested. 828 children had tartar teeth. Scaling of teeth was advised to such of them as had a very bad collection of tartar.

**Nose and Throat.**—Enlarged tonsils and cervical and submaxillary glands formed the bulk of the defects under this head. 4703 boys (25.61 per cent) and 2125 girls (20.80 per cent) had diseases and defects pertaining to the nose and throat. The corresponding percentages for the previous year were 27.57 and 22.75 respectively. 5838 children had enlargement of tonsils while 996 had enlarged glands of the neck. 925 children were advised Tonsillectomy as the condition was associated with other complications. In other cases conservative treatment was given at the Corporation dispensaries. 89 children having adenoids and 8 having nasal polypus were advised operative treatment at Government General Hospital by the specialist.

**Eye Diseases.**—454 boys (2.47 per cent) and 430 girls (4.21 per cent) had defects in the eyes, as against 2.57 per cent and 3.74 per cent respectively in the previous year. Mostly they were conjunctivitis or xerosis brought about by poor diet. 205 children had xerosis of the eyes and 180 had conjunctivitis. All cases of sore eyes were excluded temporarily from the schools to prevent infection. The xerotic children were advised change of diet and use of Cod liver oil. The details of defects are shown in the statement.

**Vision.**—224 boys (1.22 per cent) and 35 girls (0.34 per cent) had defective vision. The percentage defective under this head in the previous year was 1.30 among boys and 0.12 among girls. 104 children were advised to wear glasses while 155 were advised to take Cod liver oil.

**Ear Disease.**—305 boys (1.66 per cent) and 172 girls (1.68 per cent) had Otitis and Otorrhoea as against 1.46 per cent and 1.83 per cent respectively in the previous year. Except simple cases of Otitis all others were advised treatment at the Ear, Nose and Throat Section, Government General Hospital.

**Hearing.**—7 boys (0.04 per cent) and 8 girls (0.08 per cent) as against 0.06 and 0.11 per cent in the previous year, were short of hearing. Treatment by the specialist was suggested and the school staff was advised to give them seats close to the teachers.

**Speech.**—51 boys (0.28 per cent) and 11 girls (0.11 per cent) had defects of speech. Mostly they were either stammerers or lispers. The percentages for the previous year were 0.38 among boys and 0.13 among girls.

**Circulatory System.**—199 boys (1.08 per cent) and 32 girls (0.31 per cent) had defects of heart and anaemia as against 1.07 per cent and 0.39 per cent respectively in the previous year. Organic disease of the heart was found in 47 children. In 69, functional disorders mostly due to Hookworm were noticed. 115 children were anaemic due to Malaria and Hookworm. They were treated at the local dispensaries. In cases of organic defects of heart bordering on decompensation, institutional treatment was suggested.

**Tuberculosis.**—Minute examination of the children for detecting Tuberculosis in its incipient stages revealed 23 boys (0.13 per cent) and 20 girls (0.20 per cent) showing early signs of the disease. The corresponding percentages for the previous year were 0.10 and 0.29 respectively. In seven children requiring only general treatment as good food and Cod liver oil, prescriptions were

given for treatment at the Corporation dispensaries, while other cases were referred to the Tuberculosis Institute. By way of health education, the Medical Inspectors arranged talks on the subject with the parents who were instructed regarding nature of the disease and the necessity for early and proper action on their part. Out of the 43 children affected, the lungs were the seat of the disease in 35 and in 5 cases the glands were involved. Two children were having tubercular infection of the skin and they were advised X-ray treatment at the Government General Hospital. One child had tubercular disease of the hip joint and was referred to the Government General Hospital.

**Respiratory Diseases.**—565 boys (0.38 per cent) and 107 girls (1.05 per cent) were having ailment of the respiratory system. The percentage of incidence in the previous year was 3.13 among boys and 3.18 among girls. 647 children had Bronchitis and 25 had Bronchial Asthma. Suitable treatment was given at the local dispensaries.

**Abdominal organs.**—446 boys (2.43 per cent) and 30 girls (0.29 per cent) were defective under this head as against 1.64 per cent and 0.67 per cent respectively in the previous year. 274 children had enlarged spleen due to malaria compared with 96 in the previous year. This increase in the number of children with spleen was mainly among the entrants. Out of 274 affected 179 were entrants. 245 of these children were in the north range while only 29 were in the south. The parents of all these were met and advised to take their children to the dispensaries for treatment. The school staff was supplied with a list of these children and was requested to pay special attention to them to ensure regular treatment. The Medical Inspectors in addition examined these children at the re-inspections. The results of treatment given are shown in the following up statement. Children having hernia and hydrocele were advised operative treatment whilst others, having minor complaints of the stomach or bowels, were treated at the local dispensaries.

**Bones and Joints.**—540 boys (2.94 per cent) and 29 girls (0.28 per cent) were having affections of the bones and joints. The percentages for the previous year were 28.6 among the boys and 0.41 among girls. Most of the defects were deformities of chest or other bones (557) due to a previous attack of rickets in childhood.

**Nervous and Psychic systems.**—28 boys (0.15 per cent) and 2 girls (0.02 per cent) were having palsies and functional disorders of the nervous system as against 0.16 per cent and 0.08 per cent respectively in the previous year. 6 children had infantile palsies while the rest were functional disorders as incontinence of urine or neurosis. Suitable treatment was suggested to them.

**Infectious and Contagious Diseases.**—2514 boys (13.69 per cent) and 676 girls (6.62 per cent) had infectious diseases including skin diseases as against a percentage of 12.91 and 7.41 respectively in the previous year. Most of the defects were scabies (2297). Next to this tenia and fungi were common. 328 children had these conditions. 324 children had leprosy in early stage. A detailed report on this is given elsewhere. Isolation of the children having infectious skin complaints was arranged with the school staff and they were treated at the dispensaries.

**Other diseases and defects.**—1150 boys (6.26 per cent) and 345 girls (3.38 per cent) had defects or diseases not included in other items as against 8.79 per cent and 5.95 per cent in the previous year. The chief defects under this head were worms and minor injuries. 656 had worms and 398 had minor injuries. 164 children had phimosis and were advised circumcision.

**Deformities.**—58 boys (0.32 per cent) and 16 girls (0.16 per cent) had deformities compared with 0.42 per cent and 0.21 per cent respectively in the previous year. Details of defects noticed under this head are shown in the detailed statement.

**Number without marks of vaccination.**—A careful search among the children for vaccination marks revealed 70 boys (0.38 per cent) and 18 girls (0.18 per cent) not having clear marks. The percentages for the previous year were 0.42 among boys and 0.58 among girls. They were subsequently vaccinated.

**Medical Treatment.**—17534 children were advised treatment at the following institutions:—

|                                                                                | Boys. | Girls |
|--------------------------------------------------------------------------------|-------|-------|
| 1. Children sent to Corporation dispensaries ...                               | 11152 | 3411  |
| 2. Children referred to                                                        |       |       |
| (a) Government General Hospital ...                                            | 936   | 1168  |
| (b) Ophthalmic Hospital ...                                                    | 169   | 292   |
| (c) Tuberculosis Institute ...                                                 | 18    | 19    |
| (d) Skin department of Govt. Hospitals, Corporation and other skin clinics ... | 278   | 90    |
| (e) Number admitted in Thirumani leper settlement ...                          | 1     | ...   |
| Total ...                                                                      | 12554 | 4980  |

**Leprosy.**—A careful survey of all the school children was made for detection of leprosy in its early stages. Early detection and treatment, systematic following up, education and propaganda by lectures and talks in the schools and visits to the homes of the affected children to detect the sources of infection formed the main features of the anti-leprosy work done in the schools this year. Early in the year arrangements were made with the Government General Hospital Skin Department for the examination and treatment of all the suspicious children by the specialist. They were taken in batches once a week to the hospital where they were examined and treated. In many cases, the parents also were present at the hospital. In addition to this, whenever the Corporation Honorary Medical Officer visited a dispensary near a school, children were taken there for examination. In certain cases the officer visited the schools where the affected children were examined by him.

During the year under report 324 children (1.13 per cent.) were having Hansen infection (Leprosy). 2 Children had the disease in the infectious stage. One of them was removed from the school and was undergoing treatment at the Choolai Clinic. The other boy from the Corporation School, Bazaar Road, Mylapore, was admitted into the Thirumani Leper Hospital, on the advice of the Medical Inspector. The other cases were non-infectious. The disease was found to be more common among the boys than among girls.

The distribution according to sex is as follows:—

|           | No. Defective. | Percentage to the total examined. | Percentage to the total of leprosy cases detected. |
|-----------|----------------|-----------------------------------|----------------------------------------------------|
| Boys ...  | 279            | 1.52                              | 86.11                                              |
| Girls ... | 45             | 0.44                              | 13.89                                              |
| Total ... | 324            | 1.13                              | 100.00                                             |

From the above statement it can be seen that leprosy is prevalent more amongst boys than girls, the percentage of incidence being 86.11 in the former and 13.89 in the latter. These figures are in accordance with those obtained by Sir Leonard Rogers on a leper census of India, where he found that, of the total number of cases enumerated, 74 per cent. was in males and 26 per cent. in females. The parents of these children have been met and their family history enquired into thoroughly to investigate the sources of infection. The Medical Inspectors visited 276 homes of these pupils and detected 41 other cases, either parents, relatives of the children, or tenants living in the same house suffering from the disease. They were persuaded to attend the nearest skin clinic for treatment. Pamphlets on the subject were distributed to them. During the re-inspections of the schools the treatment given to these children was carefully followed up.

On the whole 274 children (84.57 per cent.) underwent treatment regularly at one or other of the skin clinics in the City. In 54 of these, there was slight improvement, sensation in the affected parts having partially returned while the rest had to continue treatment. The remaining 50 children did not

attend the dispensary regularly, though the parents had consented to do so. The difficulties encountered in this work were many. It was generally found difficult to convince the parents of the necessity for a prolonged course of treatment. The economic condition of the parents in nine out of ten was such that they could ill afford the expense of taking the patients regularly to the clinic. In some cases they could not spare the time as their employment demanded their attendance at the workspot throughout the day. They had to risk the loss of employment by paying the required attention to the needs of their children daily. Instances were also not wanting in which the parents objected strongly to their children being treated at the Clinics where advanced cases of leprosy with nodules on the face and deformities were treated and withdrew their children immediately.

**Reinspections and Following-up work:**—Special attention was directed to the following-up work during this year, and all the children having leprosy were kept under continuous observation. The details of work done in regard to this are shown separately. During the year under report 290 re-visits to schools were paid in addition to the routine inspections and 15165 re-examinations of children conducted. The details of results are shown separately in the form of a statement a summary of which is given below:—

**Malnutrition:**—285 children regained normal health after treatment. 2246 improved in weight as a result of treatment. 1202 children continued treatment as they did not show any improvement.

**Teeth and Mouth:**—4 children had their teeth cleaned at the Government General Hospital Dental Section. 34 had their caries teeth extracted, 568 children, who had stomatitis, were cured after treatment at the local dispensaries. In 444 children, the condition was improved while 599 had to continue treatment.

**Enlarged Tonsils:**—133 children underwent Tonsillectomy operation after medical advice and continued cod liver oil for improving their general health. 451 children who continued conservative treatment for Tonsils, obtained relief. In 1453, improvement was perceptible after long continued treatment. 1393 children continued treatment as they failed to show any improvement. A child, having nasal polypus, was operated on after medical advice.

**Defective vision:**—8 children had eyes tested for defective vision and wore glasses. 81 having the defect in a minor degree took cod liver oil as a result of which their vision improved. 73 children continued to take the oil as they did not show improvement.

**Ear Disease:**—179 children having Otitis and Otorrhoea underwent treatment at Corporation dispensaries and were cured. In 80 cases having similar complaints there was improvement after treatment.

**Circulatory System.**—54 anaemic children improved in health rapidly after treatment, while 34 continued treatment.

**Tuberculosis.**—In five children who had the disease in the early stages, further progress of the disease was arrested and they regained normal health. 7 continued treatment and their condition was found improved. 30 were still under treatment at the end of the year as the improvement in them was not rapid. One 'entrant' girl was detected with the disease in an acute condition and on the advice of the Medical Inspectress the girl was admitted at Temple Gardens, but expired after a short period in spite of treatment.

**Respiratory Affections.**—310 children who had Bronchitis were cured after treatment at the local dispensaries. In 70 children there was improvement while in the remaining 64, treatment had to be continued as the ailment was of a chronic nature.

**Abdominal Organs.**—Out of 274 children who had enlarged spleen, 51 were cured, in 92 the spleen was reduced in size while 118 continued treatment. 13 children could not be traced after the routine inspection as they were absent on all the re-inspection days. The Medical Officer (Malaria) also visited certain schools affected and directed his anti-malarial work to and around the schools affected. A case of jaundice was admitted into the Government General Hospital as an inpatient where it was cured. Three boys with inguinal hernia

underwent operation for radical cure. A case of nephritis was under treatment at General Hospital as inpatient and later left the institution cured.

**Infectious and Contagious Diseases.**—1466 children with scabies were treated at the local dispensaries and cured. 430 improved after treatment while 356 continued treatment as they were having chronic types of the disease. Children who had scabies and other infectious conditions were isolated from the healthy. They were also made to bathe daily and wash their clothes. 58 obtained relief for eczema at the local dispensaries. 12 children who had clinical signs of malaria were cured after treatment while in only one, treatment was advised to be continued as the child had not completely recovered.

The results of the following up done in regard to leprosy have already been explained.

**Other diseases and defects.**—17 children who had congenital phimosi underwent circumcision operation after medical advice.

**Co-operation of Parents.**—During the year under report 8365 parents were met at the school premises and given medical advice regarding the treatment of their children. The parents of most of the children who had defects of a serious nature were met and advised. In certain cases the parents themselves had ailments for which treatment was suggested.

**Co-operation of Teachers.**—The school staff continued its work of maintaining the list of defective children and the following up of the treatment given to the children. In addition to this a special list of children having leprosy was maintained in each school and they were followed up very carefully. In refractory cases the parents were met frequently with a view to persuade them and thereby assure regular treatment. The Medical Inspectors, in some cases, were helped by the teachers in tracing out the residences of children having leprosy when house visits were made to detect the possible sources of infection.

**School Sanitation.**—Particular attention was paid to the sanitary conditions of the schools by the Medical Inspection staff. 11 schools were considered as unfit for school purposes and 49 schools were found to possess very inadequate accommodation and were recommended minor repairs for the improvement of ventilation, latrine arrangements, etc.

**School Latrines.**—Only forty five schools had flush-out latrines. Introduction of flush-out latrine was recommended for the remaining schools.

**Water Supply.**—All the schools have been provided with a sufficient number of taps for the supply of water. Schools in the 16th division especially the Perambur School suffered a great deal due to scarcity of water. This, however, appeared to be common in the division where the supply failed between 10 a.m. and 4 p.m.

**Play Ground.**—41 schools had no playground accommodation. In two schools children were taken to the model playground nearby.

**School Equipment.**—Every school had adequate furniture and equipment.

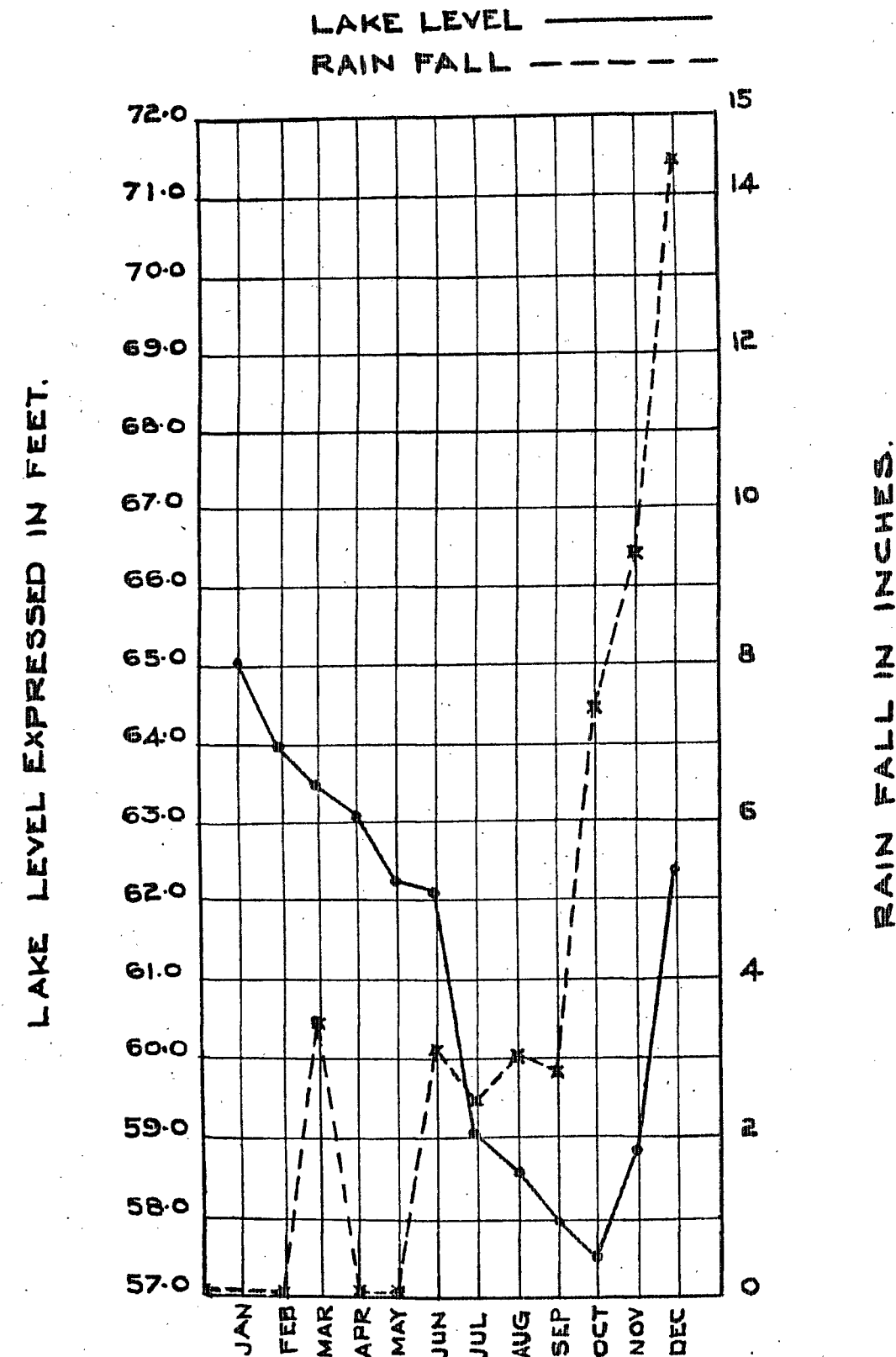
**School Baths.**—59 schools had bath rooms. Dirty children were brought here during the midday for baths and washing of clothing and they looked cleaner and brighter after this.

During the inspections this year, improvement, minor repairs or extension in schools were noticed in 12 schools. Six schools changed premises for better accommodation, ventilation, latrine arrangements, etc.

**Midday Meals.**—During the year under report 79 schools and 4200 children were given midday meals as against 78 schools and 4200 children in the previous year. The Medical Inspectors visited these schools at the time of feeding and inspected the sanitary arrangements made.

**Propaganda.**—The Medical Inspectors delivered 122 lectures and arranged 300 talks in the schools. The total attendance at these lectures and talks was 14176. Charts relating to school hygiene were exhibited in the divisional health exhibitions at Venkatarangam Pillai Street, Strahans Road, Perambur Barracks, and Lauders Gate Road, Kilpauk.

**GRAPH 1**  
**SHOWING THE RELATION BETWEEN**  
**MONTHLY AVERAGE LAKE LEVEL**  
**& RAIN FALL AT RED-HILLS LAKE 1933**



The details of propaganda work done are given below:—

| No. | Subjects.                 | No. of lectures delivered. | No. of talks arranged. | Remarks. |
|-----|---------------------------|----------------------------|------------------------|----------|
| 1   | Small-pox                 | 8                          | 23                     |          |
| 2   | Cholera                   | 15                         | 29                     |          |
| 3   | Tuberculosis              | 23                         | 38                     |          |
| 4   | Malaria                   | 8                          | 29                     |          |
| 5   | Hookworm disease          | 4                          | 5                      |          |
| 6   | Leprosy                   | 29                         | 110                    |          |
| 7   | Flies                     | 1                          | 3                      |          |
| 8   | Personal Hygiene          | 15                         | 37                     |          |
| 9   | Ventilation & Housing     | 2                          | 6                      |          |
| 10  | Infectious diseases       | 1                          | ...                    |          |
| 11  | Mosquitoes                | 3                          | 4                      |          |
| 12  | Water-supply              | ...                        | 2                      |          |
| 13  | Worms                     | 1                          | 1                      |          |
| 14  | Enlarged tonsils          | 1                          | 5                      |          |
| 15  | Dental caries             | 2                          | 6                      |          |
| 16  | Measles                   | 2                          | ...                    |          |
| 17  | Cerebro-spinal Meningitis | 1                          | ...                    |          |
| 18  | Other subjects            | 6                          | 2                      |          |
|     |                           | 122                        | 300                    |          |

#### Report of the Water Analyst for the year ending 31st December 1933.

##### General.

The year under report was conspicuous for the variety of the work turned out. Till last year the Water Analyst was confined to water analysis, but this year he had to do analysis of sewage and soil and to make bio-chemical studies of the river Cooum, Buckingham Canal, and some ponds. Sewage and soil analysis of Korukupet rubbish depot was undertaken to supply the necessary information to Dr. G. J. Fowler who has been asked by the Council to submit an estimate for a sewage purification plant (Activated Sludge Plant) for Madras. The results of the analyses are shown in Appendix A. A study of the pollution of the river Cooum and Buckingham Canal was undertaken to supply information regarding the present biological condition of the rivers to enable him to suggest remedial measures. These results are shown in Appendix B. Appendix C contains the results of an investigation to improve the condition of Krishnappa Naick Tank which is a source of nuisance to the inhabitants of the locality due to the decay of algal growths.

For the first time during the course of twenty years the Director, King Institute, Guindy, wrote a very favourable report upon our water-supply. In his report dated 30-5-1933, he wrote that "for the first time for many years sulphuretted hydrogen was not present in the effluent of any of the filter beds during this season. This fact has helped to make post-filtration chlorination a practical proposition". The improvement referred to was due to,

(i) putting up a cascading arrangement followed by rough filtration of raw water before entering the raw water conduit at Red Hills Lake;

(ii) allowing three hours' sunning and sedimentation for raw water in the improvised reservoir formed in the filter beds 15, 16 and 17 (the filtering materials having been removed from them) and rough filtration again in bed 17 before reaching the filters at Kilpauk;

(iii) maintaining a low depth of fine sand, i.e., 9 inches instead of the usual 2-3 feet in filter beds;

(iv) working the filters at a semi-rapid rate, i.e., 12 vertical inches per hour;

(v) watching the filters carefully for the production of  $H_2S$  (by suspending lead-acetate papers in the filtered water chambers) and stopping them as soon as the test papers became brown.

By adopting the above measures throughout the year and without adding copper-sulphate to the lake as in last year, filtered water which was supplied to the city was free from  $H_2S$  and the concomitant growths of sulphur bacteria, and therefore was chlorinatable. The yearly average dose of chlorine applied to filtered water was 0.72 ppm. The average daily consumption for the year was 21.11 million gallons.

The Analyst was awarded "the Sir William Wedderburn Prize" in Chemistry for 1933 by the University of Madras for his thesis "On the production of sulphuretted hydrogen in the slow sand filters of Madras", particulars of which have already appeared in the Health Officer's Annual Report for 1932.

#### Scientific.

**Red Hills Lake and Sholavaram Lake** :—It has been stated almost in all the reports of investigations carried out both by the Government and the Corporation since 1914, that the Red Hills Lake water contains "excessive organic matter of vegetable origin" and to this have been ascribed all our filtration difficulties such as the production of sulphuretted hydrogen and the consequent development of sulphur bacteria in the filtered water chambers, the short duration of life of filters, etc. Every year empirical measures are adopted to get over difficulties arising from it without studying its nature and formation in a scientific manner. Treating the lake with copper sulphate with the object of preventing hosts of algae that would form in it will be practically useless if the general conditions for the existence and multiplication of organisms—the free floating algae—are not known. Further, every lake is a microcosm, an independent system in itself, and therefore a knowledge of the natural life-processes in fresh water lakes of Europe or America about which a vast amount of literature has already accumulated will not help materially in solving the problem. Therefore, limnological studies, extending over several years, of Red Hills Lake and of its feeder lake—Sholavaram Lake—are of utmost importance from the stand-point of our water works practice, besides being of great scientific interest. These studies were started during the year under report and their results are furnished in the tabular statements (tables 1 to 4). Some of the important results are considered below.

#### Physical Conditions—Meteorological Data.

*Hours of bright sunshine, Percentage of cloudy day and velocity of wind.*

In December 1933, the wind was most powerful; maximum hours of bright sunshine was recorded in February; and August had the maximum percentage of cloudy day (Table 1).

**Rainfall** :—The total rainfall for Red Hills Lake was 46.40 inches as against 39.06 inches in last year (vide Table I a—Graph I). During the period of ten years (from 1924–1933) highest rainfall was recorded in 1930, being 75.29 inches, lowest in 1926 being 26.20 inches (vide Table Ia and Graphs III & V.) The yearly average rainfall for the ten year period comes to 46.72 inches which is in excess of the total rainfall for the year under report by 0.32 inch.

**Sholavaram Lake** :—This is situated at a distance of about two and a half miles from Red Hills Lake, and had 53.44 inches of rainfall for the year (Table I-c).

#### Temperature of the Lake Region.

Highest mean temperature was recorded in May and lowest in February (Table I-d).

#### Lake Level.

**Red Hills Lake** :—Maximum level was recorded in January 1933 and minimum in October for the year (Table I-b and Graph I). For the ten year period (1924–1933), the yearly average was found to be maximum in 1930, and minimum in 1927 (Table I-b and Graphs III and V).

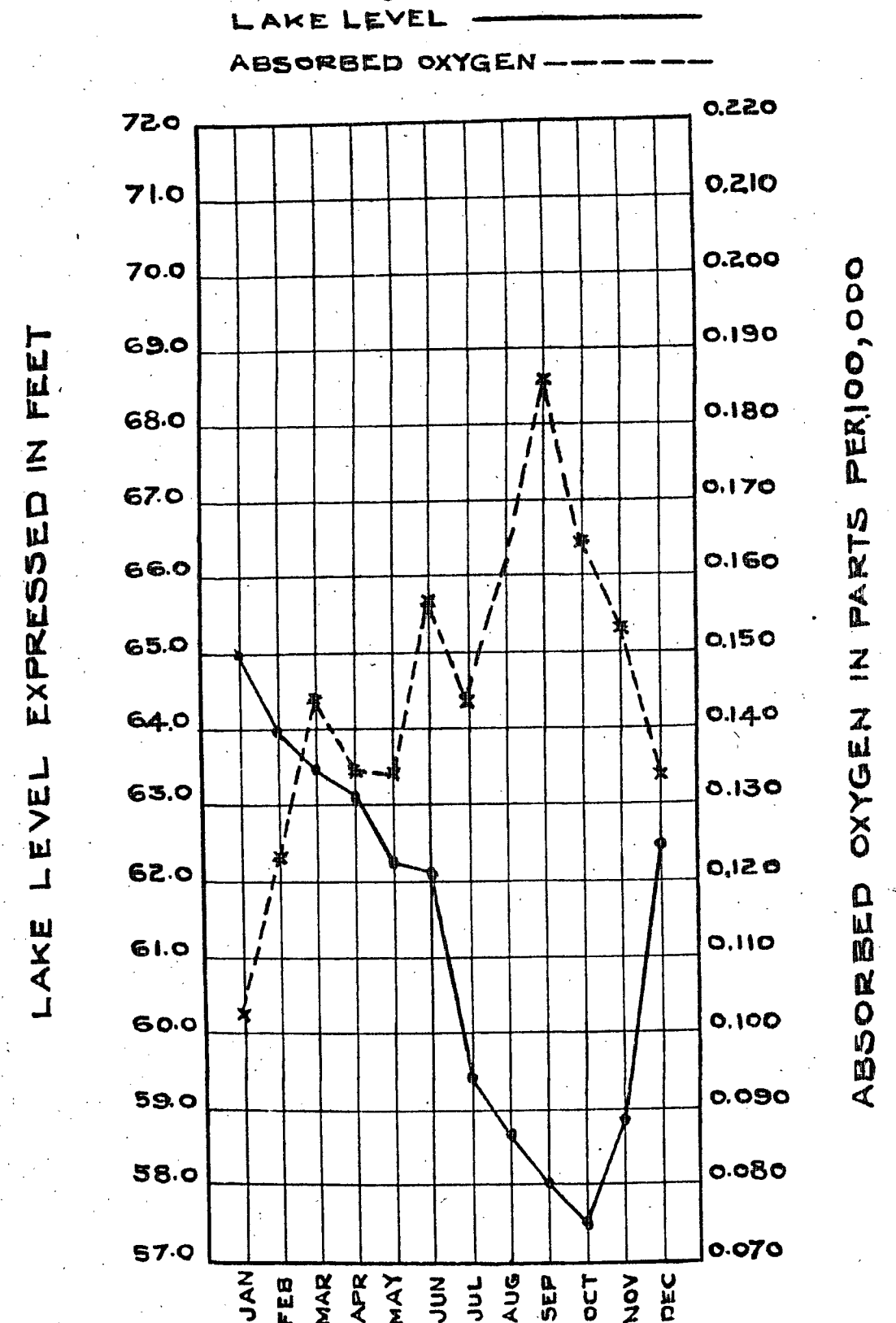
**Sholavaram Lake** :—Maximum level was recorded in January and minimum in July for the year (Table I-c).

#### Chemical Conditions.

##### Dissolved gases.

**Red Hills Lake** :—In December the surface water was richest in oxygen, containing 5.41 c. c. per litre, while on 9-4-33, it was poorest and had only 4.64 c. c., per litre (Table II).

GRAPH 2  
SHOWING THE RELATION BETWEEN  
LAKE LEVEL AND ORGANIC MATTER  
(ABSORBED OXYGEN FIGURES) KILPAUK END  
1933



*Sholavaram Lake*:—The oxygen content was highest in December, and lowest in October (data recorded only from July to December) (Table III).

**Hydrogenion concentration (pH).**

*Red Hills Lake*:—The pH. values varied from 7.7 to 8.9. Maximum value was recorded on 30-4-33 and minimum on 23-12-33 (Table II).

*Sholavaram Lake*:—The variation was between 7.5 and 9.1. Maximum value was recorded on 9-4-33 and minimum on 23-12-33 (Table III).

**Nitrogen Compounds.**

**Ammoniacal Nitrogen.**

*Red Hills Lake*:—Except in March, April, May and December it was present in "traces" during other months (Table II).

*Sholavaram Lake*:—Except in February, March, April, July, August and October, in all other months it was present in "traces". (Table III).

**Albuminoid Nitrogen.**

*Red Hills Lake*:—The highest figure was in August and the lowest in December (Table II).

*Sholavaram Lake*:—Maximum figure was recorded in August and minimum in January and February (Table III).

**Nitric Nitrogen and Nitrous Nitrogen.**

In both the lakes, they were absent (Tables II and III).

**Absorbed oxygen.**

*Red Hills Lake*:—This was found to be highest in October and lowest in December (Table II).

*Sholavaram Lake*:—The maximum figure was in July and the minimum in February.

The latter contained more organic matter than the former (Table III).

**Biological Conditions.**

**Bacteriological Results.**

*Red Hills Lake*:—The bacteriological quality of the lake water was found to be varying from month to month. Lactose fermenters were present in 60 c. c. and upwards in the sample collected on 18-6-33, while they were found in 20 c. c., 10 c. c., 5 c. c., or 1 c. c., in the remaining months. The figure for total colonies per c. c., was highest in December and lowest on 9-4-33 (Table II).

*Sholavaram Lake*:—The lake water was of highest purity on 9-4-33 and for the other months the bacteriological quality of water was found to be varying. (Table III).

**Raw Water at the Kilpauk End.**

**Physical conditions.**

*Temperature of surface water*:—(recorded weekly for the second half year). The average monthly temperature was found to be maximum in August and minimum in December (Table IV).

*Transparency*:—(recorded from 21-4-33).—The raw water was most transparent in July and had the minimum degree of transparency in December (Table IV).

**Chemical Conditions.**

**Dissolved Gases.**

*Dissolved oxygen*:—This was estimated weekly for the second half-year. The raw water was richest in oxygen content in December and poorest in July (Table IV).

*Free Carbonic acid* ( $\text{CO}_2$ ):—It was not detected throughout the latter half of the year except during the last week of December (Table IV).

*Carbonic acid* (calculated as  $\text{CO}_2$ ): was at its maximum in October and minimum in December (Table IV).

*Bicarbonic acid* (calculated as  $\text{HCO}_3$ ): was found to be maximum in September and minimum in June (Table IV).

*Hydrogenion concentration (pH)*:—The pH values were found to increase gradually from 8.18 in January to a maximum of 8.7 in June after which there was a gradual fall to 8.22 in December (Table IV).

*Combined chlorine*:—This also showed a gradual increase from 4.27 parts per 100,000 in January to a maximum of 7.37 parts per 100,000 in August

after which the figure gradually decreased to 5.58 parts per 100,000 in December (Table IV).

**Ammoniacal Nitrogen:**—During the year this was found in "traces" almost in all the months. The yearly average showed a slight reduction over the corresponding result of last year (Table VI).

**Albuminoid Nitrogen:**—Maximum was reached in September and minimum in June. The yearly average showed a definite increase over the result of last year (Table VI).

**Absorbed oxygen:**—Organic matter as represented by this figure was highest in September and lowest in January (Graph II). Compared with last year the average for the year under report showed a slight reduction. For the ten year period (1924-1933) the yearly average was highest in 1927 and lowest in 1931 (Table VII; Graph V).

#### Biological Conditions.

**Bacteriological results:**—Raw water was of fair quality almost throughout the year. Lactose fermenters were present in 20 c. c. and upwards in 10.4% of the samples; in 10 c. c. and upwards in 19%; in 5 c. c. and upwards in 50.1%; in 1 c. c. and upwards in 20.5% of the samples analysed during the year. The average total colonies per c. c. was 840. (Table IX).

**Coarse Filtered Raw Water.**—Raw water before reaching the filters was forced through a layer of coarse filtering materials (without fine sand) placed right across its path in the form of a sloping bund in bed 13. The arrangement was effective in reducing a portion of the organic matter till September only, and thereafter the raw water deteriorated instead of improving in quality. The filtering materials had served their purpose and badly needed a thorough cleaning. Consequently the yearly average figures for organic matter as represented by "absorbed oxygen" showed an increase over the corresponding raw water figure (Table VI).

A similar deterioration in quality was noticed on the bacteriological side also (Table IX).

**Filtrates from Beds:**—Bacteriologically, the number of first class samples (L.F. in  $\pm 60$  c.c.) for the year was found to be about 18 per cent (Table IX). On the chemical side, the oxidisable organic matter and albuminoid nitrogen were reduced to about 20 per cent and 10.5 per cent respectively, while the ammoniacal nitrogen showed a distinct increase over the coarse filtered water (Table VI).

**Test tap (Kilpauk Pumping Station):**—Samples collected from this place were chlorinated filtered water samples. The dose of chlorine applied to the water is given in Table VIII.

The average percentage of first class samples (L.F.  $\pm 60$  c.c.) for the year was found to be only 71.9 (Table IX). This figure is rather low as one would expect to get nearly 100 per cent. The low figure is due to the fact that for the first few months of the year, the arrangement for mixing chlorine water with the filtered water was not quite satisfactory. It was perfected only towards the end of the year and consequently the percentage of first class samples also increased towards the close of the year. The average percentage reduction of total colonies per c.c. was about 46 (Table IX). On the chemical side a reduction of about 16 per cent in oxidisable organic matter (absorbed oxygen) was noticed over the corresponding figure for filtrates from beds, due primarily to chlorination. The figures for "Ammonias" did not show any improvement, (Table VI), but nearly resembled the averages for "filtrates from beds".

**Distribution system:**—The water as distributed did not show much difference on the chemical side, while there was a distinct falling off in quality on the bacteriological side over the test tap samples (Table IX).

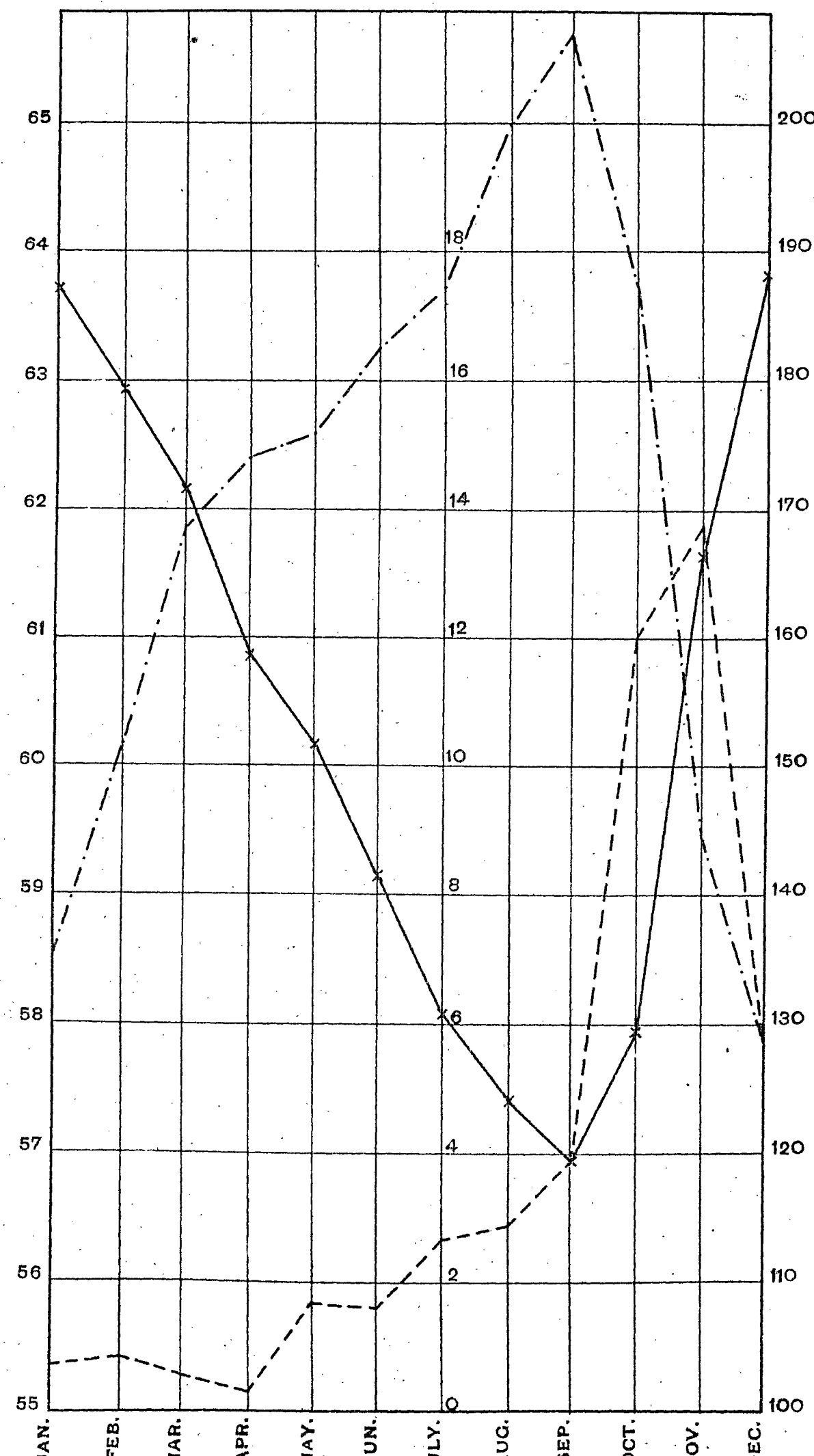
**Complaints from consumers:**—Frequent complaints were received for the presence of animalcules in water. The places were inspected and remedial measures such as scouring the pipe lines of the locality, arranging complete circulation of water etc., were suggested to the Works Department for execution.

Water Analysis Laboratory,  
Kilpauk, Water Works.  
30-4-1934.

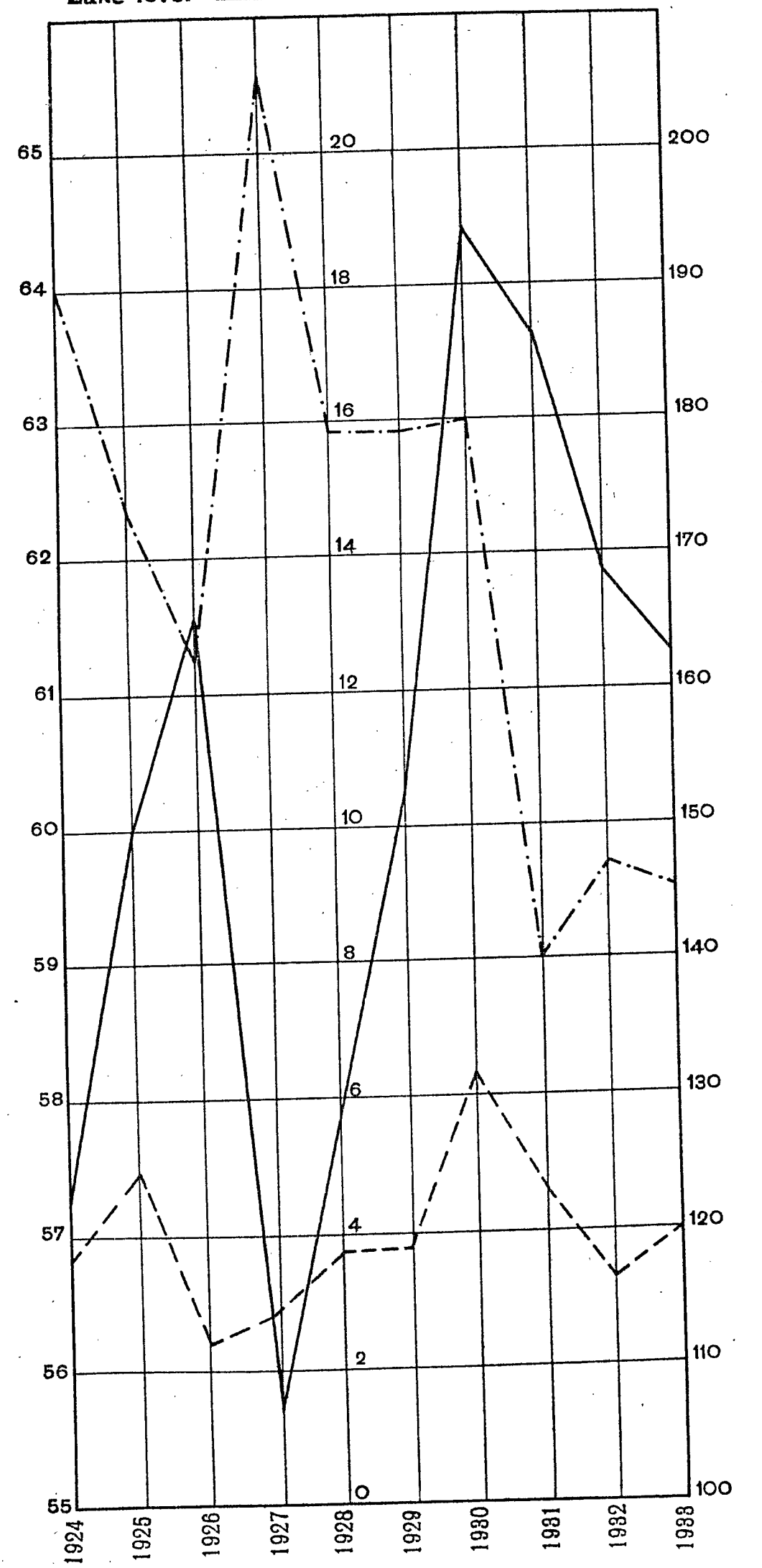
S. V. GANAPATI, B.A., M.Sc., A.I.C.,

Water Analyst.

GRAPH No. 4  
Showing the Seasonal variations in  
Organic Matter (ABSORBED OXYGEN), Lake level  
and Rain fall using month war Average from 1924-1933.



Organic Matter - - - - -  
Rain fall - - - - -  
Lake level \_\_\_\_\_



**VITAL STATISTICS (STATEMENTS).**  
**Annual Form No. A.—Meteorological Data for 1933—Madras.**  
Latitude:—13° 4' North.  
Longitude:—80° 15' East.

| Months.         | Barometer. | Reading of Thermometer.                                    |          |          |                   |                   |                                | Difference between dew point temperature and Mean air temperature. | Degree of humidity complete being 100. | Prevailing direction of wind. | Rainfall.                          |                                      |                                       |            |
|-----------------|------------|------------------------------------------------------------|----------|----------|-------------------|-------------------|--------------------------------|--------------------------------------------------------------------|----------------------------------------|-------------------------------|------------------------------------|--------------------------------------|---------------------------------------|------------|
|                 |            | Mean daily reading reduced to 32° F Sea level and gravity. | Dry.     |          |                   |                   | Mean Maximum. Solar radiation. |                                                                    |                                        |                               | Number of days on which rain fell. | Total fall of rain during the Month. | Maximum fall of rain during 24 hours. |            |
|                 |            |                                                            | Maximum. | Minimum. | Mean daily range. | Mean daily value. |                                |                                                                    |                                        |                               |                                    |                                      |                                       | Dew point. |
|                 |            |                                                            |          |          |                   |                   |                                |                                                                    |                                        |                               |                                    |                                      |                                       |            |
| January         | 29.938     | 84.1                                                       | 69.4     | 14.7     | 76.2              | 67.3              | Not available                  | 8.9                                                                | 76                                     | NE by N                       | ...                                | ...                                  | ...                                   |            |
| February        | .869       | 85.4                                                       | 68.4     | 17.0     | 76.7              | 67.9              |                                | 8.8                                                                | 77                                     | E by S                        | E                                  | ...                                  | ...                                   | 3.17       |
| March           | .852       | 86.6                                                       | 71.5     | 15.1     | 78.8              | 71.0              |                                | 7.8                                                                | 80                                     | S E                           | S E                                | ...                                  | ...                                   | 0.03       |
| April           | .793       | 91.5                                                       | 77.4     | 14.1     | 83.7              | 75.9              |                                | 7.8                                                                | 74                                     | S.S.E                         | S                                  | ...                                  | ...                                   | 0.01       |
| May             | .705       | 94.9                                                       | 80.4     | 14.5     | 86.1              | 75.1              |                                | 10.7                                                               | 60                                     | SW by S                       | S                                  | ...                                  | ...                                   | 0.21       |
| June            | .657       | 98.6                                                       | 81.6     | 17.0     | 87.9              | 70.7              |                                | 17.2                                                               | 71                                     | do                            | do                                 | ...                                  | ...                                   | 0.14       |
| July            | .662       | 96.1                                                       | 79.8     | 16.3     | 85.7              | 73.7              |                                | 12.0                                                               | 75                                     | S by W                        | S                                  | ...                                  | ...                                   | 1.55       |
| August          | .705       | 92.8                                                       | 78.8     | 14.0     | 84.1              | 73.8              |                                | 10.3                                                               | 68                                     | S W by S                      | S                                  | ...                                  | ...                                   | 0.37       |
| September       | .705       | 93.5                                                       | 78.7     | 14.8     | 84.7              | 71.1              |                                | 13.3                                                               | 83                                     | S W                           | S                                  | ...                                  | ...                                   | 3.30       |
| October         | .760       | 86.9                                                       | 75.5     | 11.4     | 79.9              | 73.4              |                                | 6.5                                                                | 81                                     | NE by N                       | N                                  | ...                                  | ...                                   | 3.28       |
| November        | .851       | 84.8                                                       | 72.5     | 12.3     | 78.1              | 72.0              |                                | 6.1                                                                | 84                                     | do                            | do                                 | ...                                  | ...                                   | 7.78       |
| December        | .879       | 82.5                                                       | 69.1     | 13.4     | 75.4              | 68.7              |                                | 6.7                                                                | 82                                     |                               |                                    | ...                                  | ...                                   | ...        |
| Annual Mean ... | 29.783     | 89.8                                                       | 75.3     | 14.5     | 81.4              | 71.8              | 9.6                            | 76                                                                 |                                        | S. E.                         | 90                                 | 40.18                                | ..                                    |            |

Annual Form No. I—Births registered by divisions during the year 1933.

| 1          | 2                  | 3                                           |          |          | 4                         |          | 5                                       |        |          | 6                                               | 7                                                    | 8                                 | 9                                                      |      | 10            | 11                   |      |
|------------|--------------------|---------------------------------------------|----------|----------|---------------------------|----------|-----------------------------------------|--------|----------|-------------------------------------------------|------------------------------------------------------|-----------------------------------|--------------------------------------------------------|------|---------------|----------------------|------|
| Divisions. | Districts.         | Population according to the Census of 1931. |          |          | No. of births registered. |          | Ratio of births per 1000 of Population. |        |          | Number of Males born to every 100 Females born. | Excess of births over deaths per 1000 of population. | Excess of deaths over population. | Mean ratio of births per 1000 during previous 5 years. |      | Still births. | Illegitimate births. |      |
|            |                    | Males.                                      | Females. | Total.   | Males.                    | Females. | Total.                                  | Males. | Females. |                                                 |                                                      |                                   | Total.                                                 |      |               |                      |      |
| 1          | Royapuram          | 10,949                                      | 11,003   | 21,952   | 487                       | 452      | 939                                     | 44.5   | 41.1     | 42.8                                            | 107.7                                                | 6.7                               | ...                                                    | 12.3 | 39.9          | 41.2                 | 33   |
| 2          | Tondiarpet         | 13,183                                      | 12,722   | 25,911   | 720                       | 651      | 1,371                                   | 51.6   | 51.2     | 52.9                                            | 110.6                                                | 8.1                               | ...                                                    | 49.2 | 46.3          | 47.8                 | 90   |
| 3          | Washermanpet       | 13,064                                      | 12,399   | 25,463   | 638                       | 531      | 1,169                                   | 48.8   | 50.2     | 49.5                                            | 100.8                                                | 5.3                               | ...                                                    | 41.9 | 42.7          | 43.8                 | 58   |
| 4          | Korukkupet         | 13,191                                      | 12,347   | 25,538   | 561                       | 544      | 1,105                                   | 42.8   | 44.1     | 43.4                                            | 103.7                                                | 3.8                               | ...                                                    | 35.5 | 36.3          | 36.4                 | 61   |
| 5          | Harbour            | 5,483                                       | 3,221    | 8,704    | 183                       | 162      | 345                                     | 33.1   | 30.3     | 31.6                                            | 113.0                                                | ...                               | 1.03                                                   | 25.8 | 39.4          | 30.8                 | 19   |
| 6          | Muthialpet         | 8,377                                       | 5,880    | 14,257   | 246                       | 245      | 491                                     | 29.4   | 41.7     | 31.4                                            | 100.4                                                | ...                               | ...                                                    | 24.5 | 36.2          | 29.3                 | 14   |
| 7          | Katchaleswaranpet  | 6,856                                       | 5,851    | 12,707   | 272                       | 253      | 525                                     | 39.7   | 41.3     | 41.3                                            | 107.5                                                | 4.1                               | ...                                                    | 35.6 | 39.5          | 37.4                 | 5    |
| 8          | Kothaval Bazaar    | 4,013                                       | 2,537    | 6,550    | 89                        | 86       | 175                                     | 23.2   | 33.9     | 26.7                                            | 103.5                                                | ...                               | 5.6                                                    | 20.9 | 32.2          | 25.3                 | 13   |
| 9          | Amman Koil         | 10,078                                      | 9,124    | 19,202   | 433                       | 395      | 828                                     | 43.0   | 43.3     | 43.1                                            | 109.5                                                | 4.9                               | ...                                                    | 38.4 | 41.6          | 39.9                 | 1    |
| 10         | Seven Wells        | 10,414                                      | 9,880    | 20,294   | 407                       | 389      | 796                                     | 39.1   | 39.4     | 39.2                                            | 100.0                                                | ...                               | ...                                                    | 34.4 | 35.7          | 35.0                 | 11   |
| 11         | Sowcarpet          | 4,160                                       | 3,034    | 7,194    | 99                        | 103      | 202                                     | 23.8   | 33.9     | 28.1                                            | 98.1                                                 | ...                               | 4.7                                                    | 31.4 | 35.7          | 33.0                 | 2    |
| 12         | Peddunakkenpet     | 11,135                                      | 10,412   | 21,547   | 473                       | 511      | 984                                     | 42.5   | 49.1     | 45.7                                            | 92.6                                                 | 2.7                               | ...                                                    | 38.9 | 26.7          | 23.3                 | 8    |
| 13         | Trevelyan Basin    | 9,681                                       | 9,235    | 18,916   | 394                       | 346      | 740                                     | 40.7   | 37.5     | 39.1                                            | 113.9                                                | 4.4                               | ...                                                    | 35.3 | 33.9          | 33.6                 | 2    |
| 14         | Esplanade          | 2,325                                       | 1,581    | 3,906    | 58                        | 55       | 113                                     | 24.9   | 34.8     | 28.9                                            | 105.5                                                | 9.0                               | ...                                                    | 22.8 | 29.1          | 25.3                 | 6    |
| 15         | Park Town          | 9,615                                       | 7,568    | 17,183   | 334                       | 329      | 663                                     | 34.7   | 43.5     | 38.6                                            | 101.5                                                | 3.1                               | ...                                                    | 31.5 | 37.7          | 34.2                 | 3    |
| 16         | Perambur           | 23,176                                      | 20,641   | 43,817   | 1,014                     | 991      | 2,005                                   | 43.8   | 48.2     | 45.8                                            | 102.0                                                | 11.5                              | ...                                                    | 36.1 | 39.1          | 37.5                 | 4    |
| 17         | Choolai            | 14,249                                      | 13,239   | 27,488   | 700                       | 677      | 1,377                                   | 49.1   | 51.1     | 50.1                                            | 103.4                                                | 10.3                              | ...                                                    | 45.3 | 43.2          | 44.3                 | 25   |
| 18         | Purasawalkam       | 13,968                                      | 13,086   | 27,054   | 592                       | 559      | 1,151                                   | 42.4   | 42.7     | 42.5                                            | 105.9                                                | 8.1                               | ...                                                    | 39.2 | 40.1          | 39.7                 | 2    |
| 19         | Vepery             | 12,373                                      | 9,764    | 22,137   | 476                       | 475      | 951                                     | 35.5   | 48.6     | 43.0                                            | 100.2                                                | 2.1                               | ...                                                    | 32.7 | 41.0          | 35.8                 | 6    |
| 20         | Egmore             | 15,353                                      | 14,022   | 29,375   | 815                       | 801      | 1,616                                   | 53.0   | 57.1     | 55.0                                            | 101.7                                                | 61.6                              | ...                                                    | 48.9 | 51.6          | 50.2                 | 12   |
| 21         | Kilpauk            | 13,075                                      | 11,259   | 24,334   | 469                       | 426      | 895                                     | 35.7   | 37.3     | 36.8                                            | 110.1                                                | 8.3                               | ...                                                    | 31.4 | 35.4          | 33.2                 | 7    |
| 22         | Nungambakkam       | 14,512                                      | 12,723   | 27,235   | 524                       | 492      | 1,016                                   | 36.1   | 38.7     | 37.3                                            | 106.5                                                | 9.2                               | ...                                                    | 33.7 | 35.8          | 31.7                 | 19   |
| 23         | Chintadripet       | 13,917                                      | 12,928   | 26,845   | 675                       | 617      | 1,292                                   | 48.5   | 47.7     | 48.1                                            | 109.4                                                | 9.1                               | ...                                                    | 42.8 | 42.8          | 42.8                 | 15   |
| 24         | Tiruvatteswaranpet | 16,223                                      | 15,148   | 31,371   | 799                       | 797      | 1,596                                   | 49.3   | 52.6     | 50.9                                            | 100.3                                                | 7.4                               | ...                                                    | 45.3 | 44.8          | 45.0                 | 27   |
| 25         | Chepauk            | 9,394                                       | 7,698    | 17,092   | 483                       | 369      | 852                                     | 51.4   | 47.9     | 49.8                                            | 130.9                                                | 16.9                              | ...                                                    | 40.2 | 49.0          | 44.2                 | 5    |
| 26         | Triplicane         | 10,301                                      | 9,213    | 19,514   | 397                       | 345      | 742                                     | 38.5   | 27.4     | 38.9                                            | 115.1                                                | 6.0                               | ...                                                    | 36.0 | 38.5          | 37.2                 | 36   |
| 27         | Amir Mahal         | 10,135                                      | 9,480    | 19,615   | 405                       | 463      | 868                                     | 40.0   | 48.8     | 44.3                                            | 87.5                                                 | ...                               | 0.5                                                    | 42.8 | 40.4          | 41.7                 | 4    |
| 28         | Mirshabpet         | 13,860                                      | 13,483   | 27,343   | 679                       | 600      | 1,279                                   | 49.0   | 44.5     | 46.8                                            | 113.2                                                | ...                               | 1.5                                                    | 43.5 | 42.1          | 42.8                 | 2    |
| 29         | Royapettah         | 17,284                                      | 15,919   | 33,203   | 768                       | 720      | 1,488                                   | 44.4   | 45.2     | 44.8                                            | 106.7                                                | 11.2                              | ...                                                    | 31.1 | 35.9          | 34.9                 | 9    |
| 30         | Mylapore           | 10,863                                      | 10,407   | 21,270   | 434                       | 417      | 851                                     | 40.0   | 40.1     | 40.0                                            | 101.1                                                | 5.3                               | ...                                                    | 34.6 | 31.1          | 31.4                 | 4    |
| Total      |                    | 3,41,223                                    | 3,06,007 | 6,47,230 | 14,627                    | 13,906   | 28,533                                  | 42.9   | 45.4     | 44.1                                            | 105.2                                                | 6.2                               | ...                                                    | 38.1 | 40.1          | 39.0                 | 1380 |
|            |                    |                                             |          |          |                           |          |                                         |        |          |                                                 |                                                      |                                   |                                                        |      |               |                      | 368  |

Annual Form No. II—Statement of Deaths by Divisions during the year 1933.

| 1          | 2                 | 3                                           | 4        | 5        | 6                        | 7        | 8                                   | 9                                             | 10                                                |          |            |          |         |          |                |               |                          |               |                                                            |           |                          |                   |        |          |        |        |          |        |      |
|------------|-------------------|---------------------------------------------|----------|----------|--------------------------|----------|-------------------------------------|-----------------------------------------------|---------------------------------------------------|----------|------------|----------|---------|----------|----------------|---------------|--------------------------|---------------|------------------------------------------------------------|-----------|--------------------------|-------------------|--------|----------|--------|--------|----------|--------|------|
| Divisions. | Districts.        | Population according to the Census of 1931. |          |          | No. of deaths registered |          | Deaths per 1,000 of population from |                                               |                                                   |          |            |          |         |          |                |               | All causes.              |               | Mean ratio of deaths per 1,000 during previous Five years. |           |                          |                   |        |          |        |        |          |        |      |
|            |                   | Males.                                      | Females. | Total.   | Males.                   | Females. | Total.                              | No. of deaths of males to every 100 of males. | No. of deaths of females to every 100 of females. | Cholera. | Small-pox. | Measles. | Plague. | Malaria. | Enteric fever. | Other fevers. | Dysentery and Diarrhoea. | Tuberculosis. | Other respiratory diseases.                                | Injuries. | Deaths from child birth. | All other causes. | Males. | Females. | Total. | Males. | Females. | Total. |      |
|            |                   |                                             |          |          |                          |          |                                     |                                               |                                                   |          |            |          |         |          |                |               |                          |               |                                                            |           |                          |                   |        |          |        |        |          |        |      |
| 1          | Royapuram         | 10,949                                      | 11,003   | 21,952   | 371                      | 420      | 791                                 | 38.3                                          | 0.09                                              | 1.0      | ...        | ...      | ...     | 0.05     | 0.1            | 4.0           | 2.4                      | 1.1           | 7.3                                                        | 0.3       | 10.6                     | 13.3              | 33.5   | 38.2     | 35.0   | 35.9   | 43.8     | 37.5   |      |
| 2          | Tondiarpet        | 13,189                                      | 12,722   | 25,911   | 613                      | 522      | 1,135                               | 46.1                                          | 0.1                                               | 1.6      | 0.1        | ...      | 0.1     | 0.08     | 4.6            | 3.7           | 1.3                      | 9.9           | 0.6                                                        | 12.4      | 22.5                     | 46.5              | 43.2   | 44.8     | 42.7   | 43.8   | 48.7     | 43.2   |      |
| 3          | Washermanpet      | 13,064                                      | 12,399   | 25,463   | 601                      | 522      | 1,123                               | 46.1                                          | 0.1                                               | 1.6      | 0.1        | ...      | 0.1     | 0.08     | 4.5            | 5.5           | 1.6                      | 10.3          | 0.5                                                        | 11.0      | 18.2                     | 46.0              | 41.4   | 43.8     | 42.9   | 44.6   | 48.7     | 43.2   |      |
| 4          | Korukkupet        | 13,191                                      | 12,347   | 25,538   | 520                      | 490      | 1,010                               | 39.6                                          | 0.04                                              | 1.4      | 0.1        | ...      | 0.1     | 0.04     | ...            | ...           | ...                      | ...           | ...                                                        | ...       | ...                      | ...               | ...    | ...      | ...    | 38.8   | 38.9     | 38.8   |      |
| 5          | Harbour           | 5,483                                       | 3,221    | 8,704    | 168                      | 168      | 336                                 | 110.7                                         | ...                                               | ...      | ...        | ...      | ...     | ...      | ...            | ...           | ...                      | ...           | ...                                                        | ...       | ...                      | ...               | ...    | ...      | ...    | 49.4   | 39.5     | 44.5   |      |
| 6          | Muthialpet        | 8,377                                       | 5,880    | 14,257   | 183                      | 160      | 343                                 | 118.1                                         | ...                                               | ...      | ...        | ...      | ...     | ...      | ...            | ...           | ...                      | ...           | ...                                                        | ...       | ...                      | ...               | ...    | ...      | ...    | 29.6   | 32.9     | 31.2   |      |
| 7          | Katchaleswaranpet | 6,856                                       | 5,851    | 12,707   | 228                      | 235      | 463                                 | 101.3                                         | ...                                               | ...      | ...        | ...      | ...     | ...      | ...            | ...           | ...                      | ...           | ...                                                        | ...       | ...                      | ...               | ...    | ...      | ...    | 21.1   | 24.6     | 22.8   |      |
| 8          | Kothaval Bazaar   | 4,013                                       | 2,537    | 6,550    | 110                      | 102      | 212                                 | 107.8                                         | ...                                               | ...      | ...        | ...      | ...     | ...      | ...            | ...           | ...                      | ...           | ...                                                        | ...       | ...                      | ...               | ...    | ...      | ...    | 34.9   | 32.9     | 33.9   |      |
| 9          | Amman Koil        | 10,078                                      | 9,124    | 19,202   | 357                      | 377      | 734                                 | 94.7                                          | 0.3                                               | 1.2      | ...        | ...      | 0.3     | 0.2      | 5.6            | 3.2           | 1.7                      | 10.9          | 0.2                                                        | 15.3      | 14.2                     | 35.4              | 41.3   | 38.2     | 34.8   | 39.2   | 35.9     | 35.7   |      |
| 10         | Seven Wells       | 10,414                                      | 9,880    | 20,294   | 409                      | 387      | 796                                 | 107.2                                         | 0.2                                               | 1.4      | 0.6        | ...      | 0.4     | 0.1      | 6.2            | 6.6           | 2.5                      | 11.3          | 0.7                                                        | 12.6      | 17.0                     | 39.5              | 39.2   | 39.2     | 44.7   | 43.2   | 44.0     | 44.0   |      |
| 11         | Sowcarpet         | 4,160                                       | 3,034    | 7,194    | 121                      | 115      | 236                                 | 105.2                                         | ...                                               | ...      | ...        | ...      | ...     | ...      | ...            | ...           | ...                      | ...           | ...                                                        | ...       | ...                      | ...               | ...    | ...      | ...    | 29.1   | 35.9     | 32.0   |      |
| 12         | Peddumalickpet    | 11,135                                      | 10,412   | 21,547   | 488                      | 438      | 926                                 | 111.4                                         | 0.6                                               | 1.8      | 0.1        | ...      | 0.7     | 0.3      | 7.1            | 1.8           | 1.3                      | 6.5           | 0.3                                                        | 24.8      | 13.8                     | 29.1              | 37.9   | 32.8     | 29.1   | 35.9   | 32.0     | 32.0   |      |
| 13         | Trevelyan Basin   | 9,681                                       | 9,235    | 18,916   | 343                      | 314      | 657                                 | 109.2                                         | 0.2                                               | 0.6      | 0.6        | ...      | 0.4     | 0.05     | 3.5            | 2.6           | 0.9                      | 9.0           | 0.3                                                        | 10.8      | 16.5                     | 35.4              | 34.0   | 34.7     | 34.6   | 36.7   | 37.5     | 37.5   |      |
| 14         | Esplanade         | 2,325                                       | 1,581    | 3,906    | 48                       | 33       | 81                                  | 135.4                                         | ...                                               | 1.8      | 1.02       | ...      | ...     | 0.8      | 2.3            | 3.6           | 6.7                      | ...           | 16.9                                                       | ...       | 17.7                     | 9.0               | 19.4   | 20.9     | 20.0   | 26.7   | 32.8     | 29.2   |      |
| 15         | Park Town         | 23,176                                      | 20,641   | 43,817   | 899                      | 637      | 1,536                               | 113.7                                         | 0.3                                               | 0.9      | 0.1        | ...      | 0.2     | 0.2      | 3.3            | 2.3           | 0.9                      | 8.9           | 0.8                                                        | 13.6      | 17.1                     | 33.7              | 37.7   | 25.4     | 32.1   | 37.1   | 34.3     | 34.3   |      |
| 16         | Perambur          | 14,249                                      | 13,239   | 27,488   | 652                      | 533      | 1,185                               | 101.1                                         | ...                                               | 1.2      | 0.02       | ...      | 0.07    | 0.1      | 5.1            | 0.9           | 0.8                      | 8.8           | 0.2                                                        | 10.0      | 14.4                     | 31.9              | 33.8   | 34.4     | 30.4   | 35.7   | 32.3     | 32.3   |      |
| 17         | Choolai           | 13,958                                      | 13,086   | 27,054   | 450                      | 433      | 883                                 | 89.9                                          | ...                                               | ...      | ...        | ...      | ...     | ...      | ...            | ...           | ...                      | ...           | ...                                                        | ...       | ...                      | ...               | ...    | ...      | ...    | 41.1   | 41.9     | 41.9   |      |
| 18         | Purasawalkam      | 12,373                                      | 9,764    | 22,137   | 143                      | 143      | 286                                 | 118.8                                         | ...                                               | ...      | ...        | ...      | ...     | 0.04     | 0.07           | 1.5           | 5.7                      | 1.7           | 11.2                                                       | 0.2       | 8.7                      | 12.5              | 31.3   | 37.7     | 34.4   | 35.2   | 38.1     | 34.6   |      |
| 19         | Vepery            | 15,353                                      | 14,022   | 29,375   | 482                      | 488      | 970                                 | 100.5                                         | ...                                               | 0.7      | ...        | ...      | 0.03    | 0.2      | 3.5            | 1.8           | 7.4                      | 10.9          | 0.8                                                        | 13.7      | 14.8                     | 35.8              | 38.2   | 36.4     | 33.5   | 40.6   | 36.8     | 36.8   |      |
| 20         | Egmore            | 13,075                                      | 11,259   | 24,334   | 321                      | 339      | 660                                 | 116.9                                         | 0.2                                               | 0.4      | 0.34       | ...      | 0.04    | 0.4      | 0.8            | 2.3           | 1.8                      | 6.2           | 0.2                                                        | 17.9      | 16.6                     | 32.0              | 34.8   | 33.3     | 31.0   | 35.6   | 33.1     | 35.6   |      |
| 21         | Kilpauk           | 14,512                                      | 12,723   | 27,235   | 375                      | 391      | 766                                 | 96.9                                          | 0.4                                               | 0.8      | ...        | ...      | 0.3     | 0.4      | 0.6            | 3.3           | 1.7                      | 7.5           | 0.3                                                        | 13.4      | 15.0                     | 25.8              | 30.7   | 28.5     | 29.7   | 29.6   | 29.6     | 29.6   |      |
| 22         | Nungambakkam      | 16,223                                      | 15,148   | 31,371   | 715                      | 650      | 1,365                               | 107.6                                         | 0.1                                               | 0.9      | ...        | ...      | 0.04    | 0.07     | 2.3            | 4.0           | 2.3                      | 10.5          | 0.3                                                        | 11.6      | 17.5                     | 38.7              | 38.7   | 28.1     | 25.6   | 25.1   | 26.7     | 26.7   |      |
| 23         | Chintadripet      | 13,917                                      | 12,928   | 26,845   | 538                      | 500      | 1,038                               | 110.9                                         | 0.2                                               | 0.8      | 0.6        | ...      | 0.2     | 0.1      | 4.2            | 4.4           | 0.8                      | 9.2           | 0.6                                                        | 8.1       | 12.5                     | 44.1              | 42.9   | 38.7     | 36.6   | 39.2   | 37.8     | 37.8   |      |
| 24         | Tiruvattewarapet  | 333                                         | 381      | 714      | 270                      | 293      | 563                                 | 108.5                                         | ...                                               | ...      | ...        | ...      | 0.2     | 0.2      | 3.5            | 3.9           | 1.5                      | 6.8           | 0.4                                                        | 14.1      | 16.9                     | 31.2              | 35.1   | 32.9     | 27.1   | 31.2   | 31.7     | 31.7   |      |
| 25         | Cheppauk          | 705                                         | 242      | 947      | 79                       | 101      | 180                                 | 98.1                                          | ...                                               | ...      | ...        | ...      | ...     | ...      | ...            | ...           | ...                      | ...           | ...                                                        | ...       | ...                      | ...               | ...    | ...      | ...    | 37.2   | 41.1     | 40.1   | 40.1 |
| 26         | Triplicane        | 168                                         | 161      | 329      | 315                      | 315      | 630                                 | 96.9                                          | ...                                               | 1.6      | 0.6        | ...      | 0.2     | 0.3      | 2.7            | 3.3           | 1.3                      | 6.8           | 0.5                                                        | 13.5      | 14.1                     | 30.0              | 34.2   | 32.9     | 30.1   | 33.1   | 31.6     | 31.6   |      |
| 27         | Amir Mahal        | 169                                         | 116.0    | 285      | 431                      | 446      | 877                                 | 96.9                                          | ...                                               | ...      | ...        | ...      | 0.3     | 0.1      | 4.0            | 5.7           | 1.1                      | 8.9           | 0.7                                                        | 11.5      | 24.3                     | 42.5              | 47.0   | 47.0     | 40.7   | 40.6   | 40.7     | 40.6   |      |
| 28         | Misambakkam       | 680                                         | 40.2     | 13,860   | 13,860                   | 13,860   | 13,860                              | 13,860                                        | ...                                               | ...      | ...        | ...      | ...     | ...      | ...            | ...           | ...                      | ...           | ...                                                        | ...       | ...                      | ...               | ...    | ...      | ...    | 35.1   | 39.3     | 38.7   | 38.7 |
| 29         | Royapettah        | 3,115                                       | 10.6     | 17,284   | 17,284                   | 17,284   | 17,284                              | 17,284                                        | ...                                               | ...      | ...        | ...      | ...     | ...      | ...            | ...           | ...                      | ...           | ...                                                        | ...       | ...                      | ...               | ...    | ...      | ...    | 29.1   | 29.6     | 29.9   | 29.9 |
| 30         | Mylapore          | 1,325                                       | 13.0     | 10,863   | 10,863                   | 10,863   | 10,863                              | 10,863                                        | ...                                               | ...      | ...        | ...      | ...     | ...      | ...            | ...           | ...                      | ...           | ...                                                        | ...       | ...                      | ...               | ...    | ...      | ...    | 30.7   | 30.7     | 30.7   | 30.7 |
|            | Total             | 19,728                                      | 32.8     | 8,41,223 | 3,06,007                 | 6,47,230 | 12,713                              | 11,787                                        | 24,500                                            | 107.9    | 0.1        | 1.3      | 0.08    | ...      | 0.2            | 0.1           | 3.2                      | 4.1           | 1.6                                                        | 0.2       | 0.5                      | 11.6              | 16.9   | 37.2     | 38.5   | 37.9   | 34.2     | 35.6   | 35.3 |

\* Includes 158 and 402 deaths in the Census of 1931.

\* Includes 168 and 402 deaths in the Government Royapuram and General Hospital of patients admitted from moffussil and destitutes.

Annual Form No. III.—Deaths Registered by Divisions during each month of the year 1933.

| Divisions. | Districts.         | 3        |           |        |        |       |       |       |         |            |          |           |           | Total deaths Registered during the year 1933. |
|------------|--------------------|----------|-----------|--------|--------|-------|-------|-------|---------|------------|----------|-----------|-----------|-----------------------------------------------|
|            |                    | January. | February. | March. | April. | May.  | June. | July. | August. | September. | October. | November. | December. |                                               |
| 1          | Royapuram          | 92       | 50        | 57     | 83     | 75    | 59    | 59    | 52      | 60         | 57       | 60        | 87        | 791                                           |
| 2          | Tondiarpet         | 115      | 88        | 92     | 91     | 72    | 61    | 98    | 87      | 93         | 98       | 145       | 125       | 1,162                                         |
| 3          | Washermanpet       | 103      | 99        | 135    | 80     | 78    | 70    | 82    | 69      | 71         | 98       | 118       | 120       | 1,128                                         |
| 4          | Korukkupet         | 80       | 67        | 93     | 87     | 63    | 73    | 77    | 76      | 72         | 88       | 108       | 126       | 1,010                                         |
| 5          | Harbour            | 40       | 34        | 25     | 21     | 41    | 27    | 9     | 25      | 38         | 31       | 33        | 30        | 354                                           |
| 6          | Muthialpet         | 28       | 41        | 21     | 30     | 30    | 27    | 30    | 25      | 27         | 32       | 28        | 28        | 349                                           |
| 7          | Katchaleswaranpet  | 64       | 42        | 46     | 40     | 50    | 35    | 21    | 31      | 30         | 39       | 34        | 41        | 473                                           |
| 8          | Kothawal Bazaar    | 22       | 17        | 20     | 20     | 15    | 10    | 11    | 17      | 15         | 20       | 25        | 20        | 212                                           |
| 9          | Amnen Koil         | 77       | 80        | 84     | 82     | 50    | 46    | 35    | 50      | 43         | 47       | 72        | 68        | 734                                           |
| 10         | Seven Wells        | 99       | 71        | 105    | 76     | 89    | 65    | 75    | 78      | 41         | 71       | 82        | 102       | 954                                           |
| 11         | Sowcarpet          | 21       | 24        | 13     | 23     | 22    | 32    | 13    | 15      | 12         | 19       | 24        | 18        | 236                                           |
| 12         | Peddunackenpet     | 83       | 67        | 71     | 97     | 78    | 53    | 65    | 70      | 50         | 68       | 102       | 122       | 926                                           |
| 13         | Trevelyan Basin    | 58       | 48        | 64     | 53     | 70    | 55    | 36    | 47      | 53         | 49       | 60        | 64        | 657                                           |
| 14         | Esplanade          | 48       | 38        | 50     | 30     | 38    | 31    | 35    | 46      | 38         | 38       | 40        | 45        | 480                                           |
| 15         | Park Town          | 65       | 63        | 54     | 49     | 41    | 49    | 41    | 49      | 38         | 34       | 57        | 69        | 609                                           |
| 16         | Perambur           | 124      | 124       | 131    | 129    | 147   | 118   | 106   | 108     | 100        | 128      | 133       | 158       | 1,506                                         |
| 17         | Choolai            | 95       | 73        | 95     | 83     | 91    | 83    | 69    | 80      | 99         | 100      | 103       | 119       | 1,095                                         |
| 18         | Purasawalkam       | 87       | 85        | 90     | 65     | 73    | 71    | 78    | 68      | 66         | 73       | 82        | 93        | 932                                           |
| 19         | Vepery             | 88       | 46        | 67     | 65     | 72    | 60    | 57    | 64      | 71         | 70       | 73        | 83        | 816                                           |
| 20         | Egmore             | 83       | 70        | 68     | 71     | 91    | 65    | 78    | 94      | 73         | 89       | 101       | 94        | 980                                           |
| 21         | Kilpauk            | 79       | 53        | 51     | 37     | 63    | 44    | 35    | 43      | 52         | 51       | 81        | 85        | 694                                           |
| 22         | Nungambakkam       | 69       | 51        | 64     | 68     | 71    | 62    | 55    | 65      | 67         | 58       | 56        | 80        | 766                                           |
| 23         | Chintadripet       | 81       | 86        | 96     | 58     | 96    | 81    | 92    | 87      | 75         | 77       | 90        | 119       | 1,038                                         |
| 24         | Tiruvateeswaranpet | 100      | 112       | 128    | 124    | 130   | 112   | 103   | 89      | 94         | 104      | 101       | 155       | 1,365                                         |
| 25         | Chepank            | 47       | 45        | 37     | 47     | 54    | 42    | 48    | 34      | 36         | 57       | 61        | 55        | 563                                           |
| 26         | Triplicane         | 50       | 45        | 50     | 61     | 52    | 46    | 50    | 35      | 47         | 50       | 83        | 55        | 624                                           |
| 27         | Amir Mahal         | 69       | 57        | 88     | 74     | 88    | 64    | 61    | 52      | 76         | 78       | 75        | 95        | 877                                           |
| 28         | Mirshahibpet       | 146      | 116       | 137    | 112    | 91    | 98    | 97    | 64      | 92         | 94       | 133       | 134       | 1,319                                         |
| 29         | Royapettah         | 85       | 81        | 89     | 97     | 93    | 71    | 85    | 83      | 85         | 86       | 131       | 127       | 1,117                                         |
| 30         | Mylapore           | 74       | 44        | 77     | 67     | 45    | 47    | 55    | 69      | 44         | 56       | 70        | 96        | 738                                           |
| Total      |                    | 2,272    | 1,917     | 2,198  | 2,039  | 2,069 | 1,760 | 1,780 | 1,775   | 1,758      | 1,949    | 2,376     | 2,607     | 24,500                                        |

Annual Form No. IV.—Deaths registered according to age by divisions during the year 1933.

| 1               | 2                  | 3            |          |                           |          | 4                           |          | 5                            |          | 6                            |          | 7                            |          | 8                            |          | 9                            |          | 10                           |          | 11                    |          | 12 |
|-----------------|--------------------|--------------|----------|---------------------------|----------|-----------------------------|----------|------------------------------|----------|------------------------------|----------|------------------------------|----------|------------------------------|----------|------------------------------|----------|------------------------------|----------|-----------------------|----------|----|
| Divisions.      | Districts.         | Under 1 year |          | 1 year and under 5 years. |          | 5 years and under 10 years. |          | 10 years and under 15 years. |          | 15 years and under 20 years. |          | 20 years and under 30 years. |          | 30 years and under 40 years. |          | 40 years and under 50 years. |          | 50 years and under 60 years. |          | 60 years and upwards. |          |    |
|                 |                    | Males.       | Females. | Males.                    | Females. | Males.                      | Females. | Males.                       | Females. | Males.                       | Females. | Males.                       | Females. | Males.                       | Females. | Males.                       | Females. | Males.                       | Females. | Males.                | Females. |    |
| 1               | Royapuram          | 138          | 137      | 88                        | 86       | 13                          | 15       | 5                            | 5        | 8                            | 13       | 14                           | 33       | 27                           | 31       | 23                           | 20       | 23                           | 18       | 58                    | 62       |    |
| 2               | Tondiarpet         | 222          | 194      | 93                        | 97       | 17                          | 10       | 7                            | 8        | 11                           | 13       | 37                           | 61       | 43                           | 44       | 41                           | 25       | 48                           | 27       | 84                    | 70       |    |
| 3               | Washermanpet       | 224          | 173      | 97                        | 114      | 21                          | 23       | 8                            | 5        | 10                           | 16       | 34                           | 42       | 43                           | 43       | 35                           | 24       | 36                           | 17       | 93                    | 65       |    |
| 4               | Korukkupet         | 186          | 161      | 66                        | 95       | 18                          | 15       | 16                           | 8        | 11                           | 14       | 34                           | 42       | 48                           | 38       | 30                           | 20       | 30                           | 23       | 81                    | 74       |    |
| 5               | Harbour            | 60           | 53       | 36                        | 40       | 5                           | 4        | 3                            | 1        | 4                            | 5        | 14                           | 13       | 18                           | 13       | 15                           | 6        | 13                           | 7        | 16                    | 26       |    |
| 6               | Muthialpet         | 49           | 54       | 33                        | 29       | 6                           | 7        | 7                            | 2        | 7                            | 6        | 23                           | 16       | 9                            | 10       | 19                           | 8        | 14                           | 14       | 23                    | 15       |    |
| 7               | Katchaleswaranpet  | 73           | 62       | 41                        | 38       | 7                           | 7        | 2                            | 4        | 7                            | 4        | 21                           | 30       | 17                           | 15       | 19                           | 16       | 21                           | 19       | 28                    | 40       |    |
| 8               | Kothawal Bazaar    | 30           | 23       | 10                        | 18       | 5                           | 3        | 3                            | ...      | 6                            | 5        | 9                            | 10       | 9                            | 6        | 9                            | 9        | 16                           | 9        | 13                    | 19       |    |
| 9               | Amnen Koil         | 166          | 144      | 56                        | 70       | 14                          | 16       | 6                            | 6        | 5                            | 9        | 26                           | 37       | 23                           | 27       | 28                           | 23       | 28                           | 25       | 53                    | 60       |    |
| 10              | Seven Wells        | 123          | 110      | 66                        | 57       | 16                          | 13       | 9                            | 11       | 17                           | 24       | 47                           | 42       | 53                           | 45       | 60                           | 31       | 43                           | 31       | 87                    | 64       |    |
| 11              | Sowcarpet          | 34           | 27       | 9                         | 12       | 5                           | 4        | 1                            | 4        | 4                            | 6        | 11                           | 16       | 11                           | 6        | 13                           | 6        | 15                           | 14       | 18                    | 20       |    |
| 12              | Peddunackenpet     | 177          | 125      | 83                        | 68       | 20                          | 16       | 6                            | 14       | 7                            | 23       | 24                           | 41       | 35                           | 40       | 42                           | 28       | 29                           | 24       | 64                    | 59       |    |
| 13              | Trevelyan Basin    | 120          | 81       | 64                        | 48       | 11                          | 10       | 5                            | 2        | 9                            | 17       | 24                           | 38       | 20                           | 25       | 22                           | 13       | 18                           | 18       | 50                    | 62       |    |
| 14              | Esplanade          | 18           | 14       | 17                        | 15       | 11                          | 4        | 11                           | 2        | 17                           | 13       | 66                           | 14       | 98                           | 12       | 70                           | 12       | 38                           | 13       | 27                    | 8        |    |
| 15              | Park Town          | 95           | 71       | 48                        | 53       | 13                          | 5        | 7                            | 4        | 8                            | 10       | 22                           | 27       | 29                           | 21       | 23                           | 19       | 26                           | 23       | 53                    | 53       |    |
| 16              | Perambur           | 268          | 223      | 140                       | 132      | 37                          | 21       | 10                           | 17       | 16                           | 16       | 60                           | 52       | 56                           | 53       | 55                           | 37       | 43                           | 31       | 120                   | 115      |    |
| 17              | Choolai            | 185          | 162      | 103                       | 113      | 25                          | 23       | 10                           | 6        | 13                           | 27       | 31                           | 41       | 38                           | 30       | 31                           | 34       | 37                           | 22       | 74                    | 85       |    |
| 18              | Purasawalkam       | 152          | 162      | 78                        | 90       | 17                          | 22       | 4                            | 11       | 9                            | 18       | 19                           | 26       | 39                           | 22       | 35                           | 24       | 18                           | 26       | 78                    | 82       |    |
| 19              | Vepery             | 134          | 87       | 78                        | 69       | 19                          | 9        | 8                            | 5        | 7                            | 17       | 27                           | 42       | 31                           | 32       | 23                           | 23       | 42                           | 28       | 74                    | 61       |    |
| 20              | Egmore             | 193          | 128      | 66                        | 70       | 17                          | 11       | 3                            | 13       | 11                           | 23       | 36                           | 49       | 36                           | 57       | 34                           | 21       | 35                           | 27       | 65                    | 79       |    |
| 21              | Kilpauk            | 32           | 84       | 39                        | 40       | 10                          | 8        | 3                            | 5        | 12                           | 16       | 46                           | 38       | 45                           | 27       | 36                           | 21       | 36                           | 26       | 67                    | 55       |    |
| 22              | Nungambakkam       | 121          | 114      | 49                        | 68       | 13                          | 16       | 6                            | 4        | 8                            | 14       | 28                           | 40       | 36                           | 23       | 24                           | 25       | 26                           | 28       | 70                    | 59       |    |
| 23              | Chintadripet       | 185          | 153      | 95                        | 95       | 25                          | 8        | 6                            | 9        | 14                           | 15       | 32                           | 43       | 33                           | 29       | 40                           | 40       | 38                           | 32       | 70                    | 75       |    |
| 24              | Tiruvateeswaranpet | 212          | 182      | 104                       | 113      | 38                          | 30       | 15                           | 14       | 23                           | 20       | 47                           | 55       | 46                           | 45       | 40                           | 23       | 45                           | 42       | 145                   | 126      |    |
| 25              | Chepauk            | 105          | 74       | 48                        | 37       | 8                           | 5        | 10                           | 5        | 7                            | 14       | 15                           | 30       | 22                           | 30       | 22                           | 19       | 21                           | 17       | 35                    | 39       |    |
| 26              | Triplicane         | 107          | 86       | 49                        | 63       | 13                          | 20       | 4                            | 4        | 5                            | 6        | 19                           | 25       | 16                           | 21       | 19                           | 14       | 21                           | 24       | 56                    | 52       |    |
| 27              | Amir Mahal         | 125          | 148      | 76                        | 76       | 25                          | 18       | 5                            | 6        | 7                            | 14       | 28                           | 34       | 28                           | 21       | 26                           | 17       | 23                           | 24       | 83                    | 88       |    |
| 28              | Mirshahibpet       | 227          | 212      | 154                       | 128      | 27                          | 33       | 15                           | 29       | 12                           | 20       | 33                           | 59       | 37                           | 31       | 31                           | 25       | 36                           | 18       | 90                    | 99       |    |
| 29              | Royapettah         | 186          | 163      | 92                        | 108      | 25                          | 29       | 7                            | 13       | 20                           | 20       | 39                           | 56       | 29                           | 32       | 31                           | 25       | 41                           | 25       | 87                    | 90       |    |
| 30              | Mylapore           | 121          | 113      | 74                        | 80       | 22                          | 17       | 5                            | 8        | 11                           | 20       | 18                           | 24       | 15                           | 24       | 24                           | 13       | 23                           | 14       | 51                    | 61       |    |
| Total           |                    | 4,060        | 3,480    | 2,036                     | 2,118    | 503                         | 425      | 205                          | 224      | 310                          | 438      | 889                          | 1,086    | 980                          | 853      | 920                          | 632      | 883                          | 669      | 1,927                 | 1,862    |    |
| Ratio per 1,000 |                    | 277.6        | 250.3    | 66.1                      | 69.2     | 14.1                        | 12.5     | 6.1                          | 7.0      | 9.2                          | 13.0     | 12.4                         | 15.9     | 16.5                         | 18.4     | 24.3                         | 22.5     | 45.5                         | 41.5     | 162.5                 | 191.0    |    |

Annual Form No. V.—Deaths registered according to class by divisions during the year 1933.

| 1          |                   | 2                                 |         | 3            |         |                              | 4           |         |              |                                          | 5      |             |         |              |         |        |
|------------|-------------------|-----------------------------------|---------|--------------|---------|------------------------------|-------------|---------|--------------|------------------------------------------|--------|-------------|---------|--------------|---------|--------|
| Divisions. | Districts.        | Population as per Census of 1931. |         |              |         | Number of deaths registered. |             |         |              | Ratio of deaths per 1,000 of population. |        |             |         |              |         |        |
|            |                   | Christians.                       | Hindus. | Mohammadans. | Others. | Total.                       | Christians. | Hindus. | Mohammadans. | Others.                                  | Total. | Christians. | Hindus. | Mohammadans. | Others. | Total. |
| 1          | Royapuram         | 5,797                             | 14,840  | 1,149        | 166     | 21,952                       | 174         | 518     | 69           | ...                                      | 791    | 30.2        | 36.9    | 60.0         | ...     | 36.0   |
| 2          | Tondiarpet        | 1,300                             | 22,616  | 1,914        | 81      | 25,911                       | 50          | 1,007   | 105          | ...                                      | 1,162  | 38.5        | 44.5    | 54.9         | ...     | 44.8   |
| 3          | Washermanpet      | 888                               | 23,635  | 1,778        | 11      | 25,633                       | 35          | 1,017   | 71           | ...                                      | 1,123  | 39.4        | 44.1    | 41.1         | ...     | 43.8   |
| 4          | Korukkupet        | 976                               | 20,557  | 3,977        | 48      | 25,538                       | 21          | 833     | 156          | ...                                      | 1,010  | 21.5        | 45.5    | 39.4         | ...     | 39.5   |
| 5          | Harbour           | 508                               | 3,491   | 4,677        | 23      | 8,704                        | 3           | 139     | 212          | ...                                      | 354    | 6.0         | 39.8    | 45.2         | ...     | 40.7   |
| 6          | Muthialpet        | 1,236                             | 12,308  | 697          | 16      | 14,257                       | 6           | 319     | 24           | ...                                      | 349    | 4.9         | 25.9    | 34.4         | ...     | 24.5   |
| 7          | Katchaleswarapet  | 1,838                             | 9,822   | 995          | 52      | 12,717                       | 39          | 378     | 56           | ...                                      | 473    | 21.2        | 38.5    | 56.3         | ...     | 37.2   |
| 8          | Kothawal Bazaar   | 185                               | 5,232   | 1,097        | 46      | 6,550                        | 4           | 185     | 23           | ...                                      | 212    | 21.6        | 35.4    | 21.2         | ...     | 32.4   |
| 9          | Annen Koil        | 2,259                             | 12,957  | 3,839        | 107     | 19,202                       | 52          | 528     | 154          | ...                                      | 731    | 22.7        | 40.7    | 40.1         | ...     | 38.2   |
| 10         | Seven Wells       | 1,571                             | 17,329  | 1,265        | 129     | 20,234                       | 47          | 672     | 77           | ...                                      | 796    | 29.1        | 38.8    | 60.9         | ...     | 39.2   |
|            |                   |                                   |         |              |         |                              |             | *138    | *11          | ...                                      | *158   | ...         | ...     | ...          | ...     | ...    |
| 11         | Sowcarpet         | 14                                | 6,658   | 34           | 488     | 7,194                        | ...         | 234     | 2            | ...                                      | 236    | ...         | 33.1    | 58.8         | ...     | 32.8   |
| 12         | Peddunaickenpet   | 75                                | 21,141  | 395          | 26      | 21,547                       | ...         | 922     | 4            | ...                                      | 926    | ...         | 43.6    | 13.1         | ...     | 43.0   |
| 13         | Trevelyan Basin   | 38                                | 18,500  | 86           | 292     | 18,916                       | ...         | 654     | 3            | ...                                      | 657    | ...         | 35.4    | 31.9         | ...     | 31.7   |
| 14         | Esplanade         | 275                               | 3,387   | 161          | 80      | 3,906                        | ...         | 78      | ...          | ...                                      | 78     | ...         | 23.0    | ...          | ...     | 29.2   |
|            |                   |                                   |         |              |         |                              | {           | *33     | *24          | ...                                      | *402   | ...         | ...     | ...          | ...     | ...    |
| 15         | Park Town         | 665                               | 16,159  | 219          | 110     | 17,183                       | 16          | 592     | 1            | ...                                      | 609    | 24.0        | 36.6    | 4.5          | ...     | 35.4   |
| 16         | Perambur          | 2,175                             | 33,024  | 8,409        | 209     | 43,817                       | 43          | 1,143   | 320          | ...                                      | 1,506  | 19.8        | 34.6    | 38.1         | ...     | 31.4   |
| 17         | Choolai           | 1,421                             | 25,525  | 507          | 29      | 27,488                       | 37          | 1,032   | 26           | ...                                      | 1,095  | 25.9        | 40.4    | 51.3         | ...     | 39.8   |
| 18         | Purasawalkam      | 4,088                             | 22,347  | 528          | 91      | 27,054                       | 89          | 825     | 18           | ...                                      | 932    | 21.8        | 36.9    | 31.1         | ...     | 34.4   |
| 19         | Vepery            | 4,116                             | 15,922  | 1,940        | 159     | 22,137                       | 105         | 650     | 51           | ...                                      | 816    | 25.6        | 41.5    | 26.3         | ...     | 36.9   |
| 20         | Egmore            | 5,080                             | 21,313  | 2,902        | 90      | 24,385                       | 112         | 762     | 106          | ...                                      | 980    | 22.0        | 35.8    | 36.5         | ...     | 33.3   |
| 21         | Kilpauk           | 3,584                             | 20,002  | 726          | 22      | 24,331                       | 69          | 596     | 99           | ...                                      | 694    | 19.3        | 29.8    | 39.9         | ...     | 28.5   |
| 22         | Nungambakam       | 4,365                             | 21,036  | 1,723        | 114     | 27,238                       | 87          | 631     | 47           | ...                                      | 765    | 19.9        | 30.0    | 27.3         | ...     | 28.1   |
| 23         | Chintadripet      | 1,951                             | 23,550  | 1,220        | 121     | 26,845                       | 52          | 941     | 46           | ...                                      | 1,038  | 26.7        | 40.0    | 36.9         | ...     | 38.7   |
| 24         | Tiruvateeswarapet | 1,071                             | 19,646  | 10,578       | 76      | 31,371                       | 31          | 813     | 521          | ...                                      | 1,355  | 28.9        | 41.4    | 49.3         | ...     | 43.5   |
| 25         | Chepauk           | 603                               | 12,817  | 3,665        | 7       | 17,922                       | 15          | 399     | 149          | ...                                      | 663    | 21.9        | 31.1    | 40.7         | ...     | 32.9   |
| 26         | Triplicane        | 94                                | 19,002  | 391          | 27      | 19,514                       | 1           | 611     | 12           | ...                                      | 624    | 10.6        | 32.2    | 30.7         | ...     | 32.0   |
| 27         | Amir Mahal        | 785                               | 11,314  | 7,505        | 11      | 19,615                       | 28          | 481     | 365          | ...                                      | 877    | 36.9        | 42.8    | 48.6         | ...     | 44.7   |
| 28         | Mirahibpet        | 1,145                             | 20,816  | 5,271        | 81      | 27,313                       | 21          | 992     | 396          | ...                                      | 1,319  | 18.3        | 47.6    | 58.1         | ...     | 48.5   |
| 29         | Royapettah        | 2,481                             | 28,612  | 1,956        | 154     | 33,203                       | 59          | 976     | 82           | ...                                      | 1,117  | 23.7        | 34.1    | 41.9         | ...     | 33.6   |
| 30         | Mylapore          | 3,507                             | 17,147  | 581          | 32      | 21,270                       | 99          | 612     | 27           | ...                                      | 738    | 28.2        | 35.7    | 46.2         | ...     | 34.7   |
| Total      |                   | 54,122                            | 520,176 | 70,031       | 2,901   | 6,47,230                     | 1,337       | 20,066  | 3,096        | 1                                        | 24,500 | 24.7        | 38.6    | 41.2         | 0.7     | 37.9   |

\* Includes 158 and 402 deaths in the Government Rayapuram and General Hospital of Patients admitted from Mofussil and districts.

\* Includes 158 and 402 deaths in the Government Rayapnam and General Hospital of Patients admitted from Moffusil and districts.

Annual Form No. VI.—Deaths registered from "CHOLERA" by division during each month of the year 1933.

| Divisions. | Districts.        | 3        |           |        |        |      |       |       |         |            |          |           |           | 4      |          |        | 5      |          |        | 6                                        |                                         |
|------------|-------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|----------|--------|--------|----------|--------|------------------------------------------|-----------------------------------------|
|            |                   |          |           |        |        |      |       |       |         |            |          |           |           |        |          |        |        |          |        |                                          |                                         |
|            |                   | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Males. | Females. | Total. | Males. | Females. | Total. | Ratio of deaths per 1,000 of population. | Mean ratio per 1,000 during five years. |
| 1          | Royapuram         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | 2         | 1      | 2        | 3      | ...    | 0.08     | 0.2    | 0.09                                     | 0.4                                     |
| 2          | Tondiarpet        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | 2         | 2         | 1      | 3        | 4      | 0.08   | 0.2      | 0.2    | 0.2                                      | 0.3                                     |
| 3          | Washermanpet      | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | 2         | 3         | 1      | 2        | 3      | 0.08   | 0.2      | 0.1    | 0.2                                      | 0.2                                     |
| 4          | Korukkupet        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | 1         | 1      | ...      | 1      | 0.08   | ...      | 0.04   | 0.4                                      | 0.4                                     |
| 5          | Harbour           | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.3                                      | 0.3                                     |
| 6          | Muthialpet        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.1                                      | 0.1                                     |
| 7          | Katchaleswarapet  | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.2                                      | 0.2                                     |
| 8          | Kothawal Bazaar   | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.3                                      | 0.3                                     |
| 9          | Annen Koil        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.3                                      | 0.3                                     |
| 10         | Seven Wells       | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.4                                      | 0.4                                     |
| 11         | Sowcarpet         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.1                                      | 0.1                                     |
| 12         | Peddunaiickenpet  | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.2                                      | 0.2                                     |
| 13         | Trevelyan Basin   | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.2                                      | 0.2                                     |
| 14         | Esplanade         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.5                                      | 0.5                                     |
| 15         | Park Town         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.1                                      | 0.1                                     |
| 16         | Perambur          | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.3                                      | 0.3                                     |
| 17         | Choolai           | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.6                                      | 0.6                                     |
| 18         | Purasawalkam      | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.3                                      | 0.3                                     |
| 19         | Vepery            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.3                                      | 0.3                                     |
| 20         | Egmore            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.2                                      | 0.2                                     |
| 21         | Kilpauk           | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.3                                      | 0.3                                     |
| 22         | Nungambakam       | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.1                                      | 0.1                                     |
| 23         | Chintadripet      | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.2                                      | 0.2                                     |
| 24         | Tiruvateeswarapet | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.1                                      | 0.1                                     |
| 25         | Chepauk           | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.2                                      | 0.2                                     |
| 26         | Triplicane        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.3                                      | 0.3                                     |
| 27         | Amir Mahal        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.3                                      | 0.3                                     |
| 28         | Mirahibpet        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.6                                      | 0.6                                     |
| 29         | Royapettah        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.2                                      | 0.2                                     |
| 30         | Mylapore          | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...    | ...    | ...      | ...    | 0.1                                      | 0.1                                     |
| Total      |                   | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 30     | 32       | 62     | 0.03   | 0.1      | 0.1    | 0.3                                      | 0.3                                     |

Annual Form No. VII—Deaths registered from 'SMALL-POX' by Divisions during each month of the year 1933.

| 1          | 2                  | 3        | 4         | 5      | 6      |      |       |       |         |            |          |           |           |                                          |          |        |                                         |     |     |     |
|------------|--------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|------------------------------------------|----------|--------|-----------------------------------------|-----|-----|-----|
| Divisions. | Districts.         | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Ratio of deaths per 1,000 of population. |          |        | Mean Ratio per 1,000 during five years. |     |     |     |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | Males.                                   | Females. | Total. |                                         |     |     |     |
| 1          | Royapuram          | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 10                                       | 12       | 22     | 0.9                                     | 1.1 | 1.0 | 0.8 |
| 2          | Tondiarpet         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 13                                       | 15       | 28     | 1.0                                     | 1.2 | 1.1 | 0.3 |
| 3          | Washermanpet       | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 23                                       | 18       | 41     | 1.8                                     | 1.4 | 1.6 | 0.3 |
| 4          | Korukkupet         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 23                                       | 13       | 36     | 1.7                                     | 1.0 | 1.4 | 0.4 |
| 5          | Harbour            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 9                                        | 5        | 14     | 1.6                                     | 1.5 | 1.6 | 0.8 |
| 6          | Muthialpet         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 12                                       | 4        | 16     | 1.4                                     | 0.7 | 1.1 | 0.3 |
| 7          | Katchaleswaranpet  | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 16                                       | 17       | 33     | 2.3                                     | 2.9 | 2.6 | 0.5 |
| 8          | Kothawal Bazaar    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 10                                       | 12       | 22     | 2.5                                     | 0.8 | 1.8 | 0.5 |
| 9          | Ammen Koil         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 12                                       | 12       | 24     | 1.2                                     | 1.3 | 1.2 | 0.5 |
| 10         | Seven Wells        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 10                                       | 16       | 26     | 0.96                                    | 1.6 | 1.3 | 0.2 |
| 11         | Sowcarpet          | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 4                                        | 2        | 6      | 1.0                                     | 0.7 | 0.8 | 0.4 |
| 12         | Peddunaickenpet    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 17                                       | 21       | 38     | 1.5                                     | 2.0 | 1.8 | 0.3 |
| 13         | Trevelyan Basin    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 4                                        | 8        | 12     | 0.4                                     | 0.9 | 0.6 | 0.4 |
| 14         | Esplanade          | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 4                                        | 3        | 7      | 1.7                                     | 1.9 | 1.8 | 0.5 |
| 15         | Park Town          | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 11                                       | 5        | 16     | 1.1                                     | 0.7 | 0.9 | 0.3 |
| 16         | Perambur           | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 20                                       | 24       | 44     | 0.9                                     | 1.1 | 1.0 | 0.3 |
| 17         | Choolai            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 18                                       | 15       | 33     | 1.3                                     | 1.1 | 1.2 | 0.5 |
| 18         | Purasawalkam       | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 13                                       | 31       | 44     | 0.9                                     | 1.4 | 1.1 | 0.5 |
| 19         | Vepery             | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 11                                       | 8        | 19     | 0.9                                     | 0.8 | 0.9 | 0.4 |
| 20         | Egmore             | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 6                                        | 15       | 21     | 0.4                                     | 1.1 | 0.7 | 0.1 |
| 21         | Kilpauk            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 6                                        | 4        | 10     | 0.5                                     | 0.4 | 0.4 | 0.2 |
| 22         | Nungambakam        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 11                                       | 11       | 22     | 0.8                                     | 0.9 | 0.8 | 0.1 |
| 23         | Chintadripet       | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 11                                       | 11       | 22     | 0.8                                     | 0.9 | 0.9 | 0.2 |
| 24         | Tiruvateeswaranpet | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 16                                       | 9        | 25     | 1.0                                     | 0.6 | 0.8 | 0.5 |
| 25         | Chepauk            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 8                                        | 11       | 19     | 0.9                                     | 1.4 | 1.1 | 0.2 |
| 26         | Triplicane         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 17                                       | 15       | 32     | 1.6                                     | 1.6 | 1.6 | 0.4 |
| 27         | Amir Mahal         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 14                                       | 7        | 21     | 1.4                                     | 0.7 | 1.1 | 0.3 |
| 28         | Mirshabpet         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 50                                       | 50       | 100    | 3.6                                     | 3.7 | 3.7 | 0.6 |
| 29         | Royapettah         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 19                                       | 23       | 42     | 1.1                                     | 1.4 | 1.3 | 0.3 |
| 30         | Mylapore           | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 24                                       | 37       | 61     | 2.2                                     | 3.6 | 2.9 | 0.3 |
|            | Total              | 58       | 95        | 174    | 147    | 79   | 53    | 81    | 52      | 42         | 30       | 16        | 16        | 426                                      | 141      | 567    | 1.2                                     | 1.3 | 1.3 | 0.4 |

Includes 2 deaths in the Government Rayapuram Hospital of Patients admitted from Mofussil and destitutes.

Annual Form No. VIII.—Deaths registered from 'MEASLES' by divisions during each month of the year 1933.

| 1          | 2                  | 3        |           |        |        |      |       |       |         |            |          |           |           | 4                                        | 5        |        |                                         | 6    |
|------------|--------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|------------------------------------------|----------|--------|-----------------------------------------|------|
| Divisions. | Districts.         | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Ratio of Deaths per 1,000 of Population. |          |        | Mean ratio per 1,000 during five years. |      |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | Males.                                   | Females. | Total. |                                         |      |
| 1          | Royapuram          | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | ..                                      | 0.05 |
| 2          | Tondiarpet         | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | ..                                      | 0.04 |
| 3          | Washermanpet       | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | ..                                      | 0.02 |
| 4          | Korukkupet         | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | ..                                      | 0.02 |
| 5          | Harbour            | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | ..                                      | 0.02 |
| 6          | Muthialpet         | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | ..                                      | ..   |
| 7          | Katchaleswaranpet  | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | 1         | ..                                       | ..       | 1      | 0.04                                    |      |
| 8          | Kothawal Bazaar    | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 0.1                                      | ..       | 0.1    | 0.08                                    |      |
| 9          | Ammen Koil         | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | ..                                      |      |
| 10         | Seven Wells        | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | ..                                      |      |
| 11         | Sowcarpet          | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | 0.05                                    |      |
| 12         | Peddunaickenpet    | ..       | ..        | ..     | 2      | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 0.09                                     | 0.1      | 0.1    | 0.09                                    |      |
| 13         | Trevelyan Basin    | 1        | ..        | 1      | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | 1         | 0.1                                      | 0.1      | 0.1    | 0.1                                     |      |
| 14         | Esplanade          | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | ..                                      |      |
| 15         | Park Town          | 2        | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 0.2                                      | ..       | 0.1    | ..                                      |      |
| 16         | Perambur           | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | 0.05                                    |      |
| 17         | Choolai            | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | 0.03                                    |      |
| 18         | Purasawalkam       | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | 1         | 0.08                                     | ..       | 0.04   | 0.01                                    |      |
| 19         | Vepery             | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | 1         | ..                                       | ..       | ..     | 0.05                                    |      |
| 20         | Egmore             | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | 1         | 0.15                                     | ..       | 0.08   | 0.07                                    |      |
| 21         | Kilpauk            | ..       | ..        | 1      | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | ..                                      |      |
| 22         | Nungambakam        | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | 0.04                                    |      |
| 23         | Chintadripet       | ..       | ..        | ..     | 1      | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 0.06                                     | ..       | 0.03   | 0.2                                     |      |
| 24         | Tiruvateeswaranpet | ..       | ..        | ..     | ..     | 2    | 1     | 1     | 2       | 2          | ..       | ..        | ..        | 0.5                                      | 0.8      | 0.6    | 0.04                                    |      |
| 25         | Chepauk            | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | 0.2                                     |      |
| 26         | Triplicane         | ..       | 3         | ..     | 1      | 1    | 1     | 1     | 2       | 2          | ..       | ..        | ..        | ..                                       | ..       | ..     | 0.02                                    |      |
| 27         | Amir Mahal         | ..       | ..        | 1      | 2      | 1    | ..    | 3     | ..      | ..         | ..       | 2         | ..        | ..                                       | 0.4      | 0.4    | 0.03                                    |      |
| 28         | Mirshibpet         | ..       | 2         | ..     | ..     | 1    | ..    | ..    | ..      | 1          | ..       | ..        | ..        | 0.06                                     | 0.1      | 0.09   | 0.03                                    |      |
| 29         | Royapettah         | 1        | ..        | 2      | 1      | 2    | 1     | ..    | 1       | ..         | ..       | ..        | ..        | 0.28                                     | 0.4      | 0.33   | 0.09                                    |      |
| 30         | Mylapore           | ..       | ..        | ..     | ..     | ..   | 1     | ..    | ..      | ..         | ..       | ..        | ..        | ..                                       | ..       | ..     | ..                                      |      |
|            | Total              | 4        | 5         | 5      | 7      | 6    | 2     | 4     | 3       | 3          | ..       | 2         | 3         | 24                                       | 20       | 44     | 0.07                                    | 0.05 |

Annual Form No. IX—Plague—Nil.



Annual Form No. XII.—Deaths registered from "OTHER FEVERS" by divisions during each month of the year 1933.

| 1          | 2                  | 3        |           |        |        |      |       |       |         |            |          |           |           | 4      |          | 5                                        |          | 6                                       |
|------------|--------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|----------|------------------------------------------|----------|-----------------------------------------|
| Divisions. | Districts.         | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |          | Ratio of Deaths per 1,000 of population. |          | Mean ratio per 1,000 during five years. |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | Males. | Females. | Males.                                   | Females. |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
| 1          | Royapuram          | 11       | 6         | 9      | 11     | 7    | 2     | 5     | 10      | 5          | 5        | 4         | 13        | 44     | 88       | 4.0                                      | 4.0      | 4.9                                     |
| 2          | Tondiarpet         | 15       | 13        | 11     | 10     | 6    | 6     | 11    | 12      | 6          | 3        | 13        | 12        | 58     | 60       | 4.7                                      | 4.5      | 5.2                                     |
| 3          | Washermanpet       | 5        | 13        | 12     | 5      | 2    | 1     | 10    | 7       | 12         | 17       | 20        | 17        | 56     | 60       | 4.3                                      | 4.5      | 3.4                                     |
| 4          | Korukkupet         | 4        | 6         | 7      | 10     | 4    | 8     | 6     | 4       | 10         | 16       | 12        | 17        | 55     | 49       | 4.2                                      | 4.1      | 3.3                                     |
| 5          | Harbour            | 4        | 9         | 2      | 5      | 8    | 3     | ...   | 7       | 11         | 8        | 2         | 2         | 28     | 33       | 5.1                                      | 10.2     | 3.9                                     |
| 6          | Muthialpet         | 3        | 10        | 1      | 8      | 4    | 8     | 7     | 3       | 3          | 4        | 5         | 6         | 32     | 30       | 3.8                                      | 5.1      | 2.8                                     |
| 7          | Katchaleswarannpet | 11       | 9         | 5      | 6      | 6    | 5     | 5     | 6       | 2          | 4        | 1         | 4         | 29     | 35       | 4.2                                      | 6.0      | 3.8                                     |
| 8          | Kothawal Bazaar    | 2        | 2         | 3      | 1      | 4    | 4     | 1     | 3       | 1          | 3        | 2         | 3         | 13     | 15       | 3.2                                      | 4.3      | 2.4                                     |
| 9          | Amman Koil         | 8        | 15        | 15     | 2      | 4    | 9     | 10    | 4       | 6          | 9        | 10        | 8         | 45     | 61       | 4.6                                      | 6.7      | 3.4                                     |
| 10         | Seven Wells        | 10       | 8         | 11     | 10     | 3    | 11    | 19    | 13      | 10         | 6        | 16        | 9         | 53     | 70       | 5.1                                      | 7.1      | 3.4                                     |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | *1     | *2       |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                          |          |                                         |

\* Includes 3 and 8 deaths in the Government Royapuram and General Hospital of patients admitted from mofussil and destitutes.

Annual Form No. XIII.—Deaths Registered from "DYSENTERY and DIARRHOEA" by Divisions during each month of the year 1933.

| 1          |                    | 2        |           | 3      |        |      |       |       |         |            |          |           |           |        |          | 4                                        |          | 5                                            |     | 6 |  |
|------------|--------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|----------|------------------------------------------|----------|----------------------------------------------|-----|---|--|
| Divisions. | Districts.         | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |          | Ratio of Deaths per 1,000 of population. |          | Mean ratio per 1000 during previous 5 years. |     |   |  |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | Males. | Females. | Males.                                   | Females. |                                              |     |   |  |
| 1          | Royapuram          | 5        | 4         | 2      | 3      | 3    | ...   | 5     | 2       | 13         | 7        | 8         | 8         | 18     | 35       | 53                                       | 1.6      | 3.2                                          | 4.5 |   |  |
| 2          | Tondiarpet         | 6        | 5         | 8      | 5      | 1    | 13    | 8     | 7       | 13         | 13       | 15        | 15        | 51     | 42       | 96                                       | 4.1      | 3.3                                          | 3.7 |   |  |
| 3          | Washermanpet       | 15       | 16        | 28     | 18     | 17   | 9     | 4     | 4       | 4          | 8        | 7         | 7         | 82     | 59       | 141                                      | 6.3      | 4.7                                          | 5.5 |   |  |
| 4          | Korukkupet         | 7        | 10        | 15     | 13     | 7    | 4     | 7     | 9       | 3          | 3        | 6         | 6         | 56     | 43       | 99                                       | 4.2      | 3.5                                          | 3.9 |   |  |
| 5          | Harbour            | 5        | 2         | 4      | 2      | 4    | 4     | 3     | 2       | 3          | 3        | 2         | 2         | 16     | 18       | 34                                       | 2.0      | 5.6                                          | 5.6 |   |  |
| 6          | Muthialpet         | ...      | 3         | 4      | 5      | 2    | 3     | 1     | 3       | 4          | 1        | ...       | ...       | 16     | 11       | 27                                       | 1.9      | 1.9                                          | 2.1 |   |  |
| 7          | Katchaleswarannpet | 4        | 1         | 6      | 4      | 8    | 2     | ...   | 4       | 2          | ...      | 4         | 3         | 18     | 20       | 38                                       | 2.6      | 3.4                                          | 3.0 |   |  |
| 8          | Kothawal Bazaar    | ...      | 1         | 2      | 1      | 5    | 2     | 4     | ...     | 1          | 1        | 8         | 2         | 9      | 8        | 17                                       | 2.2      | 3.2                                          | 2.6 |   |  |
| 9          | Amman Koil         | 9        | 9         | 6      | 5      | 5    | ...   | 4     | 5       | 2          | 3        | 4         | 3         | 21     | 40       | 61                                       | 2.1      | 4.4                                          | 3.2 |   |  |
| 10         | Seven Wells        | 19       | 12        | 13     | 11     | 16   | 9     | 10    | 11      | 3          | 10       | 7         | 10        | 51     | 45       | 96                                       | 4.9      | 4.6                                          | 4.7 |   |  |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | *26    | *12      | *38                                      |          |                                              |     |   |  |
| 11         | Sowcarpet          | 3        | 1         | 1      | 1      | 1    | 2     | 1     | 1       | 1          | ...      | 1         | ...       | 6      | 7        | 13                                       | 1.4      | 2.3                                          | 1.8 |   |  |
| 12         | Peddunackennpet    | 15       | 9         | 11     | 12     | 7    | 4     | 5     | 5       | 5          | 4        | 6         | 4         | 46     | 41       | 87                                       | 4.1      | 3.9                                          | 4.0 |   |  |
| 13         | Trevelyan Basin    | 2        | 3         | 9      | 6      | 2    | 6     | ...   | 7       | 5          | 6        | 2         | 2         | 29     | 21       | 50                                       | 3.0      | 2.3                                          | 2.6 |   |  |
| 14         | Esplanade          | 6        | 3         | 2      | 3      | 1    | 1     | ...   | 2       | 1          | 1        | 2         | 1         | 3      | 5        | 8                                        | 1.3      | 3.2                                          | 2.1 |   |  |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | *18    | ...      | *18                                      |          |                                              |     |   |  |
| 15         | Park Town          | 3        | 6         | 5      | 2      | 2    | ...   | 5     | 4       | 1          | 4        | 2         | 7         | 21     | 18       | 39                                       | 2.2      | 2.4                                          | 2.3 |   |  |
| 16         | Perambur           | 12       | 27        | 21     | 15     | 15   | 14    | 16    | 16      | 18         | 28       | 22        | 16        | 118    | 104      | 223                                      | 5.1      | 5.0                                          | 6.1 |   |  |
| 17         | Choolai            | 17       | 12        | 21     | 15     | 12   | 11    | 12    | 15      | 16         | 14       | 16        | 4         | 78     | 87       | 165                                      | 5.5      | 6.6                                          | 6.0 |   |  |
| 18         | Purasawalkam       | 21       | 12        | 11     | 12     | 14   | 16    | 8     | 12      | 14         | 14       | 13        | 7         | 83     | 70       | 153                                      | 6.4      | 5.3                                          | 6.7 |   |  |
| 19         | Vepery             | 12       | 1         | 11     | 5      | 7    | 7     | 5     | 11      | 9          | 10       | 4         | 8         | 48     | 42       | 90                                       | 3.9      | 4.3                                          | 4.0 |   |  |
| 20         | Egmore             | 8        | 5         | 2      | 9      | 17   | 6     | 10    | 13      | 15         | 5        | 9         | 3         | 60     | 42       | 102                                      | 3.9      | 3.0                                          | 3.5 |   |  |
| 21         | Kilpauk            | 8        | 5         | 4      | 6      | 10   | 5     | 10    | 3       | 5          | 3        | 6         | 6         | 35     | 35       | 71                                       | 2.8      | 3.1                                          | 2.9 |   |  |
| 22         | Nungambakam        | 6        | 5         | 11     | 7      | 8    | 8     | 9     | 11      | 9          | 6        | 5         | 6         | 41     | 50       | 91                                       | 2.8      | 3.9                                          | 3.3 |   |  |
| 23         | Chintadripet       | 9        | 7         | 10     | 9      | 12   | 10    | 12    | 12      | 12         | 4        | 10        | 1         | 51     | 54       | 108                                      | 3.9      | 4.2                                          | 4.0 |   |  |
| 24         | Tiruvalluvarannpet | 10       | 8         | 9      | 18     | 22   | 14    | 18    | 8       | 11         | 10       | 4         | 5         | 64     | 73       | 137                                      | 3.9      | 4.8                                          | 4.4 |   |  |
| 25         | Chepauk            | 6        | 6         | 1      | 4      | 6    | 7     | 4     | 6       | 8          | 4        | 9         | 6         | 37     | 30       | 67                                       | 3.9      | 3.9                                          | 3.3 |   |  |
| 26         | Trippicane         | 9        | 6         | 4      | 4      | 6    | 7     | 7     | 2       | 3          | 1        | 11        | 4         | 33     | 31       | 64                                       | 3.2      | 3.4                                          | 3.3 |   |  |
| 27         | Amir Mahal         | 6        | 4         | 9      | 8      | 13   | 9     | 4     | 5       | 11         | 3        | 1         | ...       | 40     | 33       | 73                                       | 3.9      | 3.5                                          | 3.7 |   |  |
| 28         | Misshibipet        | 26       | 15        | 15     | 21     | 15   | 21    | 19    | 5       | 15         | 14       | 20        | 6         | 98     | 94       | 192                                      | 7.1      | 7.0                                          | 7.0 |   |  |
| 29         | Royapettah         | 11       | 11        | 10     | 14     | 8    | 15    | 9     | 10      | 8          | 13       | 20        | 10        | 59     | 80       | 139                                      | 3.4      | 5.0                                          | 4.2 |   |  |
| 30         | Mylapore           | 19       | 6         | 3      | 7      | 3    | 5     | 2     | 8       | 7          | 2        | 6         | 12        | 42     | 38       | 80                                       | 3.9      | 3.7                                          | 3.8 |   |  |
| Total      |                    | 279      | 215       | 253    | 248    | 247  | 216   | 202   | 203     | 214        | 201      | 223       | 164       | 1,382  | 1,288    | 2,670                                    | 4.1      | 4.2                                          | 4.8 |   |  |

\* Includes 38 and 18 deaths in the Census.

\* Includes 38 and 18 deaths in the Government Royapuram and General Hospital of patients admitted from mofussil and destitutes.

Annual Form No. XIV.—Deaths registered from "TUBERCLE" including Tubercle of the Lungs by divisions during each month of the year 1933.

| 1          | 2                  | 3        |           |        | 4      |      | 5     |       | 6       |            |          |           |           |        |          |                                         |          |                                         |     |     |
|------------|--------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|----------|-----------------------------------------|----------|-----------------------------------------|-----|-----|
| Divisions. | Districts.         | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |          | Ratio of deaths per 1000 of population. |          | Mean ratio per 1,000 during five years. |     |     |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | Males. | Females. | Males.                                  | Females. |                                         |     |     |
| 1          | Royapuram          | ...      | ...       | 3      | 2      | 2    | ...   | 2     | 1       | 3          | 5        | 5         | 1         | 14     | 10       | 24                                      | 1.3      | 0.9                                     | 1.1 | 1.0 |
| 2          | Tondiarpet         | ...      | ...       | 3      | 1      | 2    | ...   | 2     | ...     | 9          | 5        | 4         | 4         | 22     | 11       | 33                                      | 1.7      | 0.9                                     | 1.3 | 1.4 |
| 3          | Washermanpet       | ...      | ...       | 3      | 2      | 4    | 3     | 7     | 5       | 3          | 4        | 4         | 4         | 22     | 19       | 41                                      | 1.7      | 1.5                                     | 1.6 | 2.6 |
| 4          | Korukkupet         | ...      | ...       | 3      | 2      | 3    | 3     | 5     | 4       | 2          | 4        | 4         | 4         | 29     | 13       | 42                                      | 2.2      | 1.1                                     | 1.3 | 2.5 |
| 5          | Harbour            | ...      | ...       | 2      | ...    | 1    | ...   | 1     | ...     | ...        | ...      | ...       | 1         | 5      | 2        | 7                                       | 0.9      | 0.6                                     | 0.8 | 1.3 |
| 6          | Muthialpet         | ...      | ...       | ...    | ...    | 1    | ...   | ...   | 1       | ...        | 1        | ...       | 4         | 4      | 6        | 10                                      | 0.5      | 1.0                                     | 0.7 | 0.8 |
| 7          | Katchaleswarannpet | ...      | ...       | 1      | 3      | 1    | ...   | ...   | 1       | ...        | 1        | ...       | 3         | 6      | 6        | 15                                      | 1.3      | 1.0                                     | 1.2 | 1.3 |
| 8          | Kothawal Bazaar    | ...      | ...       | 1      | 1      | 1    | ...   | ...   | 1       | ...        | 3        | 2         | ...       | 7      | 9        | 9                                       | 1.7      | 0.8                                     | 1.4 | 1.7 |
| 9          | Ammen Koil         | ...      | ...       | 3      | 3      | 3    | ...   | 2     | 3       | 2          | 3        | 2         | 2         | 20     | 12       | 32                                      | 2.0      | 1.3                                     | 1.7 | 1.9 |
| 10         | Seven Wells        | ...      | ...       | 5      | 3      | 6    | 4     | 2     | 5       | 2          | 4        | 2         | 7         | 15     | 13       | 28                                      | 1.4      | 1.3                                     | 1.4 | 1.4 |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 19     | 13       | 32                                      | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                     | ... | ... |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    |          |                                         |          |                                         |     |     |

\* Includes 23 and 50 deaths in the Government Royapuram and General Hospital of patients admitted from Madras and districts.

Annual Form No. XV.—Deaths registered from "RESPIRATORY DISEASES" excluding Tubercle of the Lungs by divisions during each month of the year 1933.

| 1          |                    | 2        |           | 3      |        |      | 4     |       | 5       |            | 6        |           |           |        |          |        |                                          |          |                                                  |        |
|------------|--------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|----------|--------|------------------------------------------|----------|--------------------------------------------------|--------|
| Divisions. | Districts.         | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |          |        | Ratio of Deaths per 1,000 of population. |          | Mean ratio per 1,000 during previous five years. |        |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | Males. | Females. | Total. | Males.                                   | Females. |                                                  | Total. |
| 1          | Royapuram          | 18       | 19        | 13     | 19     | 14   | 11    | 14    | 14      | 5          | 4        | 14        | 20        | 71     | 89       | 160    | 6.5                                      | 8.1      | 7.3                                              | 7.1    |
| 2          | Tondiarpet         | 27       | 16        | 23     | 16     | 15   | 18    | 19    | 17      | 18         | 23       | 35        | 26        | 137    | 119      | 256    | 10.4                                     | 9.4      | 9.9                                              | 8.6    |
| 3          | Washermanpet       | 24       | 24        | 36     | 24     | 20   | 27    | 15    | 22      | 18         | 18       | 28        | 33        | 134    | 131      | 265    | 10.3                                     | 10.4     | 10.3                                             | 10.9   |
| 4          | Korukkupet         | 21       | 20        | 22     | 20     | 11   | 19    | 19    | 23      | 16         | 20       | 21        | 37        | 115    | 117      | 232    | 8.7                                      | 9.5      | 9.1                                              | 8.6    |
| 5          | Harbour            | 4        | 5         | 3      | 5      | 11   | 5     | ...   | 4       | 3          | 7        | 12        | 8         | 40     | 34       | 74     | 7.3                                      | 10.6     | 8.5                                              | 10.3   |
| 6          | Muthialpet         | 7        | 4         | 1      | 4      | 6    | 6     | ...   | 6       | 5          | 5        | 6         | 5         | 28     | 35       | 63     | 3.3                                      | 6.0      | 4.4                                              | 6.9    |
| 7          | Katchaleswarannpet | 14       | 2         | 8      | 2      | 14   | 7     | 6     | 6       | 10         | 12       | 7         | 11        | 60     | 43       | 103    | 8.8                                      | 7.3      | 8.1                                              | 8.5    |
| 8          | Kothwal Bazaar     | 1        | 3         | 2      | 3      | 4    | ...   | ...   | 2       | 3          | 2        | 7         | 5         | 17     | 17       | 34     | 4.2                                      | 6.7      | 5.2                                              | 6.3    |
| 9          | Ammen Koil         | 26       | 30        | 23     | 30     | 13   | 10    | 10    | 20      | 11         | 8        | 24        | 16        | 111    | 38       | 209    | 11.0                                     | 19.7     | 10.9                                             | 10.4   |
| 10         | Seven Wells        | 23       | 18        | 22     | 18     | 21   | 15    | 14    | 14      | 12         | 24       | 17        | 31        | 115    | 101      | 216    | 11.0                                     | 10.7     | 10.6                                             | 11.2   |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | *8     | *5       | *13    |                                          |          |                                                  |        |
| 11         | Sowcarpet          | 4        | 3         | 2      | 3      | 4    | 4     | 3     | 4       | 1          | 6        | 5         | 6         | 21     | 26       | 47     | 5.0                                      | 8.6      | 6.5                                              | 8.1    |
| 12         | Peddunaickenpet    | 20       | 29        | 14     | 29     | 19   | 9     | 14    | 22      | 18         | 22       | 29        | 40        | 145    | 108      | 253    | 4.0                                      | 10.4     | 11.3                                             | 10.3   |
| 13         | Trevelyan Basin    | 9        | 10        | 19     | 10     | 24   | 13    | 14    | 7       | 9          | 8        | 20        | 26        | 105    | 65       | 170    | 10.8                                     | 7.0      | 9.0                                              | 9.7    |
| 14         | Esplanade          | 5        | 6         | 7      | 6      | 5    | 5     | 6     | 2       | 6          | 9        | 6         | 3         | 16     | 4        | 20     | 6.7                                      | 2.5      | 5.1                                              | 12.3   |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | *36    | *10      | *16    |                                          |          |                                                  |        |
| 15         | Park Town          | 15       | 12        | 11     | 12     | 12   | 14    | 12    | 6       | 6          | 14       | 18        | 17        | 80     | 73       | 153    | 8.3                                      | 9.6      | 8.9                                              | 9.1    |
| 16         | Perambur           | 29       | 35        | 28     | 35     | 49   | 31    | 25    | 27      | 29         | 23       | 33        | 37        | 221    | 163      | 384    | 9.5                                      | 7.9      | 8.8                                              | 9.9    |
| 17         | Choolai            | 25       | 22        | 25     | 22     | 33   | 24    | 22    | 25      | 33         | 31       | 33        | 42        | 177    | 171      | 348    | 12.4                                     | 12.9     | 12.7                                             | 12.9   |
| 18         | Purasawalkam       | 26       | 21        | 31     | 21     | 21   | 21    | 29    | 19      | 23         | 31       | 23        | 25        | 134    | 168      | 302    | 9.6                                      | 12.8     | 11.2                                             | 11.2   |
| 19         | Vepery             | 28       | 16        | 22     | 16     | 25   | 25    | 17    | 16      | 15         | 19       | 19        | 27        | 146    | 95       | 241    | 11.8                                     | 9.7      | 10.9                                             | 10.1   |
| 20         | Egmore             | 14       | 27        | 15     | 27     | 25   | 11    | 15    | 24      | 14         | 16       | 25        | 19        | 108    | 109      | 217    | 7.0                                      | 7.8      | 7.4                                              | 7.8    |
| 21         | Kilpauk            | 14       | 5         | 13     | 5      | 10   | 10    | 12    | 12      | 8          | 14       | 18        | 23        | 77     | 74       | 151    | 5.9                                      | 6.6      | 6.2                                              | 7.1    |
| 22         | Nungambakkam       | 13       | 18        | 14     | 18     | 25   | 19    | 14    | 20      | 18         | 9        | 16        | 27        | 108    | 95       | 203    | 7.4                                      | 7.5      | 7.5                                              | 6.8    |
| 23         | Chintadripet       | 28       | 19        | 24     | 19     | 26   | 23    | 23    | 17      | 20         | 21       | 30        | 28        | 143    | 134      | 281    | 10.3                                     | 10.7     | 10.5                                             | 10.0   |
| 24         | Tiruvateswarannpet | 16       | 14        | 23     | 14     | 22   | 41    | 30    | 15      | 21         | 17       | 23        | 49        | 161    | 128      | 289    | 9.9                                      | 8.4      | 9.2                                              | 7.0    |
| 25         | Chepauk            | 7        | 7         | 11     | 7      | 10   | 8     | 9     | 6       | 3          | 13       | 15        | 13        | 61     | 48       | 109    | 6.5                                      | 6.2      | 6.1                                              | 7.4    |
| 26         | Trippicane         | 12       | 9         | 15     | 9      | 12   | 11    | 7     | 7       | 8          | 11       | 21        | 9         | 67     | 66       | 133    | 6.5                                      | 7.2      | 6.8                                              | 6.9    |
| 27         | Amir Mahal         | 20       | 7         | 9      | 7      | 16   | 11    | 12    | 10      | 14         | 20       | 8         | 28        | 85     | 89       | 174    | 5.4                                      | 9.4      | 8.9                                              | 7.7    |
| 28         | Mirshahbpet        | 42       | 34        | 30     | 23     | 22   | 21    | 24    | 21      | 20         | 22       | 28        | 31        | 166    | 163      | 334    | 12.6                                     | 12.5     | 12.2                                             | 8.9    |
| 29         | Royapettah         | 22       | 14        | 30     | 24     | 26   | 18    | 21    | 23      | 22         | 21       | 40        | 41        | 157    | 145      | 302    | 9.1                                      | 9.1      | 9.1                                              | 7.1    |
| 30         | Mylapore           | 13       | 11        | 15     | 18     | 10   | 16    | 13    | 16      | 8          | 18       | 22        | 25        | 97     | 88       | 185    | 8.9                                      | 8.5      | 8.7                                              | 6.7    |
| Total      |                    | 527      | 395       | 513    | 497    | 534  | 453   | 423   | 427     | 411        | 476      | 603       | 708       | 3,147  | 2,820    | 5,967  | 9.2                                      | 9.2      | 9.2                                              | 8.8    |

\* Includes 19 and 46 deaths in the Government Royapuram and General Hospital of patients admitted from Madras and districts.

Annual Form No XVI.—Deaths registered from "INJURIES" by divisions during each month of the year 1933.

| 1         | 2                  | 3        |           |        |        |      |       |       |         |            |          |           |           | 4      |          | 5                                       |          | Mean ratio per 1000 during previous five years. |
|-----------|--------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|----------|-----------------------------------------|----------|-------------------------------------------------|
| Divisions | Districts.         | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |          | Ratio of Deaths per 1000 of population. |          |                                                 |
|           |                    |          |           |        |        |      |       |       |         |            |          |           |           | Males. | Females. | Males.                                  | Females. |                                                 |
| 1         | Royapuram          | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | 6        | 9                                       | 0.5      | 0.3                                             |
| 2         | Tondiarpet         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | 16       | 7                                       | 0.7      | 0.6                                             |
| 3         | Washermanpet       | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | 12       | 8                                       | 0.6      | 0.3                                             |
| 4         | Korukkupet         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | 9        | 7                                       | 0.5      | 0.2                                             |
| 5         | Harbour            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | 5        | 5                                       | 0.9      | 0.4                                             |
| 6         | Muthialpet         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | 4        | 4                                       | 0.5      | ...                                             |
| 7         | Katchaleswararpet  | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | 7        | 5                                       | 0.7      | ...                                             |
| 8         | Kothawal Bazaar    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | 3        | 2                                       | 0.3      | 0.3                                             |
| 9         | Ammen Koil         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | 4        | 3                                       | 0.5      | 0.5                                             |
| 10        | Seven Wells        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | 13       | 10                                      | 0.2      | 0.2                                             |
| 11        | Sowcarpet          | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | 1        | ...                                     | 1.0      | 0.4                                             |
| 12        | Peddunaickenpet    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 13        | Trevelyan Basin    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 14        | Esplanade          | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 15        | Park Town          | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 16        | Perambur           | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 17        | Choolai            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 18        | Purasawalkam       | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 19        | Vepery             | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 20        | Egmore             | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 21        | Kilpauk            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 22        | Nungambakam        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 23        | Chintadripet       | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 24        | Tiruvateeswararpet | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 25        | Chepauk            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 26        | Triplicane         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 27        | Amir Mahal         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 28        | Mirashibpet        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 29        | Royapettah         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| 30        | Mylapore           | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                     | ...      | ...                                             |
| Total     |                    | 29       | 24        | 31     | 17     | 26   | 21    | 29    | 23      | 24         | 19       | 20        | 37        | 201    | 102      | 303                                     | 0.6      | 0.5                                             |

\* Includes 1 and 46 deaths in the Government Royapuram and General Hospital of patients admitted from mofussil and destitutes.

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Annual Form No. XVII.—Deaths registered from "CHILD BIRTH" by divisions during each month of the year 1933.

| 1          |                    | 2        |           | 3      |        |      |       |       |         |            |          |           |           |        |          | 4                                                   |          | 5                                               |  | 6 |  |
|------------|--------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|----------|-----------------------------------------------------|----------|-------------------------------------------------|--|---|--|
| Divisions. | Districts.         | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |          | Ratio of Deaths per 1,000 of live births delivered. |          | Mean ratio per 1000 during previous five years. |  |   |  |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | Males. | Females. | Males.                                              | Females. |                                                 |  |   |  |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           |        |          |                                                     |          |                                                 |  |   |  |
| 1          | Royapuram          | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 7.5                                             |  |   |  |
| 2          | Tondiarpet         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 16.0                                            |  |   |  |
| 3          | Washermanpet       | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 12.6                                            |  |   |  |
| 4          | Korukkupet         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 13.5                                            |  |   |  |
| 5          | Harbour            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 23.2                                            |  |   |  |
| 6          | Muthialpet         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 12.2                                            |  |   |  |
| 7          | Katchaleswararpet  | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 7.6                                             |  |   |  |
| 8          | Kothawal Bazaar    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 17.1                                            |  |   |  |
| 9          | Ammen Koil         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 12.1                                            |  |   |  |
| 10         | Seven Wells        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 12.6                                            |  |   |  |
| 11         | Sowcarpet          | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 19.8                                            |  |   |  |
| 12         | Peddunaickenpet    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 11.2                                            |  |   |  |
| 13         | Trevelyan Basin    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 14.9                                            |  |   |  |
| 14         | Esplanade          | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 8.8                                             |  |   |  |
| 15         | Park Town          | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 1.4                                             |  |   |  |
| 16         | Perambur           | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 10.0                                            |  |   |  |
| 17         | Choolai            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 8.7                                             |  |   |  |
| 18         | Purasawalkam       | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 9.6                                             |  |   |  |
| 19         | Vepery             | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 6.3                                             |  |   |  |
| 20         | Egmore             | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 17.9                                            |  |   |  |
| 21         | Kilpauk            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 6.7                                             |  |   |  |
| 22         | Nungambakkam       | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 7.9                                             |  |   |  |
| 23         | Chintladripet      | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 10.1                                            |  |   |  |
| 24         | Tiruvateeswararpet | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 8.8                                             |  |   |  |
| 25         | Chepauk            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 16.4                                            |  |   |  |
| 26         | Triplicane         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 9.4                                             |  |   |  |
| 27         | Amir Mahal         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 10.4                                            |  |   |  |
| 28         | Mirashibpet        | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 7.0                                             |  |   |  |
| 29         | Royapettah         | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 6.0                                             |  |   |  |
| 30         | Mylapore           | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 8.2                                             |  |   |  |
| Total.     |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 11.6                                            |  |   |  |
|            |                    | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | ...    | ...      | ...                                                 | ...      | 11.6                                            |  |   |  |

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Annual Form No. XVIII.—Deaths registered from "Other Causes" by divisions during each month of the year 1933.

| Divisions. | Districts.         | 3        |           |        |        |      |       |       |         |            |          |           |           | 4      |          | 5                                       |          | Mean ratio per 1,000 during five years. |      |
|------------|--------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|----------|-----------------------------------------|----------|-----------------------------------------|------|
|            |                    | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |          | Ratio of deaths per 1000 of population. |          |                                         |      |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | Males. | Females. | Males.                                  | Females. |                                         |      |
| 1          | Royapuram          | 56       | 26        | 24     | 41     | 47   | 40    | 30    | 22      | 33         | 34       | 29        | 41        | 207    | 216      | 423                                     | 18.9     | 19.6                                    | 17.3 |
| 2          | Tondiarpet         | 61       | 47        | 38     | 52     | 45   | 29    | 48    | 47      | 38         | 39       | 77        | 61        | 313    | 269      | 582                                     | 23.7     | 21.1                                    | 19.9 |
| 3          | Washermanpet       | 41       | 56        | 45     | 20     | 29   | 23    | 49    | 25      | 32         | 49       | 59        | 48        | 263    | 264      | 467                                     | 20.1     | 16.2                                    | 17.0 |
| 4          | Korukkupet         | 39       | 46        | 33     | 31     | 25   | 25    | 21    | 34      | 44         | 39       | 59        | 58        | 230    | 234      | 464                                     | 17.4     | 19.0                                    | 18.2 |
| 5          | Harbour            | 21       | 16        | 12     | 9      | 13   | 12    | 6     | 12      | 12         | 12       | 15        | 15        | 83     | 70       | 153                                     | 15.1     | 21.7                                    | 17.6 |
| 6          | Muthialpet         | 16       | 13        | 10     | 10     | 14   | 9     | 15    | 14      | 13         | 14       | 20        | 13        | 93     | 68       | 161                                     | 11.1     | 11.6                                    | 11.3 |
| 7          | Katchaleswarampet  | 22       | 14        | 21     | 21     | 14   | 16    | 7     | 13      | 13         | 18       | 21        | 19        | 95     | 164      | 199                                     | 13.9     | 17.8                                    | 15.7 |
| 8          | Kothwal Pazaar     | 15       | 4         | 10     | 12     | 3    | 6     | 6     | 11      | 9          | 7        | 11        | 10        | 50     | 54       | 104                                     | 12.5     | 21.3                                    | 13.5 |
| 9          | Annen Koil         | 25       | 31        | 29     | 28     | 22   | 15    | 9     | 14      | 18         | 23       | 27        | 31        | 139    | 133      | 272                                     | 13.8     | 14.6                                    | 14.3 |
| 10         | Seven Wells        | 39       | 23        | 37     | 20     | 33   | 23    | 28    | 30      | 12         | 24       | 34        | 37        | 150    | 121      | 271                                     | 14.4     | 12.2                                    | 12.4 |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | *52    | *22      | *74                                     |          |                                         |      |
| 11         | Sowcarpet          | 9        | 11        | 7      | 8      | 12   | 13    | 2     | 6       | 6          | 6        | 9         | 7         | 54     | 42       | 96                                      | 13.0     | 13.8                                    | 14.6 |
| 12         | Peddunackipet      | 35       | 23        | 28     | 24     | 29   | 22    | 13    | 25      | 12         | 27       | 42        | 50        | 176    | 154      | 330                                     | 15.8     | 14.8                                    | 15.0 |
| 13         | Trevelyan Basin    | 37       | 26        | 22     | 29     | 32   | 27    | 16    | 23      | 22         | 26       | 27        | 24        | 148    | 164      | 312                                     | 15.3     | 17.8                                    | 15.2 |
| 14         | Esplanade          | 24       | 20        | 21     | 15     | 19   | 20    | 15    | 34      | 20         | 16       | 20        | 24        | 18     | 17       | 35                                      | 7.7      | 10.7                                    | 10.8 |
|            |                    |          |           |        |        |      |       |       |         |            |          |           |           | *178   | *35      | *213                                    |          |                                         |      |
| 15         | Park Town          | 35       | 28        | 26     | 24     | 23   | 26    | 14    | 28      | 22         | 13       | 25        | 29        | 157    | 136      | 293                                     | 16.3     | 18.0                                    | 15.8 |
| 16         | Perambur           | 65       | 43        | 60     | 57     | 53   | 49    | 44    | 33      | 36         | 56       | 55        | 78        | 333    | 296      | 629                                     | 14.4     | 14.3                                    | 12.7 |
| 17         | Choolai            | 41       | 29        | 29     | 31     | 27   | 25    | 24    | 30      | 34         | 36       | 46        | 56        | 204    | 204      | 408                                     | 14.3     | 15.4                                    | 14.6 |
| 18         | Purasawalkam       | 34       | 27        | 36     | 22     | 22   | 19    | 29    | 22      | 22         | 24       | 37        | 48        | 165    | 177      | 342                                     | 11.8     | 13.5                                    | 12.9 |
| 19         | Vepery             | 36       | 23        | 20     | 26     | 27   | 15    | 26    | 25      | 26         | 30       | 40        | 33        | 189    | 138      | 327                                     | 15.3     | 13.1                                    | 15.3 |
| 20         | Egmore             | 51       | 38        | 39     | 23     | 30   | 28    | 39    | 43      | 38         | 47       | 54        | 58        | 254    | 234      | 488                                     | 16.5     | 16.7                                    | 14.2 |
| 21         | Kilpauk            | 44       | 29        | 26     | 23     | 31   | 17    | 26    | 24      | 31         | 29       | 47        | 38        | 200    | 165      | 365                                     | 15.3     | 14.7                                    | 13.7 |
| 22         | Nungambakkam       | 45       | 29        | 29     | 26     | 29   | 17    | 15    | 28      | 30         | 36       | 30        | 39        | 170    | 183      | 353                                     | 11.7     | 14.4                                    | 11.3 |
| 23         | Chintadripet       | 32       | 42        | 40     | 21     | 43   | 36    | 44    | 45      | 49         | 58       | 63        | 81        | 378    | 327      | 705                                     | 18.2     | 16.9                                    | 15.6 |
| 24         | Tiruvattēsvarampet | 54       | 72        | 69     | 77     | 46   | 40    | 44    | 54      | 49         | 58       | 63        | 81        | 378    | 327      | 705                                     | 23.3     | 21.6                                    | 18.3 |
| 25         | Chepauk            | 24       | 28        | 12     | 28     | 24   | 17    | 25    | 15      | 17         | 28       | 24        | 31        | 145    | 128      | 273                                     | 15.4     | 16.6                                    | 14.5 |
| 26         | Tripligane         | 20       | 19        | 19     | 30     | 19   | 17    | 17    | 13      | 24         | 27       | 39        | 31        | 148    | 127      | 275                                     | 14.4     | 13.8                                    | 15.2 |
| 27         | Amir Mahal         | 22       | 36        | 52     | 28     | 38   | 29    | 37    | 31      | 45         | 40       | 52        | 57        | 228    | 219      | 477                                     | 22.5     | 26.3                                    | 18.6 |
| 28         | Mirsalibpet        | 63       | 41        | 20     | 37     | 40   | 35    | 39    | 29      | 36         | 49       | 75        | 81        | 299    | 276      | 575                                     | 21.6     | 20.5                                    | 16.6 |
| 29         | Royapettah         | 42       | 40        | 47     | 37     | 44   | 25    | 37    | 30      | 37         | 36       | 45        | 52        | 229    | 225      | 454                                     | 13.2     | 14.1                                    | 11.7 |
| 30         | Mylapore           | 36       | 18        | 41     | 21     | 18   | 18    | 26    | 38      | 24         | 32       | 28        | 46        | 184    | 174      | 358                                     | 16.9     | 15.7                                    | 14.2 |
| Total      |                    | 1098     | 896       | 912    | 831    | 856  | 694   | 749   | 797     | 799        | 912      | 1158      | 1259      | 5785   | 5,165    | 10,950                                  | 16.9     | 17.0                                    | 15.3 |

\* Includes 14 and 213 deaths in the Government R. yapuram and General Hospital of patients admitted from infirm and Destitutes.

Annual Form No. XIX.—Comparing the deaths from some of the principal diseases during the year with the deaths during the previous 5 years.

| Years.                      | Cholera. |                  | Small-Pox. |                  | Measles. |                  | Plague. |                  | Malaria. |                  | Enteric Fever. |                  | Other fevers. |                  | Dysentery and Diarrhoea. |                  | Tuberculosis other than Pulmonary. |                  | Respiratory Diseases. |                  |         |                  | Injuries. |                  | Deaths from child births. |                  | All other causes. |                  | Total Deaths. |      |
|-----------------------------|----------|------------------|------------|------------------|----------|------------------|---------|------------------|----------|------------------|----------------|------------------|---------------|------------------|--------------------------|------------------|------------------------------------|------------------|-----------------------|------------------|---------|------------------|-----------|------------------|---------------------------|------------------|-------------------|------------------|---------------|------|
|                             | Deaths.  | Ratio per 1,000. | Deaths.    | Ratio per 1,000. | Deaths.  | Ratio per 1,000. | Deaths. | Ratio per 1,000. | Deaths.  | Ratio per 1,000. | Deaths.        | Ratio per 1,000. | Deaths.       | Ratio per 1,000. | Deaths.                  | Ratio per 1,000. | Deaths.                            | Ratio per 1,000. | Deaths.               | Ratio per 1,000. | Deaths. | Ratio per 1,000. | Deaths.   | Ratio per 1,000. | Deaths.                   | Ratio per 1,000. | Deaths.           | Ratio per 1,000. |               |      |
|                             |          |                  |            |                  |          |                  |         |                  |          |                  |                |                  |               |                  |                          |                  |                                    |                  |                       |                  |         |                  |           |                  |                           |                  |                   |                  |               |      |
| 1928                        | 708      | 1.0              | 251        | 0.5              | 59       | 0.1              | ...     | ...              | 1599     | 3.0              | 177            | 0.3              | 1555          | 2.9              | 3931                     | 7.4              | 163                                | 0.4              | 1649                  | 3.2              | 6879    | 13.0             | 262       | 0.5              | 366                       | 15.4             | 9116              | 17.2             | 26715         | 50.5 |
| 1929                        | 16       | 1.3              | 506        | 1.0              | 68       | 0.1              | ...     | ...              | 681      | 1.3              | 120            | 0.2              | 1731          | 3.0              | 3127                     | 5.9              | 17                                 | 0.03             | 1354                  | 2.6              | 5324    | 10.1             | 1242      | 0.5              | 304                       | 13.1             | 8915              | 16.9             | 22415         | 42.4 |
| 1930                        | 43       | 0.03             | 188        | 0.4              | 16       | 0.03             | ...     | ...              | 283      | 0.5              | 126            | 0.2              | 1901          | 3.7              | 3056                     | 8                | 151                                | 0.3              | 924                   | 1.7              | 5256    | 9.9              | 249       | 0.5              | 328                       | 12.7             | 10258             | 19.4             | 22839         | 43.2 |
| 1931                        | 153      | 0.08             | 24         | 0.04             | 3        | 0.006            | ...     | ...              | 277      | 0.4              | 166            | 0.3              | 1748          | 2.7              | 2746                     | 4.2              | 177                                | 0.3              | 843                   | 1.3              | 5743    | 8.9              | 275       | 0.4              | 299                       | 11.6             | 10708             | 16.5             | 23162         | 35.8 |
| 1932                        | 5        | 0.008            | 176        | 0.3              | 16       | 0.02             | 1       | 0.002            | 165      | 0.3              | 101            | 0.2              | 1640          | 2.5              | 2644                     | 4.1              | 170                                | 0.3              | 747                   | 1.2              | 5509    | 8.5              | 267       | 0.4              | 279                       | 10.0             | 10564             | 16.3             | 22290         | 34.4 |
| Mean of the last 5 years... | 185      | 0.3              | 229        | 0.4              | 32       | 0.05             | 0.2     | 0.03             | 601      | 0.9              | 140            | 0.2              | 1728          | 2.7              | 3101                     | 4.3              | 136                                | 0.2              | 1103                  | 1.7              | 5742    | 8.9              | 259       | 0.4              | 315                       | 11.0             | 99.2              | 15.3             | 23484         | 36.3 |
| 1933                        | 62       | 0.1              | 837        | 1.3              | 44       | 0.07             | ...     | ...              | 140      | 0.2              | 90             | 0.1              | 20            | 5.3              | 2670                     | 4.1              | 156                                | 0.2              | 855                   | 1.3              | 5967    | 9.2              | 303       | 0.5              | 331                       | 11.6             | 10950             | 16.9             | 24500         | 37.9 |

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Annual Form No. XX—Table of Deaths for 1938 arranged in accordance with the international list (Fourth Revision 1929) as adopted for use in England and Wales, Scotland and Northern Ireland.—*contd.*

| Classification No.                                                  | Causes of death.                                   | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------------------------------------------------|----------------------------------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| <b>VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS—(Contd.)</b> |                                                    |          |           |        |        |      |       |       |         |            |          |           |           |        |
| 82-a (2)                                                            | Apoplexy                                           | 4        | 8         | 5      | 2      | ...  | 1     | 1     | 1       | 2          | 1        | 1         | 1         | 22     |
| 82-b (2)                                                            | Cerebral thrombosis                                | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 2      |
| 82-c (1)                                                            | Hemiplegia                                         | 16       | 13        | 13     | 13     | 5    | 11    | 23    | 17      | 19         | 26       | 27        | 28        | 217    |
| 82-c (2)                                                            | Other paralysis of unstated origin                 | 10       | 10        | 4      | 9      | 6    | 9     | 11    | 10      | 13         | 4        | 13        | 14        | 113    |
| 83                                                                  | General paralysis of the insane                    | ...      | 1         | ...    | ...    | ...  | ...   | ...   | ...     | 1          | ...      | ...       | ...       | 2      |
| 84                                                                  | Other forms of insanity                            | 3        | 1         | 2      | ...    | 2    | ...   | 1     | 1       | 2          | 1        | ...       | ...       | 13     |
| 85                                                                  | Epilepsy                                           | 2        | ...       | 2      | ...    | 2    | 2     | 1     | 2       | 1          | 2        | 1         | 6         | 22     |
| 86                                                                  | Infantile convulsions (under 5 years of age)       | 66       | 61        | 54     | 50     | 37   | 41    | 26    | 42      | 39         | 36       | 61        | 62        | 575    |
| 87                                                                  | Other diseases of the nervous system               | 1        | 9         | 9      | 3      | 5    | 2     | 6     | 1       | 1          | 3        | 8         | 12        | 61     |
| 87-b                                                                | Neuritis                                           | 1        | 1         | ...    | 2      | 1    | ...   | ...   | 1       | 1          | 1        | ...       | ...       | 6      |
| 88                                                                  | Diseases of the eye and annexa                     | 1        | 1         | ...    | ...    | ...  | ...   | ...   | 2       | 1          | 1        | 2         | ...       | 9      |
| 89                                                                  | Diseases of the ear and of the mastoid sinus       | ...      | 1         | 1      | ...    | 1    | 2     | ...   | ...     | 1          | 1        | 1         | 1         | 9      |
| <b>VII. DISEASES OF THE CIRCULATORY SYSTEM.</b>                     |                                                    |          |           |        |        |      |       |       |         |            |          |           |           |        |
| 90                                                                  | Pericarditis                                       | ...      | ...       | 1      | ...    | ...  | ...   | 2     | 5       | 2          | ...      | 2         | 1         | 13     |
| 92                                                                  | Chronic endocarditis Valvular diseases             | 15       | 10        | 12     | 11     | 10   | 12    | 9     | 11      | 5          | 18       | 17        | 20        | 150    |
| 92-4                                                                | Endocarditis not returned as acute or chronic      | 21       | 2         | 11     | ...    | 5    | ...   | 1     | 2       | 1          | 1        | 4         | 2         | 50     |
| 93-c                                                                | Myocarditis not distinguished as acute or chronic. | 4        | 8         | 18     | 9      | 19   | 19    | 7     | 6       | 10         | 12       | 8         | 15        | 135    |
| 94                                                                  | Angina Pectoris                                    | 2        | 2         | 1      | 1      | 1    | ...   | 1     | ...     | 2          | 2        | 1         | ...       | 13     |
| 95-b (2)                                                            | Other diseases of the heart (undefined)            | 51       | 41        | 47     | 49     | 50   | 35    | 58    | 48      | 29         | 65       | 70        | 71        | 614    |
| 96                                                                  | Cardiac dropsy                                     | 1        | 2         | 4      | 2      | 2    | 2     | 2     | ...     | 1          | 1        | 1         | 4         | 23     |
| 97                                                                  | Aneurysm                                           | ...      | ...       | ...    | ...    | ...  | ...   | ...   | 1       | 1          | ...      | 1         | ...       | 3      |
| 98                                                                  | Arterio-sclerosis                                  | 2        | 2         | 2      | 2      | 2    | 3     | 1     | 6       | 3          | 2        | 1         | ...       | 10     |
| 98-b                                                                | Gangrene                                           | 10       | ...       | 2      | 2      | 2    | ...   | 1     | 3       | ...        | ...      | 1         | 5         | 27     |
| 99                                                                  | Cancerum oris                                      | ...      | ...       | ...    | ...    | ...  | ...   | 1     | ...     | ...        | ...      | ...       | 4         | 15     |
| 100-1                                                               | Other diseases of the arteries                     | ...      | 1         | 2      | ...    | 8    | ...   | 1     | ...     | ...        | ...      | ...       | 10        | 21     |
| 101                                                                 | Haemorrhoids                                       | ...      | ...       | 2      | ...    | ...  | 2     | 1     | ...     | ...        | ...      | 2         | 6         | 17     |
| 103                                                                 | Diseases of the Lymphatic system                   | 10       | ...       | 1      | 1      | 2    | 4     | 2     | ...     | 2          | 3        | ...       | 8         | 33     |
| 104                                                                 | Other diseases of the circulatory system           | 7        | 2         | 5      | ...    | 2    | 5     | 8     | ...     | 6          | 2        | ...       | 1         | 46     |
| <b>VIII. DISEASES OF THE RESPIRATORY SYSTEM.</b>                    |                                                    |          |           |        |        |      |       |       |         |            |          |           |           |        |
| 106-a                                                               | Acute Bronchitis                                   | 17       | 9         | 12     | 9      | 10   | 6     | 8     | 15      | 8          | 13       | 22        | 16        | 145    |
| 106-b                                                               | Chronic Bronchitis                                 | 50       | 43        | 30     | 25     | 39   | 24    | 19    | 11      | 31         | 33       | 33        | 41        | 379    |
| 106-c                                                               | Bronchitis not distinguished as acute or chronic   | 6        | 3         | 10     | 9      | 2    | 3     | 9     | 7       | 10         | 11       | 15        | 19        | 104    |
| 107                                                                 | Broncho-Pneumonia                                  | 299      | 205       | 397    | 296    | 302  | 283   | 262   | 257     | 244        | 268      | 360       | 424       | 3,507  |
| 108                                                                 | Lobar Pneumonia                                    | 63       | 49        | 48     | 60     | 75   | 50    | 41    | 52      | 41         | 50       | 60        | 66        | 655    |

|                                                                        |                                          |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------------------------------------------------------------------------|------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <b>IX. DISEASES OF THE DIGESTIVE SYSTEM.</b>                           |                                          |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 109                                                                    | Pneumonia (not otherwise defined)        | ... | ... | 1   | 2   | ... | ... | ... | ... | ... | ... | ... | ... | 8   |
| 110-1                                                                  | Empyema                                  | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8   |
| 110-2                                                                  | Other Pleurisy                           | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 36  |
| 111-1                                                                  | Hypostatic congestion of lung            | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 13  |
| 112                                                                    | Asthma                                   | 14  | 13  | 20  | 17  | 17  | 11  | 11  | 23  | 14  | 9   | 24  | 24  | 197 |
| 113                                                                    | Pulmonary Emphysema                      | ... | 1   | 3   | 2   | 1   | ... | 3   | 4   | 3   | ... | 2   | 3   | 22  |
| 114                                                                    | Other diseases of the respiratory system | 2   | 3   | 2   | 2   | 1   | 2   | 2   | 4   | 2   | 3   | 2   | 3   | 28  |
| <b>X. NON-VEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.</b> |                                          |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 115-1                                                                  | Diseases of the teeth and gums           | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3   |
| 115-3                                                                  | Diseases of the tonsils                  | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8   |
| 116                                                                    | Ulcer of the stomach                     | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 11  |
| 117 (a)                                                                | " of the duodenum                        | 8   | 4   | 6   | 4   | 12  | 4   | ... | 10  | 12  | 6   | 6   | 5   | 55  |
| 117 (b)                                                                | Gastritis                                | 30  | 17  | 10  | 18  | 11  | 2   | ... | 5   | 9   | 5   | 11  | 11  | 130 |
| 118-1                                                                  | Obstruction of Pylorus                   | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6   |
| 118-2                                                                  | Diarrhoea and Enteritis                  | 81  | 61  | 95  | 75  | 81  | 60  | 57  | 61  | 83  | 68  | 46  | 40  | 808 |
| 119-120                                                                | Colitis                                  | 32  | 27  | 22  | 33  | 28  | 31  | 33  | 30  | 25  | 21  | 34  | 20  | 386 |
| " a-1                                                                  | Infantile Diarrhoea                      | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 9   |
| " a-2                                                                  | Intestinal Toxaemia                      | 5   | 2   | 3   | 2   | 2   | 2   | ... | 2   | 1   | ... | 1   | 2   | 22  |
| 121                                                                    | Appendicitis                             | 1   | 2   | 1   | ... | 1   | ... | ... | ... | ... | ... | ... | ... | 7   |
| 122                                                                    | Hernia                                   | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 28  |
| 122-a (1)                                                              | Strangulated Hernia                      | 1   | 2   | 1   | 1   | 3   | 7   | ... | 3   | 4   | 2   | 7   | 2   | 75  |
| 122 (b)                                                                | Intestinal Obstruction                   | 9   | 13  | 8   | 9   | 13  | 6   | ... | 2   | 4   | 2   | 1   | 1   | 5   |
| 123                                                                    | Intussusception                          | 1   | 1   | ... | ... | ... | 1   | ... | ... | ... | ... | ... | ... | 4   |
| 123                                                                    | Other diseases of the intestines         | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5   |
| 123-1                                                                  | Constipation                             | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 23  |
| 123-3                                                                  | Perforation of intestine                 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 17  |
| 124 (b)                                                                | Biliary Cirrhosis                        | 2   | 2   | 1   | 1   | 4   | ... | ... | 4   | ... | 2   | 4   | 1   | 22  |
| 125-2                                                                  | Cirrhosis of Liver                       | 23  | 10  | 19  | 29  | 35  | 12  | 15  | 15  | 18  | 17  | 16  | 17  | 226 |
| 126                                                                    | Atrophy of Liver                         | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2   |
| 127-2                                                                  | Choleaemia                               | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2   |
| 129                                                                    | Enlargement of Liver                     | 4   | 10  | 2   | 3   | 26  | 7   | 9   | ... | 1   | 8   | 9   | 8   | 94  |
| 126                                                                    | Hepatitis                                | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 25  |
| 127-2                                                                  | Abscess of Liver                         | 1   | 2   | 4   | 1   | 2   | 1   | 2   | 8   | 1   | 2   | 4   | 1   | 16  |
| 129                                                                    | Biliary Calculi                          | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1   |
| 129                                                                    | Catarrhal Jaundice                       | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 66  |
| 129                                                                    | Peritonitis                              | 9   | 8   | 5   | 3   | 7   | 5   | ... | 6   | 5   | 3   | 11  | 4   | 30  |
| <b>X. NON-VEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.</b> |                                          |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 130                                                                    | Acute Nephritis—                         | 17  | 10  | 15  | 12  | 13  | 9   | 5   | 10  | 2   | 12  | 8   | 15  | 128 |
| 131                                                                    | Acute Bright's Disease                   | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 286 |
| 132                                                                    | Chronic Nephritis—                       | 29  | 21  | 32  | 31  | 28  | 18  | 13  | 13  | 26  | 20  | 19  | 36  | 99  |
| 133 (a)                                                                | Renal Dropsy                             | 7   | 18  | 12  | 8   | 5   | 7   | 4   | 2   | 3   | 10  | 11  | 12  | 74  |
| 133 (b)                                                                | Uraemia                                  | 5   | 2   | 7   | 4   | 2   | 6   | 2   | 5   | 4   | 15  | 12  | 4   | 26  |
| 133 (b)                                                                | Pyelitis                                 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1   |
| 133 (b)                                                                | Suppression of Urine                     | 1   | 1   | 1   | 1   | ... | ... | 4   | ... | 2   | ... | 2   | 1   | 19  |

Annual Form No. XX.—Table of Deaths for 1938 arranged in accordance with the International list (Fourth Revision 1929) as adopted for use in England and Wales, Scotland and Northern Ireland.—*contd.*

| Classification No.                     | Causes of death.                                                          | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|----------------------------------------|---------------------------------------------------------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Diseases of the Genito-urinary System. | X. NON-VENERIAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA—(Contd.) |          |           |        |        |      |       |       |         |            |          |           |           |        |
|                                        | 134 (a) Renal Calculus                                                    | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 2      |
|                                        | 135 (b) Calculi of the bladder                                            | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 7      |
|                                        | 136 (a) Cystitis                                                          | 11       | 1         | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 88     |
|                                        | 136 (b) Incontinence of Urine                                             | 1        | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 1      |
|                                        | 137 (a) Stricture of the Urethra                                          | 7        | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 27     |
|                                        | 137 (b) Rupture of the Urethra                                            | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 2      |
|                                        | 138 Diseases of the Prostate                                              | 2        | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 8      |
|                                        | 138 Abscess of the Scrotum                                                | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 5      |
|                                        | 139 (b) Hydrocele                                                         | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 6      |
| Puerperal State.                       | Oorchitis                                                                 | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 4      |
|                                        | Dysmenorrhoea                                                             | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 3      |
|                                        | Menorrhagia                                                               | 4        | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 8      |
|                                        | XI. DISEASES OF PREGNANCY CHILD BIRTH AND THE PUERPERAL STATE.            |          |           |        |        |      |       |       |         |            |          |           |           |        |
|                                        | 141-2 Abortion                                                            | ..       | ..        | 1      | 1      | ..   | 1     | ..    | ..      | 2          | 3        | 2         | 2         | 12     |
|                                        | 143 Vesicular mole                                                        | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 1      |
|                                        | 144 Puerperal Haemorrhage                                                 | ..       | 1         | ..     | ..     | ..   | ..    | 1     | 1       | 1          | ..       | ..        | ..        | 8      |
|                                        | 144-a Placenta praevia                                                    | ..       | 1         | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 8      |
|                                        | 144-b Post Partum Haemorrhage                                             | ..       | 1         | 2      | 1      | ..   | 2     | 1     | 2       | 1          | 4        | 2         | 2         | 22     |
|                                        | 145 Puerperal anaemia                                                     | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 7      |
| Diseases of Skin and Cellular Tissue.  | Retained Placenta                                                         | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 8      |
|                                        | Puerperal sepsis                                                          | 21       | 10        | 11     | 10     | 15   | 20    | 11    | 21      | 12         | 20       | 14        | 13        | 178    |
|                                        | 146 (1) Eclampsia                                                         | 1        | 3         | 1      | ..     | 4    | 2     | 8     | 2       | ..         | 7        | 2         | 3         | 23     |
|                                        | 146 (2) Albuminuria of Pregnancy                                          | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 1      |
|                                        | 147 Other Toxaemias of Pregnancy                                          | ..       | ..        | ..     | ..     | 2    | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 1      |
|                                        | 148-b Sudden death after delivery                                         | ..       | 1         | 1      | 1      | 1    | ..    | ..    | 1       | 2          | 1        | 2         | 5         | 19     |
|                                        | 149 Caesarean section                                                     | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 10     |
|                                        | Difficult labour                                                          | ..       | 1         | 1      | 1      | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 1      |
|                                        | Prolonged labour                                                          | ..       | ..        | 1      | 1      | 2    | 1     | 1     | 2       | ..         | ..       | ..        | ..        | 11     |
|                                        | XII. DISEASES OF THE SKIN AND CELLULAR TISSUE.                            |          |           |        |        |      |       |       |         |            |          |           |           | 8      |
| Diseases of Skin and Cellular Tissue.  | Carbuncle                                                                 | 4        | 1         | 2      | 2      | 7    | 6     | 5     | 4       | 2          | 1        | 1         | ..        | 85     |
|                                        | Cellulitis                                                                | 7        | 4         | 4      | 3      | 6    | 3     | 7     | 6       | 3          | 2        | 10        | 3         | 58     |
|                                        | Multiple Abscess                                                          | 2        | 2         | 4      | 8      | 5    | 3     | 7     | 6       | 8          | 4        | 12        | 4         | 65     |
|                                        | Other diseases of the skin                                                | 3        | ..        | 4      | 4      | 3    | 2     | 1     | 3       | ..         | ..       | 1         | 1         | 23     |
|                                        | Elephantiasis                                                             | ..       | ..        | ..     | ..     | ..   | ..    | ..    | ..      | ..         | ..       | ..        | ..        | 1      |
|                                        | Ulcer (undefined)                                                         | ..       | 2         | 1      | 1      | ..   | ..    | 1     | ..      | ..         | ..       | ..        | ..        | 7      |

|                             |                                                                  |     |     |     |     |     |     |     |     |     |     |     |     |      |
|-----------------------------|------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Diseases of Bones & Joints. | XIII. DISEASES OF BONES AND ORGANS OF LOCOMOTION.                | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 7    |
|                             | 154 Osteomyelitis                                                | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 6    |
|                             | 155 Periostitis                                                  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 12   |
|                             | 156-a Acute Arthritis                                            | ..  | 1   | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |
|                             | 157-c (g) Imperforate Anus                                       | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |
| Congenital Malformation.    | 157-e (b) Congenital malformation                                | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 10   |
|                             | 158 XV. DISEASES OF EARLY INFANCY.                               | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 2    |
|                             | Congenital debility                                              | 4   | 13  | 7   | 5   | 11  | 5   | 8   | 3   | 2   | 5   | 2   | 4   | 69   |
|                             | Inanition                                                        | 11  | 8   | 6   | 5   | 7   | 2   | 10  | 14  | 7   | 11  | 20  | 9   | 110  |
|                             | Malnutrition                                                     | 8   | 2   | 4   | 3   | 2   | 5   | 12  | 8   | 4   | 4   | 5   | 19  | 77   |
| Diseases of early Infancy.  | Marasmus                                                         | 34  | 24  | 21  | 30  | 21  | 21  | 24  | 25  | 21  | 17  | 28  | 45  | 311  |
|                             | Premature birth                                                  | 201 | 148 | 145 | 127 | 131 | 118 | 117 | 123 | 140 | 211 | 240 | 258 | 1959 |
|                             | Injury at birth                                                  | ..  | ..  | 1   | 1   | 2   | 1   | 1   | ..  | ..  | ..  | ..  | ..  | ..   |
|                             | Ateleclasis                                                      | 1   | 13  | 13  | 10  | 12  | 5   | 8   | 10  | 13  | 11  | 21  | 27  | 15   |
|                             | Asphyxia neonatorum                                              | 20  | 13  | 12  | 9   | 5   | 11  | 3   | 5   | 6   | 4   | 13  | 7   | 163  |
| Old age.                    | 161-a Icterus neonatorum                                         | 5   | 3   | ..  | ..  | ..  | ..  | ..  | ..  | 1   | ..  | ..  | ..  | 83   |
|                             | 161-b XVI. OLD AGE.                                              | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 5    |
|                             | Old age                                                          | 114 | 75  | 150 | 180 | 144 | 148 | 134 | 141 | 134 | 116 | 147 | 154 | 1587 |
|                             | 162-b XVII. DEATHS FROM VIOLENCE.                                | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |
|                             | 163 Suicide by solid or liquid poisons and corrosive substances. | ..  | 2   | 1   | 1   | ..  | ..  | ..  | 1   | ..  | 1   | 1   | ..  | 7    |
| Deaths from Violence.       | 165 " by hanging                                                 | 1   | ..  | 3   | 1   | ..  | 2   | 2   | ..  | 1   | ..  | 1   | 1   | 12   |
|                             | 166 " by drowning                                                | 1   | ..  | 1   | ..  | ..  | 1   | 1   | ..  | 1   | ..  | 1   | 2   | 14   |
|                             | 168 " by cutting or piercing instruments                         | 1   | ..  | 1   | ..  | ..  | ..  | 1   | 1   | ..  | ..  | 1   | 3   | 5    |
|                             | 171 " by other means                                             | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..   |
|                             | 173 Homicide by firearms                                         | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 1    |
|                             | 175 " other means                                                | 1   | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 2    |
|                             | 176 Attacks by Venomous animals.—Snake bite                      | ..  | ..  | ..  | ..  | ..  | ..  | 1   | ..  | ..  | ..  | ..  | 1   | 2    |
|                             | 177 Sting of Scorpion                                            | ..  | ..  | 1   | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 1   | 1    |
|                             | 179 Food poisoning                                               | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 1   | 2    |
|                             | 181 Other acute accidental poisoning (not by gas)                | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 1   | 3    |
| Deaths from Violence.       | 183 Accidental Burns                                             | 5   | 5   | 8   | 4   | 9   | 10  | 2   | 6   | 8   | 5   | 7   | 8   | 74   |
|                             | 186 " Drowning                                                   | 5   | 5   | 7   | 7   | 7   | 5   | 4   | 7   | 4   | 4   | 5   | 6   | 61   |
|                             | 189 " Injury                                                     | 9   | 9   | 14  | 4   | 7   | 3   | 11  | 5   | 4   | 1   | 1   | 12  | 87   |
|                             | 189 Motor accident                                               | ..  | ..  | 1   | 1   | ..  | ..  | ..  | ..  | 1   | ..  | ..  | ..  | 4    |
|                             | 191 Starvation                                                   | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 1    |
|                             | 191 Sun-Stroke                                                   | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 1    |
|                             | 194 Other and unstated forms of accidental violence.             | 4   | 2   | 2   | ..  | 3   | ..  | 4   | 1   | ..  | 3   | ..  | 1   | 20   |
|                             | 194-2 Accidental fracture                                        | 3   | 3   | 4   | 1   | 4   | ..  | 2   | 5   | ..  | 2   | 4   | 4   | 40   |
|                             | 195 Violent deaths of unstated nature                            | 3   | 3   | 1   | ..  | 1   | ..  | ..  | ..  | ..  | ..  | ..  | 8   | 10   |
|                             | 196 Hanging (Legal execution)                                    | ..  | ..  | 1   | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 3    |

| Classification No.    | Causes of Death.                   | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|-----------------------|------------------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ill-defined diseases. | XVIII. ILL-DEFINED DISEASES.       |          |           |        |        |      |       |       |         |            |          |           |           |        |
|                       | 199 Sudden death                   | ...      | ...       | ...    | ...    | 1    | ...   | 1     | ...     | ...        | 1        | 1         | 1         | 5      |
|                       | 200 (1) Heart failure              | 45       | 31        | 27     | 35     | 23   | 28    | 41    | 33      | 23         | 30       | 39        | 48        | 403    |
|                       | Weak heart                         | 1        | 1         | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | 3         | 1         | 5      |
|                       | 200 (2) Other ill-defined causes   | 5        | 4         | ...    | ...    | 2    | 3     | 2     | ...     | 2          | 6        | 2         | 4         | 29     |
|                       | Abdominal disease                  | 11       | 7         | 11     | 5      | 5    | ...   | 6     | 9       | 2          | 4        | 10        | 10        | 79     |
|                       | Ascites                            | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 1      |
|                       | Coma                               | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 1      |
|                       | Debility age 10-50 years           | 18       | 16        | 32     | 25     | 48   | 57    | 39    | 27      | 47         | 32       | 22        | 27        | 390    |
|                       | Inanition age 10 years and over    | 8        | 2         | 2      | 1      | 1    | ...   | ...   | 3       | 1          | 4        | 3         | 1         | 27     |
| 200 (3)               | Malnutrition age 10 years and over | ...      | 1         | ...    | ...    | ...  | ...   | ...   | ...     | 1          | ...      | ...       | 1         | 3      |
|                       | Marasmus age 10 years and over     | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | 1        | ...       | ...       | 1      |
|                       | Pyrexia uncertain origin           | 163      | 189       | 170    | 162    | 168  | 174   | 168   | 147     | 144        | 147      | 194       | 223       | 2049   |
|                       | Cause not specified                | 3        | 1         | 2      | 1      | 4    | ...   | 2     | 7       | 4          | 2        | 2         | 1         | 25     |
|                       | Post-operative shock               | ...      | ...       | ...    | ...    | ...  | ...   | ...   | ...     | ...        | ...      | ...       | ...       | 7      |
|                       | Unknown                            | 3        | ...       | 2      | 3      | 2    | 1     | 3     | 2       | 1          | 2        | ...       | 2         | 21     |

TABLE—A.

Comparative Statement of deaths from some of the principal diseases during the past 12 years.

| Year. | Births.                                     |             | Deaths.                                             |             | Cholera. |             | Small-Pox. |             | Malaria. |             | Other Fevers. |             | Other Infectious diseases. |             | Plague. |             | Dysentery and Diarrhoea. |             | Respiratory diseases. |             | Infantile mortality under 1 year. |             | Children between 1 and 5 years. |             | Still Births. |
|-------|---------------------------------------------|-------------|-----------------------------------------------------|-------------|----------|-------------|------------|-------------|----------|-------------|---------------|-------------|----------------------------|-------------|---------|-------------|--------------------------|-------------|-----------------------|-------------|-----------------------------------|-------------|---------------------------------|-------------|---------------|
|       | No. of Registered exclusive of Still Births | Birth-rate. | No. of Deaths registered exclusive of Still Births. | Death-rate. | Deaths.  | Death-rate. | Deaths.    | Death-rate. | Deaths.  | Death-rate. | Deaths.       | Death-rate. | Deaths.                    | Death-rate. | Deaths. | Death-rate. | Deaths.                  | Death-rate. | Deaths.               | Death-rate. | Deaths.                           | Death-rate. | Deaths.                         | Death-rate. |               |
| 1922  | 21,650                                      | 41.1        | 22,175                                              | 42.7        | 17       | 0.03        | 1121       | 2.1         | 763      | 1.4         | 1325          | 2.5         | 612                        | 1.2         | 1       | 0.002       | 4167                     | 7.9         | 4911                  | 9.3         | 6669                              | 308.0       | 4113                            | 100.4       | 1274          |
| 1923  | 22,975                                      | 43.6        | 19,933                                              | 37.9        | 21       | 0.04        | 151        | 0.3         | 783      | 1.5         | 769           | 1.5         | 363                        | 0.7         | 1       | 0.002       | 3778                     | 7.2         | 4610                  | 8.7         | 5837                              | 254.0       | 3272                            | 79.9        | 1312          |
| 1924  | 23,275                                      | 44.2        | 21,960                                              | 41.7        | 97       | 0.4         | 197        | 0.4         | 971      | 1.8         | 631           | 1.3         | 982                        | 1.9         | ...     | ...         | 3700                     | 7.0         | 5598                  | 10.6        | 6148                              | 264.1       | 3810                            | 93.0        | 1274          |
| 1925  | 23,070                                      | 43.6        | 25,000                                              | 47.3        | 203      | 0.4         | 763        | 1.4         | 198      | 2.5         | 1039          | 2.0         | 682                        | 1.3         | ...     | ...         | 4631                     | 7.6         | 6416                  | 12.1        | 6431                              | 278.8       | 4656                            | 112.9       | 1335          |
| 1926  | 22,000                                      | 41.6        | 23,776                                              | 45.0        | 98       | 0.2         | 60         | 0.1         | 1342     | 2.6         | 1343          | 2.7         | 565                        | 1.1         | ...     | ...         | 3867                     | 7.3         | 6470                  | 12.2        | 6145                              | 279.3       | 4120                            | 100.0       | 1105          |
| 1927  | 24,760                                      | 46.8        | 22,361                                              | 42.3        | 512      | 1.0         | 320        | 0.6         | 1367     | 2.6         | 1259          | 2.1         | ...                        | ...         | ...     | ...         | 3263                     | 6.2         | 6816                  | 12.9        | 5888                              | 237.6       | 3806                            | 92.3        | 1258          |
| 1928  | 23,729                                      | 44.9        | 26,715                                              | 50.5        | 708      | 1.3         | 251        | 0.5         | 1599     | 3.0         | 1732          | 3.2         | 1056                       | 2.0         | ...     | ...         | 3927                     | 7.4         | 8691                  | 16.4        | 6806                              | 286.8       | 4864                            | 118.0       | 1321          |
| 1929  | 23,124                                      | 43.7        | 22,415                                              | 42.4        | 16       | 0.03        | 506        | 1.0         | 681      | 1.3         | 1861          | 3.5         | 612                        | 1.2         | ...     | ...         | 3127                     | 5.9         | 6695                  | 12.7        | 5933                              | 256.6       | 3875                            | 94.0        | 1287          |
| 1930  | 25,662                                      | 48.4        | 22,839                                              | 43.2        | 43       | 0.08        | 188        | 0.4         | 283      | 0.5         | 2037          | 3.9         | 411                        | 0.8         | ...     | ...         | 3056                     | 5.8         | 6331                  | 12.0        | 6258                              | 243.9       | 3633                            | 88.1        | 1260          |
| 1931  | 25,738                                      | 39.8        | 23,162                                              | 35.8        | 153      | 0.2         | 240        | 0.4         | 277      | 0.4         | 1914          | 3.0         | 1347                       | 2.1         | ...     | ...         | 2746                     | 4.2         | 5743                  | 8.9         | 6391                              | 248.3       | 3767                            | 50.3        | 1318          |
| 1932  | 27,996                                      | 43.3        | 22,290                                              | 34.4        | 5        | 0.008       | 176        | 0.3         | 165      | 0.3         | 1747          | 2.7         | 1403                       | 2.2         | 1       | 0.002       | 2644                     | 4.1         | 5569                  | 8.5         | 6622                              | 236.5       | 3609                            | 48.2        | 1326          |
| 1933  | 28,533                                      | 44.1        | 24,500                                              | 37.9        | 62       | 0.1         | 837        | 1.3         | 140      | 0.2         | 2185          | 3.3         | 519                        | 0.8         | ...     | ...         | 2670                     | 4.1         | 5967                  | 9.2         | 7540                              | 261.3       | 4154                            | 67.7        | 1380          |

TABLE—B.  
Rainfall.

| Years. | 1st Quarter.      | 2nd Quarter.    | 3rd Quarter.       | 4th Quarter.         | Total.           |
|--------|-------------------|-----------------|--------------------|----------------------|------------------|
|        | January to March. | April to June.  | July to September. | October to December. |                  |
| 1928   | Inches.<br>3.30   | Inches.<br>0.33 | Inches.<br>16.15   | Inches.<br>31.69     | Inches.<br>51.47 |
| 1929   | 8.29              | 2.77            | 13.72              | 27.64                | 52.42            |
| 1930   | 3.65              | 11.24           | 8.71               | 55.05                | 78.69            |
| 1931   | 0.05              | 6.76            | 17.94              | 33.73                | 58.53            |
| 1932   | 0.69              | 2.31            | 7.28               | 36.31                | 46.59            |
| 1933   | 3.42              | 0.98            | 5.20               | 30.58                | 40.18            |

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TABLE—C.  
Table of Births, Deaths and Infantile Death-rates for different Communities in the City of Madras for 1932 and 1933.

| Race or Caste.    | Population according to the census of 1931. | 1933.                |             |                      |             |                   |                       | 1932.                |             |                      |             |                   |                       |
|-------------------|---------------------------------------------|----------------------|-------------|----------------------|-------------|-------------------|-----------------------|----------------------|-------------|----------------------|-------------|-------------------|-----------------------|
|                   |                                             | Total No. of Births. | Birth-rate. | Total No. of Deaths. | Death-rate. | Infantile Deaths. | Infantile Death-rate. | Total No. of Births. | Birth-rate. | Total No. of Deaths. | Death-rate. | Infantile Deaths. | Infantile Death-rate. |
| Europeans         | 3,581                                       | 27                   | 7.5         | 40                   | 11.2        | 2                 | 74.1                  | 56                   | 15.6        | 37                   | 10.3        | 7                 | 125.0                 |
| Anglo-Indians     | 10,657                                      | 391                  | 36.7        | 230                  | 21.6        | 47                | 120.2                 | 398                  | 37.4        | 217                  | 20.4        | 41                | 103.0                 |
| Indian Christians | 39,884                                      | 1,470                | 36.9        | 1,067                | 26.8        | 222               | 151.0                 | 1,379                | 34.6        | 979                  | 24.6        | 180               | 130.5                 |
| Hindus            | 5,20,176                                    | 23,419               | 45.0        | 20,066               | 38.6        | 6,412             | 273.8                 | 23,075               | 44.4        | 18,313               | 35.2        | 5,862             | 254.0                 |
| Mahomedans        | 70,031                                      | 3,223                | 46.0        | 3,095                | 44.2        | 857               | 265.9                 | 3,088                | 44.1        | 2,741                | 39.1        | 532               | 172.3                 |
| Others            | 2,901                                       | 3                    | 1.0         | 1                    | 0.34        | ...               | ...                   | ...                  | ...         | 3                    | 1.0         | ...               | ...                   |
| Total             | 6,47,230                                    | 28,533               | 44.1        | 24,500               | 37.9        | 7,540             | 264.3                 | 27,996               | 43.3        | 22,290               | 34.4        | 6,622             | 236.5                 |

H—16

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TABLE-D.

Table of Birth and Death rates of principal sub-divisions of Hindu Community for 1932 and 1933.

| Name of the Community.          | Population. | 1933          |             |               |             | 1932          |             |               |             |
|---------------------------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                                 |             | Total Births. | Birth Rate. | Total Deaths. | Death Rate. | Total Births. | Birth Rate. | Total Deaths. | Death Rate. |
| Brahmins                        | ...         | 58,761        | 29.4        | 1,300         | 22.1        | 1,844         | 31.4        | 1,211         | 20.7        |
| Chetties                        | ...         | 37,949        | 43.6        | 1,602         | 42.2        | 1,756         | 46.3        | 1,333         | 35.3        |
| Vellalah or Mudaliars           | ...         | 86,716        | 49.3        | 3,810         | 43.9        | 3,309         | 38.2        | 2,599         | 29.9        |
| Baliyah or Naidus               | ...         | 60,263        | 32.7        | 1,904         | 31.6        | 2,350         | 39.0        | 1,924         | 31.9        |
| Vannia or Naickers              | ...         | 69,650        | 49.7        | 3,055         | 43.9        | 3,452         | 49.6        | 2,508         | 36.0        |
| Adi-Dravidas                    | ...         | 73,701        | 40.2        | 3,051         | 41.4        | 2,699         | 36.6        | 2,178         | 29.6        |
| Patnavars                       | ...         | 11,309        | 39.4        | 489           | 43.2        | 469           | 41.4        | 416           | 36.8        |
| Yadaval or Idayars              | ...         | 17,022        | 47.0        | 721           | 42.4        | 1,296         | 76.1        | 935           | 54.9        |
| Viswakarma Brahmin or Kammalats | ...         | 15,570        | 45.2        | 659           | 42.1        | 781           | 49.8        | 568           | 36.2        |

TABLE-E.

Table of Birth, Death and Infantile Death-rates by months for 1932 and 1933.

| Months.   | 1933.                |             |                      |             |                   |                                           | 1932.                |             |                      |             |                   |                                           |
|-----------|----------------------|-------------|----------------------|-------------|-------------------|-------------------------------------------|----------------------|-------------|----------------------|-------------|-------------------|-------------------------------------------|
|           | Total No. of Births. | Birth rate. | Total No. of Deaths. | Death rate. | Infantile Deaths. | Infantile Death rate on 1000 live births. | Total No. of Births. | Birth rate. | Total No. of Deaths. | Death rate. | Infantile Deaths. | Infantile Death rate on 1000 live births. |
| January   | 2,104                | 39.0        | 2,272                | 42.1        | 688               | 327.0                                     | 2,037                | 37.8        | 2,108                | 39.1        | 559               | 274.4                                     |
| February  | 1,822                | 33.8        | 1,917                | 35.5        | 564               | 309.5                                     | 1,613                | 29.9        | 1,753                | 32.5        | 421               | 261.0                                     |
| March     | 2,141                | 39.7        | 2,198                | 40.7        | 651               | 304.9                                     | 1,853                | 34.4        | 1,713                | 31.6        | 441               | 238.0                                     |
| April     | 2,181                | 40.4        | 2,039                | 37.8        | 625               | 286.6                                     | 2,200                | 40.8        | 1,572                | 29.1        | 477               | 216.8                                     |
| May       | 2,468                | 45.8        | 2,069                | 38.3        | 584               | 236.6                                     | 2,520                | 46.7        | 1,770                | 32.8        | 529               | 209.1                                     |
| June      | 2,247                | 41.7        | 1,760                | 32.6        | 498               | 221.6                                     | 2,418                | 44.8        | 1,803                | 33.4        | 534               | 220.8                                     |
| July      | 2,437                | 45.2        | 1,780                | 33.0        | 549               | 225.3                                     | 2,492                | 46.2        | 1,638                | 30.3        | 489               | 196.2                                     |
| August    | 2,484                | 46.1        | 1,775                | 32.9        | 519               | 221.0                                     | 2,599                | 48.2        | 1,651                | 30.6        | 523               | 201.2                                     |
| September | 2,589                | 48.0        | 1,758                | 32.6        | 574               | 221.7                                     | 2,533                | 47.0        | 1,758                | 32.6        | 600               | 236.9                                     |
| October   | 2,804                | 52.0        | 1,949                | 36.1        | 615               | 219.3                                     | 2,710                | 50.2        | 2,031                | 36.1        | 664               | 245.0                                     |
| November  | 2,570                | 47.6        | 2,376                | 44.1        | 818               | 318.3                                     | 2,578                | 47.8        | 2,170                | 40.2        | 692               | 230.0                                     |
| December  | 2,686                | 49.8        | 2,607                | 48.3        | 825               | 307.1                                     | 2,443                | 45.3        | 2,323                | 43.1        | 693               | 283.6                                     |
| Total     | 28,533               | 44.1        | 24,500               | 37.9        | 7,540             | 264.3                                     | 27,996               | 43.3        | 22,290               | 34.4        | 6,622             | 236.5                                     |

TABLE-F.

Ratio of deaths among Children under one year of age per 1000 Live Births registered in each division for 1932 and 1933.

| Divisions. | 1933.                |                        | 1932.                |                        |
|------------|----------------------|------------------------|----------------------|------------------------|
|            | Infantile Mortality. | Infantile Death-rates. | Infantile Mortality. | Infantile Death-rates. |
| 1          | 275                  | 292.9                  | 253                  | 254.8                  |
| 2          | 416                  | 303.4                  | 361                  | 256.3                  |
| 3          | 397                  | 312.4                  | 331                  | 258.9                  |
| 4          | 347                  | 313.2                  | 236                  | 225.1                  |
| 5          | 113                  | 327.5                  | 101                  | 335.5                  |
| 6          | 103                  | 209.8                  | 119                  | 258.1                  |
| 7          | 137                  | 261.0                  | 101                  | 196.4                  |
| 8          | 53                   | 302.9                  | 50                   | 270.2                  |
| 9          | 210                  | 253.6                  | 183                  | 223.4                  |
| 10         | 232                  | 292.7                  | 222                  | 273.7                  |
| 11         | 61                   | 302.0                  | 59                   | 333.3                  |
| 12         | 302                  | 306.9                  | 251                  | 257.1                  |
| 13         | 201                  | 271.6                  | 189                  | 257.1                  |
| 14         | 32                   | 283.2                  | 32                   | 310.6                  |
| 15         | 166                  | 250.4                  | 156                  | 242.9                  |
| 16         | 491                  | 244.5                  | 383                  | 198.0                  |
| 17         | 347                  | 252.0                  | 393                  | 285.1                  |
| 18         | 314                  | 272.8                  | 273                  | 230.9                  |
| 19         | 221                  | 232.4                  | 203                  | 241.9                  |
| 20         | 321                  | 198.6                  | 292                  | 180.4                  |
| 21         | 166                  | 185.5                  | 161                  | 184.0                  |
| 22         | 235                  | 231.3                  | 174                  | 170.0                  |
| 23         | 338                  | 261.6                  | 319                  | 259.9                  |
| 24         | 394                  | 246.9                  | 365                  | 247.6                  |
| 25         | 179                  | 210.1                  | 166                  | 206.6                  |
| 26         | 193                  | 265.5                  | 184                  | 229.1                  |
| 27         | 273                  | 314.5                  | 235                  | 249.7                  |
| 28         | 439                  | 343.2                  | 327                  | 352.5                  |
| 29         | 349                  | 234.5                  | 316                  | 235.6                  |
| 30         | 234                  | 275.0                  | 187                  | 230.8                  |
| Total ...  | 7,540                | 264.3                  | 6,622                | 236.5                  |

TABLE-G.

Table of Infantile Mortality by months in the year 1933.

| 1933      | Small-pox. | Measles. | Malaria. | Other fevers. | Dysentery and Diarrhoea. | Premature Birth. | Debility. | Nervous system. | Respiratory system. | All other causes. | Total of 1933. |          |        | Total of 1932. |
|-----------|------------|----------|----------|---------------|--------------------------|------------------|-----------|-----------------|---------------------|-------------------|----------------|----------|--------|----------------|
|           |            |          |          |               |                          |                  |           |                 |                     |                   | Males.         | Females. | Total. |                |
| January   | 6          | 1        | ..       | 34            | 72                       | 201              | 4         | 56              | 190                 | 124               | 328            | 300      | 688    | 559            |
| February  | 19         | ..       | 1        | 42            | 52                       | 148              | 6         | 48              | 135                 | 113               | 308            | 256      | 564    | 421            |
| March     | 31         | ..       | ..       | 40            | 79                       | 145              | 7         | 46              | 218                 | 85                | 349            | 302      | 651    | 441            |
| April     | 38         | 3        | ..       | 41            | 66                       | 127              | 5         | 40              | 198                 | 112               | 313            | 312      | 625    | 477            |
| May       | 10         | 1        | 1        | 29            | 69                       | 131              | 4         | 32              | 198                 | 109               | 328            | 266      | 584    | 529            |
| June      | 10         | 1        | 2        | 41            | 53                       | 118              | 3         | 36              | 172                 | 62                | 287            | 241      | 498    | 534            |
| July      | 14         | 2        | 1        | 57            | 66                       | 117              | 6         | 24              | 189                 | 73                | 284            | 265      | 549    | 489            |
| August    | 8          | 1        | ..       | 38            | 67                       | 123              | 3         | 31              | 172                 | 106               | 285            | 264      | 549    | 523            |
| September | 7          | 1        | ..       | 37            | 81                       | 140              | 4         | 36              | 173                 | 95                | 332            | 242      | 574    | 600            |
| October   | 2          | ..       | ..       | 32            | 67                       | 211              | 6         | 34              | 169                 | 94                | 355            | 259      | 615    | 664            |
| November  | 1          | 1        | 1        | 39            | 67                       | 240              | 3         | 52              | 252                 | 162               | 452            | 366      | 818    | 692            |
| December  | 2          | 1        | ..       | 51            | 43                       | 268              | 5         | 54              | 296                 | 115               | 468            | 357      | 825    | 693            |
| Total     | 143        | 12       | 6        | 481           | 782                      | 1,959            | 56        | 489             | 2,362               | 1,259             | 4,060          | 3,480    | 7,540  | 6,622          |

TABLE—H.  
Table of percentage of Infantile Deaths from Principal causes in the year 1933.

| Age Periods.                 | Small-pox |        | Measles. |        | Malaria. |        | Other Fevers. |        | Diarrhoea and Dysentery. |        | Premature Births. |        | Debility. |        | Nervous System. |        | Respiratory System. |        | All other Causes. |        | Total. |        |
|------------------------------|-----------|--------|----------|--------|----------|--------|---------------|--------|--------------------------|--------|-------------------|--------|-----------|--------|-----------------|--------|---------------------|--------|-------------------|--------|--------|--------|
|                              | Total.    | Ratio. | Total.   | Ratio. | Total.   | Ratio. | Total.        | Ratio. | Total.                   | Ratio. | Total.            | Ratio. | Total.    | Ratio. | Total.          | Ratio. | Total.              | Ratio. | Total.            | Ratio. | Total. | Ratio. |
| Under 7 days                 | ...       | ...    | ...      | ...    | ...      | ...    | ...           | ...    | ...                      | ...    | ...               | ...    | ...       | ...    | ...             | ...    | ...                 | ...    | ...               | ...    | 1537   | 20.4   |
| 7 days and under 1 month...  | 7         | 0.68   | ...      | ...    | ...      | ...    | 49            | 4.75   | 16                       | 1.04   | 570               | 55.29  | 13        | 1.26   | 81              | 7.26   | 96                  | 9.31   | 1031              | 16.0   | 1031   | 18.7   |
| 1 month and under 4 months   | 19        | 1.45   | 4        | 0.31   | 2        | 0.15   | 69            | 5.27   | 117                      | 8.33   | 179               | 13.75  | 22        | 1.88   | 142             | 10.84  | 390                 | 29.79  | 865               | 27.82  | 1309   | 17.4   |
| 4 months and under 7 months  | 42        | 3.01   | 4        | 0.29   | ...      | ...    | 110           | 7.89   | 249                      | 17.85  | 23                | 20.09  | 9         | 0.65   | 90              | 6.45   | 711                 | 50.97  | 151               | 10.82  | 1395   | 18.5   |
| 7 months and under 10 months | 52        | 3.17   | 4        | 0.24   | 2        | 0.12   | 165           | 10.05  | 212                      | 14.75  | 6                 | 0.37   | 2         | 0.12   | 73              | 4.45   | 783                 | 47.71  | 312               | 19.01  | 1641   | 21.7   |
| 10 months and under 1 year.  | 23        | 3.67   | ...      | ...    | 1        | 0.16   | 64            | 10.21  | 103                      | 17.22  | 3                 | 0.43   | 3         | 0.48   | 26              | 4.15   | 329                 | 52.47  | 70                | 11.16  | 627    | 8.3    |
| Total                        | 143       | 1.90   | 12       | 0.16   | 5        | 0.08   | 481           | 6.38   | 782                      | 10.37  | 1959              | 25.93  | 56        | 0.74   | 489             | 6.48   | 2362                | 31.32  | 1250              | 16.58  | 7540   | ...    |

## VACCINATION STATEMENT No. I.

Statement showing the number of births (Divisional and Hospital) verified during the calendar year 1933 and the number of vaccination of Infants under one year of age.

| Divisions. | Total Births excluding still births. |           | Still births. |           | Deaths under one year. |           | Number of infants surviving. |           | Number of infants vaccinated under one year. |           | Percentage of vaccination to births registered. |           |
|------------|--------------------------------------|-----------|---------------|-----------|------------------------|-----------|------------------------------|-----------|----------------------------------------------|-----------|-------------------------------------------------|-----------|
|            | Divisional.                          | Hospital. | Divisional.   | Hospital. | Divisional.            | Hospital. | Divisional.                  | Hospital. | Divisional.                                  | Hospital. | Divisional.                                     | Hospital. |
| 1          | 621                                  | 350       | 10            | 13        | 104                    | 53        | 517                          | 297       | 320                                          | 144       | 51.5                                            | 41.1      |
| 2          | 841                                  | 509       | 20            | 60        | 162                    | 91        | 679                          | 418       | 395                                          | 82        | 47.0                                            | 16.1      |
| 3          | 949                                  | 354       | 23            | 24        | 130                    | 64        | 819                          | 290       | 536                                          | 143       | 56.5                                            | 40.4      |
| 4          | 836                                  | 295       | 21            | 30        | 103                    | 30        | 733                          | 265       | 542                                          | 174       | 64.9                                            | 59.0      |
| 5          | 259                                  | 58        | 10            | 3         | 58                     | 7         | 201                          | 51        | 102                                          | 26        | 40.0                                            | 44.8      |
| 6          | 381                                  | 95        | 8             | 6         | 67                     | 15        | 314                          | 80        | 186                                          | 49        | 48.8                                            | 51.6      |
| 7          | 393                                  | 123       | 14            | 9         | 60                     | 25        | 333                          | 98        | 235                                          | 34        | 60.0                                            | 27.6      |
| 8          | 117                                  | 65        | 3             | 3         | 17                     | 13        | 100                          | 53        | 51                                           | 19        | 43.6                                            | 30.0      |
| 9          | 569                                  | 255       | 12            | 19        | 89                     | 31        | 480                          | 224       | 245                                          | 91        | 43.1                                            | 35.7      |
| 10         | 547                                  | 235       | 10            | 12        | 113                    | 49        | 434                          | 186       | 243                                          | 50        | 44.5                                            | 21.3      |
| 11         | 154                                  | 46        | 3             | 8         | 45                     | 3         | 109                          | 43        | 43                                           | 9         | 28.0                                            | 19.6      |
| 12         | 766                                  | 207       | 15            | 18        | 153                    | 28        | 613                          | 179       | 264                                          | 34        | 34.5                                            | 16.4      |
| 13         | 596                                  | 136       | 5             | 12        | 110                    | 39        | 486                          | 97        | 312                                          | 41        | 52.4                                            | 30.1      |
| 14         | 85                                   | 24        | 1             | 3         | 12                     | 2         | 73                           | 22        | 27                                           | 4         | 31.8                                            | 16.6      |
| 15         | 543                                  | 124       | 5             | 12        | 100                    | 20        | 443                          | 104       | 268                                          | 48        | 49.4                                            | 38.7      |
| 16         | 1,604                                | 333       | 34            | 29        | 236                    | 73        | 1,368                        | 260       | 1,001                                        | 115       | 62.4                                            | 34.5      |
| 17         | 1,103                                | 249       | 19            | 22        | 176                    | 51        | 927                          | 198       | 643                                          | 89        | 58.3                                            | 35.7      |
| 18         | 907                                  | 248       | 16            | 17        | 168                    | 39        | 739                          | 209       | 405                                          | 113       | 44.6                                            | 45.6      |
| 19         | 547                                  | 320       | 20            | 15        | 96                     | 49        | 451                          | 271       | 367                                          | 198       | 67.1                                            | 62.0      |
| 20         | 666                                  | 953       | 14            | 92        | 107                    | 95        | 559                          | 888       | 393                                          | 270       | 59.0                                            | 27.5      |
| 21         | 608                                  | 303       | 26            | 33        | 76                     | 37        | 532                          | 266       | 412                                          | 153       | 67.7                                            | 50.5      |
| 22         | 695                                  | 352       | 19            | 39        | 115                    | 60        | 580                          | 292       | 445                                          | 162       | 64.0                                            | 46.0      |
| 23         | 801                                  | 425       | 28            | 31        | 167                    | 72        | 634                          | 354       | 517                                          | 181       | 64.5                                            | 42.5      |
| 24         | 1,169                                | 495       | 29            | 46        | 298                    | 66        | 871                          | 429       | 630                                          | 129       | 51.0                                            | 26.1      |
| 25         | 472                                  | 390       | 4             | 19        | 68                     | 50        | 404                          | 340       | 203                                          | 67        | 43.0                                            | 17.2      |
| 26         | 529                                  | 230       | 15            | 16        | 69                     | 37        | 460                          | 193       | 210                                          | 64        | 40.0                                            | 27.8      |
| 27         | 727                                  | 134       | 25            | 17        | 213                    | 49        | 514                          | 85        | 349                                          | 73        | 48.0                                            | 54.5      |
| 28         | 968                                  | 392       | 30            | 55        | 230                    | 63        | 738                          | 229       | 467                                          | 102       | 48.3                                            | 26.3      |
| 29         | 1,076                                | 355       | 42            | 34        | 170                    | 68        | 906                          | 287       | 588                                          | 113       | 54.7                                            | 31.8      |
| 30         | 697                                  | 166       | 26            | 23        | 151                    | 31        | 546                          | 135       | 376                                          | 63        | 54.0                                            | 38.0      |
| Total      | 20,226                               | 8,253     | 507           | 720       | 3,663                  | 1,310     | 16,563                       | 6,943     | 10,775                                       | 2,841     | 53.3                                            | 34.4      |

## Vaccination Statement II:—Showing particulars

| Divisions. | Districts.         | Population according to the census of 1931. | Number of Depots. | Number of Vaccinators. | Total No. of persons Vaccinated. |          |         | Average No. of persons Vaccinated by each Vaccinator. | Primary |          |        |
|------------|--------------------|---------------------------------------------|-------------------|------------------------|----------------------------------|----------|---------|-------------------------------------------------------|---------|----------|--------|
|            |                    |                                             |                   |                        | Males.                           | Females. | Total.  |                                                       | Total   |          |        |
|            |                    |                                             |                   |                        |                                  |          |         |                                                       | Males.  | Females. | Total. |
| 1          | 2                  | 3                                           | 4                 | 5                      | 6                                | 7        | 8       | 9                                                     | 10      | 11       | 12     |
| 1          | Royapuram          | 21,952                                      |                   |                        | 3,109                            | 2,763    | 5,872   |                                                       | 573     | 605      | 1,178  |
| 2          | Tondiarpet         | 25,911                                      |                   |                        | 3,961                            | 4,085    | 8,046   |                                                       | 722     | 677      | 1,399  |
| 3          | Washermanpet       | 25,663                                      |                   |                        | 6,522                            | 2,455    | 8,977   |                                                       | 639     | 599      | 1,238  |
| 4          | Korukkupet         | 25,538                                      |                   |                        | 4,698                            | 2,496    | 7,194   |                                                       | 592     | 521      | 1,113  |
| 5          | Harbour            | 8,704                                       |                   |                        | 4,584                            | 485      | 5,069   |                                                       | 249     | 164      | 413    |
| 6          | Muthialpet         | 14,257                                      |                   |                        | 3,603                            | 557      | 4,160   |                                                       | 344     | 179      | 523    |
| 7          | Katchaleswaranpet  | 12,707                                      |                   |                        | 6,240                            | 1,303    | 7,543   |                                                       | 416     | 268      | 684    |
| 8          | Kothawal Bazaar    | 6,550                                       |                   |                        | 1,012                            | 323      | 1,335   |                                                       | 127     | 101      | 228    |
| 9          | Ammen Kovil        | 19,202                                      |                   |                        | 3,351                            | 4,775    | 8,126   |                                                       | 442     | 555      | 997    |
| 10         | Seven Wells        | 20,294                                      |                   |                        | 2,994                            | 4,532    | 7,526   |                                                       | 444     | 490      | 934    |
| 11         | Sowcarpet          | 7,194                                       |                   |                        | 390                              | 472      | 862     |                                                       | 81      | 121      | 212    |
| 12         | Peddunaickenpet    | 21,547                                      |                   |                        | 4,560                            | 4,842    | 9,402   |                                                       | 481     | 559      | 1,040  |
| 13         | Trevelyan Basin    | 18,916                                      |                   |                        | 1,922                            | 1,294    | 3,216   |                                                       | 479     | 316      | 795    |
| 14         | Esplanade          | 3,906                                       |                   |                        | 711                              | 541      | 1,252   |                                                       | 86      | 65       | 151    |
| 15         | Park Town          | 17,183                                      |                   |                        | 1,521                            | 863      | 2,384   |                                                       | 403     | 312      | 715    |
| 16         | Perambur           | 43,817                                      | 16                | 53                     | 16,351                           | 5,281    | 21,632  | 3691                                                  | 1,427   | 1,198    | 2,625  |
| 17         | Choolai            | 27,488                                      |                   |                        | 4,414                            | 4,631    | 9,045   |                                                       | 718     | 704      | 1,422  |
| 18         | Purasawalkam       | 27,054                                      |                   |                        | 3,229                            | 4,343    | 7,572   |                                                       | 619     | 650      | 1,269  |
| 19         | Vepery             | 22,137                                      |                   |                        | 3,531                            | 2,138    | 5,669   |                                                       | 577     | 562      | 1,139  |
| 20         | Egmore             | 29,385                                      |                   |                        | 4,222                            | 2,718    | 6,940   |                                                       | 583     | 640      | 1,223  |
| 21         | Kilpauk            | 24,334                                      |                   |                        | 6,478                            | 3,426    | 9,904   |                                                       | 108     | 513      | 1,021  |
| 22         | Nungambakkam       | 27,238                                      |                   |                        | 7,999                            | 5,361    | 13,360  |                                                       | 598     | 592      | 1,190  |
| 23         | Chintadripet       | 26,845                                      |                   |                        | 3,186                            | 2,002    | 5,188   |                                                       | 711     | 696      | 1,407  |
| 24         | Tiruvateeswaranpet | 31,371                                      |                   |                        | 2,716                            | 1,421    | 4,137   |                                                       | 604     | 597      | 1,201  |
| 25         | Chepauk            | 17,092                                      |                   |                        | 4,403                            | 1,766    | 6,169   |                                                       | 429     | 407      | 836    |
| 26         | Triplicane         | 19,514                                      |                   |                        | 2,998                            | 1,843    | 4,841   |                                                       | 445     | 459      | 904    |
| 27         | Amir Mahal         | 19,615                                      |                   |                        | 1,680                            | 1,457    | 3,137   |                                                       | 409     | 392      | 801    |
| 28         | Mirshahibpet       | 27,343                                      |                   |                        | 3,834                            | 2,904    | 6,738   |                                                       | 698     | 649      | 1,347  |
| 29         | Royapettah         | 33,203                                      |                   |                        | 5,404                            | 4,783    | 10,187  |                                                       | 909     | 896      | 1,805  |
| 30         | Mylapore           | 21,270                                      |                   |                        | 2,443                            | 1,526    | 3,969   |                                                       | 523     | 458      | 981    |
| ...        | Total              | 6,47,230                                    |                   |                        | 1,22,066                         | 77,386   | 199,452 | ...                                                   | 15,836  | 15,015   | 30,851 |

## of Vaccinations during the Calendar year 1933.

| Vaccination.    |                             |                    |        |          | Re-Vaccinations. | Percentage of Successful cases in which the results were known. | Persons Successfully Vaccinated per 1,000 of Population. | Average annual No. of persons successfully Vaccinated during the previous five years. |                  | Average annual No. of deaths from Small-pox during the previous five years. |                                | Average cost of each Successful Vaccination. |         |                                |    |
|-----------------|-----------------------------|--------------------|--------|----------|------------------|-----------------------------------------------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------|------------------|-----------------------------------------------------------------------------|--------------------------------|----------------------------------------------|---------|--------------------------------|----|
| Successful.     |                             |                    |        | Unknown. |                  |                                                                 |                                                          | Primary.                                                                              | Re-Vaccinations. | Number.                                                                     | Ratio per 1,000 of Population. |                                              | Number. | Ratio per 1,000 of population. |    |
| Under one year. | One year and under 6 years. | Six years & above. | Total. |          |                  |                                                                 |                                                          |                                                                                       |                  |                                                                             |                                |                                              |         |                                |    |
| 13              | 14                          | 15                 | 16     | 17       | 18               | 19                                                              | 20                                                       | 21                                                                                    | 22               | 23                                                                          | 24                             | 25                                           | 26      | 27                             | 28 |
| 657             | 500                         | 21                 | 1,178  | ...      | 4,694            | 1,102                                                           | 1,952                                                    | 100.0                                                                                 | 40.2             | 103.9                                                                       | 528                            | 24.1                                         | 17      | 0.8                            |    |
| 909             | 467                         | 23                 | 1,399  | ...      | 6,647            | 1,294                                                           | 2,943                                                    | 100.0                                                                                 | 34.9             | 103.9                                                                       | 1,554                          | 60.0                                         | 9       | 0.3                            |    |
| 798             | 417                         | 23                 | 1,238  | ...      | 7,739            | 508                                                             | 1,944                                                    | 100.0                                                                                 | 8.8              | 68.2                                                                        | 1,420                          | 55.3                                         | 7       | 0.3                            |    |
| 711             | 286                         | 10                 | 1,107  | ...      | 6,081            | 298                                                             | 1,271                                                    | 99.6                                                                                  | 6.2              | 55.0                                                                        | 1,295                          | 50.7                                         | 9       | 0.4                            |    |
| 226             | 175                         | 12                 | 413    | ...      | 4,656            | 754                                                             | 1,205                                                    | 100.0                                                                                 | 21.8             | 134.1                                                                       | 409                            | 47.0                                         | 7       | 0.8                            |    |
| 332             | 211                         | ...                | 543    | ...      | 3,617            | 520                                                             | 1,268                                                    | 100.0                                                                                 | 22.1             | 74.6                                                                        | 677                            | 47.5                                         | 4       | 0.3                            |    |
| 440             | 244                         | ...                | 684    | ...      | 6,859            | 1,071                                                           | 1,948                                                    | 100.0                                                                                 | 21.8             | 138.1                                                                       | 629                            | 49.5                                         | 6       | 0.5                            |    |
| 131             | 97                          | ...                | 228    | ...      | 1,107            | 212                                                             | 322                                                      | 100.0                                                                                 | 27.0             | 67.2                                                                        | 256                            | 39.1                                         | 3       | 0.5                            |    |
| 671             | 325                         | ...                | 996    | ...      | 7,129            | 1,460                                                           | 338                                                      | 99.9                                                                                  | 21.5             | 127.9                                                                       | 979                            | 51.0                                         | 9       | 0.5                            |    |
| 610             | 323                         | ...                | 933    | ...      | 6,592            | 1,548                                                           | 340                                                      | 99.9                                                                                  | 24.8             | 122.3                                                                       | 915                            | 45.1                                         | 4       | 0.2                            |    |
| 120             | 92                          | ...                | 212    | ...      | 650              | 165                                                             | 4                                                        | 100.0                                                                                 | 25.5             | 52.4                                                                        | 247                            | 34.3                                         | 3       | 0.4                            |    |
| 783             | 292                         | ...                | 1,075  | ...      | 8,322            | 1,417                                                           | 267                                                      | 99.6                                                                                  | 17.6             | 115.7                                                                       | 983                            | 45.6                                         | 7       | 0.3                            |    |
| 613             | 181                         | 1                  | 795    | ...      | 2,421            | 256                                                             | 1,097                                                    | 100.0                                                                                 | 19.3             | 55.6                                                                        | 734                            | 38.8                                         | 8       | 0.4                            |    |
| 97              | 54                          | ...                | 151    | ...      | 1,101            | 183                                                             | 422                                                      | 100.0                                                                                 | 27.0             | 85.5                                                                        | 188                            | 48.1                                         | 2       | 0.5                            |    |
| 517             | 190                         | ...                | 707    | ...      | 1,669            | 233                                                             | 713                                                      | 98.9                                                                                  | 24.4             | 54.7                                                                        | 619                            | 36.0                                         | 6       | 0.3                            |    |
| 1,832           | 749                         | 22                 | 2,603  | ...      | 19,007           | 2,784                                                           | 1,421                                                    | 99.2                                                                                  | 15.8             | 122.9                                                                       | 920                            | 21.0                                         | 11      | 0.3                            |    |
| 1,145           | 277                         | ...                | 1,422  | ...      | 7,623            | 2,540                                                           | 1,149                                                    | 100.0                                                                                 | 39.2             | 144.1                                                                       | 1,504                          | 54.7                                         | 15      | 0.5                            |    |
| 1,063           | 205                         | 1                  | 1,269  | ...      | 6,303            | 1,954                                                           | 854                                                      | 100.0                                                                                 | 35.9             | 119.1                                                                       | 1,349                          | 49.9                                         | 13      | 0.5                            |    |
| 1,058           | 81                          | ...                | 1,139  | ...      | 4,530            | 515                                                             | ...                                                      | 100.0                                                                                 | ...              | 74.7                                                                        | 1,227                          | 55.4                                         | 8       | 0.4                            |    |
| 1,017           | 185                         | 21                 | 1,223  | ...      | 5,717            | 890                                                             | 677                                                      | 100.0                                                                                 | 17.7             | 71.9                                                                        | 1,281                          | 43.6                                         | 3       | 0.1                            |    |
| 830             | 181                         | 6                  | 1,017  | 2        | 8,883            | 1,425                                                           | 1                                                        | 99.8                                                                                  | 16.0             | 100.4                                                                       | 1,051                          | 43.2                                         | 5       | 0.2                            |    |
| 925             | 260                         | ...                | 1,185  | ...      | 12,170           | 4,414                                                           | 2,861                                                    | 99.9                                                                                  | 47.4             | 205.6                                                                       | 1,326                          | 48.7                                         | 2       | 0.1                            |    |
| 1,114           | 271                         | 22                 | 1,407  | ...      | 3,781            | 452                                                             | 407                                                      | 100.0                                                                                 | 13.4             | 69.2                                                                        | 1,388                          | 51.7                                         | 5       | 0.2                            |    |
| 925             | 241                         | 13                 | 1,179  | 4        | 2,936            | 533                                                             | 7                                                        | 98.5                                                                                  | 18.2             | 54.6                                                                        | 1,308                          | 41.7                                         | 16      | 0.5                            |    |
| 586             | 232                         | 8                  | 826    | 4        | 5,333            | 57                                                              | 4,993                                                    | 99.3                                                                                  | 16.8             | 51.7                                                                        | 737                            | 43.1                                         | 3       | 0.2                            |    |
| 545             | 299                         | 13                 | 857    | 32       | 3,937            | 410                                                             | 2,692                                                    | 98.3                                                                                  | 32.9             | 64.9                                                                        | 790                            | 40.5                                         | 7       | 0.4                            |    |
| 654             | 116                         | 9                  | 779    | 14       | 2,336            | 498                                                             | ...                                                      | 99.0                                                                                  | ...              | 65.1                                                                        | 764                            | 38.9                                         | 6       | 0.3                            |    |
| 884             | 424                         | 36                 | 1,344  | ...      | 5,391            | 571                                                             | 3,210                                                    | 99.8                                                                                  | 26.2             | 70.0                                                                        | 1,034                          | 37.8                                         | 17      | 0.6                            |    |
| 1,248           | 538                         | 17                 | 1,803  | ...      | 8,382            | 1,282                                                           | 1                                                        | 97.5                                                                                  | 15.3             | 92.9                                                                        | 1,373                          | 41.4                                         | 10      | 0.3                            |    |
| 571             | 343                         | 60                 | 980    | ...      | 2,988            | 245                                                             | 2,031                                                    | 99.9                                                                                  | 25.6             | 57.6                                                                        | 831                            | 39.1                                         | 7       | 0.3                            |    |
| 22,012          | 8,362                       | 318                | 30,692 | 56       | 168,601          | 29,591                                                          | 36,338                                                   | 99.7                                                                                  | 22.4             | 93.1                                                                        | 31,036                         | 48.0                                         | 229     | 0.4                            |    |

Rs. A. P.  
0-11-3

Rs. A. P.  
0-11-3

# VACCINATION STATEMENT No. III.

Statement showing the number of Births verified in 1933 and the number of Infants Vaccinated under one year of age.

| Year.                      | Total number of Births excluding Still Births | Number of children in column 2 who died before attaining the age of one year without being vaccinated. | Number of Children in column 2 who left the City before attaining the age of one year without being vaccinated. | Number of Children in column 2 who were available for Vaccination (column 2 minus columns 3 and 4). | Number of Children in column 5 who were vaccinated before they attained the age of one year. | Percentage of column 6 to column 5. | Number of Children in column 5 whose Vaccination was postponed beyond one year of age for medical reasons. |
|----------------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------|
| 1                          | 2                                             | 3                                                                                                      | 4                                                                                                               | 5                                                                                                   | 6                                                                                            | 7                                   | 8                                                                                                          |
| 1931 { Divisional Hospital | 18,195                                        | 2,079                                                                                                  | 3,059                                                                                                           | 12,057                                                                                              | 10,074                                                                                       | 83.6                                | 973                                                                                                        |
| 1932 { Divisional Hospital | 8,098                                         | 1,173                                                                                                  | 1,772                                                                                                           | 5,153                                                                                               | 2,600                                                                                        | 50.5                                | 265                                                                                                        |
| 1933 { Divisional Hospital | 18,622                                        | 3,042                                                                                                  | 3,080                                                                                                           | 12,500                                                                                              | 9,873                                                                                        | 79.0                                | 1260                                                                                                       |
| 1933 { Divisional Hospital | 7,676                                         | 993                                                                                                    | 1,335                                                                                                           | 4,858                                                                                               | 2,580                                                                                        | 53.1                                | 218                                                                                                        |
| 1933 { Divisional Hospital | 20,226                                        | 2,663                                                                                                  | 3,427                                                                                                           | 13,136                                                                                              | 10,775                                                                                       | 82.0                                | 893                                                                                                        |
| 1933 { Divisional Hospital | 8,253                                         | 1,310                                                                                                  | 1,836                                                                                                           | 5,107                                                                                               | 2,841                                                                                        | 55.6                                | 422                                                                                                        |

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Statement showing the areas in the City which have been sewered and are yet to be sewered.

| Division. | Name of area.       | Length of sewers in feet laid during 1933. | Length of sewers in feet laid up to 31-12-1933. | Percentage of sewered portion up to 31-12-1933. | Percentage yet to be sewered. |
|-----------|---------------------|--------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------|
| 1         | Royapuram           | 139                                        | 40,972                                          | 85                                              | 15                            |
| 2         | Tondiarpet          | 493                                        | 31,979                                          | 70                                              | 30                            |
| 3         | Washermenpet        | ...                                        | 52,541                                          | 96                                              | 4                             |
| 4         | Korukkupet          | ...                                        | 22,401                                          | 65                                              | 35                            |
| 5         | Harbour             | 833                                        | 30,771                                          | 94                                              | 6                             |
| 6         | Muthialpet          | ...                                        | 24,104                                          | 94                                              | 6                             |
| 7         | Katchaleswaranpet   | ...                                        | 34,410                                          | 91                                              | 9                             |
| 8         | Kothawal Bazaar     | 1,287                                      | 23,345                                          | 100                                             | ...                           |
| 9         | Amman Koil          | 2,443                                      | 27,687                                          | 100                                             | ...                           |
| 10        | Seven Wells         | ...                                        | 28,766                                          | 100                                             | ...                           |
| 11        | Sowcarpet           | 334                                        | 18,379                                          | 100                                             | ...                           |
| 12        | Peddunaickenpet     | 227                                        | 30,824                                          | 98                                              | 2                             |
| 13        | Trevelyan Basin     | 262                                        | 32,171                                          | 97                                              | 3                             |
| 14        | Esplanade           | 1,521                                      | 10,417                                          | 90                                              | 10                            |
| 15        | Park Town           | 907                                        | 21,396                                          | 95                                              | 5                             |
| 16        | Perambur            | ...                                        | 29,179                                          | 55                                              | 45                            |
| 17        | Choolai             | 149                                        | 33,188                                          | 56                                              | 44                            |
| 18        | Purasawalkam        | ...                                        | 53,825                                          | 99                                              | 1                             |
| 19        | Vepery              | ...                                        | 38,165                                          | 80                                              | 20                            |
| 20        | Egmore              | 1,279                                      | 92,745                                          | 93                                              | 7                             |
| 21        | Kilpauk             | ...                                        | 31,079                                          | 53                                              | 47                            |
| 22        | Nungambakkam        | 8,041                                      | 33,962                                          | 32                                              | 68                            |
| 23        | Chintadripet        | ...                                        | 40,623                                          | 95                                              | 5                             |
| 24        | Tiruvatteeswaranpet | 1,993                                      | 49,264                                          | 87                                              | 13                            |
| 25        | Chepauk             | ...                                        | 22,026                                          | 90                                              | 10                            |
| 26        | Triplacane          | 2,590                                      | 28,228                                          | 87                                              | 13                            |
| 27        | Amir Mahal          | ...                                        | 27,262                                          | 85                                              | 15                            |
| 28        | Mirsahibpet         | 5,484                                      | 87,295                                          | 90                                              | 10                            |
| 29        | Royapettah          | 7,258                                      | 53,285                                          | 52                                              | 48                            |
| 30        | Mylapore            | 8,700                                      | 81,226                                          | 80                                              | 20                            |
|           | Total               | 43,940                                     | 11,31,515                                       | 83.64                                           | 16.36                         |

Statement showing the number of applications for licenses disposed of during 1933.

| Description.                              | Number of applications dealt with. | Number in which license was sanctioned. | Number in which license was refused. | Number pending disposal. |
|-------------------------------------------|------------------------------------|-----------------------------------------|--------------------------------------|--------------------------|
| Aerated Water factory                     | 37                                 | 36                                      | 1                                    | ...                      |
| Bakery                                    | 91                                 | 88                                      | 3                                    | ...                      |
| Candles & Soap                            | 20                                 | 20                                      | ...                                  | ...                      |
| Cocoonut fibre, Flax, Hemp & Jute         | 38                                 | 38                                      | ...                                  | ...                      |
| Cattle-yards                              | 2031                               | 1474                                    | 3                                    | 554                      |
| Bones, Hoofs, Hair, Rags, Wool and Horns  | 37                                 | 36                                      | 1                                    | ...                      |
| Dairy                                     | 143                                | 140                                     | 3                                    | ...                      |
| Flour                                     | 134                                | 130                                     | 4                                    | ...                      |
| Gilding, Electro-plating, and Condiments. | 134                                | 126                                     | 8                                    | ...                      |
| Hack-stable                               | 65                                 | 64                                      | 1                                    | ...                      |
| Dyeing Yards                              | 56                                 | 55                                      | 1                                    | ...                      |
| Onions and Garlic                         | 55                                 | 55                                      | ...                                  | ...                      |
| Oil Mills & Oil storing                   | 497                                | 481                                     | 16                                   | ...                      |
| Lodging house                             | 68                                 | 68                                      | ...                                  | ...                      |
| Markets                                   | 42                                 | 42                                      | ...                                  | ...                      |
| Meat Stalls                               | 296                                | 225                                     | 71                                   | ...                      |
| Spirits, Turpentine & Rosin               | 151                                | 148                                     | 3                                    | ...                      |
| Sweetmeat bazaars, & Coffee hotels        | 387                                | 367                                     | 20                                   | ...                      |
| Washing soiled clothes                    | 184                                | 184                                     | ...                                  | ...                      |
| Fish, Fins                                | 19                                 | 19                                      | ...                                  | ...                      |
| Skins, Hides & Leather                    | 117                                | 117                                     | ...                                  | ...                      |
| Paddy boiling                             | 2                                  | 2                                       | ...                                  | ...                      |
| Sugar, Sugarcandy                         | 12                                 | 12                                      | ...                                  | ...                      |
| Catgut, Tallow, Offal, Bones and Blood    | 8                                  | 8                                       | ...                                  | ...                      |
| Pig-stye                                  | 24                                 | ...                                     | 1                                    | 23                       |
| Snuff                                     | 93                                 | 85                                      | 8                                    | ...                      |
| Cotton                                    | 29                                 | 29                                      | ...                                  | ...                      |
| Brick-kiln                                | 1                                  | ...                                     | 1                                    | ...                      |
| Lime-kiln                                 | 2                                  | ...                                     | 2                                    | ...                      |
| Eating-house, Toddy-shop                  | 804                                | 775                                     | 29                                   | ...                      |
| Total                                     | 5577                               | 4824                                    | 176                                  | 577                      |

List of unwholesome articles of food destroyed during 1933.

|                         |                                                                 |
|-------------------------|-----------------------------------------------------------------|
| Aerated water.          | 33 bottles.                                                     |
| Apples.                 | 349.                                                            |
| Beef.                   | 212 lbs. and 7 seers.                                           |
| Biscuits.               | 63 tins, 6 baskets and 43.                                      |
| Berry apples.           | 492.                                                            |
| Brussel sprouts.        | 20 bundles.                                                     |
| Canned beef.            | 7 tins.                                                         |
| Canned fish.            | 359 tins.                                                       |
| Cheese.                 | 6 tins and 24 pieces.                                           |
| Chocolate.              | 47 tins, 141 boxes, 2495 tablets, 1073 pieces and 11 sticks.    |
| Custered fruits.        | 1359.                                                           |
| Cocoa.                  | 19 boxes and 179 tins.                                          |
| Dried fish.             | 73 baskets.                                                     |
| Eggs.                   | 1407.                                                           |
| Grapes.                 | 37½ lbs. 18 seers, 2 baskets and 24.                            |
| Halva.                  | 8 plates.                                                       |
| Iced Cheese.            | 52 tins.                                                        |
| Jack fruits.            | 52.                                                             |
| Lettice.                | 100 bundles.                                                    |
| Limes.                  | 890.                                                            |
| Lactogen.               | 336 tins.                                                       |
| Mutton curry.           | 6 pots, 12 plates and 50 lbs.                                   |
| Mangoes.                | 3395 and 1 basket.                                              |
| Melons.                 | 327.                                                            |
| Nestles Milk.           | 49 bottles and 114889 tins.                                     |
| Oranges.                | 4365 and 25 baskets                                             |
| Offal.                  | 23 seers and 4 baskets.                                         |
| Peas.                   | 20 lbs. (Bangalore).                                            |
| Patridges.              | 60.                                                             |
| Pumpkins.               | 90.                                                             |
| Potatoes.               | 230, 6 viss and 3 seers.                                        |
| Pork.                   | 83 lbs.                                                         |
| Plantains.              | 9609 and 40 baskets.                                            |
| Quails.                 | 100.                                                            |
| Rice.                   | 394 bags.                                                       |
| Rhubarb.                | 10 bundles.                                                     |
| Rotten prawns.          | 31½ baskets.                                                    |
| Rice eatables and cakes | 400 baskets and 15 trays.                                       |
| Rotten cabbages.        | 15 baskets and 132.                                             |
| Stale shark.            | 12 pieces.                                                      |
| Sugarcane.              | 27.                                                             |
| Salmon ruby brand.      | 20 tins.                                                        |
| Sausages.               | 1 parcel                                                        |
| Salted fish             | 9½ baskets and 6.                                               |
| Sheep head.             | 17.                                                             |
| Stale mutton.           | 177 seers, 22½ viss and 4 thighs.                               |
| Sword fish.             | 38 baskets and 283.                                             |
| Sweets.                 | 17 seers, 45 plates and 2 lbs.                                  |
| Syrup.                  | 24½ bottles.                                                    |
| Stale fish.             | 31 baskets and 103.                                             |
| Trash.                  | 144 baskets and 111 trays.                                      |
| Tea.                    | 444 measures, 56 cans, 841 kettles, 20 pots, 23 cups and 1 tin. |
| Tomatoes.               | 19½ baskets and 2233.                                           |
| Wood apples.            | 132.                                                            |

## Statement of notices issued and disposed of together with

| Section<br>or<br>By-law. | Substance of Section or By-Law.                                                                                                                | NOTICES.                            |                                |        |                   |                         |                                                                                     | No. cancelled. |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------|--------|-------------------|-------------------------|-------------------------------------------------------------------------------------|----------------|
|                          |                                                                                                                                                | No. pending on 1st<br>January 1933. | No. issued during<br>the year. | Total. | No. complied with |                         |                                                                                     |                |
|                          |                                                                                                                                                |                                     |                                |        | Volun-<br>tarily. | By<br>prose-<br>cution. | By transfer to<br>W.D. for<br>Departmental<br>execution and<br>recovery of<br>cost. |                |
| (1)                      | (2)                                                                                                                                            | (3)                                 | (4)                            | (5)    | (6)               |                         |                                                                                     | (7)            |
| 177                      | Failure to comply with the requisition regarding proper maintenance of house drains, privies and cesspools ...                                 | ...                                 | 1                              | 1      | ...               | 1                       | ...                                                                                 | ...            |
| 186                      | Failure to obey requisition to provide latrine or to remove latrine to another site and failure to keep latrines clean and in proper order ... | 232                                 | 698                            | 930    | 303               | 89                      | ...                                                                                 | 117            |
| 188                      | Failure to obey requisition to provide latrine for market, cattle-stand or cart-stand, and to keep them clean and in proper order ...          | 1                                   | 3                              | 4      | 1                 | ...                     | ...                                                                                 | 1              |
| 189                      | Failure to construct latrines so as to screen persons using them from view ...                                                                 | ...                                 | 5                              | 5      | 2                 | 3                       | ...                                                                                 | ...            |
| 202 (1)                  | Allowing rubbish or filth to accumulate in premises for more than twenty-four hours. ...                                                       | 1                                   | ...                            | 1      | 1                 | ...                     | ...                                                                                 | ...            |
| " (5)                    | Keeping rubbish or filth for more than twenty four hours, etc. ...                                                                             | 8                                   | 14                             | 22     | 10                | 1                       | ...                                                                                 | 2              |
| " (6)                    | Allowing sewage to flow in streets ...                                                                                                         | 8                                   | 35                             | 43     | 29                | 1                       | ...                                                                                 | 4              |
| 260                      | Failure to obey requisition to repair, etc. tank or other place, dangerous to passers-by or persons living in the neighbour-hood ...           | ...                                 | 15                             | 15     | 10                | ...                     | ...                                                                                 | 2              |
| 264                      | Failure to obey requisition to fill up etc. tank or well, or drain off water, etc. ...                                                         | 116                                 | 738                            | 854    | 452               | 14                      | 3                                                                                   | 56             |
| 269                      | Failure to obey requisition to enclose, clear or cleanse untenanted premises ...                                                               | 14                                  | 49                             | 63     | 31                | 11                      | ..                                                                                  | 8              |
| 270                      | Failure to obey requisition to clear or cleanse, etc. building or land in filthy state or overgrown with noxious vegeta-tion ...               | 4                                   | 36                             | 40     | 23                | 2                       | ...                                                                                 | 8              |
| 272                      | Failure to obey requisition to lime-wash or otherwise cleanse building ...                                                                     | 18                                  | 308                            | 326    | 254               | 4                       | ...                                                                                 | 13             |
| 273                      | Failure to obey requisition to execute work or take other action with respect to insanitary buildings ...                                      | 607                                 | 2462                           | 3069   | 2161              | 98                      | ...                                                                                 | 140            |
| 282                      | Use of place as stable, cattle stand etc. with-out or contrary to license ...                                                                  | ...                                 | ...                            | ...    | ...               | ...                     | ...                                                                                 | ...            |
| 283                      | Repairs to or demolishing of stable, cattle-shed, etc. ...                                                                                     | 4                                   | 19                             | 23     | 11                | ...                     | ...                                                                                 | 6              |
| 284                      | Construction or maintenance of stable, cattle-shed, etc. contrary to Act or subsi-diary legislation ...                                        | 1                                   | 13                             | 14     | 7                 | 1                       | ...                                                                                 | ...            |
| 287 (3)                  | Use of place without license or contrary to license ...                                                                                        | ...                                 | ...                            | ...    | ...               | ...                     | ...                                                                                 | ...            |

## the statement of prosecutions instituted during the year 1933.

| No. pending. | PROSECUTIONS.                                             |                                 |        |                |                    |                |                |                                          | No. pending. |
|--------------|-----------------------------------------------------------|---------------------------------|--------|----------------|--------------------|----------------|----------------|------------------------------------------|--------------|
|              | No. of prosecutions pending disposal on 1st January 1933. | No. instituted during the year. | Total. | No. convicted. | Fines imposed.     | No. acquitted. | No. withdrawn. | No. in which the parties were not found. |              |
| (8)          | (9)                                                       | (10)                            | (11)   | (12)           | (13)               | (14)           | (15)           | (16)                                     | (17)         |
| ...          | ...                                                       | 1                               | 1      | 1              | Rs. A. P.<br>1 0 0 | ...            | ...            | ...                                      | ...          |
| 421          | 21                                                        | 196                             | 217    | 27             | 78 8 0             | 2              | 145            | ...                                      | 43           |
| 2            | ...                                                       | ...                             | ...    | ...            | ...                | ...            | ...            | ...                                      | ...          |
| ...          | ...                                                       | 5                               | 5      | 3              | 11 0 0             | ...            | 2              | ...                                      | ...          |
| ...          | ...                                                       | ...                             | ...    | ...            | ...                | ...            | ...            | ...                                      | ...          |
| 9            | 8                                                         | 1                               | 4      | 2              | 1 0 0              | ...            | 2              | ...                                      | ...          |
| 9            | ...                                                       | 9                               | 9      | 2              | 4 0 0              | ...            | 7              | ...                                      | ...          |
| 3            | ...                                                       | ...                             | ...    | ...            | ...                | ...            | ...            | ...                                      | ...          |
| 329          | 11                                                        | 27                              | 38     | 6              | 7 6 0              | 1              | 21             | ...                                      | 10           |
| 13           | ...                                                       | 21                              | 21     | 3              | 2 8 0              | 3              | 9              | ...                                      | 6            |
| 7            | 1                                                         | 11                              | 12     | 3              | 5 0 0              | ...            | ...            | 5                                        | 4            |
| 55           | 7                                                         | ...                             | 7      | 1              | 4 0 0              | 1              | 4              | ...                                      | 1            |
| 670          | 30                                                        | 250                             | 280    | 108            | 159 3 0            | 1              | 133            | ...                                      | 38           |
| ...          | 78                                                        | 1037                            | 1165   | 913            | 4,999 12 0         | 10             | 98             | 1                                        | 143          |
| 6            | ...                                                       | ...                             | ...    | ...            | ...                | ...            | ...            | ...                                      | ...          |
| 6            | ...                                                       | 4                               | 4      | 3              | 13 0 0             | ...            | ...            | ...                                      | 1            |
| ...          | 18                                                        | 200                             | 218    | 133            | 1,111 0            | ...            | 53             | ...                                      | 32           |

## Statement of notices issued and disposed of together with

| Section<br>or<br>By-law. | Substance of Section or By-Law.                                                                                      | NOTICES.                            |                                |        |                   |                         |                                                                                      | No. cancelled. |
|--------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------|--------|-------------------|-------------------------|--------------------------------------------------------------------------------------|----------------|
|                          |                                                                                                                      | No. pending on 1st<br>January 1933. | No. issued during<br>the year. | Total. | No. complied with |                         |                                                                                      |                |
|                          |                                                                                                                      |                                     |                                |        | Volun-<br>tarily. | By<br>prose-<br>cution. | By transfer to<br>W. D. for<br>Departmental<br>execution and<br>recovery of<br>cost. |                |
| (1)                      | (2)                                                                                                                  | (3)                                 | (4)                            | (5)    | (6)               |                         |                                                                                      | (7)            |
| 293 (2)                  | Washing of clothes by washermen at unauthorised places ...                                                           | ...                                 | ...                            | ...    | ...               | ...                     | ...                                                                                  | ...            |
| 297                      | Slaughter of animals for sale of food or skinning or cutting up carcasses without license or contrary to license ... | ...                                 | ...                            | ...    | ...               | ...                     | ...                                                                                  | ...            |
| 303 (2)                  | Opening private market without license or contrary to license ...                                                    | ...                                 | ...                            | ...    | ...               | ...                     | ...                                                                                  | ...            |
| 304                      | Keeping open private market without license or contrary to license ...                                               | ...                                 | ...                            | ...    | ...               | ...                     | ...                                                                                  | ...            |
| 309                      | Carrying on butcher's, fishmonger's or poulteror's trade without license, etc. ...                                   | ...                                 | ...                            | ...    | ...               | ...                     | ...                                                                                  | ...            |
| 310                      | Sale of articles of food in public streets, etc. after prohibition or contrary to regulations ...                    | ...                                 | ...                            | ...    | ...               | ...                     | ...                                                                                  | ...            |
| 326                      | Discharge of the work of the grave digger or attendant at place for disposal of the dead without license ...         | ...                                 | ...                            | ...    | ...               | ...                     | ...                                                                                  | ...            |
| 333                      | Failure to obey requisition to remove cases of dangerous diseases to the Infectious Diseases Hospitals ...           | ...                                 | 3                              | 3      | 2                 | ...                     | ...                                                                                  | 1              |
| 334                      | Failure to obey requisition to cleanse or disinfect building or article ...                                          | 22                                  | 805                            | 827    | 801               | 21                      | ...                                                                                  | 1              |
| 345                      | Failure to give information of small-pox ...                                                                         | ...                                 | ...                            | ...    | ...               | ...                     | ...                                                                                  | ...            |
| 349 (11)                 | Failure to comply with the regulations re: hotels lodging houses, boarding houses, etc. ...                          | ...                                 | ...                            | ...    | ...               | ...                     | ...                                                                                  | ...            |
| " (18)                   | Sanitary control over places used for any of the purposes specified in Schedule VI ...                               | ...                                 | ...                            | ...    | ...               | ...                     | ...                                                                                  | ...            |
| " (21)                   | Prevention of sale or exposure for sale of unwholesome meat, fish, provisions, etc....                               | ...                                 | ...                            | ...    | ...               | ...                     | ...                                                                                  | ...            |

## the statement of prosecutions instituted during the year 1933.

| PROSECUTIONS. |                                                           |                                 |        |                |                     |                |                |                                          |      | No. pending. |
|---------------|-----------------------------------------------------------|---------------------------------|--------|----------------|---------------------|----------------|----------------|------------------------------------------|------|--------------|
| No. pending.  | No. of prosecutions pending disposal on 1st January 1933. | No. instituted during the year. | Total. | No. convicted. | Fines imposed.      | No. acquitted. | No. withdrawn. | No. in which the parties were not found. |      |              |
| (8)           | (9)                                                       | (10)                            | (11)   | (12)           | (13)                | (14)           | (15)           | (16)                                     | (17) |              |
| ...           | ...                                                       | 18                              | 18     | 5              | Rs. A. P.<br>10 0 0 | ...            | 4              | ...                                      | 9    |              |
| ...           | ...                                                       | 14                              | 14     | 12             | 28 12 0             | ...            | 2              | ...                                      | ...  |              |
| ...           | ...                                                       | 2                               | 2      | 1              | 76 0 0              | ...            | ...            | ...                                      | 1    |              |
| ...           | 4                                                         | 10                              | 14     | ...            | ...                 | ...            | 10             | ...                                      | 4    |              |
| ...           | 5                                                         | 26                              | 31     | 18             | 110 4 0             | ...            | 11             | ...                                      | 2    |              |
| ...           | 4                                                         | 57                              | 61     | 38             | 80 8 0              | ..             | 13             | ...                                      | 10   |              |
| ...           | ...                                                       | 1                               | 1      | ...            | ...                 | ...            | 1              | ...                                      | ...  |              |
| ...           | ...                                                       | ...                             | ...    | ...            | ...                 | ...            | ...            | ...                                      | ...  |              |
| 4             | ...                                                       | 24                              | 24     | 20             | 18 0 0              | ...            | 2              | ...                                      | 2    |              |
| ...           | ...                                                       | 265                             | 265    | 265            | 629 4 0             | ...            | ...            | ...                                      | ...  |              |
| ...           | 61                                                        | 453                             | 514    | 356            | 2,029 13 0          | 2              | 107            | ...                                      | 49   |              |
| ...           | 12                                                        | 3                               | 15     | 11             | 30 8 0              | ...            | 4              | ...                                      | ...  |              |
| ...           | 1                                                         | 115                             | 116    | 78             | 100 6 0             | 1              | 19             | 3                                        | 15   |              |

Statement showing the number of cases admitted and discharged and of deaths under various diseases in the Tondiarpet Hospital during the year 1933.

[illegible]

Statement showing the Vaccinal condition of patients for Small-pox in the Tondiarpet Hospital during 1933.

| Age.         | Vaccinated.                                 |     |     |     |     |     |                 |        |                                    |                 |        |                     | Un-vaccinated. |        |            |                     |            |        |            |                     |
|--------------|---------------------------------------------|-----|-----|-----|-----|-----|-----------------|--------|------------------------------------|-----------------|--------|---------------------|----------------|--------|------------|---------------------|------------|--------|------------|---------------------|
|              | Vaccinated successfully with marks visible. |     |     |     |     |     |                 |        | Vaccinated with marks not visible. |                 |        |                     | Total.         |        |            |                     | Admission. | Death. | Recovered. | Mortality per cent. |
|              | 1                                           | 2   | 3   | 4   | 5   | 6   | Total admitted. | Death. | Mortality per cent.                | Total admitted. | Death. | Mortality per cent. | Admission.     | Death. | Recovered. | Mortality per cent. |            |        |            |                     |
|              |                                             |     |     |     |     |     |                 |        |                                    |                 |        |                     |                |        |            |                     |            |        |            |                     |
|              |                                             |     |     |     |     |     |                 |        |                                    |                 |        |                     |                |        |            |                     |            |        |            |                     |
| 0-1          | 2                                           | 8   | 1   | 3   | ... | ... | 14              | 3      | 21.4                               | 3               | 1      | 33.3                | 17             | 4      | 13         | 23.5                | 73         | 42     | 31         | 57.5                |
| 1-2          | 1                                           | 6   | 1   | 1   | ... | ... | 9               | 1      | 11.1                               | 3               | 3      | 100                 | 12             | 4      | 8          | 33.3                | 35         | 16     | 19         | 45.7                |
| 2-3          | 2                                           | 5   | 1   | ... | ... | ... | 8               | 3      | 37.5                               | 11              | 2      | 27.3                | 19             | 6      | 13         | 31.6                | 24         | 12     | 12         | 50                  |
| 3-4          | 2                                           | 2   | ... | 1   | ... | ... | 5               | 1      | 20                                 | 14              | 5      | 35.7                | 19             | 6      | 13         | 31.6                | 12         | 4      | 8          | 33.3                |
| 4-5          | ...                                         | 2   | ... | 1   | ... | ... | 3               | ...    | ...                                | 9               | 4      | 44.4                | 12             | 4      | 8          | 33.3                | 18         | 2      | 16         | 11.1                |
| 5-10         | 10                                          | 12  | 4   | 10  | ... | ... | 36              | ...    | ...                                | 48              | 10     | 20.8                | 84             | 10     | 74         | 11.9                | 38         | 9      | 29         | 23.7                |
| 10-20        | 80                                          | 91  | 44  | 58  | 8   | 4   | 285             | 27     | 9.5                                | 136             | 29     | 21.3                | 421            | 56     | 365        | 13.3                | 85         | 18     | 67         | 21.2                |
| 20-40        | 137                                         | 196 | 113 | 189 | 9   | 60  | 704             | 70     | 9.9                                | 189             | 74     | 39.1                | 893            | 144    | 749        | 16.1                | 122        | 35     | 87         | 28.7                |
| 40-60        | 6                                           | 13  | 10  | 18  | ... | 5   | 52              | 6      | 11.5                               | 32              | 15     | 46.8                | 84             | 21     | 63         | 25                  | 16         | 9      | 7          | 56.3                |
| 60 & upwards | 1                                           | ... | ... | 1   | ... | ... | 2               | 1      | 50                                 | 4               | 1      | 25                  | 6              | 2      | 4          | 33.3                | 3          | 1      | 2          | 33.3                |
| Total ...    | 241                                         | 335 | 174 | 282 | 17  | 69  | 1118            | 112    | 10.1                               | 449             | 145    | 32.3                | 1557           | 257    | 1310       | 16.4                | 426        | 148    | 273        | 34.7                |

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Statement showing the number of cases admitted, discharged and of deaths under various diseases in the Krishnamel Hospital during the year 1933.

|                                                               | Small-Pox. | Chicken-Pox. | Measles. | Cholera. | Dysentery. | Diarrhoea. | Mumps. | Whooping Cough. | Pneumonia. | Enteric Fever. | Malaria. | Pyrexia of unknown origin. | Kala-Azar. | Pulmonary Tuberculosis. | Secondary Syphilis. | Other Diseases. | Total. |
|---------------------------------------------------------------|------------|--------------|----------|----------|------------|------------|--------|-----------------|------------|----------------|----------|----------------------------|------------|-------------------------|---------------------|-----------------|--------|
| Patients remaining in the Hospital on 31st December, 1932     | 26         | 1            | ...      | ...      | ...        | ...        | 3      | ...             | ...        | ...            | ...      | ...                        | ...        | ...                     | ...                 | 1               | 31     |
| Patients admitted from 1st January 1933 to 31st December 1933 | 1163       | 73           | 16       | 33       | 4          | 1          | ...    | ...             | ...        | ...            | 1        | 3                          | ...        | ...                     | 3                   | 4               | 1339   |
| Total number treated                                          | 1189       | 74           | 16       | 33       | 4          | 1          | 3      | ...             | ...        | ...            | 1        | 3                          | ...        | ...                     | 3                   | 43              | 1370   |
| " " discharged                                                | 955        | 74           | 16       | 9        | 4          | 1          | 3      | ...             | ...        | ...            | ...      | ...                        | ...        | ...                     | 3                   | 29              | 1099   |
| " " died                                                      | 207        | ...          | ...      | 20       | ...        | ...        | ...    | ...             | ...        | ...            | ...      | ...                        | ...        | ...                     | ...                 | 10              | 237    |
| Mortality rate per cent                                       | 17.4       | ...          | ...      | 60.6     | ...        | ...        | ...    | ...             | ...        | ...            | ...      | ...                        | ...        | ...                     | ...                 | 23.2            | 17.3   |
| Patients remaining in the Hospital on 31st December, 1933     | 26         | ...          | ...      | 4        | ...        | ...        | ...    | ...             | ...        | ...            | ...      | ...                        | ...        | ...                     | ...                 | 4               | 34     |

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Statement showing the Vaccinal condition of patients for Small-pox in the Krishnampet Hospital during 1933.

| Age.          | Vaccinated.                                 |     |     |                     |    |    |                |                                    |      |     |                     | Un-vaccinated. |       |            |                     |
|---------------|---------------------------------------------|-----|-----|---------------------|----|----|----------------|------------------------------------|------|-----|---------------------|----------------|-------|------------|---------------------|
|               | Vaccinated successfully with marks visible. |     |     |                     |    |    |                | Vaccinated with marks not visible. |      |     |                     | Total.         |       |            |                     |
|               | Total admitted                              |     |     | Mortality per cent. |    |    | Total admitted | Death                              |      |     | Mortality per cent. | Admission      | Death | Recovered. | Mortality per cent. |
|               | 1                                           | 2   | 3   | 4                   | 5  | 6  |                | 1                                  | 2    | 3   |                     |                |       |            |                     |
| 0-1           | 3                                           | 9   | ..  | 1                   | .. | .. | 13             | 7                                  | 50.3 | 5   | 3                   | 18             | 10    | 8          | 55.6                |
| 1-2           | 1                                           | 10  | ..  | 3                   | .. | .. | 14             | 3                                  | 21.4 | 1   | 1                   | 15             | 4     | 11         | 26.7                |
| 2-3           | 2                                           | 1   | ..  | 1                   | .. | .. | 4              | 1                                  | 25   | 5   | 1                   | 9              | 2     | 7          | 22.8                |
| 3-4           | ..                                          | 7   | 1   | 2                   | .. | .. | 10             | 2                                  | 20   | 5   | 2                   | 15             | 4     | 11         | 26.7                |
| 4-5           | ..                                          | 5   | ..  | 1                   | .. | .. | 6              | 2                                  | 33.3 | 9   | 2                   | 15             | 4     | 11         | 26.7                |
| 5-10          | 15                                          | 22  | 8   | 14                  | .. | .. | 59             | 5                                  | 8.5  | 39  | 6                   | 98             | 11    | 87         | 11.2                |
| 10-20         | 29                                          | 43  | 48  | 74                  | 4  | .. | 198            | 6                                  | 3    | 52  | 9                   | 250            | 15    | 235        | 6                   |
| 20-40         | 39                                          | 57  | 50  | 100                 | 44 | .. | 230            | 26                                 | 9    | 64  | 33                  | 354            | 59    | 295        | 16.7                |
| 40-60         | 3                                           | 4   | 8   | 10                  | 11 | .. | 36             | 1                                  | 2.8  | 18  | 7                   | 54             | 8     | 46         | 14.8                |
| 60 and above. | ..                                          | 1   | ..  | ..                  | .. | .. | 1              | 1                                  | 100  | 2   | 1                   | 3              | 2     | 1          | 66.7                |
| Total ..      | 92                                          | 159 | 115 | 206                 | 59 | .. | 631            | 54                                 | 8.6  | 200 | 65                  | 831            | 119   | 712        | 14.3                |

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Statement showing the admissions in the two infectious diseases hospitals according to nationality and sex during 1933.

| Nationality. | Tondiarpet Hospital. |          | Krishnampet Hospital. |          | Total. |
|--------------|----------------------|----------|-----------------------|----------|--------|
|              | Males.               | Females. | Males.                | Females. |        |
| Europeans    | 4                    | 3        | ..                    | ..       | 7      |
| Hindus       | 1166                 | 640      | 477                   | 370      | 2653   |
| Muhammadans  | 88                   | 27       | 25                    | 14       | 154    |
| Others       | 443                  | 317      | 242                   | 211      | 1213   |
| Total ..     | 1701                 | 987      | 744                   | 595      | 4027   |

## List of works of a sanitary nature executed during 1933.

## Burial Grounds :

1. Acquisition of land for a burial ground for Sunni Community.
2. Shifting the waiting shed from Perambur High Road to the Hindu Burial Ground, 16th division.
3. Fixing Glow lamp posts in the centre of the Hindu Burial Ground off Basin Road.
4. Construction of burning platform and waiting shed in the cremation ground, Suryanarayana Chetti Street.
5. Forming road in the burial ground, Brick Kiln Road, 21st division.

## Dispensary:

1. Construction of a building for the dispensary in George Town.

## Improvement of Slums:

1. Construction of plinths in Ritchie Street, 23rd division.
2. " flush-out latrines of 20 seats in Vasudeva Pillai Garden, 18th division.
3. Raising road and latrine-site in Vasudeva Pillai Garden, 18th division.
4. Fixing Glow lamp posts in the west of Sundaram Pillai Street, 18th division.
5. Fixing Glow lamp posts in Habibulla Sahib Street, 24th division.
6. Fixing bathing fountain in Habibulla Sahib Hutting Ground, 24th division.
7. Erecting public bathing fountain in Ritchie Street, 23rd division.

## Public flush-out latrines and bathing fountains.

| Serial Number. | Division | Works.                                                                                                                                       |
|----------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 1              | 1        | Converting the existing sanded latrine into a flushout latrine of 40 seats in Kasimodu Kuppam.                                               |
| 2              | 1        | Alterations and additions to the existing latrine and converting it into 20 seat f. o. latrine with bathing fountain at Market Lane.         |
| 3              | 1        | Alterations and additions to the bathing fountain with flushout latrine in the hutting ground in Ammenkoil Street and East Mada Church Road. |
| 4              | 2        | Converting the existing latrine into 20 seats at Tondiarpet Chery.                                                                           |
| 5              | 2        | Installing flushout latrine of 12 seats at Robinson Park.                                                                                    |
| 6              | 3        | Installing a flushout latrine of 12 seats at Maniganda Mudali Street.                                                                        |
| 7              | 3        | Constructing 10 seated flushout latrine in Mukunda Ammal Hutting Ground at Sreerangammal Street.                                             |
| 8              | 4        | Installing a reinforced concrete flushout latrine of 4 seats on the road side land near Washermanpet Tram Terminus.                          |
| 9              | 5        | Installing a single seated reinforced concrete flushout latrine, Tailor's Lane, 2nd Line Beach.                                              |
| 10             | 7        | Installing a single seated flushout latrine at the junction of Broadway and Baker Street.                                                    |
| 11             | 8        | Installing double seated flushout latrine in Hanumantharayan Koil Street, South end.                                                         |
| 12             | 8        | Installing a single seated flushout latrine in Gosha Sahib Lane.                                                                             |
| 13             | 9        | Installing a single seated flushout latrine in Saheb Hazarath Street.                                                                        |
| 14             | 9        | Installing a single seated flushout latrine in south end of Muthu Naicken Street.                                                            |
| 15             | 9        | Extending the existing latrine in Vasamodu adjoining the new latrine.                                                                        |
| 16             | 10       | Converting the existing latrine into flushout latrine and bathing fountain in Sadayappa Maistry Street, R. S. No. 1743/4.                    |
| 17             | 12       | Construction of a flushout latrine of 36 seats with bathing ghat adjoining Wall Tax Road Pumping Station.                                    |
| 18             | 12       | Construction of a flushout latrine of 12 seats by the side of Medical Stores Compound wall in Saravana Mudaly Street.                        |
| 19             | 13       | Installing a single seated flushout latrine at the junction of Mint Street and Tholasingam Street.                                           |
| 20             | 13       | Installing a single seated flushout latrine in Wall Tax Road and Amman Koil Street.                                                          |
| 21             | 13       | Construction of a flushout latrine of 12 seats in the vacant space between Timber Depot at Perumal Koil Garden.                              |
| 22             | 15       | Installing double seated flushout latrine at the junction of Rasappa Chetty Street with Bangarammal Street.                                  |
| 23             | 15       | Installing double-seated flushout latrine in Devaraja Mudaly Street and Ayah Pillai Street north end.                                        |
| 24             | 15       | Installing a flushout latrine of 4 seats in Wall Tax Road at the junction of Mannaru Street.                                                 |
| 25             | 15       | Converting the existing latrine into a flushout latrine of 64 seats with bathing fountain in Wall Tax Road opposite to Edapalayam.           |
| 26             | 15       | Converting the existing latrine into a flushout latrine of 63 seats with bathing fountain in Wall Tax Road opposite to Edapalayam.           |
| 27             | 18       | Construction of a flushout latrine of 20 seats in Kandasami Koil Street.                                                                     |
| 28             | 19       | Installing double seated flushout latrine at Zoo.                                                                                            |
| 29             | 19       | Construction of a flushout latrine of 20 seats in Ekambara Chery.                                                                            |
| 30             | 20       | Installing double seated flushout latrine with bathing ghat at the west side of the village in Swami Reddipuram.                             |
| 31             | 20       | Installing a flushout latrine of 4 seats in Thiruvengada Naicken Lane and Seeyala Mudali Street.                                             |
| 32             | 21       | Installing double seated flushout latrine in Purasawalkam High Road west end near bus stand.                                                 |
| 33             | 22       | Construction of a flushout latrine of 20 seats in R.S. No. 36/15 Nungambakam.                                                                |
| 34             | 22       | Construction of a flushout latrine of 20 seats in R.S. No. 36/41 Nungambakam.                                                                |
| 35             | 24       | Extending the existing latrine in Keeraichery by 12 seats more.                                                                              |
| 36             | 24       | Extending the existing latrine by 8 seats more in Suparigunta.                                                                               |
| 37             | 26       | Extending the flushout latrine in Pycrofts Road, 26th division.                                                                              |
| 38             | 29       | Converting the existing sanded latrine into a flushout latrine of 20 seats with bathing ghats in Oddarpalayam.                               |
| 39             | 30       | Converting the existing latrine in Mandavalli into a flushout latrine of 20 seats.                                                           |

## Medical Inspection of Corporation Schools.

1933-34

Statement I.

| No.     | Defects.                           | Boys.          |             |                |             |                                 |             | Girls.         |             |                |             |                                 |             | Remarks. |     |       |
|---------|------------------------------------|----------------|-------------|----------------|-------------|---------------------------------|-------------|----------------|-------------|----------------|-------------|---------------------------------|-------------|----------|-----|-------|
|         |                                    | Entrants.      |             | Regulars.      |             | Total of Entrants and Regulars. |             | Entrants.      |             | Regulars.      |             | Total of Entrants and Regulars. |             |          |     |       |
|         |                                    | No. Defective. | Percentage. | No. Defective. | Percentage. | No. Defective.                  | Percentage. | No. Defective. | Percentage. | No. Defective. | Percentage. | No. Defective.                  | Percentage. |          |     |       |
|         |                                    |                |             |                |             |                                 |             |                |             |                |             |                                 |             |          |     |       |
|         |                                    |                |             |                |             |                                 |             |                |             |                |             |                                 |             |          |     |       |
| 1933-34 | 1932-33                            | 1933-34        | 1932-33     | 1933-34        | 1932-33     | 1933-34                         | 1932-33     | 1933-34        | 1932-33     | 1933-34        | 1932-33     |                                 |             |          |     |       |
| 1       | Malnutrition                       | 1783           | 23-86       | 23-27          | 1-22        | 150                             | 1-74        | 1-66           | 305         | 1-61           | 1-54        | 101                             | 1-75        | 2-03     | 172 | 1-68  |
| 2       | Dirty head, body and Nails         | 1219           | 16-31       | 18-29          | 0-05        | 3                               | 0-03        | 0-04           | 7           | 0-07           | 0-09        | 5                               | 0-09        | 0-13     | 8   | 0-08  |
| 3       | Teeth and Mouth                    | 1520           | 17-66       | 17-12          | 0-21        | 35                              | 0-32        | 0-28           | 51          | 0-14           | 0-11        | 5                               | 0-09        | 0-16     | 11  | 0-11  |
| 4       | Nose and Throat                    | 2079           | 27-82       | 29-51          | 1-26        | 162                             | 1-49        | 1-32           | 221         | 0-27           | 0-52        | 23                              | 0-10        | 0-20     | 35  | 0-31  |
| 5       | Eye disease                        | 178            | 2-38        | 2-53           | 0-83        | 276                             | 2-53        | 2-60           | 454         | 4-00           | 4-47        | 253                             | 4-37        | 3-13     | 430 | 20-80 |
| 6       | Vision                             | 62             | 0-83        | 1-26           | 0-21        | 162                             | 1-49        | 1-32           | 221         | 0-27           | 0-52        | 23                              | 0-10        | 0-20     | 35  | 0-31  |
| 7       | Ear disease                        | 115            | 1-54        | 1-22           | 1-04        | 190                             | 1-74        | 1-66           | 305         | 1-61           | 1-54        | 101                             | 1-75        | 2-03     | 172 | 1-68  |
| 8       | Hearing                            | 4              | 0-05        | 0-07           | 0-21        | 3                               | 0-03        | 0-06           | 7           | 0-07           | 0-09        | 5                               | 0-09        | 0-13     | 8   | 0-08  |
| 9       | Speech                             | 16             | 0-21        | 0-21           | 0-21        | 35                              | 0-32        | 0-28           | 51          | 0-14           | 0-11        | 5                               | 0-09        | 0-16     | 11  | 0-11  |
| 10      | Circulatory System                 | 78             | 1-04        | 1-03           | 1-04        | 121                             | 1-11        | 1-10           | 199         | 0-20           | 0-38        | 23                              | 0-40        | 0-40     | 32  | 0-31  |
| 11      | Tuberculosis                       | 8              | 0-11        | 0-03           | 0-11        | 15                              | 0-14        | 0-15           | 23          | 0-14           | 0-26        | 14                              | 0-24        | 0-31     | 20  | 0-20  |
| 12      | Respiratory System                 | 306            | 4-09        | 3-45           | 2-38        | 259                             | 2-38        | 2-89           | 565         | 1-24           | 3-31        | 52                              | 0-90        | 3-07     | 107 | 1-05  |
| 13      | Abdominal Organs                   | 229            | 3-06        | 1-30           | 1-34        | 217                             | 1-99        | 1-89           | 445         | 0-36           | 0-71        | 14                              | 0-24        | 0-63     | 30  | 0-29  |
| 14      | Bones and Joints                   | 248            | 3-32        | 2-98           | 2-68        | 292                             | 2-68        | 2-79           | 543         | 0-27           | 0-43        | 17                              | 0-29        | 0-40     | 29  | 0-28  |
| 15      | Nervous and Psychic systems        | 9              | 0-12        | 0-17           | 0-17        | 19                              | 0-17        | 0-14           | 28          | 0-32           | 0-04        | 1                               | 0-02        | 0-11     | 2   | 0-02  |
| 16      | Infectious and Contagious diseases | 1061           | 14-20       | 13-33          | 13-34       | 1463                            | 13-34       | 13-39          | 2514        | 6-82           | 7-10        | 374                             | 6-46        | 7-66     | 676 | 6-62  |
| 17      | Other diseases and defects         | 551            | 7-37        | 9-81           | 5-09        | 599                             | 5-50        | 8-02           | 1150        | 2-78           | 5-52        | 222                             | 3-84        | 6-31     | 345 | 3-38  |
| 18      | Vaccination                        | 70             | 0-94        | 0-98           | 0-41        | ...                             | ...         | ...            | 70          | 0-41           | 1-25        | ...                             | ...         | ...      | 18  | 0-18  |
| 19      | Deformities                        | 16             | 0-21        | 0-41           | 0-21        | 42                              | 0-39        | 0-42           | 58          | 0-14           | 0-17        | 10                              | 0-17        | 0-23     | 16  | 0-16  |

## Appendix to Statement I.

| Group.        | No. on Roll. |        | Average daily attendance. |        | No. Examined. |        | No. defective. |        | Percentage defective. |        |
|---------------|--------------|--------|---------------------------|--------|---------------|--------|----------------|--------|-----------------------|--------|
|               | Boys.        | Girls. | Boys.                     | Girls. | Boys.         | Girls. | Boys.          | Girls. | Boys.                 | Girls. |
| Entrants .... | 20,587       | 12,706 | 16,605                    | 9,823  | 7,174         | 4,429  | 4,827          | 2,310  | 64.58                 | 52.16  |
| Regulars .... | ...          | ...    | ...                       | ...    | 10,889        | 5,786  | 6,393          | 2,616  | 58.71                 | 45.21  |
| Total ...     | 20,587       | 12,706 | 16,605                    | 9,823  | 18,363        | 10,215 | 11,220         | 4,926  | 61.10                 | 48.22  |

## STATEMENT II—Height and Weight Table.

| Age.        | Boys.                     |                           | Girls.                    |                           | Remarks.                |
|-------------|---------------------------|---------------------------|---------------------------|---------------------------|-------------------------|
|             | Average height in inches. | Average weight in pounds. | Average height in inches. | Average weight in pounds. |                         |
| 4 years ... | 39.08                     | 29.24                     | 37.33                     | 35.50                     | One boy.                |
| 5 " ...     | 38.94                     | 32.24                     | 38.80                     | 33.70                     |                         |
| 6 " ...     | 42.03                     | 35.52                     | 40.04                     | 36.86                     |                         |
| 7 " ...     | 44.32                     | 37.07                     | 42.63                     | 36.37                     |                         |
| 8 " ...     | 45.84                     | 39.12                     | 44.49                     | 39.76                     |                         |
| 9 " ...     | 48.22                     | 44.18                     | 47.01                     | 44.47                     |                         |
| 10 " ...    | 50.26                     | 50.13                     | 49.26                     | 43.79                     |                         |
| 11 " ...    | 51.77                     | 52.85                     | 51.01                     | 54.27                     |                         |
| 12 " ...    | 53.54                     | 56.42                     | 53.13                     | 53.88                     |                         |
| 13 " ...    | 55.32                     | 55.96                     | 55.14                     | 63.30                     |                         |
| 14 " ...    | 56.18                     | 62.52                     | 56.08                     | 69.18                     |                         |
| 15 " ...    | 57.83                     | 68.26                     | 57.98                     | 72.79                     |                         |
| 16 " ...    | 59.24                     | 78.01                     | 58.80                     | 67.23                     |                         |
| 17 " ...    | 58.72                     | 80.92                     | 59.98                     | 69.08                     | Two boys & three girls. |
| 18 " ...    | 66.50                     | 77.00                     | ...                       | ...                       | One boy.                |
| 19 " ...    | ...                       | ...                       | 61.50                     | 95.00                     | Two women               |
| 20 " ...    | ...                       | ...                       | 60.00                     | 84.00                     | One woman               |
| 21 " ...    | ...                       | ...                       | 59.75                     | 103.00                    | Two women               |
| 22 " ...    | ...                       | ...                       | 60.00                     | 80.00                     | One woman               |
| 23 " ...    | ...                       | ...                       | 57.00                     | 76.00                     | One "                   |
| 24 " ...    | ...                       | ...                       | 61.00                     | 90.00                     | One "                   |
| 25 " ...    | ...                       | ...                       | 60.00                     | 72.00                     | One "                   |
| 28 " ...    | ...                       | ...                       | 58.00                     | 92.50                     | Three women             |
| 30 " ...    | ...                       | ...                       | ...                       | ...                       |                         |

## Treatment Table.

| Group. | No. sent to Corporation Dispensaries. |       | No. referred to Govt. General Hospital. |       | No. referred to Govt. Ophthalmic Hospital. |       | No. referred to Tuberculosis Institute. |       | No. referred to Govt. General Hospital. |       | No. referred to Skin Department of Govt. General Hospital. |       | No. of parents met. |       | No. of re-visits paid to Schools. |       | No. of re-examinations of children made. |       | No. admitted into Thirumani Lepet Settlement, Chengleput. |       | Remarks. |  |
|--------|---------------------------------------|-------|-----------------------------------------|-------|--------------------------------------------|-------|-----------------------------------------|-------|-----------------------------------------|-------|------------------------------------------------------------|-------|---------------------|-------|-----------------------------------|-------|------------------------------------------|-------|-----------------------------------------------------------|-------|----------|--|
|        | Boys                                  | Girls | Boys                                    | Girls | Boys                                       | Girls | Boys                                    | Girls | Boys                                    | Girls | Boys                                                       | Girls | Boys                | Girls | Boys                              | Girls | Boys                                     | Girls | Boys                                                      | Girls |          |  |
| Boys   | 11,152                                | ...   | 936                                     | ...   | 169                                        | ...   | 18                                      | ...   | ...                                     | ...   | 278                                                        | ...   | 5,633               | ...   | 146                               | ...   | 10,270                                   | ...   | 1                                                         | ...   |          |  |
| Girls  | 3,411                                 | ...   | 1,168                                   | ...   | 292                                        | ...   | 19                                      | ...   | ...                                     | ...   | 90                                                         | ...   | 2,682               | ...   | 144                               | ...   | 4,895                                    | ...   | ...                                                       | ...   |          |  |
| Total  | 14,563                                | ...   | 2,104                                   | ...   | 461                                        | ...   | 37                                      | ...   | ...                                     | ...   | 368                                                        | ...   | 8,365               | ...   | 290                               | ...   | 15,165                                   | ...   | 1                                                         | ...   |          |  |

## Teeth and Mouth Table.

| No. | Defects.         | Entrants.      |                                       |                                         | Regulars.      |                                       |                                         | Total defective of boys and girls. |      |
|-----|------------------|----------------|---------------------------------------|-----------------------------------------|----------------|---------------------------------------|-----------------------------------------|------------------------------------|------|
|     |                  | No. Defective. | No. sent to Corporation Dispensaries. | No. referred to Govt. General Hospital. | No. Defective. | No. sent to Corporation Dispensaries. | No. referred to Govt. General Hospital. |                                    |      |
| 1   | Dirty Teeth      | 263            | 3                                     | 68                                      | 297            | 34                                    | 83                                      | 93                                 | 828  |
| 2   | Dental Caries    | 296            | 205                                   | 73                                      | 384            | 276                                   | 84                                      | 237                                | 1298 |
| 3   | Stomatitis       | 745            | 745                                   | ...                                     | 955            | 933                                   | 2                                       | ...                                | 1980 |
| 4   | Tongue Tie       | 1              | ...                                   | 1                                       | 4              | ...                                   | 4                                       | 1                                  | 6    |
| 5   | Oral Sepsis      | 1              | 1                                     | ...                                     | 1              | 1                                     | ...                                     | ...                                | 2    |
| 6   | Other Conditions | 17             | 17                                    | ...                                     | 45             | 45                                    | ...                                     | 2                                  | 65   |

N.B.—Cases not amenable to or not requiring treatment have been omitted in the treatment column.

Nose and Throat Table.

| No. | Defects.                  | Entrants.      |                                       |                                   |                |                                       |                                   | Regulars.      |                                       |                                   |        |      |     | Total defective of boys and girls. |
|-----|---------------------------|----------------|---------------------------------------|-----------------------------------|----------------|---------------------------------------|-----------------------------------|----------------|---------------------------------------|-----------------------------------|--------|------|-----|------------------------------------|
|     |                           | Boys.          |                                       |                                   | Girls.         |                                       |                                   | Boys.          |                                       |                                   | Girls. |      |     |                                    |
|     |                           | No. Defective. | No. sent to Corporation Dispensaries. | No. referred to General Hospital. | No. Defective. | No. sent to Corporation Dispensaries. | No. referred to General Hospital. | No. Defective. | No. sent to Corporation Dispensaries. | No. referred to General Hospital. |        |      |     |                                    |
|     |                           |                |                                       |                                   |                |                                       |                                   |                |                                       |                                   |        |      |     |                                    |
| 1   | Nasal Catarrh             | ...            | 155                                   | 155                               | ...            | 15                                    | 15                                | 125            | 125                                   | ...                               | 15     | 15   | ... | 310                                |
| 2   | Nasal Polypus             | ...            | ...                                   | ...                               | 2              | ...                                   | ...                               | 1              | ...                                   | 1                                 | 5      | ...  | 5   | 8                                  |
| 3   | Enlarged Tonsils          | ...            | 1694                                  | 1509                              | 185            | 916                                   | 741                               | 175            | 2113                                  | 1908                              | 205    | 1115 | 755 | 360                                |
| 4   | Granular Pharynx          | ...            | ...                                   | ...                               | ...            | 5                                     | 5                                 | ...            | 6                                     | 6                                 | ...    | 1    | 1   | ...                                |
| 5   | Adenoids                  | ...            | 37                                    | ...                               | 37             | ...                                   | ...                               | ...            | 52                                    | ...                               | 52     | ...  | ... | 89                                 |
| 6   | Enlarged cervical glands. | ...            | 382                                   | 382                               | ...            | 61                                    | 61                                | ...            | 464                                   | 464                               | ...    | 89   | 85  | 4                                  |
| 7   | Bifid & elongated uvula.  | ...            | 3                                     | ...                               | ...            | 2                                     | ...                               | ...            | 1                                     | ...                               | ...    | 3    | ... | ...                                |
| 8   | Other Conditions          | ...            | ...                                   | ...                               | ...            | ...                                   | ...                               | ...            | ...                                   | ...                               | ...    | 4    | ... | 4                                  |

N.B.—Cases not amenable to or not requiring treatment have been omitted in the treatment column.

Eye Table.

| No. | Defects.         | Entrants.      |                                       |        |                                      | Regulars.      |        |                                       |                                      | Total defective of boys and girls. |     |     |
|-----|------------------|----------------|---------------------------------------|--------|--------------------------------------|----------------|--------|---------------------------------------|--------------------------------------|------------------------------------|-----|-----|
|     |                  | Boys.          |                                       | Girls. | Boys.                                |                | Girls. |                                       |                                      |                                    |     |     |
|     |                  | No. defective. | No. sent to Corporation dispensaries. |        | No. referred to Ophthalmic Hospital. | No. defective. |        | No. sent to Corporation dispensaries. | No. referred to Ophthalmic Hospital. |                                    |     |     |
|     |                  |                |                                       |        |                                      |                |        |                                       |                                      |                                    |     |     |
| 1   | Conjunctivitis   | 48             | 48                                    | ...    | 36                                   | 51             | ...    | 45                                    | 44                                   | ...                                | 1   | 180 |
| 2   | Blepharitis      | 2              | 1                                     | ...    | 3                                    | ...            | ...    | ...                                   | 3                                    | ...                                | ... | 8   |
| 3   | Granular lids    | 11             | 9                                     | ...    | 82                                   | 42             | ...    | 135                                   | 3                                    | ...                                | 135 | 270 |
| 4   | Corneal opacity  | 17             | ...                                   | 13     | 15                                   | 30             | ...    | 12                                    | ...                                  | ...                                | 12  | 74  |
| 5   | Corneal ulcer    | ...            | ...                                   | ...    | 3                                    | ...            | ...    | ...                                   | ...                                  | ...                                | ... | 6   |
| 6   | Staphyloma       | ...            | ...                                   | ...    | 3                                    | ...            | ...    | ...                                   | ...                                  | ...                                | ... | 9   |
| 7   | Dacryocystitis   | ...            | ...                                   | ...    | ...                                  | ...            | ...    | ...                                   | ...                                  | ...                                | ... | 3   |
| 8   | Cataract         | 1              | ...                                   | 1      | ...                                  | 3              | ...    | ...                                   | ...                                  | ...                                | ... | 3   |
| 9   | Xerosis          | 58             | 58                                    | ...    | 29                                   | ...            | ...    | ...                                   | ...                                  | ...                                | ... | 1   |
| 10  | Stye             | 7              | 7                                     | ...    | 1                                    | 14             | ...    | ...                                   | 33                                   | ...                                | ... | 205 |
| 11  | Squint           | 25             | ...                                   | 13     | 4                                    | 24             | ...    | ...                                   | 5                                    | ...                                | ... | 27  |
| 12  | Keratitis        | ...            | ...                                   | ...    | ...                                  | ...            | ...    | ...                                   | ...                                  | ...                                | ... | 67  |
| 13  | Ptosis           | ...            | ...                                   | ...    | ...                                  | 1              | ...    | ...                                   | ...                                  | ...                                | ... | 1   |
| 14  | Other conditions | 8              | 7                                     | 1      | ...                                  | 22             | ...    | ...                                   | ...                                  | ...                                | ... | 2   |
| 15  | Defective Vision | 62             | 32                                    | 30     | 12                                   | 162            | 3      | 57                                    | 9                                    | 14                                 | ... | 33  |
|     |                  |                |                                       |        |                                      |                |        |                                       |                                      |                                    |     | 259 |

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N.B.—Cases not amenable to or not requiring treatment have been omitted in the treatment column.

Infectious Diseases Table.

| No.                                | Defects.            | Entrants.      |                                       |                                               |                | Regulars.                             |                                               |                |                                       | Total defective of boys and girls. |                                               |
|------------------------------------|---------------------|----------------|---------------------------------------|-----------------------------------------------|----------------|---------------------------------------|-----------------------------------------------|----------------|---------------------------------------|------------------------------------|-----------------------------------------------|
|                                    |                     | Boys.          |                                       | Girls.                                        |                | Boys.                                 |                                               | Girls.         |                                       |                                    |                                               |
|                                    |                     | No. defective. | No. sent to Corporation dispensaries. | No. referred to special section of Hospitals. | No. defective. | No. sent to Corporation dispensaries. | No. referred to special section of Hospitals. | No. defective. | No. sent to Corporation dispensaries. |                                    | No. referred to special section of Hospitals. |
| <i>Skin:—</i>                      |                     |                |                                       |                                               |                |                                       |                                               |                |                                       |                                    |                                               |
| 1                                  | Scabies             | 712            | 712                                   | ...                                           | 283            | 948                                   | 948                                           | 354            | 354                                   | ...                                | 2,297                                         |
| 2                                  | Eczema              | 56             | 56                                    | ...                                           | 1              | 64                                    | 63                                            | 2              | 2                                     | ...                                | 128                                           |
| 3                                  | Tenia & Fungus      | 143            | 143                                   | ...                                           | 13             | 172                                   | 172                                           | ...            | ...                                   | ...                                | 328                                           |
| 4                                  | Lichen              | 23             | 23                                    | ...                                           | ...            | 30                                    | 30                                            | ...            | ...                                   | ...                                | 53                                            |
| 5                                  | Dermatitis          | 14             | 13                                    | ...                                           | 2              | 21                                    | 21                                            | ...            | ...                                   | 2                                  | 39                                            |
| 6                                  | Pruritis            | 1              | 1                                     | ...                                           | ...            | ...                                   | ...                                           | ...            | ...                                   | ...                                | 1                                             |
| 7                                  | Psoriasis           | ...            | ...                                   | ...                                           | ...            | 1                                     | 1                                             | ...            | ...                                   | ...                                | 1                                             |
| 8                                  | Impetigo            | 3              | 3                                     | ...                                           | ...            | 6                                     | 6                                             | ...            | ...                                   | ...                                | 9                                             |
| 9                                  | Leprosy             | 106            | ...                                   | 106                                           | 23             | 173                                   | ...                                           | 22             | ...                                   | 22                                 | 324                                           |
| 10                                 | Other Conditions    | 2              | 1                                     | 1                                             | ...            | 2                                     | ...                                           | ...            | ...                                   | ...                                | 4                                             |
| <i>Other infectious diseases:—</i> |                     |                |                                       |                                               |                |                                       |                                               |                |                                       |                                    |                                               |
| 1                                  | Malaria             | 10             | 10                                    | ...                                           | 5              | 5                                     | 5                                             | 4              | 4                                     | ...                                | 24                                            |
| 2                                  | Kala-azar           | 1              | 1                                     | ...                                           | ...            | ...                                   | ...                                           | ...            | ...                                   | ...                                | 1                                             |
| 3                                  | Hookworm            | 6              | 5                                     | ...                                           | 5              | 12                                    | 9                                             | 7              | 4                                     | 3                                  | 30                                            |
| 4                                  | Influenza           | 4              | 4                                     | ...                                           | ...            | 9                                     | 9                                             | ...            | ...                                   | ...                                | 13                                            |
| 5                                  | Mumps               | ...            | ...                                   | ...                                           | 1              | 1                                     | 1                                             | 1              | 1                                     | ...                                | 3                                             |
| 6                                  | Gonorrhoea          | 1              | ...                                   | 1                                             | ...            | ...                                   | ...                                           | ...            | ...                                   | ...                                | 1                                             |
| 7                                  | Congenital Syphilis | 1              | ...                                   | 1                                             | ...            | ...                                   | ...                                           | ...            | ...                                   | ...                                | 1                                             |

\* Advised X-ray treatment at the General Hospital.  
† 1 Sent to Thirumani Leper Settlement, Chengleput.

Other Diseases Table.

| No. | Defects.                  | Entrants.      |                                       |        |                                         | Regulars.      |        |                                       |                                         | Total defective of boys and girls. |     |     |
|-----|---------------------------|----------------|---------------------------------------|--------|-----------------------------------------|----------------|--------|---------------------------------------|-----------------------------------------|------------------------------------|-----|-----|
|     |                           | Boys.          |                                       | Girls. | Boys.                                   |                | Girls. |                                       |                                         |                                    |     |     |
|     |                           | No. defective. | No. sent to Corporation dispensaries. |        | No. referred to Govt. General Hospital. | No. defective. |        | No. sent to Corporation dispensaries. | No. referred to Govt. General Hospital. |                                    |     |     |
| 1   | Worms                     | 263            | 263                                   | ...    | 44                                      | 247            | 247    | ...                                   | 102                                     | 99                                 | 3   | 656 |
| 2   | Wounds, cuts, ulcers, etc | 122            | 121                                   | ...    | 31                                      | 185            | 184    | ...                                   | 60                                      | 55                                 | 5   | 398 |
| 3   | Undescended Testis        | 1              | ...                                   | ...    | ...                                     | 2              | ...    | ...                                   | ...                                     | ...                                | ... | 3   |
| 4   | Phimosis                  | 92             | ...                                   | 92     | ...                                     | 72             | ...    | ...                                   | ...                                     | ...                                | ... | ... |
| 5   | Enlarged groin glands     | 8              | 8                                     | ...    | ...                                     | 14             | 14     | ...                                   | 3                                       | ...                                | 3   | 25  |
| 6   | Pyrexia                   | 20             | 20                                    | ...    | 10                                      | 14             | 14     | ...                                   | 18                                      | 18                                 | ... | 62  |
| 7   | Boils and abscesses       | 28             | 28                                    | ...    | 14                                      | 25             | 25     | ...                                   | 8                                       | 8                                  | ... | 75  |
| 8   | Keloids                   | 5              | ...                                   | ...    | ...                                     | 2              | ...    | ...                                   | 1                                       | ...                                | ... | 8   |
| 9   | Warts                     | 4              | ...                                   | 4      | ...                                     | 2              | ...    | ...                                   | ...                                     | ...                                | ... | 6   |
| 10  | Leucodermic patches       | 4              | 4                                     | ...    | 20                                      | 6              | ...    | ...                                   | 30                                      | 30                                 | ... | 60  |
| 11  | Tumours                   | 2              | ...                                   | 2      | ...                                     | 2              | ...    | ...                                   | ...                                     | ...                                | ... | 4   |
| 12  | Obesity                   | ...            | ...                                   | ...    | ...                                     | ...            | ...    | ...                                   | ...                                     | ...                                | ... | 1   |
| 13  | Whitlow                   | ...            | ...                                   | ...    | ...                                     | 1              | ...    | ...                                   | ...                                     | ...                                | ... | 1   |
| 14  | General Xerosis           | 4              | 4                                     | ...    | ...                                     | 5              | ...    | ...                                   | ...                                     | ...                                | ... | 9   |
| 15  | Dog & rat bite            | ...            | ...                                   | ...    | ...                                     | 1              | 1      | ...                                   | ...                                     | ...                                | ... | 3   |
| 16  | Sinus                     | ...            | ...                                   | ...    | ...                                     | 3              | ...    | ...                                   | ...                                     | ...                                | ... | 1   |
| 17  | Burns & Scalds            | ...            | ...                                   | ...    | ...                                     | 1              | 1      | ...                                   | ...                                     | ...                                | ... | 1   |
| 18  | Other Conditions          | 9              | 5                                     | ...    | 5                                       | 26             | 13     | 13                                    | 12                                      | 12                                 | ... | 53  |

N.B.—Cases not amenable to or not requiring treatment have been omitted in the treatment column.

Statement showing the details of defects found on Medical  
Inspection of Schools, 1933-34.

| No. | System or<br>Organs.      | Details.                                               | No. Defective. |        |           |        | Total defect-<br>ive of boys<br>and girls. |
|-----|---------------------------|--------------------------------------------------------|----------------|--------|-----------|--------|--------------------------------------------|
|     |                           |                                                        | Entrants.      |        | Regulars. |        |                                            |
|     |                           |                                                        | Boys.          | Girls. | Boys.     | Girls. |                                            |
| 1   | Ear.                      | 1. Otorrhoea ...                                       | 95             | 49     | 154       | 82     | 380                                        |
|     |                           | 2. Otitis ...                                          | 8              | 22     | 12        | 19     | 61                                         |
|     |                           | 3. Other ear diseases ...                              | 12             | ...    | 25        | ...    | 37                                         |
|     |                           | 4. Defective hearing ...                               | 4              | 3      | 3         | 5      | 15                                         |
| 2   | Speech.                   | 1. Stammering ...                                      | 13             | 6      | 31        | 5      | 55                                         |
|     |                           | 2. Lipping ...                                         | 1              | ...    | 3         | ...    | 4                                          |
|     |                           | 3. Dumb ...                                            | 2              | ...    | 1         | ...    | 3                                          |
| 3   | Heart and<br>circulation. | 1. Heart Disease (a) Organic ...                       | 11             | 6      | 28        | 2      | 47                                         |
|     |                           | (b) Functional ...                                     | 29             | ...    | 36        | 4      | 69                                         |
|     |                           | 2. Anaemia ...                                         | 40             | 2      | 56        | 17     | 115                                        |
|     |                           | 3. Other conditions ...                                | 1              | 1      | 2         | ...    | 4                                          |
| 4   | Lungs.                    | 1. Bronchitis (acute and chronic) ...                  | 300            | 54     | 243       | 50     | 647                                        |
|     |                           | 2. Other non-tubercular diseases<br>(asthma, etc.) ... | 6              | 1      | 16        | 2      | 25                                         |
| 5   | Tuberculosis.             | 1. Pulmonary (a) Definite ...                          | ...            | 1      | 1         | 1      | 3                                          |
|     |                           | (b) Suspected ...                                      | 6              | 4      | 13        | 9      | 32                                         |
|     |                           | 2. Non-Pulmonary (a) Glands ...                        | ...            | 1      | ...       | 4      | 5                                          |
|     |                           | (b) Spine ...                                          | ...            | ...    | ...       | ...    | ...                                        |
|     |                           | (c) Hip ...                                            | ...            | ...    | 1         | ...    | 1                                          |
|     |                           | (d) Bones & Joints ...                                 | ...            | ...    | ...       | ...    | ...                                        |
|     |                           | (e) Skin ...                                           | 2              | ...    | ...       | ...    | 2                                          |
|     |                           | (f) Other forms ...                                    | ...            | ...    | ...       | ...    | ...                                        |
| 6   | Abdominal<br>Organs.      | 1. Enlarged Spleen ...                                 | 165            | 14     | 88        | 7      | 274                                        |
|     |                           | 2. " Liver ...                                         | 3              | ...    | 6         | ...    | 9                                          |
|     |                           | 3. " Liver and Spleen ...                              | 3              | 1      | 2         | 1      | 7                                          |
|     |                           | 4. Hydrocele (a) Vaginal ...                           | 13             | ...    | 19        | ...    | 32                                         |
|     |                           | (b) Cord ...                                           | 1              | ...    | 1         | ...    | 2                                          |
|     |                           | (c) Infantile ...                                      | 4              | ...    | 19        | ...    | 23                                         |
|     |                           | 5. Hernia (a) Inguinal ...                             | 22             | ...    | 50        | ...    | 72                                         |
|     |                           | (b) Umbilical ...                                      | 7              | 1      | 9         | 3      | 20                                         |
|     |                           | (c) Femoral ...                                        | ...            | ...    | ...       | ...    | ...                                        |
|     |                           | 6. Stomach conditions ...                              | 1              | ...    | 3         | ...    | 4                                          |
|     |                           | 7. Bowel conditions ...                                | 21             | 1      | 20        | 2      | 44                                         |
|     |                           | 8. Other conditions ...                                | 4              | 2      | 9         | ...    | 15                                         |
|     |                           | 9. Generative disorders in girls ...                   | ...            | ...    | ...       | ...    | ...                                        |
| 7   | Bones and<br>Joints.      | 1. Bones (a) Fractures ...                             | 1              | ...    | 1         | ...    | 2                                          |
|     |                           | (b) Caries ...                                         | ...            | ...    | ...       | ...    | ...                                        |
|     |                           | (c) Deformities ...                                    | ...            | 1      | ...       | 2      | 3                                          |
|     |                           | (d) Diseases ...                                       | ...            | ...    | ...       | ...    | ...                                        |
|     |                           | 2. Joints (a) Dislocations & sprains ...               | 2              | ...    | 1         | 1      | 4                                          |
|     |                           | (b) Diseases ...                                       | ...            | ...    | ...       | 2      | 2                                          |
|     |                           | (c) Deformities ...                                    | ...            | 1      | ...       | 1      | 2                                          |
|     |                           | 3. Rickets (a) General ...                             | 127            | ...    | 150       | ...    | 277                                        |
|     |                           | (b) Deformed chest... 118                              | 10             | 140    | 12        | 280    |                                            |
| 8   | Nervous<br>System.        | 1. Organic disease (palsies etc.) ...                  | 3              | ...    | 2         | 1      | 6                                          |
|     |                           | 2. Functional disorders ...                            | 3              | ...    | 8         | ...    | 11                                         |
|     |                           | 3. Other conditions ...                                | 1              | ...    | 6         | ...    | 7                                          |
| 9   | Psychic<br>System.        | 1. Mentally defective ...                              | 2              | 1      | 2         | ...    | 5                                          |
| 10  | Deformities.              | 1. General Deformity—                                  |                |        |           |        |                                            |
|     |                           | (a) Spinal deformity ...                               | 5              | 1      | 5         | ...    | 11                                         |
|     |                           | (b) Talipes ...                                        | ...            | 1      | 3         | ...    | 4                                          |
|     |                           | (c) Shortened limbs ...                                | 2              | 1      | 12        | ...    | 15                                         |
|     |                           | (d) Congenital dislocation hip ...                     | ...            | ...    | ...       | ...    | ...                                        |
|     |                           | (e) Ankylosis of joints ...                            | 2              | ...    | 6         | 1      | 9                                          |
|     |                           | (f) Amputated limbs ...                                | ...            | ...    | ...       | ...    | ...                                        |
|     |                           | (g) Genu Varum & Valgum ...                            | 1              | ...    | 1         | ...    | 2                                          |
|     |                           | (h) Supernumerary fingers ...                          | ...            | 1      | 3         | ...    | 4                                          |
|     |                           | (i) Flat foot ...                                      | ...            | 1      | ...       | 2      | 3                                          |
|     |                           | (j) Syndactily ...                                     | ...            | ...    | 1         | ...    | 1                                          |
|     |                           | (k) Dwarf ...                                          | ...            | 1      | ...       | ...    | 1                                          |
|     |                           | (l) Other conditions ...                               | 7              | ...    | 11        | 4      | 22                                         |

Statement of "following-up" work done showing the results of medical advice, 1933-1934.

| No. | Headings.                | Diseases.                           | Operations<br>performed<br>after<br>medical<br>advice. | No. of<br>cases<br>cured after<br>treatment | No. of<br>cases im-<br>proved<br>after<br>treatment. | No. of<br>cases where<br>treatment<br>was<br>continued. | Remarks.                                                        |
|-----|--------------------------|-------------------------------------|--------------------------------------------------------|---------------------------------------------|------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------------|
| 1   | ...                      | Malnutrition ...                    | ...                                                    | 285                                         | 2246                                                 | 1202                                                    | * Cleaned by a<br>dentist.                                      |
| 2   | Teeth & Mouth.           | Dirty teeth ...                     | 4*                                                     | 68†                                         | 121                                                  | 114                                                     | † Cleaned or<br>washed daily.                                   |
|     |                          | Dental Caries ...                   | 34‡                                                    | 100§                                        | 32                                                   | 88                                                      | ‡ Extracted.<br>§ Fallen out.                                   |
|     |                          | Stomatitis ...                      | ...                                                    | 568                                         | 444                                                  | 599                                                     |                                                                 |
|     |                          | Glossitis ...                       | ...                                                    | 27                                          | 16                                                   | 27                                                      |                                                                 |
|     |                          | Salivary fistula ...                | ...                                                    | ...                                         | ...                                                  | 1                                                       |                                                                 |
| 3   | Nose & Throat.           | Nasal Catarrh and<br>Rhinitis.      | ...                                                    | 108                                         | 56                                                   | 124                                                     |                                                                 |
|     |                          | Enlarged Tonsils<br>and Adenoids.   | 123                                                    | 451                                         | 1453                                                 | 1393                                                    |                                                                 |
|     |                          | Enlarged Cervical<br>glands.        | ...                                                    | 139                                         | 318                                                  | 273                                                     |                                                                 |
|     |                          | Granular Pharynx...                 | ...                                                    | 2                                           | 3                                                    | ...                                                     |                                                                 |
|     |                          | Nasal Polypus ...                   | 1                                                      | ...                                         | ...                                                  | ...                                                     |                                                                 |
|     |                          | Enlarged Sub-maxil-<br>lary glands. | ...                                                    | 2                                           | ...                                                  | ...                                                     |                                                                 |
|     |                          | Pharyngitis ...                     | ...                                                    | 1                                           | ...                                                  | ...                                                     |                                                                 |
| 4   | Eye Diseases ...         | Conjunctivitis ...                  | ...                                                    | 126                                         | 15                                                   | 19                                                      |                                                                 |
|     |                          | Xerosis ...                         | ...                                                    | 35                                          | 52                                                   | 84                                                      |                                                                 |
|     |                          | Stye ...                            | ...                                                    | 20                                          | 3                                                    | 1                                                       |                                                                 |
|     |                          | Granular lids ...                   | ...                                                    | 39                                          | 45                                                   | 74                                                      |                                                                 |
|     |                          | Blepharitis ...                     | ...                                                    | 4                                           | 2                                                    | ...                                                     |                                                                 |
|     |                          | Leucoma ...                         | 1                                                      | ...                                         | ...                                                  | 8                                                       |                                                                 |
|     |                          | Staphyloma ...                      | ...                                                    | ...                                         | ...                                                  | 1                                                       |                                                                 |
|     |                          | Cataract ...                        | ...                                                    | ...                                         | ...                                                  | 1                                                       |                                                                 |
|     |                          | Keratitis ...                       | ...                                                    | ...                                         | 1                                                    | ...                                                     |                                                                 |
|     |                          | Pterygium ...                       | ...                                                    | 1                                           | ...                                                  | ...                                                     |                                                                 |
|     |                          | Nystagmus ...                       | ...                                                    | ...                                         | ...                                                  | 1                                                       |                                                                 |
|     |                          | Naso-lachrymal ob-<br>struction.    | 1                                                      | ...                                         | ...                                                  | 1                                                       |                                                                 |
|     |                          | Squint ...                          | ...                                                    | ...                                         | ...                                                  | 3                                                       |                                                                 |
|     |                          | Corneal opacity ...                 | ...                                                    | ...                                         | 7                                                    | 16                                                      |                                                                 |
|     |                          | Corneal ulcer ...                   | ...                                                    | ...                                         | ...                                                  | 1                                                       |                                                                 |
|     |                          | Ptosis ...                          | ...                                                    | ...                                         | ...                                                  | 1                                                       |                                                                 |
|     |                          | Photophobia ...                     | ...                                                    | ...                                         | 1                                                    | 1                                                       |                                                                 |
|     |                          | Keratomalacia ...                   | ...                                                    | ...                                         | ...                                                  | 1                                                       |                                                                 |
| 5   | Defective Vision         | ...                                 | 8**                                                    | 35                                          | 46                                                   | 73                                                      | ** Vision corrected<br>by glasses.                              |
| 6   | Ear Diseases ...         | Otitis ...                          | ...                                                    | 23                                          | 6                                                    | 6                                                       | The rest took Cod-<br>liver oil.                                |
|     |                          | Otorrhoea ...                       | ...                                                    | 156                                         | 74                                                   | 59                                                      |                                                                 |
|     |                          | Wax ear ...                         | ...                                                    | 9                                           | ...                                                  | 1                                                       |                                                                 |
| 7   | Circulatory Sys-<br>tem. | Anaemia ...                         | ...                                                    | 17                                          | 37                                                   | 34                                                      |                                                                 |
|     |                          | Functional disease<br>of the heart. | ...                                                    | 7                                           | 28                                                   | 31                                                      |                                                                 |
|     |                          | Organic disease of<br>the heart.    | ...                                                    | ...                                         | 9                                                    | 23                                                      |                                                                 |
|     |                          | Other conditions ...                | ...                                                    | 1                                           | ...                                                  | ...                                                     |                                                                 |
| 8   | Tuberculosis ...         | Pulmonary—                          |                                                        |                                             |                                                      |                                                         |                                                                 |
|     |                          | (a) Definite ...                    | ...                                                    | ...                                         | 1                                                    | 1                                                       | One Acute case<br>died in spite of<br>treatment<br>†† arrested. |
|     |                          | (b) Suspicious ...                  | ...                                                    | 5††                                         | 6                                                    | 21                                                      |                                                                 |
|     |                          | Other forms ...                     | ...                                                    | ...                                         | ...                                                  | 8                                                       |                                                                 |

| No. | Headings.                           | Diseases.                                                                                                                                                                                                                                                                | Operations performed after medical advice.                                                                   | No. of cases cured after treatment.                                                          | No. of cases improved after treatment.                                                      | No. of cases where treatment was continued.                                                   | Remarks.                                                              |
|-----|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| 9   | Respiratory System.                 | Bronchitis ...<br>Bronchial Asthma. ...                                                                                                                                                                                                                                  | ...<br>...                                                                                                   | 310<br>...                                                                                   | 70<br>6                                                                                     | 64<br>9                                                                                       |                                                                       |
| 10  | Abdominal Organs.                   | Enlarged Spleen ...<br>" Liver ...<br>" Spleen and Liver. ...<br>Diarrhoea ...<br>Dysentery ...<br>Colic ...<br>Colitis ...<br>Gastritis ...<br>Chronic constipation ...<br>Jaundice ...<br>Inguinal Hernia ...<br>Umbilical Hernia ...<br>Chronic Bright's Disease. ... | ...<br>...<br>...<br>...<br>...<br>...<br>...<br>...<br>...<br>...<br>3<br>...<br>...<br>...                 | 51<br>3<br>...<br>2<br>8<br>11<br>1<br>2<br>1<br>1<br>...<br>...<br>...<br>1                 | 92<br>2<br>1<br>...<br>1<br>...<br>...<br>...<br>3<br>8<br>...<br>...<br>...                | 118<br>1<br>1<br>...<br>...<br>...<br>...<br>...<br>2<br>4<br>2<br>...                        | 13 not traceable.<br>3 " "                                            |
| 11  | Bones & Joints.                     | Fractures ...<br>Rickety Chest and General Rickets. ...                                                                                                                                                                                                                  | 2<br>...                                                                                                     | ...<br>...                                                                                   | ...<br>163                                                                                  | ...<br>284                                                                                    | Set right at Hospital.                                                |
| 12  | Infectious and Contagious Diseases. | Scabies ...<br>Eczema ...<br>Leprosy ...<br>Ringworm ...<br>Lichen ...<br>Pruritis ...<br>Urticaria ...<br>Psoriasis ...<br>Malaria ...<br>Hookworm ...<br>Mumps ...<br>Influenza ...<br>Kala-Azar ...<br>Dermatitis ...<br>Gonorrhoea ...<br>Impetigo ...               | ...<br>...<br>...<br>...<br>...<br>...<br>...<br>...<br>...<br>...<br>...<br>...<br>...<br>...<br>...<br>... | 1466<br>58<br>...<br>161<br>1<br>...<br>4<br>...<br>12<br>3<br>2<br>13<br>1<br>1<br>...<br>1 | 430<br>15<br>54<br>42<br>19<br>1<br>...<br>1<br>1<br>16<br>...<br>...<br>...<br>5<br>1<br>5 | 356<br>18<br>220<br>185<br>33<br>...<br>...<br>...<br>4<br>...<br>...<br>...<br>5<br>...<br>3 | 50 Indifferent.                                                       |
| 13  | Nervous and Psychic systems.        | Palsies ...<br>Incontinence of urine. ...<br>Epilepsy ...<br>Other conditions ...<br>Mentally defective ...                                                                                                                                                              | ...<br>...<br>...<br>...<br>...                                                                              | ...<br>1<br>...<br>...<br>...                                                                | ...<br>3<br>...<br>3<br>...                                                                 | 3<br>...<br>1<br>3<br>1                                                                       |                                                                       |
| 14  | Other diseases and defects.         | Worms ...<br>Wounds, cuts, ulcers etc. ...<br>Boils and Abscesses. ...<br>Pyrexia ...<br>Phimosis ...<br>Leucodermic patches. ...<br>Burns and Scalds ...<br>Sinuses ...<br>Enlarged Groin glands. ...<br>Warts ...<br>Rat bite ...<br>Other conditions ...              | ...<br>1*<br>28†<br>...<br>17<br>...<br>...<br>...<br>...<br>...<br>...<br>...<br>...                        | 452<br>145<br>19<br>52<br>...<br>...<br>1<br>1<br>...<br>...<br>1<br>19                      | 10<br>3<br>20<br>...<br>...<br>...<br>...<br>...<br>9<br>1<br>...<br>...<br>5               | 20<br>...<br>...<br>...<br>...<br>15<br>...<br>...<br>16<br>...<br>...<br>...<br>3            | * Anti-tetanic Serum given.<br>† Incised at Corporation dispensaries. |

**Water Analysis Statements,**  
**Table I.—Showing the Meteorological Data from 1924—1933.**

| Year.     | 1924   |                    |                           | 1925                      |                    |                           | 1926                      |                    |                           | 1927                      |                    |                           | 1928                      |                    |                           | 1929                      |                    |                           | 1930                      |                    |                           | 1931                      |                    |                           | 1932                      |                    |                           | 1933                      |      |    |
|-----------|--------|--------------------|---------------------------|---------------------------|--------------------|---------------------------|---------------------------|--------------------|---------------------------|---------------------------|--------------------|---------------------------|---------------------------|--------------------|---------------------------|---------------------------|--------------------|---------------------------|---------------------------|--------------------|---------------------------|---------------------------|--------------------|---------------------------|---------------------------|--------------------|---------------------------|---------------------------|------|----|
|           | Month. | Velocity in miles. | Bright Sunshine in hours. | Cloudy Sky in percentage. | Velocity in miles. | Bright Sunshine in hours. | Cloudy Sky in percentage. | Velocity in miles. | Bright Sunshine in hours. | Cloudy Sky in percentage. | Velocity in miles. | Bright Sunshine in hours. | Cloudy Sky in percentage. | Velocity in miles. | Bright Sunshine in hours. | Cloudy Sky in percentage. | Velocity in miles. | Bright Sunshine in hours. | Cloudy Sky in percentage. | Velocity in miles. | Bright Sunshine in hours. | Cloudy Sky in percentage. | Velocity in miles. | Bright Sunshine in hours. | Cloudy Sky in percentage. | Velocity in miles. | Bright Sunshine in hours. | Cloudy Sky in percentage. |      |    |
| January   | 135    | 7.4                | 42                        | 110                       | 7.3                | 35                        | 131                       | 7.4                | 38                        | 132                       | 7.7                | 51                        | 154                       | 8.0                | 44                        | 125                       | 8.5                | 33                        | 120                       | 7.8                | 45                        | 154                       | 8.1                | 42                        | 151                       | 8.9                | 28                        | 225                       | 8.0  | 59 |
| February  | 112    | 9.2                | 21                        | 106                       | 9.8                | 16                        | 98                        | 9.5                | 16                        | 144                       | 9.7                | 35                        | 109                       | 9.4                | 25                        | 100                       | 8.9                | 30                        | 124                       | 8.3                | 41                        | 104                       | 9.9                | 27                        | 138                       | 9.5                | 30                        | 184                       | 10.2 | 51 |
| March     | 109    | 8.9                | 19                        | 130                       | 7.6                | 32                        | 147                       | 8.9                | 19                        | 144                       | 9.0                | 46                        | 121                       | 9.4                | 26                        | 115                       | 10.4               | 17                        | 129                       | 9.6                | 34                        | 138                       | 10.1               | 16                        | 122                       | 10.1               | 23                        | 187                       | 9.4  | 33 |
| April     | 196    | 9.9                | 22                        | 192                       | 9.4                | 28                        | 188                       | 9.4                | 28                        | 196                       | 9.8                | 42                        | 158                       | 9.6                | 33                        | 145                       | 8.9                | 42                        | 168                       | 10.0               | 25                        | 176                       | 9.4                | 33                        | 150                       | 9.3                | 38                        | 210                       | 10.1 | 49 |
| May       | 94     | 6.6                | 37                        | 173                       | 6.8                | 44                        | 171                       | 7.5                | 52                        | 207                       | 8.6                | 42                        | 231                       | 9.6                | 26                        | 196                       | 8.2                | 40                        | 185                       | 7.2                | 51                        | 196                       | 8.2                | 41                        | 179                       | 8.1                | 53                        | 207                       | 8.3  | 71 |
| June      | 203    | 5.1                | 64                        | 179                       | 4.9                | 59                        | 215                       | 6.0                | 55                        | 204                       | 5.5                | 65                        | 218                       | 5.7                | 60                        | 217                       | 5.1                | 74                        | 180                       | 4.8                | 71                        | 196                       | 7.4                | 51                        | 209                       | 7.4                | 55                        | 186                       | 6.0  | 78 |
| July      | 167    | 4.3                | 76                        | 164                       | 4.0                | 72                        | 154                       | 4.2                | 84                        | 190                       | 4.4                | 80                        | 177                       | 4.6                | 76                        | 192                       | 5.3                | 74                        | 181                       | 5.8                | 65                        | 166                       | 4.8                | 78                        | 191                       | 4.8                | 82                        | 176                       | 4.8  | 82 |
| August    | 153    | 5.0                | 61                        | 146                       | 5.2                | 74                        | 174                       | 3.8                | 83                        | 159                       | 5.5                | 62                        | 167                       | 5.7                | 70                        | 165                       | 5.4                | 73                        | 160                       | 5.9                | 67                        | 169                       | 6.3                | 73                        | 142                       | 7.1                | 65                        | 163                       | 4.9  | 84 |
| September | 118    | 4.7                | 60                        | 147                       | 7.7                | 37                        | 136                       | 5.6                | 68                        | 135                       | 6.6                | 73                        | 129                       | 5.8                | 61                        | 134                       | 6.7                | 58                        | 153                       | 7.4                | 56                        | 125                       | 6.1                | 64                        | 151                       | 6.1                | 62                        | 169                       | 6.1  | 77 |
| October   | 118    | 6.6                | 51                        | 117                       | 4.4                | 72                        | 113                       | 6.2                | 60                        | 134                       | 7.1                | 55                        | 104                       | 6.2                | 56                        | 119                       | 6.0                | 63                        | 115                       | 4.5                | 73                        | 122                       | 6.4                | 57                        | 93                        | 5.1                | 69                        | 141                       | 4.7  | 79 |
| November  | 133    | 3.5                | 74                        | 151                       | 5.0                | 68                        | 148                       | 5.0                | 65                        | 163                       | 5.8                | 60                        | 172                       | 6.2                | 58                        | 170                       | 5.7                | 65                        | 173                       | 4.4                | 72                        | 139                       | 5.3                | 68                        | 187                       | 4.4                | 76                        | 193                       | 7.4  | 68 |
| December  | 161    | 6.3                | 38                        | 165                       | 4.0                | 64                        | 167                       | 6.1                | 55                        | 165                       | 7.4                | 47                        | 190                       | 5.7                | 55                        | 138                       | 6.9                | 50                        | 126                       | 6.5                | 55                        | 206                       | 4.7                | 71                        | 112                       | 7.2                | 47                        | 245                       | 7.4  | 60 |
| Average   | 150    | 6.5                | 47                        | 148                       | 6.3                | 50                        | 153                       | 6.6                | 52                        | 164                       | 7.3                | 53                        | 160                       | 7.2                | 50                        | 151                       | 7.2                | 52                        | 151                       | 6.9                | 56                        | 157                       | 7.2                | 52                        | 160                       | 7.3                | 53                        | 191                       | 7.3  | 64 |

TABLE I-(a)--Showing the Monthly Average Rainfall at Red Hills Lake during a period of Ten Years (1924-1933).  
(Rainfall expressed in inches.)

| Year.           | 1924. | 1925. | 1926. | 1927. | 1928. | 1929. | 1930. | 1931. | 1932. | 1933. | Ten Year's<br>monthwar<br>average. |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------------------------|
| January         | 0.08  | 0.48  | 1.08  | 0.44  | 0.56  | 1.70  | 2.78  | 0.20  | Nil.  | Nil.  | 0.73                               |
| February        | Nil.  | Nil.  | Nil.  | 0.22  | 1.45  | 3.71  | 2.65  | Nil.  | Nil.  | Nil.  | 0.80                               |
| March           | Nil.  | 1.25  | 0.70  | Nil.  | 0.35  | Nil.  | Nil.  | Nil.  | Nil.  | 3.50  | 0.58                               |
| April           | Nil.  | Nil.  | 0.13  | 0.26  | 0.02  | 0.76  | Nil.  | 1.72  | Nil.  | Nil.  | 0.29                               |
| May             | Nil.  | 4.72  | 0.20  | 1.27  | 0.90  | 0.33  | 6.10  | 2.85  | 2.95  | Nil.  | 1.71                               |
| June            | 1.51  | 0.05  | 0.05  | 2.31  | 1.35  | 1.47  | 2.31  | 0.70  | 1.07  | 3.18  | 1.62                               |
| July            | 5.20  | 1.98  | 3.74  | 1.92  | 2.72  | 2.02  | 1.61  | 4.99  | 0.34  | 2.63  | 2.62                               |
| August          | 0.72  | 4.40  | 3.32  | 4.06  | 3.20  | 2.61  | 2.53  | 2.73  | 2.22  | 3.03  | 2.88                               |
| September       | 7.24  | 0.30  | 2.18  | 4.92  | 5.57  | 5.24  | 1.96  | 4.96  | 4.22  | 2.85  | 3.94                               |
| October         | 8.76  | 15.60 | 5.31  | 5.12  | 20.19 | 9.11  | 26.61 | 8.60  | 14.06 | 7.51  | 12.09                              |
| November        | 18.38 | 15.78 | 8.28  | 11.26 | 6.15  | 14.74 | 23.84 | 16.78 | 12.37 | 9.40  | 13.70                              |
| December        | 0.78  | 13.87 | 1.21  | 1.96  | 2.36  | 3.72  | 4.90  | 12.59 | 1.83  | 14.40 | 5.76                               |
| Yearly Rainfall | 43.40 | 58.43 | 26.20 | 32.76 | 44.82 | 45.44 | 75.29 | 56.12 | 39.03 | 46.40 | 46.72                              |

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TABLE I--(b) showing the Monthly Average Lake Level at Red Hills Lake for a period of 10 years (1924-1933).  
Lake level expressed in feet.†

| Year.          | 1924. | 1925. | 1926. | 1927. | 1928. | 1929. | 1930. | 1931. | 1932. | 1933. | Ten years'<br>monthwar<br>average. |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------------------------|
| January        | 61.74 | 63.13 | 65.77 | 60.16 | 61.37 | 63.25 | 65.20 | 65.87 | 65.55 | 65.05 | 63.71                              |
| February       | 60.45 | 62.19 | 64.32 | 58.98 | 60.64 | 62.80 | 65.47 | 65.39 | 65.28 | 63.96 | 62.95                              |
| March          | 59.28 | 61.04 | 64.32 | 57.73 | 59.39 | 62.63 | 65.34 | 64.04 | 64.05 | 63.49 | 62.16                              |
| April          | 57.78 | 59.59 | 63.65 | 56.35 | 58.69 | 61.66 | 62.25 | 62.85 | 62.74 | 63.13 | 60.86                              |
| May            | 56.28 | 58.42 | 62.40 | 54.93 | 57.41 | 60.55 | 63.95 | 62.60 | 62.57 | 62.25 | 60.14                              |
| June           | 55.11 | 58.36 | 61.02 | 53.38 | 56.89 | 58.18 | 64.33 | 61.80 | 61.00 | 62.15 | 59.12                              |
| July           | 54.13 | 57.02 | 59.43 | 52.20 | 54.58 | 57.92 | 64.91 | 61.38 | 59.53 | 59.43 | 58.05                              |
| August         | 53.32 | 57.20 | 58.44 | 51.19 | 53.47 | 56.87 | 63.55 | 62.97 | 58.39 | 58.64 | 57.40                              |
| September      | 52.32 | 57.53 | 57.54 | 50.71 | 52.43 | 55.82 | 63.75 | 63.16 | 57.95 | 58.00 | 56.92                              |
| October        | 54.93 | 58.75 | 58.93 | 53.29 | 54.40 | 55.78 | 63.83 | 64.26 | 57.65 | 57.50 | 57.93                              |
| November       | 58.83 | 62.54 | 61.62 | 58.63 | 62.67 | 61.98 | 64.55 | 64.49 | 63.12 | 58.86 | 61.63                              |
| December       | 63.49 | 64.47 | 61.61 | 61.89 | 63.86 | 65.08 | 65.75 | 64.47 | 65.10 | 62.39 | 63.81                              |
| Yearly average | 57.31 | 60.02 | 61.58 | 55.79 | 57.92 | 60.21 | 64.41 | 63.61 | 61.33 | 61.24 | 60.39                              |

† Deduct 48.05 from the values given here to get the exact depth.

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TABLE I (c)—Showing the Monthly Rainfall and Lake Level in Sholavaram Lake for 1933.

| Month.    | Total Rainfall<br>in inches. | Depth of water over<br>sill of sluice |                                  |
|-----------|------------------------------|---------------------------------------|----------------------------------|
|           |                              | on the first<br>of the month.         | on the last day<br>of the month. |
| January   | Nil.                         | 11.73 feet.                           | 12.02 feet.                      |
| February  | Nil.                         | 12.01 "                               | 11.28 "                          |
| March     | 3.12                         | 11.26 "                               | 11.74 "                          |
| April     | 0.69                         | 11.72 "                               | 6.50 "                           |
| May       | Nil.                         | 6.48 "                                | 2.11 "                           |
| June      | 1.91                         | 1.95 "                                | 0.45 "                           |
| July      | 3.69                         | 0.45 "                                | 1.22 "                           |
| August    | 6.44                         | 1.20 "                                | 1.40 "                           |
| September | 1.93                         | 1.39 "                                | 1.08 "                           |
| October   | 8.70                         | 1.15 "                                | 2.80 "                           |
| November  | 8.44                         | 2.80 "                                | 1.95 "                           |
| December  | 18.52                        | 1.95 "                                | 15.20 "                          |
| Total     | 53.44                        | ...                                   | ...                              |

TABLE I (d).

Temperature of Red Hills Lake Region—monthly averages for 1933.

| 1933.          | Maximum<br>° F. | Minimum<br>° F. | Mean<br>° F. |
|----------------|-----------------|-----------------|--------------|
| January        | 100             | 71              | 85.60        |
| February       | 94              | 71              | 82.28        |
| March          | 100             | 71              | 85.68        |
| April          | 102             | 71              | 86.35        |
| May            | 103             | 71              | 87.21        |
| June           | 102             | 71              | 86.68        |
| July           | 101             | 71              | 86.10        |
| August         | 101             | 71              | 85.78        |
| September      | 100             | 71              | 85.30        |
| October        | 99              | 70              | 84.68        |
| November       | 99              | 70              | 84.43        |
| December       | 98              | 70              | 84.07        |
| Yearly average | 100             | 71              | 85.35        |

TABLE II.

Limnological Data for Red Hills Lake for 1933.

(Surface water collected about hundred yards away from Jones Tower.)

| Date of<br>Collection. | Depth in feet. | Transparency in cms. | Temperature of surface<br>water °C. | Dissolved oxygen in cc.<br>per litre. | Milligrams per litre.  |                   |                    | Results expressed in parts per 100,000. |               |               |                   |                       |               |               |                              | Lactose fermenters pre-<br>sent in 2 cc. and up-<br>wards? | Total colonies per cc.<br>on agar at 37°C after<br>48 hours. | Meteorological conditions.                                                                          |
|------------------------|----------------|----------------------|-------------------------------------|---------------------------------------|------------------------|-------------------|--------------------|-----------------------------------------|---------------|---------------|-------------------|-----------------------|---------------|---------------|------------------------------|------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
|                        |                |                      |                                     |                                       | Free CO <sub>2</sub> . | CO <sub>2</sub> . | HCO <sub>3</sub> . | pH.                                     | Total Solids. | Fixed Solids. | Ignitable matter. | Combined<br>Chlorine. | Ammoniacal N. | Albuminoid N. | Absorbed Oxygen<br>(Tidy's). | Nitric N.                                                  | Nitrous N.                                                   |                                                                                                     |
| 15-1-33                | 22.75          | ...                  | 26.6                                | 5.32                                  | Nil.                   | 7.5               | 106.8              | 8.3                                     | 188           | 14.8          | 4.0               | 4.25                  | Trace         | 0.036         | 0.117                        | Nil                                                        | Nil                                                          | Not clear blue sky—white clouds in plenty<br>—not very bright sunshine—strong wind<br>—big waves.   |
| 12-2-33                | 21.27          | ...                  | 27.2                                | 5.20                                  | "                      | 6.0               | 112.9              | 8.5                                     | 19.8          | 15.6          | 4.2               | 4.35                  | "             | 0.031         | 0.098                        | "                                                          | "                                                            | Sampled at 4 p. m.—whitish blue sky—not<br>bright sunshine—still no winds.                          |
| 18-3-33                | 21.27          | ...                  | 28.1                                | 4.80                                  | "                      | 4.5               | 112.9              | 8.5                                     | 22.0          | 18.0          | 4.0               | 4.95                  | 0.003         | 0.049         | 0.133                        | "                                                          | "                                                            | Do.                                                                                                 |
| 9-4-33                 | 20.20          | ...                  | 29.6                                | 4.64                                  | "                      | 4.5               | 111.3              | 8.7                                     | 20.0          | 15.0          | 5.0               | 4.95                  | 0.002         | 0.031         | 0.138                        | "                                                          | "                                                            | Do.                                                                                                 |
| 30-4-33                | 20.05          | 95.0                 | 30.0                                | 5.24                                  | "                      | 9.0               | 112.9              | 8.9                                     | ...           | ...           | ...               | 5.55                  | Trace         | 0.031         | 0.112                        | "                                                          | "                                                            | Sampled at 12 noon—white clouds in<br>plenty—not bright sunshine—slight wind—<br>ripples formed.    |
| 27-5-33                | 18.89          | 107.5                | 30.4                                | 5.21                                  | "                      | 9.0               | 113.6              | 8.5                                     | 24.4          | 18.0          | 6.4               | 5.65                  | 0.002         | 0.029         | 0.140                        | "                                                          | "                                                            | Sampled at 1 p. m.—cloudy sky—not bright<br>sunshine—winds strong—big waves.                        |
| 18-6-33                | 17.83          | 100.0                | 29.8                                | 5.00                                  | "                      | 9.0               | 109.8              | 8.8                                     | 24.0          | 18.0          | 6.0               | 6.00                  | Trace         | 0.036         | 0.136                        | "                                                          | "                                                            | Cloudy sky—not bright sunshine—strong<br>winds—big waves.                                           |
| 23-7-33                | 16.54          | 108.0                | 30.5                                | 5.03                                  | "                      | 15.0              | 109.8              | 8.7                                     | 24.4          | 17.4          | 7.0               | 7.35                  | "             | 0.038         | 0.127                        | "                                                          | "                                                            | Sampled at 11 a. m.—clear blue sky—very<br>bright sunshine—no wind—surface<br>smooth.               |
| 20-8-33                | 16.29          | 85.5                 | 31.5                                | 4.90                                  | "                      | 15.0              | 108.3              | 8.7                                     | 31.0          | 24.6          | 6.4               | 7.35                  | "             | 0.060         | 0.142                        | "                                                          | "                                                            | Sampled at 12 noon—cloudy sky—not bright<br>sunshine—drizzling—moderate wind—sur-<br>face agitated. |
| 7-10-33                | 14.80          | 100.0                | 30.4                                | 5.32                                  | "                      | 22.5              | 100.7              | 8.7                                     | 34.0          | 27.0          | 7.0               | 6.75                  | "             | 0.056         | 0.216                        | "                                                          | "                                                            | Sampled at 10.30 a. m.—clear blue sky—<br>bright sunshine—no wind—surface smooth.                   |
| 12-11-33               | 16.00          | 79.0                 | 28.4                                | 5.40                                  | "                      | 13.5              | 106.8              | 8.7                                     | ...           | ...           | ...               | 7.05                  | "             | 0.040         | 0.155                        | "                                                          | "                                                            | Sampled at 12 noon—few white clouds—<br>bright sunshine—no wind—smooth sur-<br>face.                |
| 23-12-33               | 22.77          | 36.0                 | 26.8                                | 5.41                                  | present                | Absent            | 86.93              | 7.7                                     | 20.6          | 13.6          | 7.0               | 3.50                  | 0.020         | 0.022         | 0.096                        | "                                                          | "                                                            |                                                                                                     |

† Samples were not collected in September.

TABLE IV.

Combined Chlorine, pH., Temperature and Dissolved Gases and Turbidity in Raw-water taken at the Kilpauk end of the Raw-water Conduit. (Results of Weekly Analysis.)

| Date.   | Combined chlorine in parts per 100,000. | Actual figure. | Temperature of surface water. | Milligrams per litre. |                 |                   | Dissolved oxygen in c.c. per litre. | Transparency in cms. |
|---------|-----------------------------------------|----------------|-------------------------------|-----------------------|-----------------|-------------------|-------------------------------------|----------------------|
|         |                                         | pH.            |                               | Free CO <sub>2</sub>  | CO <sub>3</sub> | H CO <sub>3</sub> |                                     |                      |
| 4-1-33  | 4.15                                    | 8.1            |                               |                       |                 |                   |                                     |                      |
| 10-1-33 | 4.25                                    | 8.1            |                               |                       |                 |                   |                                     |                      |
| 17-1-33 | 4.25                                    | 8.1            |                               |                       |                 |                   |                                     |                      |
| 24-1-33 | 4.35                                    | 8.3            |                               |                       |                 |                   |                                     |                      |
| 31-1-33 | 4.35                                    | 8.3            |                               |                       |                 |                   |                                     |                      |
| Average | 4.27                                    | 8.18           |                               |                       |                 |                   |                                     |                      |
| 7-2-33  | 4.55                                    | 8.5            |                               |                       |                 |                   |                                     |                      |
| 15-2-33 | 4.45                                    | 8.5            |                               |                       |                 |                   |                                     |                      |
| 24-2-33 | 4.55                                    | 8.5            |                               |                       |                 |                   |                                     |                      |
| 28-2-33 | 4.55                                    | 8.5            |                               |                       |                 |                   |                                     |                      |
| Average | 4.53                                    | 8.5            |                               |                       |                 |                   |                                     |                      |
| 7-3-33  | 4.65                                    | 8.5            |                               |                       |                 |                   |                                     |                      |
| 14-3-33 | 4.65                                    | 8.3            |                               |                       |                 |                   |                                     |                      |
| 21-3-33 | 4.95                                    | 8.5            |                               |                       |                 |                   |                                     |                      |
| 28-3-33 | 4.95                                    | 8.6            |                               |                       |                 |                   |                                     |                      |
| Average | 4.80                                    | 8.48           |                               |                       |                 |                   |                                     |                      |
| 4-4-33  | 4.95                                    | 8.7            |                               |                       |                 |                   |                                     |                      |
| 11-4-33 | 5.15                                    | 8.7            |                               |                       |                 |                   |                                     |                      |
| 21-4-33 | 5.35                                    | 8.6            |                               |                       |                 |                   |                                     | 108.0                |
| 25-4-33 | 5.35                                    | 8.6            |                               |                       |                 |                   |                                     | 105.0                |
| Average | 5.20                                    | 8.65           |                               |                       |                 |                   |                                     | 106.5                |
| 2-5-33  | 5.55                                    | 8.5            |                               |                       |                 |                   |                                     | 106.0                |
| 9-5-33  | 5.55                                    | 8.6            |                               |                       |                 |                   |                                     | 106.0                |
| 16-5-33 | 5.75                                    | 8.7            |                               |                       |                 |                   |                                     | 126.0                |
| 23-5-33 | 5.75                                    | 8.7            |                               |                       |                 |                   |                                     | 115.0                |
| 30-5-33 | 5.75                                    | 8.7            |                               |                       |                 |                   |                                     | 113.5                |
| Average | 5.67                                    | 8.64           |                               |                       |                 |                   |                                     | 113.3                |
| 13-6-33 | 5.85                                    | 8.7            | 30.6                          | Nil.                  | 9.00            | 43.7              | 4.60                                | 100.0                |
| 21-6-33 | 5.55                                    | 8.7            | 31.0                          | "                     | 10.5            | 115.9             | 4.50                                | 100.0                |
| 27-6-33 | 6.15                                    | 8.7            | 28.6                          | "                     | 12.0            | 111.3             | 4.05                                | 116.0                |
| Average | 5.85                                    | 8.70           | 30.07                         | Nil                   | 10.50           | 90.30             | 4.38                                | 105.3                |
| 5-7-33  | 6.15                                    | 8.7            | 31.0                          | Nil                   | 12.0            | 112.9             | 4.30                                | 114.5                |
| 13-7-33 | 6.15                                    | 8.7            | 28.0                          | "                     | 10.5            | 115.9             | 4.40                                | 117.0                |
| 19-7-33 | 6.15                                    | 8.7            | 31.0                          | "                     | 12.0            | 115.9             | 4.24                                | 111.0                |
| 25-7-33 | 6.95                                    | 8.5            | 30.0                          | "                     | 15.0            | 109.8             | 4.28                                | 114.0                |
| Average | 6.35                                    | 8.65           | 30.0                          | Nil                   | 12.38           | 113.63            | 4.31                                | 114.13               |

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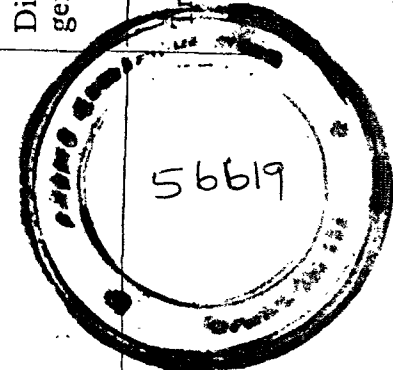


TABLE III.  
Limnological Data for Sholavaram Lake for 1933.  
(Surface water collected near the Head-sludge.)

| Date of Collection. | Depth in feet. | Transparency in cms. | Temperature of surface water. | Dissolved oxygen in cc. per litre. | Milligrams per litre.  |                   |                    | H <sub>2</sub> O. | Results expressed in parts per 100,000. |               |                   |                    |               |               |                           |                                                                                                | Lactose fermenters present in 2 c.c. and up-wards ? | Total colonies per c.c. on agar at 37°C after 48 hours. | Meteorological conditions. |            |
|---------------------|----------------|----------------------|-------------------------------|------------------------------------|------------------------|-------------------|--------------------|-------------------|-----------------------------------------|---------------|-------------------|--------------------|---------------|---------------|---------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------|----------------------------|------------|
|                     |                |                      |                               |                                    | Free CO <sub>2</sub> . | CO <sub>2</sub> . | HCO <sub>3</sub> . |                   | Total Solids.                           | Fixed Solids. | Ignitable matter. | Combined Chlorine. | Ammoniacal N. | Albuminoid N. | Absorbed oxygen (Tidy's.) | Nitric N.                                                                                      |                                                     |                                                         |                            | Nitrous N. |
|                     |                |                      |                               |                                    |                        |                   |                    |                   |                                         |               |                   |                    |               |               |                           |                                                                                                |                                                     |                                                         |                            |            |
| 15-1-33             | 11.95          | ...                  | ...                           | ...                                | ...                    | ...               | ...                | 3.7               | Trace                                   | 0.013         | 0.119             | Nil                | Nil           | 5 cc          | 860                       | Not recorded.                                                                                  |                                                     |                                                         |                            |            |
| 12-2-33             | 11.89          | ...                  | ...                           | ...                                | ...                    | ...               | ...                | ...               | 0.002                                   | 0.013         | 0.081             | "                  | "             | 1 cc          | 1800                      | Do.                                                                                            |                                                     |                                                         |                            |            |
| 18-3-33             | 11.79          | ...                  | ...                           | ...                                | ...                    | ...               | ...                | ...               | 0.002                                   | 0.036         | 0.154             | "                  | "             | 5 cc          | 1200                      | Do.                                                                                            |                                                     |                                                         |                            |            |
| 9-4-33              | 11.38          | ...                  | ...                           | ...                                | ...                    | ...               | ...                | 9.1               | 0.002                                   | 0.031         | 0.131             | "                  | "             | 60 cc         | 640                       | Do.                                                                                            |                                                     |                                                         |                            |            |
| 30-4-33             | 6.50           | 65.0                 | ...                           | ...                                | ...                    | ...               | ...                | ...               | Trace                                   | 0.025         | 0.136             | "                  | "             | 5 cc          | 970                       | Do.                                                                                            |                                                     |                                                         |                            |            |
| 27-5-33             | 2.72           | 50.0                 | ...                           | ...                                | ...                    | ...               | ...                | 8.7               | 7.95                                    | 0.036         | 0.168             | "                  | "             | 1 cc          | 1800                      | Sampled at 10 a.m.-white clouds in plenty-not bright sunshine-slight wind -surface not smooth. |                                                     |                                                         |                            |            |
| 18-6-33             | 0.80           | 26.5                 | ...                           | ...                                | Nil                    | 12.0              | 149.5              | 8.8               | 9.60                                    | 0.034         | 0.254             | "                  | "             | 10 cc         | 890                       | Sampled at 8.30 a.m.-cloudy sky-not bright sunshine-strong wind-big waves.                     |                                                     |                                                         |                            |            |
| 23-7-33             | 2.00           | 32.0                 | 30.5                          | 5.03                               | "                      | 21.0              | 91.5               | 8.9               | 8.25                                    | 0.003         | 0.311             | "                  | "             | 1 cc          | 1400                      | Sampled at 9.30 a.m.-sky entirely cloudy -not bright sunshine-moderate wind-surface agitated.  |                                                     |                                                         |                            |            |
| 20-8-33             | 1.85           | 41.0                 | 31.0                          | 4.71                               | "                      | 24.0              | 67.1               | 8.9               | 6.75                                    | 0.011         | 0.205             | "                  | "             | 1 cc          | 1300                      | Sampled at 9 a.m.-almost a clear blue sky-bright sunshine-slight wind -surface agitated.       |                                                     |                                                         |                            |            |
| 7-10-33             | 1.15           | 41.3                 | 29.8                          | 4.37                               | "                      | 16.5              | 100.7              | 8.7               | 6.0                                     | 0.006         | 0.151             | "                  | "             | 5 cc          | 900                       | Sampled at 10.30 a.m.-sky entirely cloudy-not bright sunshine-no wind-smooth surface.          |                                                     |                                                         |                            |            |
| 12-11-33            | 4.20           | 42.0                 | 27.4                          | 5.44                               | "                      | 15.0              | 61.0               | 8.7               | 4.75                                    | Trace         | 0.121             | "                  | "             | 0.1 cc        | 1500                      | Sampled at 9 a.m.-clear blue sky-bright sunshine-no wind-smooth surface.                       |                                                     |                                                         |                            |            |
| 23-12-33            | 12.90          | 28.0                 | 26.4                          | 5.60                               | present                | Nil.              | 62.5               | 7.5               | 4.8                                     | "             | 0.101             | "                  | "             | 1.0 cc        | 850                       | Sampled at 10.30 a.m.-heavy rains-dark clouds-not bright sunshine-no wind.                     |                                                     |                                                         |                            |            |

† Samples were not collected in September.

TABLE IV—(contd.)

Combined Chlorine, pH., Temperature, and Dissolved Gases and Turbidity in Raw-water taken at the Kilpauk end of the Raw-water conduit (Results of Weekly Analysis).

| Date.   | Combined chlorine in parts per 100,000. | Actual figure. | Temperature of surface water. | Milligrams per litre. |                 |                  | Dissolved oxygen in c.c. per litre. | Transparency in cms. |
|---------|-----------------------------------------|----------------|-------------------------------|-----------------------|-----------------|------------------|-------------------------------------|----------------------|
|         |                                         | pH.            |                               | Free CO <sub>2</sub>  | CO <sub>2</sub> | HCO <sub>3</sub> |                                     |                      |
| 1-8-33  | 7.75                                    | 8.5            | 28.4                          | Nil.                  | 15.0            | 109.80           | 4.47                                | 113.0                |
| 8-8-33  | 7.15                                    | 8.5            | 29.0                          | "                     | 9.0             | 123.50           | 4.02                                | 96.0                 |
| 5-8-33  | 7.15                                    | 8.5            | 29.6                          | "                     | 12.0            | 112.90           | 4.55                                | 97.0                 |
| 3-8-33  | 7.35                                    | 8.6            | 32.0                          | "                     | 9.0             | 122.00           | 4.26                                | 98.0                 |
| 9-8-33  | 7.45                                    | 8.7            | 31.5                          | "                     | 13.5            | 115.90           | 4.70                                | 98.0                 |
| verage. | <b>7.37</b>                             | <b>8.56</b>    | <b>30.1</b>                   | "                     | <b>11.7</b>     | <b>116.82</b>    | <b>4.40</b>                         | <b>100.4</b>         |
| 5-9-33  | 6.65                                    | 8.5            | 29.6                          | "                     | 15.0            | 120.50           | 4.69                                | 92.0                 |
| 4-9-33  | 6.90                                    | 8.7            | 27.9                          | "                     | 15.0            | 115.90           | 4.96                                | 86.0                 |
| 0-9-33  | 6.65                                    | 8.7            | 29.6                          | "                     | 18.0            | 109.80           | 5.21                                | 82.0                 |
| 6-9-33  | 6.85                                    | 8.7            | 30.5                          | "                     | 12.0            | 125.10           | 5.05                                | 81.0                 |
| verage. | <b>6.76</b>                             | <b>8.65</b>    | <b>29.4</b>                   | "                     | <b>15.0</b>     | <b>117.83</b>    | <b>4.98</b>                         | <b>85.3</b>          |
| -10-33  | 6.95                                    | 8.7            | 30.0                          | "                     | 18.0            | 109.80           | 5.11                                | 86.0                 |
| -10-33  | 7.25                                    | 8.7            | 31.7                          | "                     | 15.0            | 112.90           | 4.87                                | 100.0                |
| -10-33  | 7.15                                    | 8.7            | 28.4                          | "                     | 15.0            | 112.90           | 5.40                                | 93.4                 |
| -10-33  | 7.35                                    | 8.5            | 30.3                          | "                     | 19.5            | 106.80           | 5.36                                | 84.5                 |
| -10-33  | 7.35                                    | 8.5            | 28.1                          | "                     | 13.5            | 119.00           | 5.22                                | 99.0                 |
| verage. | <b>7.21</b>                             | <b>8.62</b>    | <b>29.7</b>                   | "                     | <b>16.2</b>     | <b>112.28</b>    | <b>5.19</b>                         | <b>92.6</b>          |
| -11-33  | 7.05                                    | 8.7            | 28.0                          | "                     | 13.5            | 117.40           | 5.25                                | 87.5                 |
| -11-33  | 6.95                                    | 8.5            | 28.4                          | "                     | 12.0            | 106.80           | 5.12                                | 86.0                 |
| -11-33  | 6.35                                    | 8.5            | 27.8                          | "                     | 10.5            | 106.80           | 5.43                                | 82.0                 |
| -11-33  | 6.55                                    | 8.5            | 28.4                          | "                     | 13.5            | 94.60            | 5.13                                | 88.0                 |
| verage. | <b>6.73</b>                             | <b>8.55</b>    | <b>28.15</b>                  | "                     | <b>12.35</b>    | <b>106.40</b>    | <b>5.23</b>                         | <b>85.9</b>          |
| -12-33  | 6.55                                    | 8.5            | 27.0                          | "                     | 12.0            | 100.70           | 5.90                                | 88.0                 |
| -12-33  | 6.75                                    | 8.5            | 25.4                          | "                     | 10.5            | 112.90           | 5.79                                | 92.0                 |
| -12-33  | 5.95                                    | 8.3            | 23.4                          | "                     | 7.5             | 102.20           | 5.46                                | 84.5                 |
| -12-33  | 5.15                                    | 8.1            | 26.5                          | "                     | 4.5             | 85.40            | 5.63                                | 40.0                 |
| -12-33  | 3.50                                    | 7.7            | 26.2                          | Present               | Absent.         | 88.50            | 5.38                                | 62.5                 |
| verage. | <b>5.58</b>                             | <b>8.22</b>    | <b>25.7</b>                   | Nil.                  | <b>6.90</b>     | <b>97.94</b>     | <b>5.63</b>                         | <b>73.4</b>          |

TABLE V—Showing the length of Runs of Filters at work during 1933.

| Bed No. | Total No. of runs during the year. | Total No. of days. | Average No. of days per run. | Remarks. |
|---------|------------------------------------|--------------------|------------------------------|----------|
| 1       | 11                                 | 209                | 19.0                         |          |
| 2       | 12                                 | 237                | 19.8                         |          |
| 3       | 12                                 | 244                | 20.3                         |          |
| 4       | 11                                 | 206                | 18.7                         |          |
| 5       | 15                                 | 217                | 14.5                         |          |
| 6       | 10                                 | 193                | 19.3                         |          |
| 7       | 12                                 | 237                | 19.8                         |          |
| 8       | 12                                 | 196                | 16.3                         |          |
| 9       | 8                                  | 220                | 27.5                         |          |
| 10      | 10                                 | 228                | 22.8                         |          |
| 11      | 13                                 | 200                | 16.7                         |          |
| 12      | 9                                  | 161                | 17.9                         |          |
| 13      | 11                                 | 234                | 21.3                         |          |
| 14      | 10                                 | 175                | 17.5                         |          |
| 15      | Nil.                               | Nil.               | ...                          |          |
| 16      | Nil.                               | Nil.               | ...                          |          |
| 17      | Nil.                               | Nil.               | ...                          |          |

Table VI.—Showing the Chemical Results for 1933—(expressed in parts per 100,000).

| 1933        | Red Hills Lake.      | Raw-water Kilpauk end of R. W. Conduit. | Coarse Filtered Raw-water. | Filtrates from Beds. | Test tap Kilpauk Pumping Station. | Distribution System. |
|-------------|----------------------|-----------------------------------------|----------------------------|----------------------|-----------------------------------|----------------------|
| Months.     | Ammoniacal Nitrogen. | Albuminoid Nitrogen.                    | Ammoniacal Nitrogen.       | Ammoniacal Nitrogen. | Ammoniacal Nitrogen.              | Ammoniacal Nitrogen. |
|             | Absorbed Oxygen.     | Albuminoid Nitrogen.                    | Absorbed Oxygen.           | Albuminoid Nitrogen. | Albuminoid Nitrogen.              | Absorbed Oxygen.     |
| January ... | Trace                | Trace                                   | 0.102                      | 0.003                | 0.023                             | 0.075                |
| February... | Trace                | Trace                                   | 0.123                      | 0.005                | 0.032                             | 0.095                |
| March ...   | 0.002                | 0.001                                   | 0.144                      | 0.005                | 0.037                             | 0.095                |
| April ...   | 0.001                | Trace                                   | 0.135                      | 0.010                | 0.033                             | 0.088                |
| May ...     | 0.001                | 0.002                                   | 0.134                      | 0.004                | 0.028                             | 0.093                |
| June ...    | Trace                | Trace                                   | 0.156                      | 0.006                | 0.026                             | 0.101                |
| July ...    | 0.001                | 0.001                                   | 0.142                      | 0.002                | 0.032                             | 0.101                |
| August ...  | 0.005                | 0.002                                   | 0.161                      | 0.006                | 0.035                             | 0.114                |
| September.  | ...                  | Trace                                   | 0.186                      | 0.008                | 0.039                             | 0.103                |
| October ... | 0.003                | 0.002                                   | 0.165                      | 0.006                | 0.047                             | 0.118                |
| November.   | Trace                | Trace                                   | 0.153                      | 0.003                | 0.039                             | 0.127                |
| December.   | 0.008                | Trace                                   | 0.135                      | 0.004                | 0.036                             | 0.104                |
| Average ... | 0.002                | 0.001                                   | 0.145                      | 0.006                | 0.034                             | 0.092                |
|             |                      |                                         |                            | 0.119                | 0.032                             | 0.100                |
|             |                      |                                         |                            | 0.006                | 0.007                             | 0.034                |
|             |                      |                                         |                            |                      |                                   | 0.097                |

\* Samples were not collected.

TABLE VII.--Raw-water (Kilpauk end of the Raw-water conduit)  
Absorbed Oxygen in parts per 100,000.

| Year.               | 1924  | 1925  | 1926  | 1927  | 1928  | 1929  | 1930  | 1931  | 1932  | 1933  | Month<br>war<br>average. |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------------|
| January             | 0.158 | 0.136 | 0.127 | 0.135 | 0.146 | 0.143 | 0.155 | 0.141 | 0.129 | 0.102 | 0.136                    |
| February            | 0.179 | 0.140 | 0.139 | 0.187 | 0.150 | 0.140 | 0.175 | 0.139 | 0.133 | 0.123 | 0.151                    |
| March               | 0.195 | 0.170 | 0.175 | 0.208 | 0.182 | 0.154 | 0.186 | 0.128 | 0.138 | 0.144 | 0.168                    |
| April               | 0.209 | 0.177 | 0.150 | 0.209 | 0.169 | 0.179 | 0.237 | 0.145 | 0.135 | 0.135 | 0.174                    |
| May                 | 0.199 | 0.206 | 0.156 | 0.197 | 0.147 | 0.187 | 0.200 | 0.159 | 0.171 | 0.184 | 0.176                    |
| June                | 0.198 | 0.209 | 0.176 | 0.205 | 0.162 | 0.191 | 0.201 | 0.152 | 0.192 | 0.156 | 0.183                    |
| July                | 0.201 | 0.201 | 0.177 | 0.213 | 0.235 | 0.221 | 0.176 | 0.140 | 0.168 | 0.142 | 0.187                    |
| August              | 0.210 | 0.216 | 0.186 | 0.227 | 0.237 | 0.224 | 0.196 | 0.153 | 0.184 | 0.16  | 0.199                    |
| September           | 0.223 | 0.192 | 0.195 | 0.291 | 0.220 | 0.217 | 0.230 | 0.154 | 0.157 | 0.186 | 0.206                    |
| October             | 0.200 | 0.162 | 0.181 | 0.289 | 0.219 | 0.201 | 0.154 | 0.141 | 0.156 | 0.165 | 0.187                    |
| November            | 0.160 | 0.143 | 0.142 | 0.167 | 0.141 | 0.157 | 0.157 | 0.121 | 0.113 | 0.153 | 0.145                    |
| December            | 0.152 | 0.141 | 0.149 | 0.130 | 0.150 | 0.131 | 0.092 | 0.110 | 0.092 | 0.135 | 0.128                    |
| Yearwar average ... | 0.190 | 0.174 | 0.163 | 0.205 | 0.179 | 0.179 | 0.180 | 0.140 | 0.147 | 0.145 | 0.170                    |

TABLE VIII.—Showing the Applied Dose of Chlorine for Filtered water.

| 1933.                | Applied dose<br>parts per<br>million. | Remarks                                                                                              |
|----------------------|---------------------------------------|------------------------------------------------------------------------------------------------------|
| January              | 0.63                                  |                                                                                                      |
| February             | 0.63                                  | 0.63 — 0.71.                                                                                         |
| March                | 0.66                                  | 0.60 — 0.68.                                                                                         |
| April                | 0.67                                  | 0.66 — 0.68 (0.66 for 5 days.)                                                                       |
| May                  | 0.68                                  | 0.63 — 0.66 (0.63 for 2 days.)                                                                       |
| June                 | 0.66                                  | 0.63 — 0.66 (0.63 for 5 days.)                                                                       |
| July                 | 0.66                                  | 0.63 — 0.66 (0.63 for 10 days.)                                                                      |
| August               | 0.65                                  |                                                                                                      |
| September            | 0.66                                  |                                                                                                      |
| October              | 0.70                                  | 0.55 — 1.09.<br>8 days — 0.66.<br>1 day — 0.60.<br>12 days — 0.55.<br>2 days — 0.57.<br>8 days — 1.0 |
| November             | 1.0                                   |                                                                                                      |
| December             | 1.0                                   |                                                                                                      |
| Average for the year | 0.72                                  |                                                                                                      |

• TABLE X—Showing the quantity of water filtered during 1933.

| Bed No. | Quantity of water in million gallons filtered at |                        | Total quantity filtered in million gallons. | Remarks. |
|---------|--------------------------------------------------|------------------------|---------------------------------------------|----------|
|         | 8" vertical per hour.                            | 12" vertical per hour. |                                             |          |
| 1       | 136.50                                           | 323.00                 | 459.50                                      |          |
| 2       | 175.50                                           | 450.00                 | 625.50                                      |          |
| 3       | 164.00                                           | 486.00                 | 650.00                                      |          |
| 4       | 187.00                                           | 339.00                 | 526.00                                      |          |
| 5       | 123.00                                           | 468.00                 | 591.00                                      |          |
| 6       | 96.50                                            | 547.00                 | 643.50                                      |          |
| 7       | 159.00                                           | 474.00                 | 633.00                                      |          |
| 8       | 195.75                                           | 297.00                 | 492.75                                      |          |
| 9       | 120.00                                           | 480.00                 | 600.00                                      |          |
| 10      | 192.50                                           | 396.00                 | 588.50                                      |          |
| 11      | 96.00                                            | 456.00                 | 552.00                                      |          |
| 12      | 136.00                                           | 279.00                 | 415.00                                      |          |
| 13      | 93.40                                            | 374.75                 | 468.15                                      |          |
| 14      | 122.00                                           | 339.00                 | 461.00                                      |          |
| 15      | Nil.                                             | Nil.                   | Nil.                                        |          |
| 16      | Nil.                                             | Nil.                   | Nil.                                        |          |
| 17      | Nil.                                             | Nil.                   | Nil.                                        |          |
| 1997.15 |                                                  | 5708.75                | 7705.90                                     |          |

Average quantity of water filtered per day—21.11 million gallons.

## APPENDIX A.

Results of Analysis of samples of sewage collected from the well in the Napier Park Sewage Pumping Station, Madras.

Date of Collection :— 7-9-1933. (Thursday).

Date of Analysis :— 8-9-1933. (Friday).

Results expressed in parts per 100,000.

|      |                                   | 8 A. M.    | 12 A. M. | 4 P. M. | 8 P. M. |
|------|-----------------------------------|------------|----------|---------|---------|
| I.   | Suspended solids (by centrifuge)  | ... 560.0  | 65.0     | 33.0    | 28.0    |
|      | (a) Per cent Organic matter       | ... 6.7    | 69.2     | 60.6    | 60.7    |
|      | (b) Per cent Inorganic matter     | ... 93.3   | 30.8     | 39.4    | 39.3    |
| II.  | Ammoniacal Nitrogen               | ... 6.56   | 2.80     | 1.36    | 1.68    |
| III. | Albuminoid Nitrogen               | ... 4.80   | 2.80     | 1.32    | 1.52    |
| IV.  | Oxygen absorbed 3 minutes at 80°F | ... 5.258  | 4.948    | 3.402   | 2.371   |
| V.   | Oxygen absorbed 4 hours at 80°F   | ... 16.722 | 11.546   | 6.494   | 6.598   |
| VI.  | Alkalinity (Methyl orange)        | ... 40.0   | 39.0     | 38.0    | 33.0    |

## APPENDIX A.—(Contd.)

## Madras Sewage Analysis.

Place :—From the well in Napier Park Sewage Pumping Station.

Date of Collection :— 5-10-1933 (Thursday).

Date of Analysis :— 6-10-1933 (Friday).

Results expressed in parts per 100,000.

|                                               | 8 A. M. | 12 A. M. | 4 P. M. | 8 P. M. |
|-----------------------------------------------|---------|----------|---------|---------|
| I. Suspended Solids (by centrifuge) ...       | 60.0    | 56.0     | 63.0    | 43.0    |
| (a) Per cent Organic matter ...               | 56.7    | 67.9     | 63.5    | 60.5    |
| (b) Per cent Inorganic matter ...             | 43.3    | 32.1     | 36.5    | 39.5    |
| II. Ammoniacal Nitrogen ...                   | 5.3     | 4.6      | 3.0     | 2.4     |
| III. Albuminoid Nitrogen ...                  | 1.2     | 3.0      | 0.9     | 1.2     |
| IV. Oxygen absorbed in 3 minutes at 80° F ... | 5.67    | 6.43     | 5.86    | 8.60    |
| V. Oxygen absorbed in 4 hours at 80° F ...    | 10.95   | 11.72    | 11.59   | 14.84   |
| VI. Alkalinity ...                            | ...     | ...      | ...     | ...     |

## APPENDIX A.—(Contd.)

## Madras Sewage Analysis.

Place :—From the well in Napier Park Sewage Pumping Station.

Date of Collection :— 24-11-33 (Friday).

Date of Analysis :— 25-11-33 (Saturday).

Results expressed in parts per 100,000.

|                                               | 8 A. M. | 12 A. M. | 4 P. M. | 8 P. M. |
|-----------------------------------------------|---------|----------|---------|---------|
| I. Suspended Solids (by centrifuge) ...       | 49.0    | 96.0     | 36.00   | 85.00   |
| (a) Per cent Organic matter ...               | 67.35   | 79.16    | 63.89   | 82.35   |
| (b) Per cent Inorganic matter ...             | 32.65   | 20.84    | 36.11   | 17.65   |
| II. Ammoniacal Nitrogen ...                   | 5.65    | 3.90     | 0.79    | 2.7     |
| III. Albuminoid Nitrogen ...                  | 0.9     | 5.1      | 0.8     | 3.6     |
| IV. Oxygen absorbed in 3 minutes at 80° F ... | 4.89    | 5.59     | 2.15    | 7.01    |
| V. Oxygen absorbed in 4 hours at 80° F ...    | 7.95    | 16.93    | 7.18    | 17.71   |
| VI. Alkalinity ...                            | ...     | ...      | ...     | ...     |

## APPENDIX A.—(Contd.)

## Madras Sewage Analysis.

Place :—From the well in Napier Park Sewage Pumping Station.

Date of Collection :— 25-11-1933 (Saturday).

Date of Analysis :— 26-11-1933 (Sunday).

Results expressed in parts per 100,000.

|                                              | 8 A. M. | 12 A. M. | 4 P. M. | 8 P. M. |
|----------------------------------------------|---------|----------|---------|---------|
| I. Suspended Solids (by centrifuge) ...      | 63.00   | 53.00    | ...     | ...     |
| (a) Per cent Organic matter ...              | 63.5    | 64.15    | ...     | ...     |
| (b) Per cent Inorganic matter ...            | 36.5    | 35.85    | ...     | ...     |
| II. Ammoniacal Nitrogen ...                  | 1.45    | 1.30     | 1.90    | 1.00    |
| III. Albuminoid Nitrogen ...                 | 1.20    | 0.90     | 0.90    | 0.40    |
| IV. Oxygen absorbed in 3 minutes at 80°F ... | 3.30    | 3.44     | 2.20    | 1.93    |
| V. Oxygen absorbed in 4 hours at 80°F ...    | 7.59    | 8.00     | 5.70    | 5.12    |
| VI. Alkalinity (Methyl Orange) ..            | ...     | ...      | ...     | ...     |

## APPENDIX A.—(Contd.)

## Madras Sewage Analysis.

Place :—From the well in Napier Park Sewage Pumping Station.

Date of Collection :— 26-11-1933 (Sunday).

Date of Analysis :— 27-11-1933 (Monday).

Results expressed in parts per 100,000.

|                                              | 8 A. M. | 12 A. M. | 4 P. M. | 8 P. M. |
|----------------------------------------------|---------|----------|---------|---------|
| I. Suspended Solids (by centrifuge) ...      | ...     | ...      | ...     | ...     |
| II. Ammoniacal Nitrogen ...                  | 2.8     | 0.9      | 0.9     | 2.2     |
| III. Albuminoid Nitrogen ...                 | 3.4     | 1.4      | 0.9     | 0.8     |
| IV. Oxygen absorbed in 3 minutes at 80°F ... | 10.78   | 4.31     | 2.41    | 2.00    |
| V. Oxygen absorbed in 4 hours at 80°F ...    | 27.22   | 12.73    | 6.37    | 4.95    |
| VI. Alkalinity (Methyl Orange) ...           | 43.0    | 33.0     | 32.0    | 29.0    |

## APPENDIX B.

Results of Analysis of Samples collected from the River Cooum during the year 1933.

| Date.    | Description of Sample.                                                                                       | Temperature of Surface Water. | Dissolved Oxygen in cc per litre. | Three minutes' test for Oxygen absorbed Results expressed in parts per 100,000. |                                         | Chlorine in parts per 100,000. | Percentage of ignitable matter in bottom mud. |
|----------|--------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------------|---------------------------------------------------------------------------------|-----------------------------------------|--------------------------------|-----------------------------------------------|
|          |                                                                                                              |                               |                                   | Before incubation.                                                              | After incubation at 37°C for four days. |                                |                                               |
| 18-1-33  | Taken near Anderson Bridge, about 100 ft. from the central column ...                                        | ...                           | ...                               | 0.086                                                                           | 0.058                                   | 28.0                           | 2.87                                          |
| "        | Taken near Commander-in-Chief's Bridge on the eastern side on the Connemara Hotel side                       | ...                           | ...                               | 0.134                                                                           | 0.067                                   | 33.0                           | 5.22                                          |
| "        | Taken opposite the back yard of 27, Perumal Mudali Street, Munnar-swami Koil, Mount Road ...                 | ...                           | ...                               | 0.246                                                                           | 0.067                                   | 38.0                           | 4.59                                          |
| "        | Taken near the junction of the river and the storm water over-flow in Napier Park, West of Wellington Bridge | ...                           | ...                               | 0.200                                                                           | 0.086                                   | 58.0                           | 38.80                                         |
| "        | Taken in front of Military Secretary's Bungalow opposite to M. W. L. Mark on the other bank of the river     | ...                           | ...                               | 0.200                                                                           | 0.134                                   | 60.0                           | 3.53                                          |
| "        | Taken near the lock before entrance into Buckingham Canal                                                    | ...                           | ...                               | 0.277                                                                           | 0.260                                   | 72.0                           | 4.50                                          |
| 26-1-33  | Taken near Munro's Bridge                                                                                    | ...                           | 2.75                              | ...                                                                             | ...                                     | 33.0                           | ...                                           |
| "        | Taken opposite Tuberculosis Hospital in Spur Tank Road between Munro's Bridge and Anderson Bridge            | ...                           | ...                               | ...                                                                             | ...                                     | 33.0                           | ...                                           |
| "        | Taken near Anderson Bridge                                                                                   | ...                           | ...                               | ...                                                                             | ...                                     | 38.0                           | ...                                           |
| "        | Taken near Commander-in-Chief's Bridge on the Connemara Hotel side                                           | ...                           | 2.2                               | ...                                                                             | ...                                     | 160                            | ...                                           |
| "        | Taken midway between Commander-in-Chief's Bridge and Harris Bridge                                           | ...                           | 2.2                               | ...                                                                             | ...                                     | 350                            | ...                                           |
| "        | Taken near Harris Bridge                                                                                     | ...                           | ...                               | ...                                                                             | ...                                     | 360                            | ...                                           |
| "        | Taken near St. Andrew's Bridge                                                                               | ...                           | ...                               | ...                                                                             | ...                                     | 450                            | ...                                           |
| "        | Taken midway between St. Andrew's Bridge and Law's Bridge                                                    | ...                           | ...                               | ...                                                                             | ...                                     | 520                            | ...                                           |
| "        | Taken near Law's Bridge                                                                                      | ...                           | ...                               | ...                                                                             | ...                                     | 570                            | ...                                           |
| "        | Taken near Wellington Bridge at the junction of the river with Napier Park sewage outflow                    | ...                           | 1.43                              | ...                                                                             | ...                                     | 620                            | ...                                           |
| "        | Taken opposite Military Secretary's Bungalow                                                                 | ...                           | 1.76                              | ...                                                                             | ...                                     | 620                            | ...                                           |
| "        | Taken near Chepaok Lock                                                                                      | ...                           | 1.54                              | ...                                                                             | ...                                     | 890                            | ...                                           |
| 15-11-33 | Taken near Anderson Bridge about 100 ft. from the central column on the eastern side                         | ...                           | ...                               | ...                                                                             | ...                                     | 50                             | 2.11                                          |
| "        | Taken near Commander-in-Chief's Bridge on the Connemara Hotel side                                           | ...                           | ...                               | ...                                                                             | ...                                     | 230                            | 4.73                                          |

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## APPENDIX A—(Contd.)

Investigation of soil conditions in Korukupet Rubbish Depot, Corporation of Madras.  
Date of Examination—25-2-1933.

| Source. (Refer to the sketch map for detailed information). | Character of the soil below surface.         |                            |                               | pH. of soil determined by using B. D. H. soil testing outfit and Indicator solution. |              |              | Remarks.                                                                    |
|-------------------------------------------------------------|----------------------------------------------|----------------------------|-------------------------------|--------------------------------------------------------------------------------------|--------------|--------------|-----------------------------------------------------------------------------|
|                                                             | ½ ft.                                        | 1 ft.                      | 2 ft.                         | ½ ft.                                                                                | 1 ft.        | 2 ft.        |                                                                             |
| A                                                           | Plenty of debris black soil moist.           | Debris less black soil.    | Debris still less black soil. | Blue Colour.                                                                         | Blue Colour. | Blue Colour. | Not much vegetation.                                                        |
| B                                                           | Debris little brownish soil.                 | Debris less brownish soil. | Debris less brownish soil.    | Blue Colour.                                                                         | Blue Colour. | Blue Colour. | Shrubs growing in plenty.                                                   |
| C                                                           | ...                                          | ...                        | Debris little soil black.     | ...                                                                                  | ...          | Blue Colour. | Soil from this place is being removed by a contractor—forms a little mound. |
| D                                                           | Debris in plenty black soil.                 | Debris less black soil.    | Debris less soil black.       | Blue Colour.                                                                         | Blue Colour. | Blue Colour. | No vegetation.                                                              |
| E                                                           | Big solid particles in plenty soil brownish. | Debris less black soil.    | Debris less black soil.       | Blue Colour.                                                                         | Blue Colour. | Blue Colour. | No vegetation.                                                              |
| F                                                           | Debris little.                               | ...                        | ...                           | Blue Colour.                                                                         | ...          | ...          | Shrubs growing in plenty.                                                   |
| G                                                           | Debris little.                               | ...                        | ...                           | Blue Colour.                                                                         | ...          | ...          | Shrubs growing in plenty.                                                   |

A blue colour indicates an Alkaline soil and implies the probability of a reserve of lime in the soil.

## APPENDIX B.

Analysis of a Sample of Water taken from the Buckingham Canal, north of Korukupet (about 200 yards from the Bridge, Collected on 30-8-1933)

|                                        | Results expressed in parts per 100,000. |                          |
|----------------------------------------|-----------------------------------------|--------------------------|
| 1. Colour and Transparency             | ...                                     | ... Greenish and opaque. |
| 2. Smell                               | ...                                     | Nil.                     |
| 3. Reaction                            | ...                                     | Alkaline.                |
| 4. Total Solids                        | ...                                     | 2434.0                   |
| 5. Suspended Solids                    | ...                                     | 98.0                     |
| 6. Solids in Solution                  | ...                                     | 2336.0                   |
| 7. Alkalinity (Methyl Orange)          | ...                                     | 25.0                     |
| 8. Chlorine                            | ...                                     | 1140.0                   |
| 9. Ammoniacal Nitrogen                 | ...                                     | 0.196                    |
| 10. Albuminoid Nitrogen                | ...                                     | 0.224                    |
| 11. Oxygen absorbed—4 hours (Tidy's)   | ...                                     | 0.896                    |
| 12. Nitrite                            | ...                                     | Nil.                     |
| 13. Nitrate                            | ...                                     | Trace.                   |
| 14. Dissolved Oxygen in c.c. per litre | ...                                     | 1.82                     |
| 15. Temperature of surface Water       | ...                                     | 30.5 C                   |

## APPENDIX B—contd.

Results of Analysis of Samples collected from the river Cooum during the year 1933—Contd.

| Date.    | Description of Sample.                                                                                   | Temperature of Surface Water. | Dissolved Oxygen in cc. per litre. | Three minutes' test for Oxygen absorbed. Results expressed in parts per 100,000. |                                         | Chlorine in parts per 100,000 | Percentage of ignitable matter in bottom mud. |
|----------|----------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------|-------------------------------|-----------------------------------------------|
|          |                                                                                                          |                               |                                    | Before incubation.                                                               | After incubation at 37°C for four days. |                               |                                               |
| 15-11-33 | Taken near Mannarswami Koil side Mount Road                                                              | ...                           | ...                                | ...                                                                              | ...                                     | 340                           | ...                                           |
| "        | Taken near Wellington Bridge at the junction of the river with the Napier Park Sewage outflow            | ...                           | ...                                | ...                                                                              | ...                                     | 640                           | 9.45                                          |
| "        | Taken in front of Military Secretary's Bungalow opposite M.W.L. Mark on the other side of the river      | ...                           | ...                                | ...                                                                              | ...                                     | 720                           | ...                                           |
| "        | Taken near Chepauk Lock                                                                                  | ...                           | ...                                | ...                                                                              | ...                                     | 830                           | ...                                           |
| 30-11-33 | Taken 100 yards east of Munro's Bridge                                                                   | 28.0°C                        | 4.0                                | ...                                                                              | ...                                     | 60                            | ...                                           |
| "        | Taken opposite Tuberculosis Hospital midway between Munro's Bridge and Anderson Bridge                   | 28.0°C                        | 3.36                               | ...                                                                              | ...                                     | 270                           | ...                                           |
| "        | Taken near Anderson Bridge                                                                               | 28.0°C                        | 3.50                               | ...                                                                              | ...                                     | 500                           | 3.46                                          |
| "        | Taken near Commander-in-Chief's Bridge on the Connemara Hotel side                                       | 28.0°C                        | 2.49                               | ...                                                                              | ...                                     | 630                           | 8.96                                          |
| "        | Taken 100 yards south of Harris Bridge                                                                   | 26.20°C                       | 4.84                               | ...                                                                              | ...                                     | 640                           | 4.11                                          |
| "        | Taken near Mannarswami Koil side                                                                         | ...                           | ...                                | ...                                                                              | ...                                     | ...                           | ...                                           |
| "        | Taken 50 yards south of Andrew's Bridge                                                                  | 28.0°C                        | 2.75                               | ...                                                                              | ...                                     | 670                           | ...                                           |
| "        | Taken midway between St. Andrew's Bridge and Law's Bridge                                                | 28.0°C                        | 2.22                               | ...                                                                              | ...                                     | 680                           | ...                                           |
| "        | Taken 100 yards east of Law's Bridge where the river bifurcates                                          | 28.0°C                        | 2.78                               | ...                                                                              | ...                                     | 720                           | ...                                           |
| "        | Taken near Wellington Bridge at the junction of the river with Napier Park Sewage outflow                | 28.0°C                        | 3.01                               | ...                                                                              | ...                                     | 720                           | ...                                           |
| "        | Taken in front of Military Secretary's Bungalow opposite to M. W. L. Mark on the other bank of the river | 23.0°C                        | 2.42                               | ...                                                                              | ...                                     | 790                           | 16.90                                         |
| "        | Taken near Chepauk Lock                                                                                  | 28.0°C                        | 1.90                               | ...                                                                              | ...                                     | 830                           | ...                                           |
| "        | Taken near Chepauk Lock                                                                                  | 28.20°C                       | 2.03                               | ...                                                                              | ...                                     | 900                           | ...                                           |

## APPENDIX C.

Experiments carried out with Alumino-ferric and Sulphuric Acid for improving the Sanitary quality of Krishnappa Naick Tank water.

## 1. Description of the Tank—

|                                 |                         |
|---------------------------------|-------------------------|
| (a) Length :—                   | ... 285 feet.           |
| (b) Breadth                     | ... 230 "               |
| (c) Depth { Maximum             | ... 12 "                |
| { Minimum                       | ... 8 "                 |
| (d) Capacity of the tank        | ... 598,000 cubic feet. |
| (e) Volume of water in the Tank | ... 322,000 "           |

## 2. Physical condition—

|                             |                        |
|-----------------------------|------------------------|
| (a) Colour and Transparency | ... Greenish & Opaque. |
| (b) Smell                   | ... Grassy odour.      |

## 3. Chemical condition—

Results of analysis of a sample collected on 9-11-33.

|                                                    |                          |
|----------------------------------------------------|--------------------------|
|                                                    | In parts per 100,000     |
| (a) Ammoniacal Nitrogen                            | ... 0.004 "              |
| (b) Albuminoid Nitrogen                            | ... 0.123 "              |
| (c) Absorbed oxygen { (1) Unfiltered water         | ... 3.616 "              |
| (2) Filtered water                                 | ... 1.260 "              |
| (d) Total Hardness                                 | ... 16 parts per 100,000 |
| (e) Permanent Hardness                             | ... 3 "                  |
| (f) Temporary Hardness                             | ... 13 "                 |
| (g) Chlorine                                       | ... 53.0 "               |
| (h) Phosphate                                      | ... Nil.                 |
| (i) Nitric Nitrogen                                | ... Nil.                 |
| (j) Nitrous Nitrogen                               | ... Nil.                 |
| (k) Carbonic Acid (Calculated as CO <sub>2</sub> ) | ... 3.6 mg. per 100 c.c. |
| (l) Bicarbonic Acid ( " H CO <sub>3</sub> )        | ... 32.13mg. per "       |
| (m) Hydrogenion Concentration (pH)                 | ... 8.8                  |
| (n) Silica                                         | ... Present.             |

## 4. Biological condition—

Dominant algae:—*Clothrocystis aeroginosa* and *Spirulina*.

## 5. Experiments with—

- (a) Copper Sulphate.  
(b) Sulphuric Acid.  
(c) Alumino ferric.  
(d) Alumino ferric and Sulphuric Acid.

## 6. The effect of addition of Chemicals after 48 hours—

Experiment—(a) Using varying doses of copper Sulphate:—Scum floating—bad smell—no clarity.

Experiment—(b) Using Sulphuric Acid—8 c.c. of the acid added to a gallon of water renders it clear.

Experiment—(c) Using Alumino ferric Solution:—Clear but thin Scum floating—unpleasant odour.

Experiment—(d) Using Alumino ferric and Sulphuric Acid—4 c.c. of Sulphuric Acid and 4 grains of Alumino ferric per gallon renders a gallon of water clear and odourless.

## 7. Cost of treating the tank with—

|                                            |                          |
|--------------------------------------------|--------------------------|
| (a) Sulphuric Acid                         |                          |
| The Volume of water in the tank in gallons | ... 2,012,500            |
| The dose of Sulphuric Acid                 | ... 8 c.c. per gallon.   |
| The amount of Sulphuric Acid required      | ... 64400 lbs.           |
| The cost of the Acid at 0-6-0 per lb.      | ... Rs. 24,150.          |
| (b) Alum                                   |                          |
| Dose of Alum                               | ... 4 grains per gallon. |
| Alum required to treat 2,012,500 gallons   | ... 1150 lbs.            |
| 1 cwt. of Alum costs                       | ... Rs. 10.              |
| The cost of 10 cwts & 30 lbs.              | ... Rs. 103.             |

## 8. The attempt to improve the Sanitary quality of the tank water had to be abandoned as it involved a lot of money.

**Annual Report on the working of the Child Welfare Scheme,  
Corporation of Madras for the year 1933.**

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The most outstanding feature in the record of work of the Child Welfare Scheme, Corporation of Madras during the year 1933 is the Ante Natal work. The increasing number of expectant mothers who attended the centres shows the appreciation of the Ante Natal work done by the Child Welfare Scheme.

As already pointed out in my report for the year 1932, the Ad Hoc. Committee's recommendations mainly those relating to Ante Natal work, Maternity Service and Booked cases have been carried out on the lines recommended by the Committee. It has not however been possible to give effect to those recommendations which affected the finances.

**Personnel.**

It is regretted that Dr. D. Devanesen, permanent Lady Superintendent who was on long medical leave, expired on 25-10-1933 and Dr. H. V. Kamalammal, permanent Lady Doctor, Triplicane, Centre, continued to act in this vacancy during the year under review. Dr. C. M. Leelavathy who was acting in the place of Lady Doctor, Triplicane Centre, took up a post under Government and Dr. L. D'Cunha was appointed in her place from 9-12-1933. Dr. R. H. Sharada was appointed as acting Relieving Lady Doctor from 19-7-1933.

**Staff.**

There were 13 Lady Doctors, 82 Midwives and 31 Health Visitors attached to the Scheme.

**Work of the Staff.**

During the year under report 14,948 cases of labour (i.e., 52.4 per cent of the total births in the City came under the care of the Child Welfare Scheme. Of these 12,133 cases were actually conducted by the Midwives of the Scheme, 1,650 cases were taken over by the Child Welfare Staff after barber women had conducted the labour and 1,165 cases were sent to various Hospitals. Compared with 1932 there is a slight fall of 160 cases. *Vide* Statement No. 1. This is due to the fact that the Child Welfare Staff had to carry out the following recommendation of the Ad Hoc. Committee viz.,

"There should be no Maternity Service by the Corporation for those whose income is above Rs. 50."

The difference is due chiefly to barber women cases, as the middle class people whose income is above Rs. 50 engaged barber women after the introduction of this rule.

The total number of visits paid by the Lady Doctors was 15,554. They treated also 5,355 morbid cases. The total number of women and children treated at the out-patient clinic was 2,53,942. The average daily attendance was 695.7. The Lady Doctors treated expectant and nursing mothers and children not more than 5 years old. The total number of visits paid by Health Visitors was 1,65,341. The total number of visits paid by midwives was 1,80,200. *Vide* Statements II, IV & VII.

**Ante Natal Work.**

The total number of prematernity cases registered by Health Visitors was 13,584. Of these as many as 10,486 were expectant mothers and they attended the Centres for Ante Natal advice and treatment. The large attendance of expectant mothers is an index to the growing appreciation of the work of the Scheme. *Vide* Statement III.

**Maternity Service.**

Some difficulty is experienced in giving effect to the rule that the Scheme should not render service to people whose income is more than Rs. 50. Some persons note their income to be less than Rs. 50 and avail themselves of the Corporation Maternity Service free of cost. To meet such cases the following "Maternity Service Cards" are printed on :—

"In case it is brought to the notice of the Corporation that a person whose income is more than Rs. 50 is found to have utilized the Corporation Maternity Service, the Corporation should recover from such a person a sum not less than Rs. 50."

It frequently happens that when this card is offered for signature, the person concerned quietly withdraws.

**Booked Cases.**

Out of the total of 14,948 cases, 10,486 i.e., 70.1% are booked cases. The Child Welfare Scheme has still to keep the public informed that Corporation Maternity Service will not be available to such pregnant women as have not taken care to register themselves in time, i.e., at least one month before the date of confinement.

**Abortion.**

The total number of abortions treated during the year was 83. In accordance with the Ad Hoc. Committee's recommendation the Child Welfare staff has not conducted any case of abortion that took place within 20 weeks of pregnancy. The rest of the cases were advised to adopt the best possible course. *Vide* Statement VI.

**Maternal Mortality.**

Out of a total of 14,948 cases which came under the observation of the Scheme, there were 46 cases of maternal mortality of which 30 occurred among complicated cases sent to hospitals, 6 handed over to private doctors, 4 under Vydians and 1 under barber women. Only 5 cases of death took place among those treated by the Scheme. This gives a percentage of .31 which is the lowest on record (*Vide* Statement V a, b and c).

**Infantile Mortality.**

15,108 babies which came under the observation of the Child Welfare Scheme in 1932, were actually born during the said year. Of these 564 were still births and 14,544 were live births which were kept under the observation of the Scheme, during their first year of life i.e., during 1933. The mortality among the live births was 2,156. This gives an infantile mortality rate of 142.7 per mille as against 131.3 of 1932. This rise must be attributed to the same causes as those that contributed to the rise in 1933 of the infantile mortality for the whole City to 264.3 from 236.5 of the previous year. *Vide* Statements VIII and IX.

**Ambulance Car.**

The total number of calls answered by the car was 566.

**Milk Supply.**

454 babies received free milk supply during the year as against 626 of the previous year. The fall in number is due to compulsory centre feeding which was carried on satisfactorily at all the Centres. The cows are brought to the centres both morning and evening and milk is drawn in the presence of the Resident Health Visitor. The empty vessels are shown to the Resident Health Visitor before milking, and the milk is measured after froth subsides. The milk is accepted only when the specific gravity is 1.028. After pasteurization the milk is distributed to infants. The milk is diluted according to the age of each baby. Two centre feeds are given, one in the morning and another in the evening and the rest of the milk is allowed to be taken home. The babies are weighed every fortnight. *Vide* Statement X.

**Bath.**

During the year 91,685 babies were given warm baths. Bath is restricted to children of pre-school age i.e., up to 5 years. *Vide* Statement XI.

**Health Propaganda.**

580 lectures were delivered at the various Child Welfare Centres. Of these 238 lectures were delivered with the aid of the magic lantern and 49 lectures with cinema. 293 were outdoor lectures. The total attendance was 32,011. *Vide* Statement XII.

**Conclusion.**

The workers are grateful for all help and encouragement received from the public. The record of work set out above affords ground for the belief that the work of the Scheme is receiving a steadily increasing measure of public appreciation.

This Scheme itself has to keep on improving and it can be done only when the handicaps to the successful working of the Scheme disappear with increasing confidence in its work.

Dated, 16—6—34.

H. V. KAMALAMMAL,  
Ag. Lady Superintendent,  
Child Welfare Scheme.

## STATEMENT I.

Statement showing the cases of labour which came under the observation of the staff of the Child Welfare Scheme from January to December 1933 with comparative statements for the years 1918 ; 1928 to 1932.

| Statement showing the cases of labour which came under the provisions of the Factories Act, 1948, for the years 1918 ; 1928 to 1932. |                    |                           |                                                 |                     |              |                 |                     |                                        |  |
|--------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------|-------------------------------------------------|---------------------|--------------|-----------------|---------------------|----------------------------------------|--|
| Period.                                                                                                                              | Centres.           | How conducted.            |                                                 |                     | Total cases. | Caste.          |                     | Remarks.                               |  |
|                                                                                                                                      |                    | By Nurses of the C. W. S. | Taken over after Barber Women conducted labour. | Taken to Hospitals. |              | Maho-<br>madan. | Non-Maho-<br>madan. |                                        |  |
|                                                                                                                                      |                    |                           |                                                 |                     |              |                 |                     |                                        |  |
| From 1st January to 31st December 1933 ...                                                                                           | Triplicane ...     | 1,602                     | 101                                             | 22                  | 1,725        | 740             | 985                 | Divisions.<br>24th, 25th & 27th.       |  |
|                                                                                                                                      | Washermanpet ...   | 1,074                     | 249                                             | 136                 | 1,459        | 249             | 1,210               | 3rd & 4th.                             |  |
|                                                                                                                                      | Purasawalkam ...   | 1,043                     | 67                                              | 70                  | 1,180        | 54              | 1,126               | 18th & 21st.                           |  |
|                                                                                                                                      | George Town ...    | 1,642                     | 193                                             | 125                 | 1,960        | 105             | 1,855               | 8th, 10th, 12th, 13th,<br>14th & 15th. |  |
|                                                                                                                                      | Nungambakkam.      | 304                       | 178                                             | 90                  | 572          | 48              | 524                 | 22nd.                                  |  |
|                                                                                                                                      | Mirsaibpet ...     | 1,143                     | 122                                             | 87                  | 1,352        | 231             | 1,121               | 26th, 28th & 30th.                     |  |
|                                                                                                                                      | Muthialpet ...     | 1,049                     | 83                                              | 131                 | 1,268        | 320             | 948                 | 5th, 6th, 7th, & 9th.                  |  |
|                                                                                                                                      | Royapuram ...      | 891                       | 91                                              | 118                 | 1,130        | 99              | 1,031               | 1st & 2nd.                             |  |
|                                                                                                                                      | Perambur ...       | 982                       | 130                                             | 125                 | 1,237        | 292             | 945                 | 16th.                                  |  |
|                                                                                                                                      | Egmore ...         | 823                       | 180                                             | 81                  | 1,084        | 136             | 948                 | 20th & 23rd.                           |  |
|                                                                                                                                      | Royapettah ...     | 560                       | 134                                             | 58                  | 752          | 65              | 687                 | 29th                                   |  |
|                                                                                                                                      | Choolai ...        | 1,020                     | 117                                             | 92                  | 1,229        | 56              | 1,173               | 17th & 19th.                           |  |
|                                                                                                                                      | Total for 1933 ... | 12,133                    | 1,650                                           | 1,165               | 14,948       | 2,395           | 12,553              |                                        |  |
|                                                                                                                                      | 1932 ...           | 11,777                    | 1,978                                           | 1,358               | 15,108       | 2,801           | 12,306              |                                        |  |
| 1931 ...                                                                                                                             | 10,449             | 1,821                     | 1,244                                           | 13,514              | 2,077        | 11,437          |                     |                                        |  |
| 1930 ...                                                                                                                             | 9,733              | 1,738                     | 1,129                                           | 12,600              | 2,027        | 10,573          |                     |                                        |  |
| 1929 ...                                                                                                                             | 8,585              | 1,796                     | 1,027                                           | 11,416              | 1,862        | 9,546           |                     |                                        |  |
| 1928 ...                                                                                                                             | 8,216              | 1,541                     | 1,136                                           | 10,893              | 1,967        | 8,926           |                     |                                        |  |
| 1918 ...                                                                                                                             | 550                | 77                        | 54                                              | 681                 | ...          | ...             | ...                 |                                        |  |

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## STATEMENT II.

Table showing the total attendance of Children and Mothers at the Child Welfare Centres during 1933.

| From 1st<br>January to 31st<br>December 1933. | Age.          |               |                |        | Total New<br>Attendance. | Nature of disease. |             |                 |            |                          |          |           |         | Total attendance<br>for the year. | Pregnant women<br>treated at the<br>Centres. | Average Daily<br>Attendance. |               |
|-----------------------------------------------|---------------|---------------|----------------|--------|--------------------------|--------------------|-------------|-----------------|------------|--------------------------|----------|-----------|---------|-----------------------------------|----------------------------------------------|------------------------------|---------------|
|                                               | Under 1 year. | 1 to 5 years. | 5 to 10 years. | Women. |                          | Respiratory.       | Alimentary. | Skin affection. | Influenza. | Ear and Eye<br>diseases. | Malaria. | Syphilis. | Anemia. |                                   |                                              |                              | Other causes. |
|                                               |               |               |                |        |                          |                    |             |                 |            |                          |          |           |         |                                   |                                              |                              |               |
| Triplicane                                    | 4,110         | 2,671         | ...            | 4,294  | 11,075                   | 3,083              | 2,327       | 876             | 878        | 653                      | 453      | ...       | 1,376   | 1,429                             | 30,961                                       | 1,212                        | 85.           |
| Washermanpet                                  | 2,305         | 1,592         | ...            | 3,794  | 7,691                    | 1,236              | 1,745       | 520             | 423        | 358                      | 378      | ...       | ...     | 3,040                             | 16,582                                       | 689                          | 45.4          |
| Purasawalkam                                  | 1,901         | 1,225         | 1,132          | 3,469  | 7,727                    | 1,460              | 1,901       | 459             | 561        | 258                      | 306      | 30        | 415     | 2,337                             | 23,995                                       | 1,114                        | 65.7          |
| George Town                                   | 3,454         | 2,316         | 269            | 6,873  | 12,912                   | 1,316              | 1,120       | 1,333           | 282        | 1,196                    | 1,081    | 14        | 890     | 5,980                             | 36,529                                       | 1,529                        | 100.07        |
| Nungambakkam                                  | 1,664         | 2,027         | 338            | 1,636  | 5,665                    | 838                | 459         | 495             | 335        | 202                      | 227      | ...       | 304     | 2,205                             | 13,350                                       | 361                          | 36.6          |
| Mirsaibpet                                    | 2,909         | 2,091         | ...            | 4,677  | 9,677                    | 1,485              | 2,628       | 615             | 445        | 191                      | 86       | ...       | 286     | 3,941                             | 26,507                                       | 901                          | 72.6          |
| Muthialpet                                    | 2,595         | 1,374         | 153            | 3,476  | 7,598                    | 627                | 2,225       | 404             | 508        | 121                      | 310      | ...       | 114     | 3,289                             | 26,688                                       | 1,029                        | 73.11         |
| Royapuram                                     | 2,176         | 1,693         | 209            | 3,286  | 7,364                    | 1,536              | 2,358       | 479             | 111        | 162                      | 490      | 2         | 131     | 2,095                             | 13,409                                       | 843                          | 36.8          |
| Perambur                                      | 2,627         | 2,088         | ...            | 3,243  | 7,938                    | 360                | 3,026       | 652             | 351        | 691                      | 219      | 10        | 929     | 2,497                             | 17,979                                       | 801                          | 49.25         |
| Egmore                                        | 1,682         | 1,520         | ...            | 2,552  | 5,754                    | 1,064              | 1,167       | 441             | 318        | 376                      | 319      | 2         | 799     | 1,238                             | 13,482                                       | 613                          | 38.02         |
| Royapettah                                    | 1,441         | 1,519         | 152            | 1,930  | 5,042                    | 1,337              | 1,192       | 747             | 257        | 261                      | 104      | ...       | 173     | 971                               | 14,765                                       | 394                          | 40.4          |
| Choolai                                       | 2,081         | 1,018         | ...            | 3,837  | 6,936                    | 1,664              | 1,891       | 486             | 127        | 161                      | 15       | ...       | 15      | 2,577                             | 19,295                                       | 1,040                        | 50.2          |
| Total for                                     | 1933 28,945   | 21,114        | 2,253          | 42,067 | 95,379                   | 15,996             | 22,046      | 7,207           | 5,199      | 4,640                    | 3,998    | 58        | 4,642   | 31,599                            | 2,53,942                                     | 10,526                       | 695.73        |
| "                                             | 1932 29,884   | 16,529        | 13,109         | 45,616 | 105,138                  | 17,455             | 22,391      | 8,616           | 5,907      | 5,878                    | 5,754    | 232       | 5,083   | 32,819                            | 2,43,583                                     | 11,510                       | 687.4         |
| "                                             | 1931 27,373   | 18,510        | 15,271         | 43,396 | 104,550                  | 15,338             | 21,958      | 9,014           | 5,373      | 6,006                    | 6,316    | 292       | 6,636   | 33,617                            | 2,37,285                                     | 9,251                        | 684.3         |
| "                                             | 1930 23,681   | 15,000        | 11,711         | 38,644 | 88,436                   | 13,752             | 19,524      | 7,672           | 5,191      | 5,406                    | 5,441    | 395       | 4,653   | 26,354                            | 2,02,441                                     | 8,463                        | 599.53        |
| "                                             | 1929 19,514   | 13,254        | 11,062         | 37,720 | 81,530                   | 1,838              | 18,570      | 6,196           | 3,634      | 3,980                    | 6,026    | 247       | 4,253   | 26,801                            | 1,88,329                                     | 7,104                        | 520.19        |
| "                                             | 1928 15,195   | 10,167        | 9,265          | 33,745 | 63,918                   | 9,864              | 15,633      | 4,200           | 1,808      | 2,813                    | 4,845    | 195       | 3,513   | 18,273                            | 1,61,801                                     | 6,637                        | 442.1         |

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## STATE

Pre-maternity cases registered and diseases and

| Serial No. | Centres.       | Constipation. | Anaemia. | Malaria. | Albuminuria. | Worms. | Bronchitis. | Dysentery. | Influenza. | Diarrhoea. | Retention of Urine. | Torpid Liver. | Oedema & Swelling. | Fever. | Skin affections. | Syphilis. | T. P. | V. D. H. | Rheumatism. | Otorrhoea. | Jaundice. | A. P. H. | Pneumonia. | General Anasarca. | Asthma. |
|------------|----------------|---------------|----------|----------|--------------|--------|-------------|------------|------------|------------|---------------------|---------------|--------------------|--------|------------------|-----------|-------|----------|-------------|------------|-----------|----------|------------|-------------------|---------|
| 1          | Triplicane ... | 447           | 322      | 4        | 81           | 2      | 47          | 20         | 7          | 14         | 72                  | ...           | 20                 | 20     | 12               | ...       | ...   | 3        | ...         | 1          | ...       | ...      | ...        | 4                 | 2       |
| 2          | Washermanpet.  | 248           | 94       | 9        | 42           | ...    | 46          | 13         | 3          | 11         | 26                  | ...           | 12                 | 17     | 5                | ...       | ...   | 33       | 4           | 9          | 2         | ...      | 2          | 4                 |         |
| 3          | Purasawalkam.  | 296           | 164      | 35       | 105          | 9      | 66          | 54         | 54         | 36         | 17                  | ...           | 24                 | 22     | 4                | 1         | 7     | 5        | 15          | 1          | ...       | 2        | 3          | 7                 |         |
| 4          | George Town... | 392           | 247      | 136      | 114          | 28     | 36          | 65         | 30         | 28         | ...                 | ...           | 54                 | 54     | 9                | 10        | 7     | 6        | 10          | 6          | ...       | ...      | ...        | 19                |         |
| 5          | Nungambakkam   | 163           | 33       | 14       | 38           | 11     | 24          | 4          | 21         | 2          | 11                  | ...           | 2                  | 3      | ...              | 1         | ...   | 1        | ...         | 4          | ...       | ...      | ...        | 1                 |         |
| 6          | Mirsaibpet ... | 507           | 30       | 12       | ...          | ...    | 22          | 14         | 6          | 8          | ...                 | ...           | 3                  | 18     | 2                | 1         | ...   | 2        | 1           | ...        | 12        | 8        | 1          |                   |         |
| 7          | Muthialpet ... | 166           | 80       | 44       | 59           | 189    | 87          | 6          | 9          | 4          | ...                 | 3             | 19                 | ...    | 15               | 3         | 3     | 6        | 1           | 1          | ...       | 12       | 3          |                   |         |
| 8          | Royapuram ...  | 550           | 78       | 17       | 65           | ...    | 52          | 11         | 7          | 12         | 1                   | ...           | 2                  | 1      | 2                | ...       | 3     | ...      | 2           | ...        | ...       | ...      | ...        |                   |         |
| 9          | Perambur ...   | 448           | 13       | 4        | 64           | 4      | 36          | 26         | 14         | 7          | 1                   | ...           | 2                  | 9      | 2                | ...       | 3     | 2        | 5           | ...        | ...       | ...      | 3          |                   |         |
| 10         | Egmore ...     | 218           | 88       | ...      | 84           | 5      | 61          | 22         | 6          | 28         | ...                 | ...           | 9                  | 18     | 2                | ...       | 3     | 9        | ...         | ...        | ...       | ...      | ...        |                   |         |
| 11         | Royapettah ... | 162           | 29       | 1        | 16           | 1      | 40          | 1          | 3          | 7          | ...                 | ...           | 3                  | 11     | 4                | ...       | 2     | 9        | ...         | ...        | ...       | ...      | 2          |                   |         |
| 12         | Choolai ...    | 282           | 9        | 16       | 37           | ...    | 77          | 10         | 15         | 21         | ...                 | ...           | ...                | 139    | ...              | ...       | ...   | 2        | 9           | 14         | ...       | ...      | ...        | 1                 |         |
| Total ...  |                | 3,831         | 1,127    | 292      | 705          | 229    | 574         | 246        | 751        | 178        | 128                 | 3             | 156                | 303    | 64               | 19        | 20    | 61       | 53          | 40         | 6         | 16       | 3          | 29                | 43      |

Total for 1933--

1932--

1931--

1930--

1929--

## STATE

Maternal Morbidity

| Serial No. | Centres.     | Anaemia. | Albuminuria. | Malaria. | V. D. H. | Bronchitis. | Dysentery. | Influenza. | Typhoid. | Retained Membrane. | Adherent Placenta. | Retained Placenta. | Eclampsia. | Pneumonia. | T. P. | Ulcerated Vagina. | Retention of Urine. | Syphilis. | Asthma. | Diarrhoea. | Jaundice. | Indigestion. | Gastritis. |
|------------|--------------|----------|--------------|----------|----------|-------------|------------|------------|----------|--------------------|--------------------|--------------------|------------|------------|-------|-------------------|---------------------|-----------|---------|------------|-----------|--------------|------------|
| 1          | Triplicane   | ...      | 249          | 47       | 3        | 34          | 16         | 11         | ...      | 5                  | 4                  | ...                | 3          | ...        | ...   | 25                | 23                  | ...       | 1       | 16         | ...       | ...          | 13         |
| 2          | Washermanpet | ...      | 174          | 9        | 18       | 21          | 39         | 9          | 13       | 1                  | 3                  | 2                  | ...        | ...        | ...   | 5                 | ...                 | ...       | 4       | 10         | 21        | 12           | 4          |
| 3          | Purasawalkam | ...      | 55           | 37       | 23       | 13          | 35         | 39         | 42       | ...                | 12                 | ...                | 3          | 3          | 9     | 12                | 16                  | 35        | 8       | 2          | 22        | 24           | 11         |
| 4          | George Town  | ...      | 123          | 64       | 41       | 10          | 27         | 28         | 40       | ...                | 2                  | ...                | 14         | ...        | 4     | ...               | ...                 | 5         | 3       | 5          | ...       | 4            | ...        |
| 5          | Nungambakkam | ...      | 20           | 26       | 16       | ...         | 18         | 8          | 19       | ...                | 1                  | ...                | ...        | 1          | 1     | 4                 | ...                 | ...       | ...     | 4          | ...       | 1            | ...        |
| 6          | Mirsaibpet   | ...      | 25           | ...      | ...      | ...         | 3          | 6          | ...      | ...                | ...                | ...                | 3          | ...        | ...   | ...               | ...                 | ...       | 2       | 9          | 1         | ...          | ...        |
| 7          | Muthialpet   | ...      | 42           | 79       | 21       | ...         | 6          | 4          | 3        | ...                | ...                | ...                | 3          | ...        | ...   | ...               | ...                 | ...       | 2       | 9          | 1         | ...          | ...        |
| 8          | Royapuram    | ...      | 27           | 6        | 4        | ...         | 11         | 5          | ...      | 2                  | ...                | ...                | 4          | 5          | 5     | 11                | 2                   | 3         | 6       | 13         | 12        | 4            | 2          |
| 9          | Perambur     | ...      | 10           | 19       | 10       | 3           | 23         | 11         | 11       | ...                | 3                  | 1                  | 1          | 2          | 1     | 3                 | 3                   | ...       | 2       | 17         | 1         | 4            | 6          |
| 10         | Egmore       | ...      | 247          | 51       | 17       | 1           | 57         | 16         | 11       | ...                | 2                  | 1                  | ...        | ...        | 1     | 1                 | ...                 | 1         | 2       | 6          | ...       | 9            | ...        |
| 11         | Royapettah   | ...      | 38           | 10       | 11       | 3           | 31         | 8          | 15       | ...                | 2                  | 1                  | ...        | ...        | ...   | ...               | ...                 | ...       | 2       | ...        | ...       | ...          | ...        |
| 12         | Choolai      | ...      | 5            | ...      | 103      | 4           | 10         | 9          | ...      | ...                | ...                | ...                | ...        | ...        | ...   | ...               | ...                 | ...       | 2       | ...        | ...       | ...          | ...        |
| Total.     |              | 1016     | 348          | 273      | 58       | 295         | 159        | 163        | 131      | 17                 | 4                  | 32                 | 15         | 29         | 60    | 70                | 22                  | 22        | 158     | 27         | 82        | 36           | ...        |

## MENT III.

ailments of Pregnancy treated at the Centres in 1933.

| Breast Abscess. | Gastritis. | Conjunctivitis. | Flatulence. | Hysteria. | Enteritis. | Strangury Leucorrhoea. | Morning Sickness. | Gonorrhoea. | Stomatitis. | Ear and Eye diseases. | Threatened Abortion. | Bleeding. | Eclampsia. | Dyspepsia. | Scanty Urine. | Cough. | Piles. | Neuritis. | Indigestion. | Debility. | Mastitis. | Tuberculosis. | Enlarged spleen. | Other diseases. | Total. | Total to Pre-maternity cases registered. |
|-----------------|------------|-----------------|-------------|-----------|------------|------------------------|-------------------|-------------|-------------|-----------------------|----------------------|-----------|------------|------------|---------------|--------|--------|-----------|--------------|-----------|-----------|---------------|------------------|-----------------|--------|------------------------------------------|
| 6               | 4          | ...             | ...         | ...       | ...        | ...                    | 15                | ...         | 79          | 3                     | ...                  | ...       | ...        | 9          | 5             | ...    | ...    | ...       | 12           | ...       | ...       | ...           | ...              | 1               | 1,212  | 1,377                                    |
| 6               | 14         | ...             | 9           | 2         | ...        | ...                    | 15                | 8           | 41          | ...                   | 1                    | 7         | ...        | 1          | ...           | 23     | 3      | 2         | ...          | ...       | ...       | ...           | 3                | ...             | 689    | 689                                      |
| 1               | 3          | 6               | 25          | 4         | 3          | ...                    | 39                | ...         | 112         | ...                   | 2                    | ...       | ...        | 20         | 23            | 3      | 3      | ...       | ...          | ...       | ...       | ...           | ...              | ...             | 1,114  | 1,229                                    |
| 6               | 10         | ...             | ...         | ...       | ...        | ...                    | 57                | 7           | 198         | ...                   | ...                  | ...       | ...        | ...        | ...           | ...    | ...    | ...       | ...          | ...       | ...       | ...           | ...              | ...             | 1,529  | 1,997                                    |
| ...             | ...        | ...             | ...         | ...       | ...        | ...                    | ...               | ...         | 16          | ...                   | ...                  | ...       | ...        | ...        | 10            | ...    | ...    | ...       | ...          | ...       | ...       | ...           | ...              | ...             | 361    | 640                                      |
| ...             | 11         | ...             | ...         | ...       | ...        | ...                    | 3                 | ...         | 33          | ...                   | 1                    | ...       | ...        | ...        | 73            | ...    | 3      | 122       | ...          | ...       | ...       | ...           | 1                | ...             | 901    | 1,094                                    |
| ...             | 2          | ...             | 25          | ...       | ...        | ...                    | 3                 | 1           | 103         | ...                   | 3                    | ...       | ...        | 1          | 34            | ...    | 3      | 72        | 1            | ...       | ...       | 4             | 56               | ...             | 989    | 1,294                                    |
| ...             | 5          | ...             | 1           | ...       | ...        | ...                    | 4                 | ...         | 2           | 1                     | 9                    | 1         | ...        | 1          | 15            | ...    | 1      | ...       | ...          | ...       | ...       | ...           | ...              | ...             | 843    | 1,254                                    |
| ...             | 5          | ...             | 3           | ...       | ...        | ...                    | 2                 | 8           | 23          | ...                   | 3                    | ...       | 2          | 6          | 88            | ...    | ...    | ...       | ...          | ...       | ...       | ...           | 5                | ...             | 801    | 869                                      |
| ...             | ...        | ...             | ...         | ...       | ...        | ...                    | 5                 | ...         | 50          | ...                   | ...                  | ...       | ...        | ...        | ...           | ...    | ...    | ...       | ...          | ...       | ...       | ...           | 7                | ...             | 613    | 675                                      |
| 1               | ...        | ...             | ...         | ...       | ...        | ...                    | ...               | ...         | 47          | ...                   | ...                  | ...       | ...        | 13         | 47            | 2      | ...    | ...       | ...          | ...       | ...       | ...           | 1                | ...             | 394    | 725                                      |
| 4               | ...        | 9               | ...         | ...       | 16         | 37                     | 32                | ...         | ...         | 17                    | 13                   | 1         | 78         | 161        | ...           | ...    | ...    | ...       | ...          | ...       | ...       | 12            | 87               | ...             | 1,040  | 1,741                                    |
| 29              | 49         | 16              | 63          | 6         | 20         | 51                     | 178               | 24          | 705         | 4                     | 36                   | 21        | 3          | 129        | 396           | 5      | 6      | 6         | 137          | 72        | 1         | 12            | 8                | 158             | 10,486 | 13,584                                   |

13,584.

13,476.

13,315.

11,292.

10,535.

## MENT IV.

(Puerperal) 1933.

| Constipation. | Worms. | Mastitis & Breast Abscess. | Sapraemia. | A. P. H. | P. P. H. | Skin disease. | Stomatitis. | Sepsis. | Neuritis and Sciatica. | Septicaemia. | Ulcerated Vulva. | Fever and Hyperpyrexia. | After pains. | Piles. | Rheumatism. | G. Conjunctivitis. | Other diseases. | L. P. | Gen. Anasarca. | Hysteria. | Debility. | Total. |
|---------------|--------|----------------------------|------------|----------|----------|---------------|-------------|---------|------------------------|--------------|------------------|-------------------------|--------------|--------|-------------|--------------------|-----------------|-------|----------------|-----------|-----------|--------|
| 145           | ...    | 22                         | ...        | 2        | 2        | 20            | 45          | ...     | ...                    | ...          | 25               | 32                      | 31           | ...    | ...         | ...                | 61              | ...   | ...            | ...       | ...       | 854    |
| 110           | 3      | ...                        | ...        | ...      | 9        | 9             | 38          | ...     | 12                     | ...          | ...              | 48                      | 39           | ...    | ...         | ...                | 7               | 15    | 4              | 1         | 47        | 723    |
| 73            | 19     | 13                         | ...        | 4        | 8        | 35            | 53          | 3       | ...                    | ...          | 2                | 80                      | ...          | ...    | ...         | ...                | 2               | ...   | ...            | ...       | ...       | 717    |
| 191           | ...    | 3                          | ...        | ...      | 15       | 6             | 41          | ...     | ...                    | ...          | ...              | 54                      | 69           | ...    | ...         | ...                | 18              | ...   | ...            | ...       | ...       | 817    |
| 2             | ...    | ...                        | ...        | ...      | 1        | ...           | ...         | ...     | ...                    | ...          | ...              | ...                     | 7            | ...    | ...         | ...                | 4               | ...   | ...            | ...       | ...       | 131    |
| 3             | ...    | 3                          | ...        | ...      | 1        | ...           | 3           | ...     | 1                      | ...          | 2                | 98                      | 4            | ...    | ...         | ...                | 22              | 23    | 1              | ...       | ...       | 210    |
| 5             | ...    | 23                         | 1          | 4        | 1        | ...           | ...         | ...     | ...                    | ...          | ...              | ...                     | 36           | ...    | ...         | ...                | 32              | ...   | 1              | 55        | ...       | 386    |
| 11            | ...    | ...                        | ...        | ...      | 1        | 1             | ...         | ...     | ...                    | ...          | ...              | ...                     | 2            | ...    | ...         | ...                | 8               | ...   | ...            | ...       | ...       | 82     |
| 61            | 4      | 8                          | ...        | 5        | 11       | 15            | 16          | 3       | ...                    | ...          | 5                | 12                      | 11           | ...    | 9           | 3                  | 14              | ...   | 8              | 2         | 5         | 345    |
| 104           | 9      | ...                        | ...        | ...      | ...      | ...           | ...         | ...     | ...                    | ...          | ...              | ...                     | 183          | ...    | ...         | ...                | 3               | 2     | ...            | ...       | ...       | 740    |
| 20            | ...    | 4                          | ...        | 1        | 2        | 5             | 24          | ...     | 2                      | ...          | 2                | 4                       | 1            | ...    | ...         | ...                | ...             | ...   | ...            | ...       | ...       | 214    |
| ...           | ...    | 1                          | ...        | 1        | ...      | ...           | ...         | ...     | ...                    | ...          | ...              | ...                     | ...          | ...    | ...         | ...                | ...             | ...   | ...            | ...       | 1         | 136    |
| 725           | 35     | 84                         | 1          | 17       | 51       | 101           | 277         | 6       | 15                     | 2            | 36               | 328                     | 383          | 16     | 16          | 5                  | 171             | 40    | 13             | 4         | 113       | 5,355  |

## STATEMENT V.

A

Maternal mortality (Puerperal) among cases treated by Child Welfare Scheme for 1933.

| Centres.     | V. D. H. | Eclampsia. | Shock. | Tetanus. | Small-Pox. | Total. |
|--------------|----------|------------|--------|----------|------------|--------|
| Triplicane   | ...      | ...        | ...    | ...      | ...        | ...    |
| Washermanpet | ...      | ...        | ...    | ...      | ...        | ...    |
| Purasawalkam | ...      | ...        | ...    | ...      | ...        | ...    |
| George Town  | ...      | ...        | ...    | ...      | ...        | ...    |
| Nungambakkam | ...      | ...        | ...    | ...      | ...        | ...    |
| Mirsaibpet   | 1        | 1          | ...    | 1        | ...        | 3      |
| Muthialpet   | ...      | ...        | 1      | ...      | ...        | 1      |
| Royapuram    | ...      | ...        | ...    | ...      | ...        | ...    |
| Perambur     | ...      | ...        | ...    | ...      | ...        | ...    |
| Egmore       | ...      | ...        | ...    | ...      | 1          | 1      |
| Royapettah   | ...      | ...        | ...    | ...      | ...        | ...    |
| Choolai      | ...      | ...        | ...    | ...      | ...        | ...    |
| Total        | 1        | 1          | 1      | 1        | 1          | 5      |

B

Deaths among cases brought to the notice of the Child Welfare Scheme in 1933 but not under our treatment.

|                             | Triplicane. | Washermanpet. | Purasawalkam. | George Town. | Nungambakkam. | Mirsaibpet. | Muthialpet. | Royapuram. | Perambur. | Egmore. | Royapettah. | Choolai | Total. |
|-----------------------------|-------------|---------------|---------------|--------------|---------------|-------------|-------------|------------|-----------|---------|-------------|---------|--------|
| 1. In Hospital              | ...         | ...           | 1             | 4            | 1             | 6           | 5           | 3          | 2         | 1       | 3           | 4       | 30     |
| 2. Under private Doctors    | ...         | ...           | ...           | 3            | ...           | ...         | 1           | 1          | ...       | 1       | ...         | ...     | 6      |
| 3. Under Vydians' treatment | ...         | ...           | ...           | 2            | ...           | ...         | ...         | ...        | ...       | 2       | ...         | ...     | 4      |
| 4. Under Barber Women       | ...         | ...           | ...           | ...          | ...           | ...         | ...         | 1          | ...       | ...     | ...         | ...     | 1      |
| Total                       | ...         | ...           | 1             | 9            | 1             | 6           | 6           | 5          | 2         | 4       | 3           | 4       | 41     |

## STATEMENT V—contd.

C

Showing the causes of death among cases brought to the notice of Child Welfare Scheme but not under our treatment in 1933.

| Centres.     | Eclampsia. | Adherent Placenta. | A. P. H. | V. D. H. | Anaemia. | Tub. Enteritis. | Septicaemia. | Pneumonia. | Gen. Anasarca. | Diarrhoea. | Fever. | Causes unknown. | Typhoid. | Sepsis. | Small-pox. | Influenza. | Other diseases. | Total. |
|--------------|------------|--------------------|----------|----------|----------|-----------------|--------------|------------|----------------|------------|--------|-----------------|----------|---------|------------|------------|-----------------|--------|
| Triplicane   | ...        | ...                | ...      | ...      | ...      | ...             | ...          | ...        | ...            | ...        | ...    | ...             | ...      | ...     | ...        | ...        | ...             | ...    |
| Washermanpet | ...        | ...                | ...      | ...      | ...      | ...             | ...          | ...        | ...            | ...        | ...    | ...             | ...      | ...     | ...        | ...        | ...             | ...    |
| Purasawalkam | ...        | 1                  | ...      | ...      | ...      | ...             | ...          | ...        | ...            | ...        | ...    | ...             | ...      | ...     | ...        | ...        | 1               | 2      |
| George Town  | ...        | 1                  | 1        | ...      | ...      | ...             | ...          | 2          | ...            | 1          | ...    | ...             | 2        | ...     | 2          | ...        | ...             | 9      |
| Nungambakkam | ...        | ...                | ...      | ...      | ...      | ...             | ...          | ...        | ...            | ...        | ...    | ...             | ...      | ...     | ...        | ...        | ...             | ...    |
| Mirsaibpet   | ...        | 1                  | ...      | ...      | ...      | ...             | 2            | ...        | 1              | ...        | ...    | ...             | ...      | ...     | ...        | 2          | ...             | 6      |
| Muthialpet   | ...        | 2                  | ...      | ...      | ...      | 1               | ...          | ...        | ...            | ...        | 1      | ...             | ...      | 1       | 1          | ...        | ...             | 6      |
| Royapuram    | ...        | 3                  | 1        | ...      | ...      | ...             | ...          | ...        | ...            | ...        | ...    | 1               | ...      | ...     | ...        | ...        | ...             | 5      |
| Perambur     | ...        | ...                | ...      | ...      | 1        | ...             | ...          | ...        | 1              | ...        | ...    | ...             | ...      | ...     | ...        | ...        | ...             | 2      |
| Egmore       | ...        | ...                | ...      | 1        | ...      | 1               | 1            | ...        | ...            | ...        | ...    | ...             | ...      | ...     | ...        | 1          | ...             | 4      |
| Royapettah   | ...        | ...                | 1        | ...      | ...      | ...             | ...          | 2          | ...            | ...        | ...    | ...             | ...      | ...     | ...        | ...        | ...             | 3      |
| Choolai      | ...        | 1                  | 1        | ...      | 1        | ...             | ...          | 1          | ...            | ...        | ...    | ...             | ...      | ...     | ...        | ...        | ...             | 4      |
| Total        | ...        | 9                  | 4        | 1        | 1        | 2               | 2            | 2          | 5              | 2          | 1      | 1               | 1        | 2       | 1          | 4          | 2               | 141    |

A total of 46 deaths occurred among the 14,948 labour cases which came under the observation of the Child Welfare Scheme. Maternal Mortality rate for all deaths among cases brought to the notice of the Scheme is 31 per cent.

Maternal Mortality rates for the C. W. S. for:—

1933— 31 per cent.  
 1932— 41 per cent.  
 1931— 61 per cent.  
 1930— 49 per cent.  
 1929— 49 per cent.

## STATEMENT VI.

Showing the number of abortion cases which came under the observation of the C. W. Scheme staff during the year 1933.

| Period.                                 | Centres      | How conducted.      |                                         |                    | Total. |
|-----------------------------------------|--------------|---------------------|-----------------------------------------|--------------------|--------|
|                                         |              | By Nurses of C.W.S. | Taken over after B.W. conducted labour. | Taken to Hospital. |        |
| From 1st January to 31st December 1933. | Triplicane   | ...                 | ...                                     | ...                | ...    |
|                                         | Washermanpet | 7                   | 1                                       | 1                  | 9      |
|                                         | Purasawalkam | 4                   | ...                                     | 5                  | 9      |
|                                         | George Town  | 6                   | ...                                     | 2                  | 8      |
|                                         | Nungambakkam | ...                 | ...                                     | 2                  | 2      |
|                                         | Mirsaibpet   | 4                   | ...                                     | 5                  | 9      |
|                                         | Muthialpet   | 10                  | ...                                     | 9                  | 19     |
|                                         | Royapuram    | 1                   | ...                                     | 3                  | 4      |
|                                         | Perambur     | 3                   | ...                                     | 5                  | 8      |
|                                         | Egmore       | 2                   | ...                                     | 7                  | 9      |
|                                         | Royapettah   | ...                 | ...                                     | 2                  | 2      |
|                                         | Choolai      | 2                   | ...                                     | 2                  | 4      |
|                                         | Total        | 39                  | 1                                       | 43                 | 83     |

## STATEMENT VII.

Number of visits paid by the staff of the C. W. Scheme during the year 1933.

| Centres.     | Visits paid by |                  |               | Total.   |
|--------------|----------------|------------------|---------------|----------|
|              | Midwives.      | Health Visitors. | Lady Doctors. |          |
| Triplicane   | 19,445         | 18,334           | 1,678         | 39,457   |
| Washermanpet | 15,552         | 14,785           | 1,173         | 31,510   |
| Purasawalkam | 15,578         | 15,068           | 888           | 31,529   |
| George Town  | 26,162         | 15,693           | 1,280         | 38,135   |
| Nungambakkam | 9,021          | 9,552            | 1,305         | 19,878   |
| Mirsaibpet   | 15,621         | 20,860           | 1,484         | 38,025   |
| Muthialpet   | 16,270         | 17,200           | 1,410         | 34,880   |
| Royapuram    | 11,865         | 14,326           | 1,378         | 27,569   |
| Perambur     | 14,206         | 7,554            | 1,294         | 23,054   |
| Egmore       | 11,756         | 8,434            | 1,070         | 21,260   |
| Royapettah   | 10,215         | 9,657            | 1,277         | 21,149   |
| Choolai      | 14,449         | 18,283           | 1,307         | 34,639   |
| Total        | 1,80,200       | 65,341           | 15,544        | 2,61,085 |

## STATEMENT VIII.

Ages at death of infants born during 1932 and kept under observation during the 1st year of life.

| From 1st January to 31st December 1933. |     | Total No. of cases visited. | Still born. | Died within |                |     |                | Total deaths excluding Still births. | Left City or otherwise not traceable. | No. of living children traceable when one year old. |                 |
|-----------------------------------------|-----|-----------------------------|-------------|-------------|----------------|-----|----------------|--------------------------------------|---------------------------------------|-----------------------------------------------------|-----------------|
|                                         |     |                             |             | 10 Days.    | 1 to 3 Months. |     | 3 to 6 Months. |                                      |                                       |                                                     | 6 to 12 Months. |
|                                         |     |                             |             |             |                |     |                |                                      |                                       |                                                     |                 |
| ...                                     | ... | 1,718                       | 56          | 54          | 54             | 64  | 107            | 279                                  | 387                                   | 996                                                 |                 |
| ...                                     | ... | 1,472                       | 71          | 35          | 35             | 30  | 91             | 210                                  | 288                                   | 903                                                 |                 |
| ...                                     | ... | 1,179                       | 37          | 43          | 43             | 43  | 36             | 152                                  | 184                                   | 806                                                 |                 |
| ...                                     | ... | 2,009                       | 99          | 68          | 68             | 66  | 73             | 297                                  | 135                                   | 1,478                                               |                 |
| ...                                     | ... | 617                         | 18          | 14          | 14             | 21  | 20             | 71                                   | 57                                    | 471                                                 |                 |
| ...                                     | ... | 1,472                       | 63          | 39          | 41             | 40  | 75             | 195                                  | 85                                    | 1,129                                               |                 |
| ...                                     | ... | 1,171                       | 53          | 45          | 45             | 49  | 79             | 208                                  | 221                                   | 686                                                 |                 |
| ...                                     | ... | 1,297                       | 51          | 26          | 26             | 63  | 103            | 241                                  | 250                                   | 755                                                 |                 |
| ...                                     | ... | 1,191                       | 42          | 20          | 21             | 25  | 31             | 100                                  | 296                                   | 753                                                 |                 |
| ...                                     | ... | 989                         | 20          | 17          | 21             | 32  | 31             | 161                                  | 154                                   | 714                                                 |                 |
| ...                                     | ... | 800                         | 19          | 17          | 29             | 34  | 33             | 113                                  | 112                                   | 556                                                 |                 |
| ...                                     | ... | 1,193                       | 35          | 46          | 34             | 49  | 60             | 189                                  | 115                                   | 854                                                 |                 |
| Total ...                               |     | 15,108                      | 564         | 467         | 431            | 516 | 742            | 2,156                                | 2,287                                 | 10,101                                              |                 |

|                                      |                  |            |
|--------------------------------------|------------------|------------|
| For infants in care of C. W. Scheme. |                  | City rate. |
| 1933                                 | 142.7 per mille. | 264.3      |
| 1932                                 | "                | 236.5      |
| 1931                                 | "                | 248.3      |
| 1930                                 | "                | 243.9      |
| 1929                                 | "                | 256.8      |

|                              |      |
|------------------------------|------|
| Infantile Mortality rate for |      |
| do.                          | 1933 |
| do.                          | 1932 |
| do.                          | 1931 |
| do.                          | 1930 |
| do.                          | 1929 |

For infants in care of C. W. Scheme.

City rate.

Infantile Mortality rate for

per mille.

264.3  
236.5  
248.3  
243.9  
256.8

1933 142.7  
1932 131.3  
1931 134.9  
1930 139.5  
1929 157.2

STATEMENT IX.

Causes of Death among infants born in 1932 and kept under observation during the 1st year of life.

| Centres.     | Total No. of cases visited. | Still born. | Died within 10 days. | Pneumonia. | Abscess. | Enteritis. | Small-pox. | Bronchitis. | Malnutrition. | Malaria. | Convulsion. | Whooping cough. | Skin diseases. | Syphilis. | Chicken-pox. | Fever. | Drugged with native medicines. | Dysentery. | Constipation. | Rickets. | Gastritis. | Causes unknown. | Measles. | Total deaths. | Left the City and not traceable. | No. of living children who survived the 1st year of life. |
|--------------|-----------------------------|-------------|----------------------|------------|----------|------------|------------|-------------|---------------|----------|-------------|-----------------|----------------|-----------|--------------|--------|--------------------------------|------------|---------------|----------|------------|-----------------|----------|---------------|----------------------------------|-----------------------------------------------------------|
| Triplicane   | 1,718                       | 56          | 54                   | 9          | 5        | ...        | 13         | 14          | 2             | 1        | 14          | 318             | ...            | 1         | 79           | ...    | 56                             | 4          | 1             | ...      | 5          | ...             | 279      | 387           | 896                              |                                                           |
| Washermanpet | 1,472                       | 71          | *                    | 2          | 1        | 23         | 6          | 10          | 1             | ...      | 29          | 17              | 1              | ...       | 40           | 3      | 40                             | 1          | ...           | 2        | 34         | ...             | 210      | 288           | 903                              |                                                           |
| Purasawalkam | 1,179                       | 37          | *                    | 10         | 3        | 30         | 16         | ...         | 3             | ...      | 27          | ...             | ...            | ...       | 52           | ...    | 11                             | ...        | ...           | ...      | ...        | 152             | 184      | 805           |                                  |                                                           |
| George Town  | 2,009                       | 99          | *                    | 5          | 5        | 29         | 9          | 24          | 4             | 14       | 29          | 18              | 14             | ...       | 22           | 23     | 40                             | 28         | ...           | 18       | 14         | 297             | 135      | 1,478         |                                  |                                                           |
| Nungambakkam | 617                         | 18          | 16                   | ...        | ...      | 5          | 2          | 13          | ...           | ...      | 2           | ...             | ...            | ...       | 19           | ...    | 12                             | 1          | ...           | ...      | 1          | ...             | 71       | 57            | 471                              |                                                           |
| Mirsaibpet   | 1,472                       | 63          | *                    | 13         | 3        | 22         | 13         | 6           | ...           | ...      | 14          | 2               | 1              | ...       | 49           | 1      | 11                             | 2          | ...           | ...      | 58         | ...             | 195      | 85            | 1,129                            |                                                           |
| Muthialpet   | 1,171                       | 52          | 35                   | 6          | ...      | 28         | 14         | 9           | 7             | ...      | 9           | 1               | ...            | 1         | 61           | ...    | 7                              | ...        | ...           | ...      | 29         | 1               | 208      | 224           | 686                              |                                                           |
| Royapuram    | 1,297                       | 51          | *                    | 9          | 5        | 46         | 16         | 14          | 6             | ...      | 10          | ...             | 9              | ...       | 56           | ...    | ...                            | 3          | 2             | ...      | ...        | 65              | ...      | 241           | 260                              | 755                                                       |
| Perambur     | 1,191                       | 42          | *                    | ...        | 3        | 20         | 6          | 12          | ...           | ...      | 8           | 1               | 3              | ...       | 37           | ...    | ...                            | 5          | ...           | ...      | 5          | ...             | 100      | 296           | 753                              |                                                           |
| Egmore       | 989                         | 20          | 17                   | 1          | ...      | 20         | ...        | 32          | ...           | ...      | 2           | ...             | 1              | ...       | 23           | ...    | ...                            | 4          | 1             | ...      | ...        | ...             | 101      | 154           | 714                              |                                                           |
| Royapettah   | 800                         | 19          | *                    | 2          | 1        | 11         | 1          | 21          | 2             | 1        | 5           | ...             | 4              | 1         | 23           | ...    | ...                            | 31         | ...           | ...      | 9          | ...             | 113      | 112           | 556                              |                                                           |
| Choolai      | 1,193                       | 35          | 46                   | 2          | 1        | 49         | 5          | 3           | ...           | ...      | 11          | 5               | 1              | ...       | 44           | ...    | ...                            | 7          | ...           | ...      | 9          | 5               | 189      | 115           | 854                              |                                                           |
| Total        | 15,108                      | 564         | 168                  | 40         | 27       | 283        | 101        | 158         | 25            | 16       | 160         | 47              | 52             | 2         | 2505         | 27     | 27                             | 39         | 2             | 2        | 233        | 20              | 2,156    | 2,287         | 10,101                           |                                                           |

\* Cases died within 10 days are included in the causes of death.

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STATEMENT X.

Showing the number of cases taken on for Milk Supply during the year 1933.

| Centres.     | No. taken on for milk supply. | Yearly attendance. | Average daily attendance. |
|--------------|-------------------------------|--------------------|---------------------------|
| Triplicane   | 31                            | 7,623              | 20.0                      |
| Washermanpet | 36                            | 10,327             | 28.2                      |
| Purasawalkam | 55                            | 16,038             | 43.9                      |
| George Town  | 38                            | 8,947              | 24.5                      |
| Nungambakkam | 33                            | 8,573              | 23.4                      |
| Mirsaibpet   | 44                            | 7,681              | 21.0                      |
| Muthialpet   | 45                            | 7,364              | 20.0                      |
| Royapuram    | 42                            | 9,568              | 26.2                      |
| Egmore       | 36                            | 7,972              | 21.8                      |
| Perambur     | 52                            | 14,052             | 38.4                      |
| Royapettah   | 21                            | 4,976              | 14.0                      |
| Choolai      | 21                            | 6,056              | 17.0                      |
| Total        | 454                           | 1,09,177           | 299.1                     |

STATEMENT XI.

Showing the number of Children who were given free baths during the year 1933.

| Centres.     | New admissions. | No. of baths given to babies. | Average daily attendance. |
|--------------|-----------------|-------------------------------|---------------------------|
| Triplicane   | 145             | 6,843                         | 19.1                      |
| Washermanpet | 29              | 7,939                         | 21.7                      |
| Purasawalkam | 566             | 15,556                        | 42.6                      |
| George Town  | 180             | 5,392                         | 14.7                      |
| Nungambakkam | 371             | 8,714                         | 23.8                      |
| Mirsaibpet   | 242             | 4,246                         | 11.6                      |
| Muthialpet   | 58              | 4,293                         | 11.8                      |
| Royapuram    | 334             | 10,912                        | 30.0                      |
| Perambur     | 355             | 8,947                         | 24.5                      |
| Egmore       | 546             | 6,451                         | 17.7                      |
| Royapettah   | 129             | 6,521                         | 18.0                      |
| Choolai      | 121             | 5,871                         | 16.0                      |
| Total        | 3,076           | 91,685                        | 241.5                     |

STATEMENT XII.

Showing the details of Health Propaganda Work done by the C.W. Staff in 1933.

| Centres.     | Subjects.                           |                                              |                                                |                                   | Total. |
|--------------|-------------------------------------|----------------------------------------------|------------------------------------------------|-----------------------------------|--------|
|              | No. of out-door lectures delivered. | No. of lectures with the aid of Cinema shows | No. of lectures with the aid of Magic Lantern. | Total attendance at the lectures. |        |
| Triplicane   | 26                                  | 6                                            | 22                                             | 3,802                             | 51     |
| Washermanpet | 23                                  | 2                                            | 20                                             | 1,741                             | 45     |
| Purasawalkam | 25                                  | 1                                            | 22                                             | 2,878                             | 48     |
| George Town  | 27                                  | 2                                            | 21                                             | 2,996                             | 50     |
| Nungambakkam | 23                                  | 8                                            | 22                                             | 2,825                             | 51     |
| Mirsalipet   | 22                                  | 8                                            | 17                                             | 3,510                             | 47     |
| Muthialpet   | 23                                  | 7                                            | 20                                             | 3,750                             | 52     |
| Royapuram    | 24                                  | 2                                            | 19                                             | 1,820                             | 45     |
| Perambur     | 23                                  | 1                                            | 20                                             | 2,268                             | 44     |
| Egmore       | 25                                  | 2                                            | 24                                             | 1,876                             | 51     |
| Royapettah   | 26                                  | 9                                            | 15                                             | 2,840                             | 50     |
| Choolai      | 24                                  | 1                                            | 16                                             | 1,705                             | 41     |
| Total        | 293                                 | 49                                           | 238                                            | 32,011                            | 2580   |

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STATEMENT XIII.

Showing the Births, Infantile Mortality and Infantile Mortality rate during 1933 and Infantile Mortality rate from 1924 to 1932.

| Divisions.             | No. of Births registered excluding Still-births. | Infantile Mortality rate for |      |       |       |       |       |       |       |       |       |
|------------------------|--------------------------------------------------|------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|
|                        |                                                  | 1933                         | 1932 | 1931  | 1930  | 1929  | 1928  | 1927  | 1926  | 1925  | 1924  |
| 1                      | 939                                              | 33                           | 275  | 292-9 | 254-8 | 232-6 | 227-1 | 247-9 | 296-9 | 352-2 | 253-6 |
| 2                      | 1371                                             | 90                           | 416  | 303-4 | 236-3 | 322-3 | 227-1 | 247-9 | 296-9 | 352-2 | 253-6 |
| 3                      | 1271                                             | 58                           | 397  | 312-4 | 258-9 | 247-7 | 235-2 | 235-2 | 302-7 | 316-5 | 253-0 |
| 4                      | 1108                                             | 61                           | 347  | 313-2 | 225-1 | 300-3 | 283-3 | 269-7 | 269-7 | 343-4 | 251-9 |
| 5                      | 345                                              | 19                           | 113  | 327-5 | 335-5 | 366-0 | 317-1 | 373-0 | 373-0 | 502-1 | 332-0 |
| 6                      | 491                                              | 16                           | 103  | 209-8 | 258-1 | 239-8 | 231-2 | 231-2 | 231-2 | 265-3 | 239-4 |
| 7                      | 525                                              | 23                           | 137  | 261-0 | 196-4 | 229-1 | 212-7 | 239-0 | 239-0 | 265-3 | 239-4 |
| 8                      | 175                                              | 10                           | 53   | 302-9 | 270-2 | 357-5 | 241-4 | 310-3 | 310-3 | 328-8 | 289-8 |
| 9                      | 828                                              | 33                           | 210  | 253-6 | 222-4 | 213-2 | 250-5 | 230-0 | 230-0 | 323-8 | 266-1 |
| 10                     | 796                                              | 32                           | 233  | 292-7 | 273-7 | 245-3 | 248-3 | 335-5 | 335-5 | 407-6 | 365-4 |
| 11                     | 202                                              | 8                            | 61   | 302-0 | 333-3 | 286-5 | 288-0 | 315-4 | 315-4 | 367-8 | 308-7 |
| 12                     | 984                                              | 30                           | 302  | 306-9 | 257-1 | 245-1 | 263-7 | 293-6 | 293-6 | 367-8 | 308-7 |
| 13                     | 740                                              | 23                           | 201  | 271-6 | 257-1 | 279-4 | 302-0 | 289-8 | 289-8 | 465-9 | 319-5 |
| 14                     | 1113                                             | 6                            | 32   | 283-2 | 310-6 | 287-0 | 357-8 | 474-1 | 474-1 | 301-2 | 255-7 |
| 15                     | 663                                              | 26                           | 166  | 250-4 | 242-9 | 259-3 | 234-4 | 283-7 | 283-7 | 296-9 | 231-4 |
| 16                     | 2008                                             | 49                           | 491  | 244-5 | 198-0 | 216-0 | 233-2 | 283-7 | 283-7 | 281-2 | 279-4 |
| 17                     | 1377                                             | 47                           | 347  | 252-0 | 285-1 | 244-4 | 274-0 | 288-8 | 288-8 | 261-0 | 232-9 |
| 18                     | 1151                                             | 45                           | 314  | 272-3 | 230-9 | 265-1 | 243-3 | 218-7 | 218-7 | 248-5 | 248-5 |
| 19                     | 951                                              | 36                           | 221  | 232-4 | 241-9 | 260-3 | 214-6 | 266-1 | 266-1 | 275-6 | 232-9 |
| 20                     | 1616                                             | 126                          | 321  | 198-6 | 180-4 | 178-0 | 211-4 | 191-1 | 191-1 | 223-1 | 192-1 |
| 21                     | 895                                              | 63                           | 166  | 185-5 | 184-0 | 217-9 | 198-0 | 233-3 | 233-3 | 232-1 | 209-3 |
| 22                     | 1016                                             | 57                           | 235  | 231-3 | 170-0 | 227-9 | 204-9 | 204-7 | 204-7 | 239-1 | 211-9 |
| 23                     | 1292                                             | 63                           | 338  | 261-6 | 253-9 | 257-2 | 258-5 | 258-5 | 258-5 | 271-7 | 233-3 |
| 24                     | 1536                                             | 79                           | 394  | 243-9 | 247-6 | 207-5 | 223-6 | 233-2 | 233-2 | 248-6 | 248-6 |
| 25                     | 852                                              | 62                           | 179  | 210-1 | 206-6 | 207-5 | 223-6 | 166-2 | 166-2 | 177-6 | 177-6 |
| 26                     | 742                                              | 26                           | 193  | 265-5 | 229-1 | 241-1 | 243-3 | 235-4 | 235-4 | 279-3 | 224-5 |
| 27                     | 868                                              | 44                           | 273  | 314-5 | 249-7 | 278-5 | 269-2 | 303-9 | 303-9 | 225-7 | 225-7 |
| 28                     | 1279                                             | 94                           | 439  | 343-2 | 252-5 | 272-3 | 260-9 | 235-4 | 235-4 | 220-7 | 190-3 |
| 29                     | 1488                                             | 63                           | 349  | 284-5 | 235-6 | 233-1 | 208-5 | 195-9 | 195-9 | 203-0 | 203-0 |
| 30                     | 851                                              | 48                           | 234  | 275-0 | 230-8 | 259-1 | 237-1 | 324-9 | 324-9 | 248-0 | 258-3 |
| Total                  | 28533                                            | 1380                         | 7540 | 264-3 | 236-5 | 248-3 | 243-9 | 256-6 | 256-6 | 286-8 | 237-6 |
| General Death rate ... |                                                  | 37-9                         | 34-4 | 35-8  | 43-2  | 42-4  | 50-5  | 42-3  | 45-0  | 47-3  | 41-7  |

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