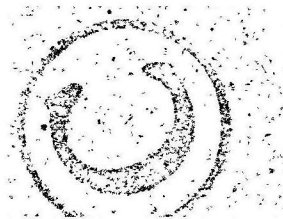
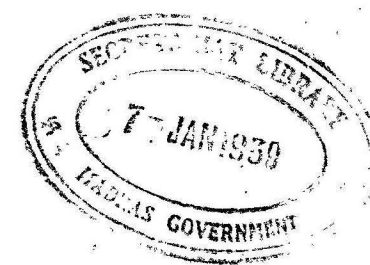


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Annual Report of the
Health Dept; Corporation of Madras
1937



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Annual Report

of

The Health Department

Corporation of Madras

for

The Year 1937

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MADRAS
1938

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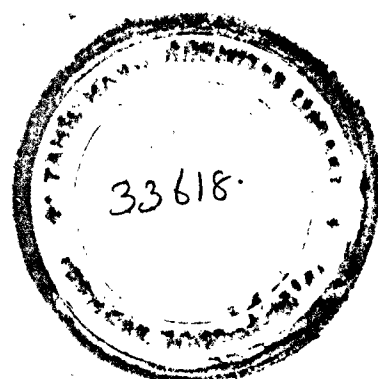
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INTRODUCTION

Commissioner,

Sir,

I submit herewith my report on the Health of Madras during 1937.

The estimated population for 1937 was 7,35,613 as against the census population of 6,48,230 in 1931. The number of live births exceeded the number of deaths by 5,284. This excess of births over deaths was equivalent to 7.2 per thousand of the population and was recorded nine times in succession. A slight reduction is noticed in the number of illegitimate births.

The total number of births 30,958 shows an increase of 1,769 births over the previous year and 1,977 births over the average of the quinquennium, 1932-1936. The birth-rate was 42.1 per thousand of the estimated population. The birth-rate was highest amongst Hindus.

The death-rate shows an increase of 2.1 per thousand of the estimated population. The total number of deaths 25,674 shows an increase of 2,014 as compared to 1936. 4,028 non-residents died in the city as against 2,569 in 1936. Excluding the deaths of non-residents the death-rate of the city for 1937 was 29.4.

The increase in the mortality was due to two circumstances, namely, the larger number of non-residents who died in the city during the year and the unusually high mortality that prevailed during the last quarter of the year owing to the heavy rains which resulted in the flooding of the several low-lying parts of the city. About a fourth of Madras is composed of low-lands occupied by the poor labouring classes. Unless adequate storm-water drainage is effected in these areas, there will be a high toll of human lives during the rainy season. Perambore, Choolai and Washermanpet require storm-water drainage urgently. It is sad to contemplate that what ought to be a season of comfort and low mortality is the reverse in Madras. Why should there be twice the number of deaths in the month of December when compared to that of July? A reference to the statement on page 5 shows that the fourth quarter recorded 1,941 deaths over and above the third quarter. Absence of effective storm-water drainage leads to the flooding of areas, destruction of huts and increase of dampness of flooring. Thousands are rendered homeless and mortality from respiratory and bowel diseases shoots up.

It is not possible to reclaim all the low-lands owing to the heavy expenditure involved. The best remedy lies therefore in effectively draining the low-lands and insisting on high plinths for tenements and huts. The expenditure on storm-water drainage has been totally inadequate and it is necessary that this question should receive greater attention at the hands of the authorities.

The main index of public health is the general death-rate and infant mortality. It is gratifying to note that despite the increase in the general death-rate, the rise in infantile mortality has not been proportionately high. Deaths among infants numbered 6,836 as against 6,318 in 1936. The infantile mortality rate was 220.8 which is the second lowest in the statistical records of the city. The infant mortality rate was highest among Muslims.

The most outstanding feature of the epidemiology of the year was the occurrence of cholera in epidemic form during the last quarter. As noted already, it was the result of the floods and the consequent insanitation of the low-lying areas. Thousands of people were rendered homeless

and panic stricken. The dissemination of the disease to the other parts of the city was an easy matter. But for the strenuous efforts of the staff there was every likelihood of a serious epidemic breaking out in the city. The existence of several villages and small towns round about Madras without any drainage and protected water supply has been a serious menace to the health of the city. 238 cases of cholera were brought from outside the city limits to the two Infectious Diseases Hospitals of the city. 46 of them died. It is high time that the Chingleput District Board takes up the question in right earnest and provides one or two isolation hospitals in suitable centres for the treatment of these cases with ambulance service. Unfortunately, epidemics of cholera occur almost simultaneously and it will not be possible to send the Corporation ambulance cars to distant parts when there are calls in the city itself.

When compared to 1936 mortality from small-pox, tuberculosis and respiratory diseases shows slight increase, while mortality from malaria, enteric fever, dysentery, diarrhoea and child-birth shows reduction.

1,155 persons died of tuberculosis as against 1,136 in 1936. Though constant efforts are made by the Corporation to reduce the general mortality by improving sanitation, the prevention of tuberculosis has not received much attention. The city tuberculosis hospital is not adequate to accommodate all the open and advanced cases. Another hospital is urgently required. Hundreds of cases are now kept in dwelling houses without proper isolation. It is these cases that disseminate the disease. In a campaign against tuberculosis nothing is more important than a vigorous and strict control of the construction and reconstruction of dwelling houses. Plans for the construction of tenements on "barrack" and "back to back" patterns are not rare even now. Such constructions should not be permitted.

The report of the School Medical Service reveals on the whole a high incidence of sickness, general debility and mal-nutrition, absence of cleanliness etc. This is obviously due to the low standard of life of parents who are unable to provide their children with the primary needs of a clean and hygienic home life. 2,662 children were afflicted with mal-nutrition. Administration of Cod liver oil enabled only 27 of them to regain normal health. In 1,292 improvement was noticed, while as many as 833 had to continue treatment without progress. Mal-nutrition is a condition brought about by the lack of balanced diet at home. These children are sure to become a prey to one or more of the dangerous diseases owing to the absence of the "resistance" in their system. Mere administration of Cod liver oil will not do in severe cases. Their diet has to be supplemented substantially to obtain better results. A supply of wholesome milk, wholesome bread and jaggery, with Cod liver oil as a tonic, will yield better results. The "follow-up" work of the Medical Inspectors yielded good results. 56 children had their carious teeth removed. 490 cases of stomatitis were cured. 127 children had their tonsils removed. 948 children having scabies, eczema etc. were cured. 79 children underwent operation for phimosis.

The leprosy survey of school children was kept up as in the previous year. 509 children were on the leprosy list. Of these 360 were old cases and 149 were from the entrants. In two children the symptom disappeared after treatment. In 32 children there was definite improvement after a prolonged course of treatment. In 428 cases no change was noticed. Owing to the paucity of funds the proposal to appoint a Chief School Medical Inspector was not sanctioned. However, it has to be emphasized that the expansion of work introduced in the School Medical Service in recent years would indicate the urgent necessity for the crea-

tion of such a post. A Chief Medical Inspector will be in a position to co-ordinate and supervise the work of the honorary and paid Medical Inspectors and ensure proper attention to the treatment of children at various hospitals and clinics. Further more, he will be in a position to organise the supply of mid-day meals and introduce more satisfactory diets in advanced cases of mal-nutrition etc.

The work of the Food Inspectors and the Public Analyst shows a progressive increase in the number of samples taken and a decrease in the adulteration of food stuffs. The percentage of adulteration was 22.5 during the year as against 23.9 in 1936. More important than the above is the reduction noticed in the degree of adulteration, especially in ghee. Other articles such as butter, milk, gingelly oil etc., all improved in quality. The construction of a Food Analysis Laboratory was sanctioned and the work was started towards the close of the year. With the addition of an assistant to the Public Analyst and better facilities for analytical work, even greater progress can be expected in coming years.

The expansion of the anti-mosquito measures yielded excellent results. For the first time mosquito nuisance was brought to a minimum during the cold months. Unsewered garden areas received special attention. The periodical visits of our staff have become a familiar feature in these areas and I am very thankful to the citizens for their co-operation in this behalf. With the repetition of the visits a progressive reduction of breeding places was noticed as mentioned in the report on pages 30, 31 and 32. 11,474 breeding places were destroyed by the house inspection staff alone. 25,320 unservicable articles which would have become breeding places for mosquitoes by the collection of rain water in them were removed. Water stored in pots, tubs, drums and cisterns and kept near latrines was a fertile source for the breeding of mosquitoes. A little more care on the part of the citizens can avoid this nuisance causing so much inconvenience to themselves and others. Anti-mosquito work in Thyagarayanagar was augmented by increasing the staff. If the scheme of house inspection is extended to the entire city, there would be a more uniform relief from mosquito nuisance.

Permanent measures included the filling up of 7 ponds and 702 wells. 229 wells were covered with Cuddapah slabs. 656 wells were provided with trap-doors. An intensive programme to fill up low-lands was inaugurated. Several areas were reclaimed notably behind Record Office, Egmore, in Couran Smith Nagar, near Kodambakkam, in Dr. Vijayaragavelu Road, in Perambore Tank, in Appasami Mudaly Street, Junction of Kandapillai Street and Vaidyanatha Mudaly Street, in Venkatanarayana Road, in Greenaway Road and in front of the Slaughter Houses. Further, several pits and depressions were reclaimed all over the city.

41,307 feet of new sewers were laid during the year as against 36,578 feet in 1936. A vigorous drive to convert the dry latrines into flushout latrines in sewerage areas was maintained throughout the year. 4,008 dry latrines were converted into flushout latrines in dwelling houses as against 2,727 in the previous year. Although the out-turn of work for the year has been fair, it should be pointed out that even after the lapse of 10 years during which the scheme has been in progress, about 50% of the houses in the city remain without this essential amenity. Unless every house is fitted up with flushout latrines in south Madras it will not be possible to close the Ice House Road Pail Depot. During the year under report an improved type of public convenience was put up in Gandhi Irwin Road, Egmore. Hundreds of people are using the bathrooms and latrines provided there every day. Proposals were under preparation for similar latrines in Choolai, Moore Market and Peoples Park. There is a great demand for these improved sanitary conveniences in all the slum areas in the city and it is the aim of the department to accomplish it within a reasonable time.

2,197 houses were repaired and rendered fit for human habitation. 415 houses which had no latrines previously were provided with latrines. Flushout latrines were installed in 7 factories. 624 cattle yards were rendered fit for licence after repeated prosecution. Owing to inadequate fines 327 cattle yards remained in the condemned list and they were a source of nuisance and ill-health to the neighbourhood. A scheme for the construction of public cattle yards was placed before the authorities. Owing to the difficulty of land alienation, the scheme sanctioned for putting up dhoby khanas was not taken in hand. A scheme for establishing a venereal clinic at Perambore was sanctioned and the clinic came into existence towards the close of the year.

The sanitation of private markets has been a matter of great concern and difficulty to the department. It was taken up early in the year firstly in connection with the issue of licences. A scheme was prepared to enable the Corporation to municipalise all the private markets in central Madras. The scheme was approved by the Council and it is now awaiting funds. This is a scheme involving huge finance, but it can be asserted at the same time that it is one which is likely to prove a great financial success if wisely managed. From the public health point of view, the benefit to the citizens will be immeasurable and I trust this scheme will be taken up for execution immediately.

As in the previous years a vigorous drive was maintained throughout the year against the sale of noxious food in public streets. Most of the thoroughfares of the city were free from gross abuse. All the private markets were kept in a better condition when compared to 1936 except Kothwal Market, the largest private market in the city. The trustees were interviewed. It was represented that they had a scheme for remodelling and rebuilding the market. Nothing came out of these promises and the market continues in the same condition as it was 10 years ago. What is required here is the widening of passages, building up of gangways, construction of roads, remodelling the latrines and drainage, rat-proofing the grain godowns, abolition of encroachments and gang-way bazaars. It is hoped that the authorities of the market will carry out the improvements which are long overdue.

The urgent need for a pure, sparkling and abundant supply of water to the city had been emphasized in the last report. Another year has passed without any achievement. Chlorination has become the only important feature of our water works practice. The process of filtration has been relegated to the background. Colonel C. A. H. Harold, Director of Water Examination, Metropolitan Water Board, London, has rightly voiced a warning as regards the place of chlorination in any scheme of water purification. He says: "The aim of application of chlorine should be a corrective to counter an emergency rather than the be-all and end-all of water purification; otherwise there is a definite risk of allowing our filtration, sedimentation and storage barriers to fall into a less important position and to depend upon chlorination entirely." Therefore greater attention has to be paid to the process of filtration to make the city water supply aesthetically satisfactory.

The proposal for the construction of storage tanks for Mylapore and Mandavelli was taken in hand towards the close of the year. The object of these storage tanks is to store water from 9 P. M. to 5 A. M. and supply the same from 5 A. M. to 10 A. M. and 4 P. M. to 6 P. M. At the time of writing the Report, two pairs of storage tanks have been put up and are functioning. The scarcity of water in these areas has been relieved, but more storage tanks in other out-lying areas have soon to be built.

The Royal Swimming Bath at the Peoples' Park has been functioning throughout the year on "the fill and empty" system. The Bath is likely to become more and more popular. Owing to the loss of nearly half a million gallons of water every week the present arrangement cannot be regarded as economical. In its place the system of "continuous circulation and purification of water" should be introduced. The Bath water will be kept in circulation during the period it is in use and will be so chlorinated continuously that a residual chlorine of 2 to 4 p. p.m. will be maintained. This will be more economical and hygienic.

Another wing to the recently constructed Food Laboratory has to be put up early for Water Analysis Section so that a fresh impetus may be given to the co-ordination and expansion of all chemical and biological work done at present at several places. The condition of the present Water Analysis Laboratory is very unsatisfactory and it has to be rebuilt next year.

Some useful work has been done in connection with the improvement of slums in the city during the year. 1,739 new houses came into existence as a result of private enterprise. Proposals were under preparation for improving a few Corporation slums by introducing underground drainage, sanitary conveniences, taps, roads and lights. These schemes have since come into operation. As regards private slums the preliminary step of declaring the areas as cheries under section 257 A has been done. Work connected with the preparation of standard plans for three of the worst cheries has been in progress. A close examination of the provisions of the chapter dealing with cheries and hutting grounds will reveal that the success of the scheme will ultimately depend upon the finances of the Corporation. The procedure is long and tedious and unless a special staff is put on this work, better progress cannot be expected.

In conclusion, I wish to state that the large volume of work noticed in the report would never have been possible but for the courtesy and active interest of the Commissioner and the co-operation of the Councillors. I thank them and also my assistants and staff for their high sense of duty and co-operation.

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

Forwarded to the Council.

R. SUBBAYYA,
Commissioner.

SUMMARY OF VITAL STATISTICS FOR 1937

Area	...	29,396	Sq. miles.
Population (Census, 1931)	...	6,47,230	
Population (estimated to middle of the year, 1937)	...	7,35,613	
Average density per acre	...	39.1	
Inhabited houses (Census, 1931)	...	73,845	
Births	...	30,958	
Birth-rate	...	42.1	per 1000 estimated population.
Birth-rate (average for the 5 years, 1932-36)	...	41.9	"
Still births	...	1,400	
Deaths	...	25,674	
Death-rate	...	34.9	per 1000 estimated population.
Death-rate (average for the 5 years, 1932-36)	...	34.4	"
Natural increase	...	5,284	
Rate of natural increase	...	7.2	per 1000 estimated population.
Infant mortality rate	...	220.8	per 1000 live births.
Infant mortality rate (average for the 5 years, 1932-36)	...	233.9	"
Maternal mortality rate	...	9.3	"
Maternal mortality rate (average for the 5 years, 1932-36)	...	10.5	"

DEATHS FROM PRINCIPAL DISEASES

	No.	Rate per 1000 estimated population.
Cholera	...	232
Diarrhoea and Dysentery	...	2,133
Small-pox	...	196
Measles	...	8
Malaria	...	78
Enteric Fever	...	96
Phthisis	...	1,104
Respiratory Diseases	...	6,676

VITAL STATISTICS

Area and Population :—The area of the city is 29·396 square miles. The mid-year population for 1937 worked out by the method of geometrical progression is estimated to be 7,35,613, the 1931 census population being 6,47,230. The estimated population has been used for the calculation of the important rates in the report; whereas the rates in the statistical statements appended to the report have been as usual worked out on the 1931 census population. The population for each of the 40 divisions into which the city is divided as per the Madras City Municipal (Amendment) Act, 1936, not being available, it has not been possible to work out the various divisional rates in the statements.

Meteorology:—A statement showing the atmospheric conditions recorded during 1937 is furnished in the Annual Form A and Table B.

The total rainfall of 61.38 inches recorded during the year is the highest since 1930 which recorded 78.69 inches. An increase of 17.13 inches as compared with the rainfall in the preceding year and an increase of 19.8 inches over the average rainfall for the past 5 years (1932-36) are noticeable.

The highest rainfall was in November (23·81 inches) and the lowest in January (0·07 inch). There was no rainfall in the months of February, March and May.

As usual, the last quarter of the year recorded the highest rainfall (41.06 inches) as against 24.63 inches in the same quarter of 1936. There was rainfall on 100 days during the year.

The weather conditions have a definite influence upon public health. The atmospheric conditions following a severe monsoon usually contribute to the increase of mortality. It was so during the year under report. The abnormal rainfall and the consequent inundation in different parts of the city exerted a baneful influence in increasing the general mortality and the spread of cholera. The people were rendered homeless in the flooded areas. Overcrowded and damp areas thus favoured high mortality. The havoc caused by the flood this year was definitely worse than that of the flood which occurred in 1930.

The graph No. 1 showing the rainfall and its influence on weekly mortality illustrates clearly the rise in the mortality curve soon after the severe and continued rains.

Registration Staff.:—Seventeen sub-assistant surgeons attended to the registration of births and deaths in the city during the year.

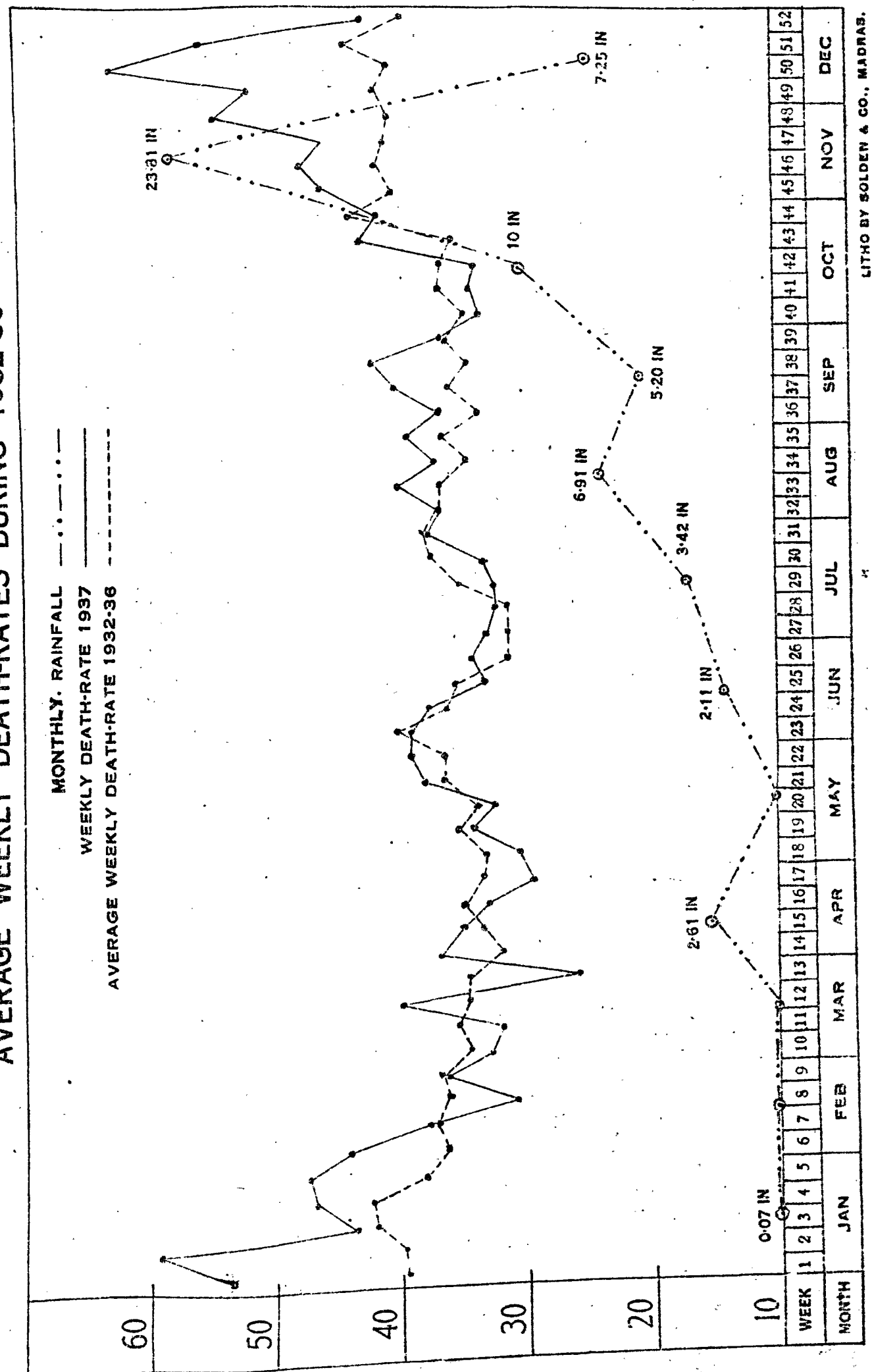
Births and Deaths :—30,958 live births were registered during the year; thus recording an increase of 1,769 births over the previous year and 1,977 births over the average of the quinquennium (1932-36). The number of births registered during the year stands next to the year 1935 which recorded the highest (31,031 births).

Calculated on the estimated population the birth-rate was 42.1 as compared with 40.5 in 1936, the average rate for the past 5 years (1932-36) being 41.9.

The birth-rate calculated on the census population is given in the Annual Form I appended to the report. It was 47.8 as against 45.1 in 1936, the quinquennial (1932-36) average being 44.8.

Of the total births, 15,931 were males and 15,027 females; thus there were 106 male births for every 100 female births. The excess of male

GRAPH I
RAINFALL AND WEEKLY DEATH-RATES IN 1937, AND
AVERAGE WEEKLY DEATH-RATES DURING 1932-36



births over female births was recorded in 32 municipal divisions. The births were equal in both sexes in one division and the female births were in excess of the male births in the remaining 7 divisions.

Illegitimate Births :—The number of illegitimate births registered during the year was 210 or 0·7 per-cent of the total births as compared with 256 births or 0·9 per cent in 1936.

Births in Different Quarters of 1937 :—The largest number of births was recorded in December (3,332) and the lowest in February (1,865). A comparative statement of births registered in each quarter of 1936 and 1937 and the quarterly average for the quinquennium (1932-36) is furnished below :

Year.	1st. Quarter.	2nd. Quarter.	3rd. Quarter.	4th. Quarter.
1932-36	5,999	7,034	7,857	8,090
1936	5,985	6,747	8,043	8,414
1937	6,247	7,768	8,045	8,898

The first and fourth quarters recorded the lowest and the highest births respectively.

Birth-rates in communities :—The birth-rates recorded among the principal communities during the year are as follows :

Communities.	No. of births registered.	Rate per 1000 estimated population in each community.
European	35	8·7
Anglo-Indian	384	32·5
Indian Christian	1,564	34·3
Hindu	25,620	43·6
Mohamedan	3,350	40·4
All communities	30,958	42·1

The birth-rate was highest among the Hindus. The Mohamedans returned the next highest. The Europeans recorded the lowest.

Table C appended to the report gives the number of births and birth-rates in the above communities worked out on the census population.

Still-Births :—The number of still-births registered during the year was 1,400 as against 1,415 in 1936. This represented 45·2 per 1,000 live births as compared with 48·5 in the preceding year.

Deaths and Death-rates :—The total number of deaths registered during the year under report numbered 25,674 as compared with 23,660 deaths in 1936, the quinquennial average being 23,813. As previously stated this increase in mortality was the result of the abnormal rainfall and floods experienced during the year and was also due to the prevalence of small-pox and cholera. These adverse conditions prevailed in the districts of the Presidency adjoining the city as well and were responsible for the rise in mortality during the year. The constant influx of people into this metropolitan city from within and without the Presidency makes it always vulnerable to infectious diseases.

Of the total deaths, 21,646 deaths were those of residents and 4,028 deaths were those of non-residents (including destitutes and homeless) chiefly occurring in public institutions, hospitals, etc.

Calculated on the estimated population, the annual death-rate was 34.9 as against 32.8 in the preceding year, the quinquennial average being 34.4.

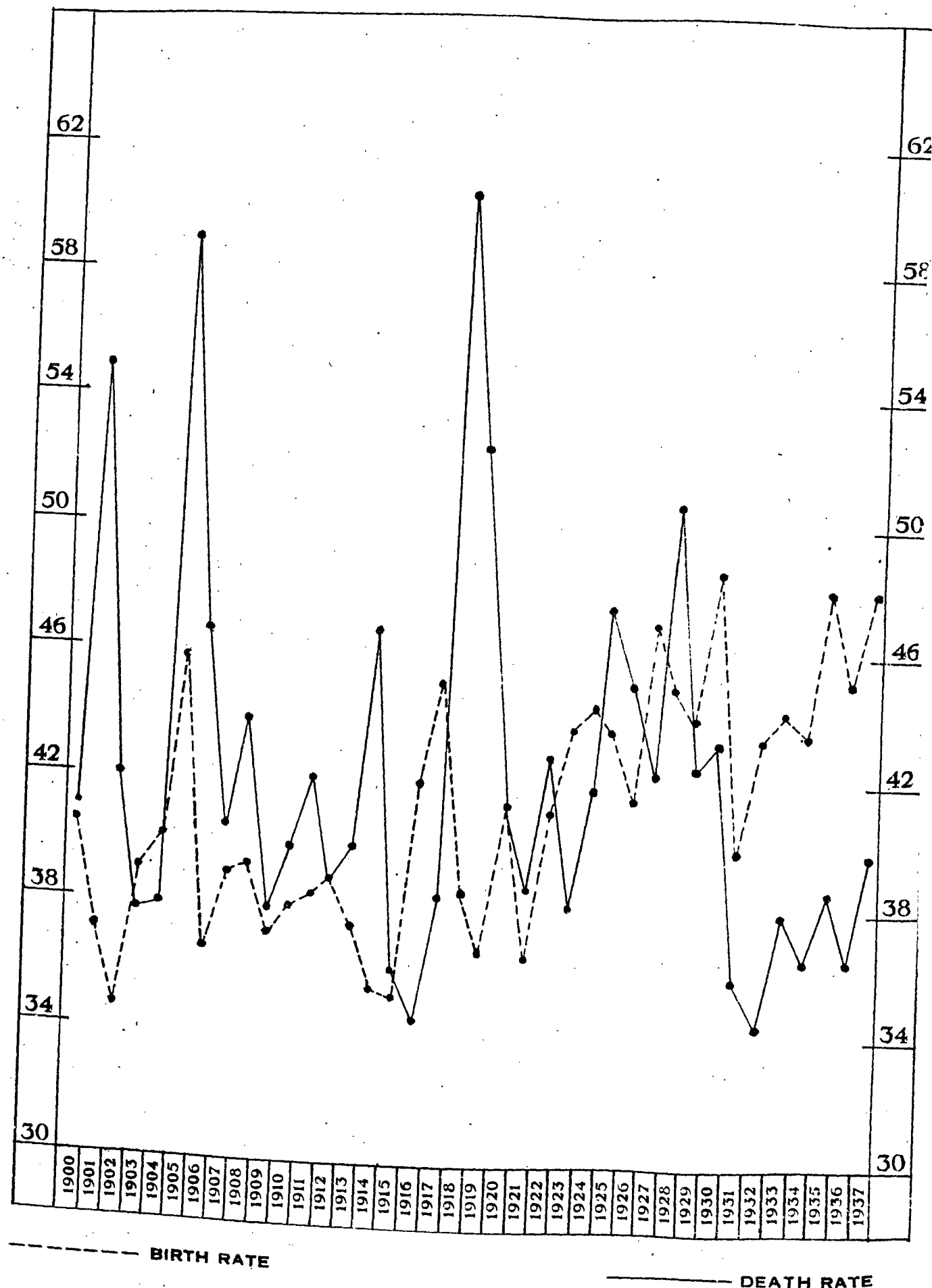
The annual death-rate calculated on the census population was 39.7 as compared with 36.6 in 1936, the average for the quinquennium (1932-36) being 36.3.

An excess of 5,284 births over deaths was recorded during the year as compared with 5,529 in 1936. The rate of "Natural Increase" worked out to 7.2 per mille of estimated population as against 7.7 in the previous year.

A statement of births and deaths recorded in the city from 1900 to 1937 is furnished below with special reference to the natural increase. It will be observed that the natural increase is being continuously recorded since 1929.

Year.	Births.	Deaths.	Natural increase or decrease.
1900	20,672	20,937	-265
1901	18,872	28,031	-9159
1902	17,743	21,395	-3652
1903	19,830	19,205	+625
1904	20,439	19,305	+1134
1905	23,263	30,060	-6797
1906	18,608	23,749	-5141
1907	19,808	20,638	-830
1908	19,980	22,285	-2305
1909	18,981	19,354	-373
1910	19,340	20,312	-972
1911	19,735	21,771	-2036
1912	20,099	20,132	-33
1913	19,470	20,675	-1205
1914	18,241	24,174	-5933
1915	18,331	18,688	-357
1916	21,675	17,872	+3803
1917	23,296	19,917	+3379
1918	19,897	31,262	-11365
1919	18,936	27,187	-8251
1920	21,396	21,418	-22
1921	19,187	20,268	-1081
1922	21,650	22,475	-825
1923	22,975	19,933	+3042
1924	23,275	21,960	+1315
1925	23,070	25,000	-1930
1926	22,000	23,776	-1776
1927	24,760	22,364	+2396
1928	23,729	26,715	-2986
1929	23,124	22,415	+709
1930	25,662	22,839	+2823
1931	25,738	23,162	+2576
1932	27,996	22,290	+5706
1933	28,533	24,500	+4033
1934	28,149	23,659	+4490
1935	31,031	24,955	+6076
1936	29,189	23,660	+5529
1937	30,958	25,674	+5284

GRAPH II
CITY OF MADRAS
BIRTH AND DEATH-RATES 1900-1937
RATE PER 1,000 POPULATION (CENSUS)



LITHO BY SOLDEN & CO., MADRAS.

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Graph No. II illustrates the birth and death rates from 1900 to 1937.

During the year under report, 32 municipal divisions recorded natural increase, i. e. excess of births over deaths.

Deaths in different Quarters of 1937 :—The highest number of deaths was registered in December (3,320) and the lowest in April (1,759). The following statement furnishes the number of deaths registered in the different quarters of 1936 and 1937 and the quarterly average for the quinquennium (1932-1936).

Year.	1st. Quarter.	2nd. Quarter.	3rd. Quarter.	4th. Quarter.
1932-36	5,860	5,546	5,729	6,678
1936	5,583	5,517	5,814	6,746
1937	6,054	5,587	6,046	7,987

Death-rates in communities :—The principal communities recorded the following death-rates during the year :

Community.	Deaths.	Rate per 1000 estimated population in each community.
European	...	18
Anglo-Indian	...	253
Indian Christian	...	1,124
Hindu	...	21,265
Mohamedan	...	3,011
Others	...	3
All Communities	25,674	34.9

Table C gives the statement of deaths and death-rates in the communities calculated on the census population.

Age and Sex distribution of Deaths :—Of the total deaths registered during the year, 13,281 were among males and 12,393 among females; As usual, male deaths predominated over female deaths — 107 deaths among males for every 100 deaths among females as compared with 105 male deaths for every 100 female deaths in 1936. This was noticed in 27 municipal divisions. In one division, the deaths were equal in both the sexes. In the remaining 12 divisions, the female deaths exceeded the male deaths.

The specific death-rates among males and females during the year were 34.1 and 35.8 per mille of the estimated population respectively.

The statement furnished below gives the number of deaths at the various age-periods, the death-rate per 1000 of the estimated population and the percentage to the total number of deaths in each age-period :

Age-period.	No. of Deaths.	Rate per 1000 estimated population.	Percentage to total deaths.
Under 1 year	6,836	220.8*	26.6
1- 5 years	4,611	62.2	18.0
5- 10 years	979	12.6	3.8
10-15 years	474	6.3	1.8
15-20 years	630	8.0	2.5
20-30 years	2,133	13.5	8.3
30-40 years	1,869	15.8	7.3

Age-period.	No. of Deaths.	Rate per 1000 estimated population.	Percentage to total deaths.
40-50 years ...	1,700	24.2	6.6
50-60 years ...	1,801	50.1	7.0
60 and above ...	4,641	235.6	18.1
	<u>25,674</u>	<u>34.9</u>	<u>100.0</u>

*Calculated on 1000 live births registered during the year.

Annual Form No. IV furnishes the death-rates in different age-periods calculated on the census population.

Infantile Mortality:— During the year under report, the deaths of 6,836 infants under one year of age were registered. Of these, 4,722 deaths occurred among infants born in the city and 2,114 deaths among infants born in the moffusil.

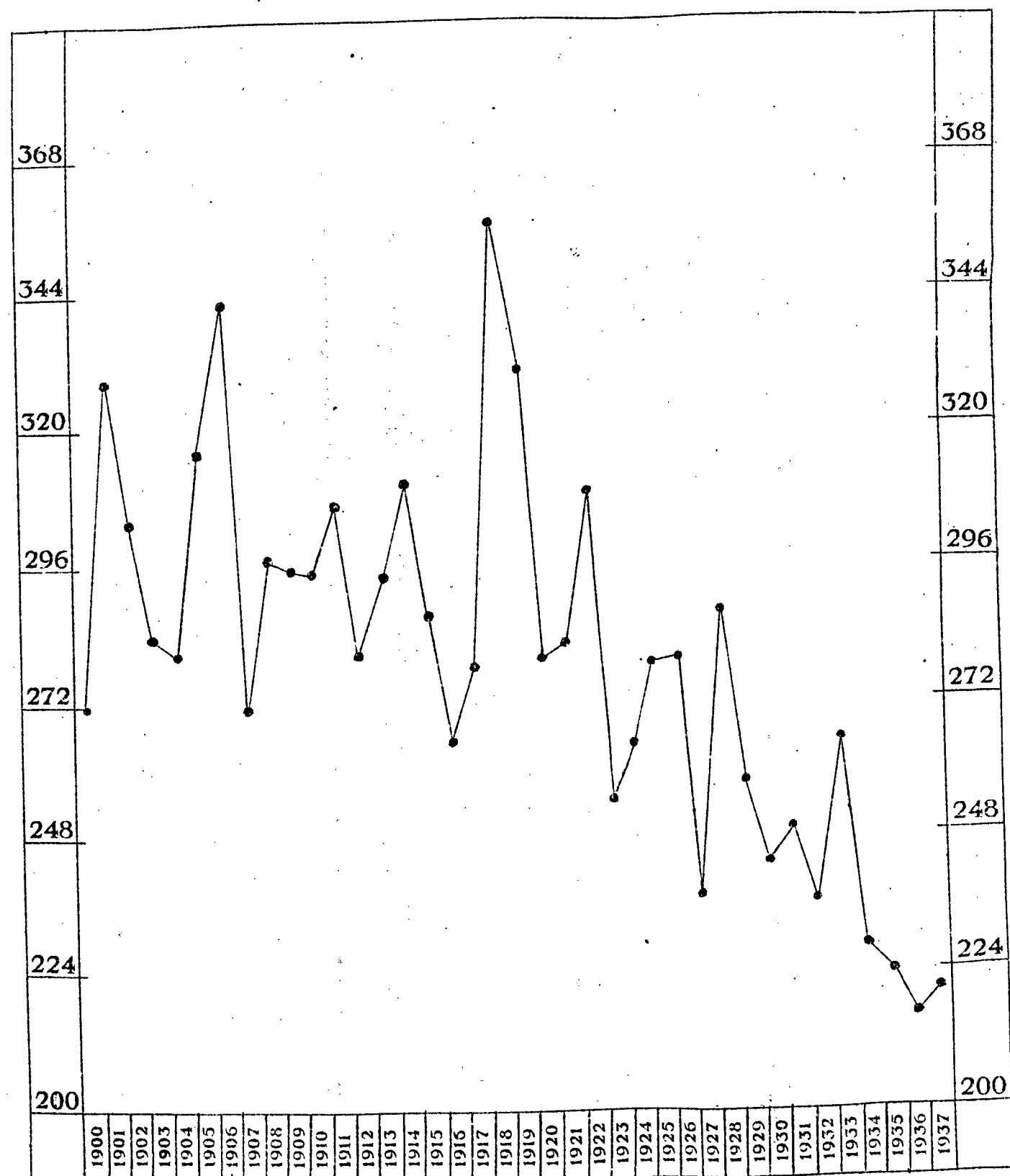
The infantile death-rate during the year was 220.8 as compared with 216.5 in the preceding year. The rate recorded in 1936 is the lowest. The rate during the year under report is the second lowest in the vital statistical records. The average rate for the past 5 years (1932-36) was 233.9.

Excluding the deaths of infants born outside the city, the infantile death-rate would be 152.5.

The infantile mortality rates recorded in the city from 1900 to 1937 are as follows :

Year.	Rate per 1000 births.	Average for 10 years.
1900	272.0	
1901	328.3	
1902	303.9	
1903	283.3	
1904	280.9	298.8
1905	316.3	
1906	341.2	
1907	270.7	
1908	296.3	
1909	295.0	
1910	294.1	
1911	305.4	
1912	280.4	
1913	293.4	
1914	308.9	299.5
1915	286.1	
1916	265.1	
1917	277.3	
1918	355.2	
1919	329.0	
1920	279.3	
1921	281.9	
1922	308.0	
1923	254.0	
1924	264.1	272.6

GRAPH III
CITY OF MADRAS
INFANTILE MORTALITY RATES 1900-1937
(RATE PER 1,000 LIVE BIRTHS)



LITHO BY SOLDEN & CO., MADRAS.

Year.	Rate per 1000 births.	Average for 10 years.
1925	278.8	
1926	279.3	
1927	237.6	
1928	286.8	
1929	256.6	
1930	243.9	
1931	248.3	
1932	236.5	
1933	264.3	
1934	228.2	
1935	223.9	
1936	216.5	
1937	220.8	

Graph No. III illustrates the infantile death-rates from 1900 to 1937.

Age and Causes of infant deaths :—The following statement furnishes the principal causes of infant deaths under different age-periods :

Age-periods.	Small-pox.	Measles.	Malaria.	Other fevers.	Diarrhoea and Dysentery.	Premature birth.	Debility.	Nervous system (Infantile convulsions)	Respiratory diseases.	Other causes.	Total.	Percentage of deaths to total infant deaths.
Under 7 days.				7	16	1,219	12	58	15	157	1,484	21.7
7 days and under one month.				16	32	681	12	54	53	163	1,021	14.9
1 month and under 4 months.	4		1	70	105	252	37	184	440	291	1,384	20.2
4 months and under 7 months.	7			70	139	9	27	132	583	191	1,158	16.9
7 months and under 10 months.	4	2	2	66	125		3	89	586	174	1,051	15.5
10 months and under one year.				58	88		4	51	313	224	738	10.8
Total.	15	2	3	287	505	2,161	95	568	2,000	1,200	6,836	100.0

Infantile Deaths by Months :—Table E in the appendix gives in detail the number of infant deaths and infantile mortality rates according to months as compared with 1936. The highest mortality rate was recorded in January (282.6) and the lowest in April (171.3).

Infantile mortality-rates in divisions:—The number of births and the number of infant deaths registered in the 40 municipal divisions with the infantile mortality rates per 1000 births during the year are given in the following statement:

Municipal divisions.	No. of births registered.	No. of infant deaths.	Infantile mortality rates per 1000 births.
1	579	155	267.7
2	616	126	204.6
3	1,465	297	202.7
4	1,316	306	232.6
5	1,262	303	240.1
6	381	98	257.2
7	774	145	187.4
8	306	52	166.1
9	666	134	201.2
10	379	106	279.7
11	746	156	209.1
12	293	69	235.5
13	1,083	267	246.5
14	759	217	286.0
15	326	91	279.1
16	406	126	310.3
17	1,272	306	240.5
18	958	232	242.2
19	1,414	355	251.1
20	838	187	223.1
21	832	163	195.9
22	550	86	156.3
23	881	208	236.1
24	550	108	196.3
25	851	185	217.4
26	914	194	212.2
27	876	148	169.0
28	621	117	188.1
29	433	103	237.9
30	826	173	209.1
31	998	205	205.4
32	962	173	179.8
33	645	138	213.9
34	735	165	224.5
35	1,678	373	222.3
36	701	141	201.1
37	766	174	227.2
38	464	73	157.3
39	503	100	198.8
40	333	81	243.3
	30,958	6,836	220.8

20 municipal divisions returned rates above the annual infantile mortality rate for the whole city. High death-rates occurred in divisions which are congested and which contain poorer classes. Ignorance, poverty and economic distress of the parents account for the high mortality among the infants.

Infantile mortality rates in communities:—The infantile mortality rates in the principal communities during 1937 are as follows:

Community.	Births registered.	Infantile deaths.	Rate per 1000 births in each community.
European	35	2	57.1
Anglo-Indian	384	46	119.8
Indian Christian	1,564	304	194.4
Hindu	25,620	5,659	220.9
Mohamedan	3,350	818	244.2

The births, infant deaths and infantile mortality rates in the principal sub-castes of the Hindu community for 1937 are set forth in the table below:

Caste.	Births in each caste.	Infant deaths in each caste.	Rate per 1000 births in each caste.
Brahmin	2,126	352	165.6
Chetty	1,814	433	238.7
Vellala or Mudaliar	4,122	795	192.9
Balijah or Naidu	2,522	629	249.5
Vannia or Naicker	4,033	968	240.1
Adi-dravida	3,910	1,003	256.4
Patnavar	342	106	309.9
Yadhava or Edayar	852	217	254.8
Viswakarma Brahmin or Kammalar	790	168	212.7
Others	5,109	988	193.4
	25,620	5,659	220.9

Principal Causes of Deaths:—The following table gives the number of deaths from various causes together with the death-rates per 1000 of the estimated population and the percentage to the total number of deaths registered during the year.

Causes of deaths.	No. of deaths registered.	Rate per 1000 estimated population.	Percentage to total deaths.
Cholera	232	0.32	0.90
Dysentery & Diarrhoea	2,133	2.9	8.31
Small-pox	196	0.27	0.76
Measles	8	0.01	0.03
Malaria	78	0.11	0.30
Enteric fever	96	0.13	0.38
Other fevers	2,036	2.8	7.93
General respiratory diseases	6,676	9.1	26.00
Tuberculosis	1,155	1.6	4.50
Deaths from childbirth	289	0.39	1.13
All other causes including deaths from injuries	12,775	17.4	49.76
	25,674	34.9	100.00

Cholera:—795 attacks and 232 deaths from cholera occurred during the year as against 395 attacks and 140 deaths in the preceding year. The annual death-rate calculated on the estimated population was 0·32 as compared with 0·19 in 1936, the average for the quinquennium (1932–36) being 0·15.

The death-rate calculated on the census population was 0·36 as compared with 0·22 in the preceding year, the quinquennial average being 0·17.

The statistics of deaths from cholera from 1918 to 1937 are given below:

Year.	Deaths.	Year.	Deaths.
1918	503	1928	708
1919	642	1929	16
1920	22	1930	43
1921	139	1931	153
1922	17	1932	5
1923	21	1933	62
1924	97	1934	166
1925	203	1935	145
1926	98	1936	140
1927	512	1937	232

Graph IV illustrates the mortality from cholera from 1918 to 1937. The distribution of attacks and deaths in each of the quarters of 1937 are as follows:

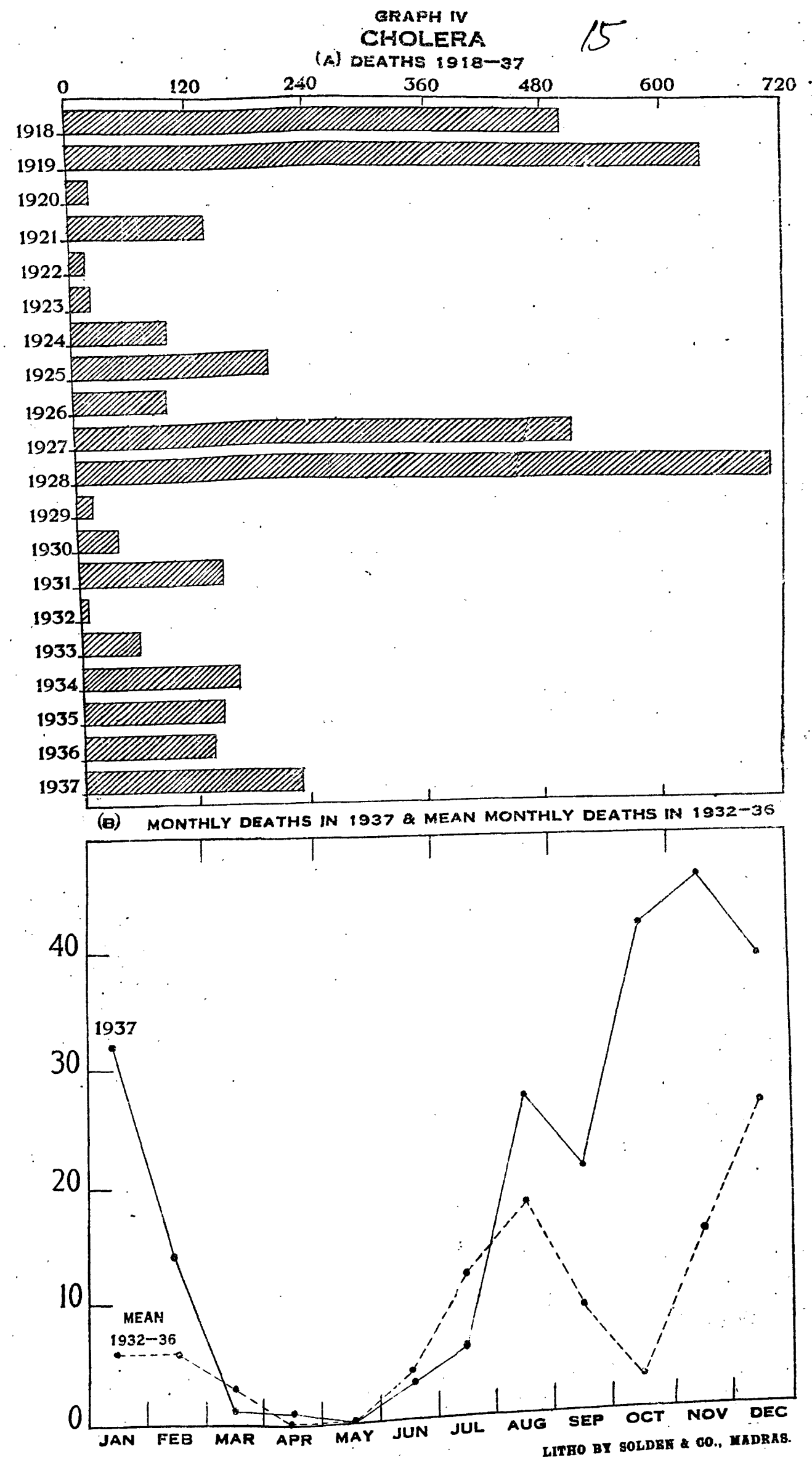
Quarters.	Attacks.	Deaths.
1st. quarter	89	47
2nd. quarter	9	4
3rd. quarter	164	54
4th. quarter	533	127
	<u>795</u>	<u>232</u>

A comparative statement of the incidence of cholera in the city during each quarter of 1936 and 1937 and the quarterly average for the quinquennium (1932–1936) is furnished below:

	1st. quarter.	2nd. quarter.	3rd. quarter.	4th. quarter.
1932–36 ...	36	10	97	106
1936 ...	103	7	14	271
1937 ...	89	9	164	533

It will be seen from the above statement that the incidence is lowest during the second quarter. The infection begins to spread and accounts for larger number of cases during the third quarter. The Periapalayam festival in Chingleput district which is held every year during July attracts thousands of people from the adjoining districts including the city and gives annually a cause for alarm. Invariably, the epidemic breaks out following this festival in the adjoining districts and Madras, being very adjacent, cannot but share the chances of the infection. It is during the last quarter of every year that the largest number of cases often occurs. The atmospheric conditions following the monsoons probably account for the intensity and the spread of the infection which continues to give rise to the incidence of the disease in the following year also.

The seasonal occurrence of cholera in the city is shown in Graph IV (B).



The disease which was prevalent in 1936 continued to prevail during the year under report and accounted for 89 cases during the first quarter. Though it showed signs of abatement during the second quarter, it re-appeared due to the usual effects of the seasonal influence and accounted for 164 cases during the third quarter. The infection became more severe and wide spread during the last quarter and there were as many as 533 cases during this quarter. The highest number of attacks and deaths occurred in November (265 attacks and 46 deaths) and this severe rise in the incidence of cholera was due to the unusual rains, floods and the consequent insanitation of the affected areas. Thousands of people were rendered homeless and panic stricken. The dissemination of the infection to the other parts of the city occurred very easily. The disease was severe in December also (168 attacks and 39 deaths).

During the year all the municipal divisions returned cases of cholera except the 29th. division. The highest incidence took place in the 4th. municipal division (87 attacks), followed by the 1st. municipal division (66 attacks), 5th. municipal division (52 attacks), 3rd. municipal division (45 attacks), 19th. municipal division (44 attacks), 18th. municipal division (35 attacks), and 35th. municipal division (31 attacks). A large number of cases in these divisions as well as in other divisions occurred soon after the floods specially among the homeless and those stranded as a result of the floods.

The disease was raging in the adjoining districts as well before and after the floods and as many as 238 cases from the surrounding infected areas were admitted into the Infectious Diseases Hospitals for treatment. Among these 238 cases, death occurred in 46 cases.

The Annual Form VI gives the number of deaths in the various divisions during the year. Deaths occurred in all the municipal divisions excepting in 26th. 29th. and 38th. divisions.

Preventive measures were promptly carried out by the sanitary and medical staff of the department. Isolation, disinfection and inoculation were strictly enforced. As many as 41,031 persons were inoculated with anti-cholera vaccine. The hospital staff was suitably augmented to meet the requirements. The city water supply was carefully watched and found to be safe. The incidence of the disease in the city and the methods of its prevention were made known to the public through the Corporation Broadcasting Station and press communiques. Pamphlets were distributed. The medical practitioners in the city were requested by a circular letter to co-operate with the department and avail themselves of the free supply of anti-cholera vaccine from the Corporation Vaccine Depot. The sale of noxious food was prevented. Special attention was paid to the conservancy of the affected localities.

The two ambulance cars attached to the Corporation Isolation Hospitals were utilised for the prompt removal of patients free of charge. The number of cases treated and the results of treatment are given in the statements of the Infectious Diseases Hospitals.

Diarrhoea and Dysentery :—Diarrhoea and dysentery accounted for 2,133 deaths with a death-rate of 2·9 per mille of the estimated population as compared with 3·1 in 1936, the average of the quinquennium (1932-36) being 3·4. Calculated on the census population, the annual death-rate was 3·3 as against 3·4 in 1936, the average rate for the past 5 years being 3·6.

The mortality from diarrhoea and dysentery from 1928 to 1937 is given below:

Year.	Deaths.	Year.	Deaths.
1928	3,931	1933	2,670
1929	3,127	1934	2,008
1930	3,056	1935	2,320
1931	2,746	1936	2,208
1932	2,644	1937	2,133

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

Quarters.	Deaths.
1st. Quarter.	550
2nd. Quarter.	462
3rd. Quarter.	514
4th. Quarter.	607
	2,133

The Annual Form No. XIII furnishes the deaths in the various divisions.

Small-pox:—During the year 756 attacks and 196 deaths were reported from small-pox as against 37 attacks and 3 deaths in the previous year, 1936. The disease was prevalent in the districts of this Presidency as well as in Bombay. The annual death-rate was 0·27 per mille of the estimated population as compared with 0·004 in 1936. The quinquennial average (1932–36) was 0·36. Calculated on the census population, the annual death-rate was 0·3 in 1937 and 0·005 in 1936, the rate for the past 5 years being 0·38

The incidence of small-pox during the past 20 years (1918–1937) is furnished below:

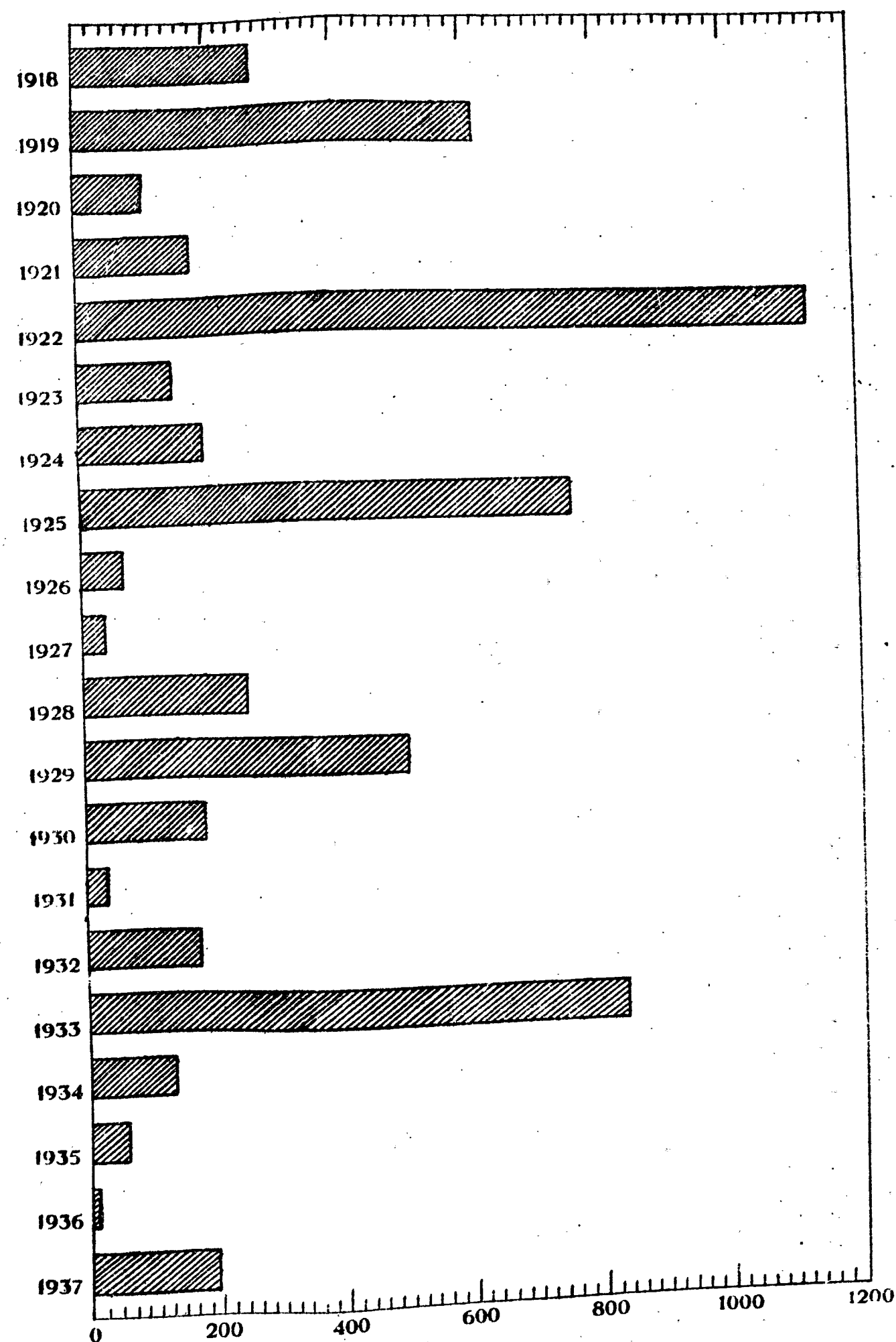
Year.	Attacks.	Deaths.	Year.	Attacks.	Deaths.
1918	677	272	1928	1,066	251
1919	1,227	611	1929	2,019	506
1920	315	109	1930	877	188
1921	569	180	1931	109	24
1922	2,727	1,121	1932	842	176
1923	481	151	1933	3,503	837
1924	665	197	1934	638	131
1925	1,807	763	1935	295	59
1926	300	60	1936	37	3
1927	385	32	1937	756	196

The mortality statistics from small-pox in the city during the past 20 years is illustrated in Diagram No. V. It will be seen that there is a seasonal prevalence of the disease in the city once in 3 to 4 years.

The incidence in the several quarters of the year under report was as follows:

Quarters.	Attacks.	Deaths.
1st. Quarter	73	19
2nd. Quarter	125	43
3rd. Quarter	297	73
4th. Quarter	261	61
	756	196

DIAGRAM V
DEATHS FROM SMALLPOX 1918–37.



Cases were reported during all the months of the year. The highest number of attacks and deaths was reported in December (142 attacks and 32 deaths). The next in severity was in August (139 attacks and 31 deaths), and then in July (85 attacks and 21 deaths), in September (73 attacks and 21 deaths), in October (66 attacks and 19 deaths) and in November (53 attacks and 10 deaths). The incidence was the lowest in January (6 attacks and 3 deaths).

All the municipal divisions were affected. 35th. division reported the largest number of attacks (101 attacks and 32 deaths) followed by the 14th. division (59 attacks and 15 deaths), 13th. division (39 attacks and 10 deaths), 15th. division (39 attacks and 15 deaths), 10th. division (39 attacks and 8 deaths), 16th. division (37 attacks and 7 deaths) and 12th. division (35 attacks and 9 deaths). The lowest number of attacks was reported from the 28th. division (1 attack and no death). Deaths occurred only in 35 municipal divisions.

The disease was raging in the adjoining districts and as many as 40 cases were admitted into the Infectious Diseases Hospitals for treatment. Death occurred in 7 cases.

Annual Form No. VII gives the number of deaths in the various divisions during the year.

The patients were promptly removed to the hospitals and the infected houses were disinfected immediately by the sanitary staff. House to house inspections were made to detect hidden cases. The medical staff pushed on vaccination and re-vaccination among the contacts by house to house visits. The medical practitioners were requested to notify all cases coming to their notice. A press communique was issued and a message on the prevention of small-pox and the need for notification and re-vaccination was sent to the public through the Corporation Broadcasting Station. Pamphlets were also distributed. The heads of public institutions, colleges and schools were informed to get their staff and pupils re-vaccinated. Additional staff was appointed for the Infectious Diseases Hospitals to cope with the increased work. The infected areas were specially conserved and kept clean.

Vaccination and re-vaccination performed during the year are given in a separate report elsewhere.

The number of small-pox cases isolated and treated during the year is given in the statements of the Infectious Diseases Hospitals.

Measles :—8 deaths from measles were registered during the year as against 5 in 1936. The annual death-rate was 0.01 per mille of estimated population as compared with 0.007 in 1936. Only 6 municipal divisions reported deaths from this disease. (Annual Form No. VIII.)

Malaria :—78 deaths from malaria were registered as against 113 in the previous year. The annual death-rate was 0.11 per mille of estimated population as against 0.16 in 1936, the average for the quinquennium being 0.24. Calculated on the census population, the death-rate was 0.12 in 1937 and 0.18 in 1936, the quinquennial rate being 0.24.

The mortality from malaria for the past 10 years (1928-37) is furnished below :

Year.	Deaths.	Year.	Deaths.
1928	1,599	1933	140
1929	681	1934	193
1930	283	1935	167
1931	277	1936	113
1932	165	1937	78

The number of deaths during the year is the lowest.

The distribution of deaths during the quarters of the year was as follows :

Quarters.	Deaths.
1st.	21
2nd.	19
3rd.	18
4th.	20
	78

Annual Form No. X gives the number of deaths registered in each municipal division.

Anti-malarial measures were carried out as usual by a special staff. A report of work done by the staff is given separately.

Enteric Fever :—The occurrence of 274 cases of enteric fever was notified during the year as against 423 cases in the preceding year, 1936. Of these, 96 died with an annual death-rate of 0.13 per mille of estimated population as against 0.23 in 1936, the quinquennial (1932-36) average being 0.2. Calculated on the census population, the death-rate was 0.15 in 1937 and 0.25 in 1936, the average for the previous five years being 0.21.

The mortality from enteric fever for the past 10 years is given below :

Year.	Deaths.	Year.	Deaths.
1928	177	1933	90
1929	130	1934	145
1930	126	1935	186
1931	166	1936	163
1932	101	1937	96

With the exception of the year, 1933, the number of deaths during the year stands lowest. Cases occurred throughout the year. The highest number of attacks was reported in October (34 attacks) followed by September (32 attacks) and August (30 attacks). The lowest incidence was reported in April (8 attacks).

The distribution of the 274 cases during the year was as follows :

Quarters.	Attacks.	Deaths.
1st.	53	21
2nd.	51	23
3rd.	89	33
4th.	81	19
	274	96

With the exception of the 6th. municipal division, cases were reported from all the other divisions. 23rd. and 32nd. municipal divisions reported the largest number of cases (19). Among the 39 municipal divisions which reported the incidence, no death occurred in the 10th. 16th. 21st. 22nd. 34th. 36th. 37th. and 40th. divisions. (Annual Form No. XI.)

Prompt preventive measures were vigorously carried out in all the infected houses and 1,849 contacts were inoculated with anti-typhoid vaccine as a prophylactic measure.

Other Fevers :—2,036 deaths were registered as against 1,799 in the preceding year, the annual death-rate being 2.8 and 2.5 per mille of estimated population respectively. The average for the past 5 years (1932-36) was 2.9. Calculated on the census population, the death-rate was 3.1 in 1937 and 2.8 in 1936, the quinquennial average being 3.1.

The number of deaths registered in each municipal division is given in the Annual Form No. XII.

General Respiratory Diseases :—6,676 deaths were registered under this group as compared with 6,410 in 1936. The annual death-rate was 9.1 per mille of estimated population as against 8.9 in the previous year, the quinquennial (1932-36) average being 8.7. Calculated on the census population, the death-rate was 10.3 in 1937 and 9.9 in 1936, the rate for the past 5 years being 9.2.

The distribution of mortality during the year was as follows :

Quarters.	Deaths.
1st.	1,721
2nd.	1,529
3rd.	1,496
4th.	1,930
	6,676

The number of deaths registered in each division is given in the Annual Form No. XV.

Tuberculosis :—1,155 deaths were registered from tuberculosis during the year as compared with 1,136 deaths in 1936. Calculated on the estimated population, the annual death-rate was 1.6 being the same as in the previous year. The average of the quinquennium (1932-36) was also 1.6. Calculated on the census population, the death-rate was 1.8 in 1937 and the rates for 1936 and for the quinquennium (1932-36) were 1.7 and 1.6 respectively.

The number of deaths due to tuberculosis of lungs was 1,104 or 1.5 per mille of estimated population as against 1,010 or 1.4 in 1936.

The mortality from tuberculosis from 1928 to 1937 is furnished below :

Year.	Deaths.	Year.	Deaths.
1928	1,812	1933	1,011
1929	1,371	1934	1,122
1930	1,075	1935	1,209
1931	1,020	1936	1,136
1932	917	1937	1,155

The following is the number of deaths registered in each quarter of the year :

Quarters.	Deaths.
1st.	267
2nd.	245
3rd.	282
4th.	361
	<u>1,155</u>

The number of deaths registered in the various divisions is given in the Annual Form No. XIV.

The sanitary and medical staff disinfected the infected houses and explained to the contacts and relatives the necessity for early notification and early treatment and the value of fresh air and food in preventing this disease.

All the cases that were notified by the hospitals and medical practitioners were visited from time to time and kept under observation. The patients were also instructed about the methods of prevention, isolation, disinfection of sputum and its disposal, value of fresh air, fresh and nutritious food, personal cleanliness, treatment, rest, etc. Pamphlets on tuberculosis were freely distributed to them.

The problem relating to the prevention of tuberculosis is purely a social problem as it is more a disease of the poor than of the well-to-do classes. It gains a strong foot-hold only where poor food, bad housing, over-crowding, over-work and worry exist. If any great reduction in the incidence of this disease is to be effected, the social and economic conditions of the masses have to be improved.

Deaths from Child-birth:—289 women died from causes connected with child-bearing as compared with 294 in 1936. The maternal mortality rate was 9.3 per 1000 live births as compared with 10.1 in the preceding year. The average for the quinquennium (1932-36) was 10.5.

The maternal mortality rates from 1928 to 1937 are furnished below :

Year.	Rate per 1000 births.
1928	15.4
1929	13.1
1930	12.7
1931	11.6
1932	10.0
1933	11.6
1934	11.1
1935	9.5
1936	10.1
1937	9.3

A considerable improvement is noticed during the year compared with the other years under reference and the rate during this year is the lowest.

The maternal deaths registered during the year are classified below according to age and cause of death.

Cause of death.	Deaths in age-periods.				Total deaths.	Percentage to total deaths.
	15-20 Years.	20-30 Years.	30-40 Years.	40 and above.		
Puerperal sepsis	32	71	37	3	143	49.5
Abortion	5	11	5	—	21	7.3
Other accidents and diseases of pregnancy	27	66	31	1	125	43.2
Total	64	148	73	4	289	100.0

Puerperal sepsis accounted for 143 deaths or 49.5% of the total deaths. Calculated with reference to the births registered during the year, the death-rate from puerperal sepsis was 4.6 per 1000 births as compared with 6.4 in 1936.

Annual Form No. XVII gives the maternal deaths and death-rates in the various divisions. High rates are noticed in the divisions which contain a large percentage of poor classes.

The statistics relating to the deaths of mothers who came under the care of the various clinics of the Corporation Child Welfare Scheme are given in a separate report of the Superintendent, Child Welfare Scheme.

Deaths from other causes:—12,605 deaths were registered under this group as against 11,157 in 1936. Under this group are included deaths due to the diseases of the circulatory, digestive, nervous, genito-urinary and other systems except respiratory system. The annual death-rate was 17.1 per mille of estimated population as against 15.5 in 1936 and 16.1 which is the quinquennial (1932-36) average. Calculated on the census population, the death-rate was 19.5, the rates for 1936 and for the quinquennium (1932-36) being 17.2 and 17.0 respectively (Annual Form No. XVIII).

Certified Deaths:—4,679 deaths were certified by the various hospitals in the city and 1,704 deaths by the private medical practitioners as to the causes of death. The certified deaths represent 24.9 per cent of the total deaths as compared with 22.4 per cent in 1936. This increase indicates the amount of response on the part of the hospitals and medical practitioners in reporting to the Health Department the causes of the death of persons who came under their treatment. The Medical Registrars of Births and Deaths verified the causes of the other deaths.

Burial and Burning Grounds:—The divisional Sanitary Inspector supervised the burial and burning grounds in the city. Out of 25,674 deaths 7,795 corpses were burnt and 17,879 corpses buried.

VACCINATION

Staff:—17 Sub-assistant surgeons were in charge of the vaccination work assisted by 38 Vaccinators including 2 women Vaccinators. The female Vaccinators worked in the Mohamedan localities.

Operations:—80,250 vaccinations were performed during the year as against 43,179 in 1936; an increase of 37,071 was thereby recorded.

The statement below furnishes the primary vaccinations and re-vaccinations performed during the past 20 years :

Year.	Primary vaccination.	Re-vaccination.	Total.
1918	19,151	12,452	31,603
1919	17,192	14,035	31,227
1920	16,500	7,772	24,272
1921	16,459	9,756	26,215
1922	16,985	33,905	50,890
1923	17,900	18,218	36,118
1924	17,633	18,603	36,236
1925	19,428	57,652	77,080
1926	19,330	6,481	25,811
1927	20,763	11,875	32,638
1928	22,051	29,591	51,642
1929	23,250	43,356	66,606
1930	25,958	33,257	59,215
1931	27,260	9,377	36,637
1932	27,076	21,757	48,833
1933	30,851	1,68,601	1,99,452
1934	28,233	19,805	48,038
1935	26,414	35,505	61,919
1936	27,286	15,893	43,179
1937	28,192	52,058	80,250

A steady record of distinct improvement under primary vaccination is maintained specially since 1927. The number of primary vaccinations during the year under report is the 3rd. highest in the above statement; so also is the number of re-vaccinations during the year. The total number of vaccinations performed in 1937 comes next to 1933 which recorded the highest.

An increase of 906 under primary vaccinations and an increase of 36,165 under re-vaccinations were recorded during the year as compared with the preceding year.

Number of Successful Vaccinations:—27,997 primary vaccinations and 5,261 re-vaccinations were successful during the year as against 27,052 and 1,459 respectively in 1936.

Success-rate:—The success-rate in primary vaccination was 99·8 being the same as that of the previous year. The success rate in re-vaccination was 15·1 as against 15·9 in 1936.

The success-rates in primary vaccination for the past 10 years are given below :

Year.	Success rate.	Year.	Success rate.
1928	99·7	1933	99·7
1929	98·5	1934	99·8
1930	99·0	1935	99·8
1931	99·6	1936	99·8
1932	99·9	1937	99·8

Number of persons successfully vaccinated per 1000 population:—The number of persons successfully vaccinated per mille of population rose from 44·5 in 1936 to 51·4 during the year.

Infantile Vaccinations:—18,779 infants under one year of age were vaccinated during the year as against 19,053 in the preceding year. Of these, 18,669 were successfully vaccinated as compared with 18,918 in 1936.

Out of 18,779 infants vaccinated, 13,918 were born in the city and 4,861 in the mofussil.

The vaccination staff continued to examine children under 5 years of age for vaccinal condition by house to house visits. Unprotected children born in the city or mofussil and whose vaccination was evaded for some reason or other were detected and vaccinated. Such a campaign was helpful in vaccinating 3,888 children.

The value of vaccination and re-vaccination was explained to the public during the course of house visits and persons who desired re-vaccination were vaccinated at the spot.

Verification of Births:—30,920 births were verified for the purpose of vaccination as compared with 28,998 births verified in the preceding year. 4,434 children died before attaining the age of one year and without being vaccinated. 6,656 children were removed from the city before they could be vaccinated. The number of children available for vaccination was 19,830. Of these, 14,283 children or 72·0 per cent were vaccinated as against 74·7 per cent in 1936.

Postponement of Vaccination in children:—The vaccination of 2,205 children was postponed for medical reasons.

Inspection of vaccinated persons:—The results of vaccination were verified by the Health Officer, the Assistant Health Officers and the Medical Vaccinators. The results of 28,046 or 99·5 per cent of the total primary vaccination and of 34,893 or 67 per cent of the total re-vaccination were verified by them during the year.

Prosecutions:—42 persons were prosecuted during the year for failure to vaccinate their children. The prosecutions of 2 others were already pending at the beginning of the year. Of these 44 prosecutions, 29 were withdrawn as the parties had their children vaccinated subsequently. 11 persons were convicted and a fine of Rs. 7-4-0 was collected. 4 prosecutions were left pending on 31-12-1937.

Cost of Vaccination:—The cost of each successful vaccination in 1937 was Re. 0-14-1 as compared with Re. 0-15-9 in 1936.

Vaccine lymph was supplied as usual by the King Institute of Preventive Medicine, Guindy.

In G. O. No. Ms. 2249 P. H. dated 7-9-1937 the Government revised the instructions increasing the number of insertions from 2 to 4 in the case of primary vaccination. This was adopted in the city and would, it is hoped, confer greater protection to the infants from small-pox.

SANITATION

The two Assistant Health Officers continued to be in immediate charge of sanitation in the two ranges of the city. Dr. S. E. D. Masilamoney, M.B.B.S., B.S.Sc., returned from England after obtaining the D.P.H. of the London University and resumed charge of his duties as Assistant Health Officer, North range, on 7th. September, 1937, on which date Dr. P. Sadasivan, L.M. & S., B.S.Sc., proceeded on leave. Consequently, Dr. G. Sreenivasan, M.B.B.S., B.S.Sc., continued to be the Assistant Health Officer and was placed in charge of the South Range. Mr. V. Venkatachalam M.A., A.I.C., continued to be the Public Analyst of the Corporation.

The city came to be divided into 40 divisions under the Amended Act and the work of the out-door staff was re-distributed.

Water Supply.—The quality of the water supply continued to be safe from a bacteriological point of view. The public, however, expect a better quality so long as they do not get a clear and colourless water. The proposals for improving the quality of water are yet to materialise. A detailed report of the Corporation Water Analyst regarding the chemical and bacteriological analysis of water will be found elsewhere in this report. There were 2,712 public water taps, 146 bathing fountains and 78 cattle troughs in the city.

Sewerage.—41,307 feet of new sewers were laid during the year. Of these, 11,233 feet were laid in Kilpauk area and 9,624 feet in Nungambakkam. The total length of sewers laid up to the end of the year was 13,08,825 feet. The scheme of compulsory construction of F.O.Ls was extended to Mylapore area. 4,008 F. O. Ls were installed in private premises during the official year as against 2,727 in the previous year. One modern type of public convenience with 3 water-closets, one urinal and one bath-room for each sex was put up in Redoubt Road, Egmore, at a cost of Rs. 3,471.

Housing.—During the year, the Health Department received 2,886 plans for the construction and reconstruction of buildings in the city and rejected 424 plans on sanitary grounds. F. O. Ls were recommended in the case of every house constructed or reconstructed within sewered areas. 1,739 new houses were constructed during the year. This is a very encouraging feature. During the past few years, the city has made a rapid progress in the matter of new buildings, which have come up in large numbers in many out-lying areas as a result of individual enterprise of the upper middle classes and the capitalists. No substantial efforts have yet been made by the Corporation to give effect to the recommendations of the Housing Committee. The condition of the lower middle and the poorer classes has not undergone any improvement. By reason of their poverty, they are compelled to live in dark, ill-ventilated, over-crowded and disease-ridden houses and fare no better than the slum dwellers in point of health and power of resisting diseases. Provision of cheap sanitary dwellings to house the middle and the poor classes is a matter of vital necessity and should not be delayed any longer.

The Sanitary Inspectors conducted a detailed inspection of 14,104 houses in the city and took action to remedy the following defects:

- 798 houses having no proper drainage.
- 580 houses having no adequate latrine accommodation.
- 695 houses having no water supply.
- 719 houses having no ventilation.
- 1,778 houses having miscellaneous defects such as bad flooring, bad roofing, broken walls, etc.

As a result of the action taken by the Health Department, 2,197 houses were improved during the year. 415 houses which had no latrines were provided with latrines. 190 prosecutions were launched for failure to provide proper latrine accommodation.

Factories:—128 factories in the city were inspected by the Assistant Health Officers who are Additional Inspectors of Factories under the Factory Act. Sanitary defects such as unsatisfactory latrine accommodation etc., were communicated to the Chief Inspector of Factories for taking suitable action. Seven factories were provided with F.O. Ls during the year.

Offensive Trades:—In G. O. No. 1673 P.H. dated 13-7-1937 the Government sanctioned the bye-laws framed by the Corporation under section 349 for the control of cattle sheds, dairies, markets (public and private), control of premises used for washing clothes and barber shops and shaving saloons. 6,488 applications for offensive trades were dealt with during the year. The schedule of fees for licensable trades was revised by the Council with effect from 1-4-1937. 1,532 persons were prosecuted for carrying on trades without licenses. Places which had been licensed were inspected frequently and 388 licensees were prosecuted for failure to observe the conditions of license.

Cattle Yards:—1,404 cattle yards were fit for license at the beginning of the year. 624 yards were rendered fit after improvements and 486 yards were condemned as absolutely unfit for license. Vigorous action was taken to remove the condemned cattle yards. 159 yards were vacated after repeated prosecutions. 1,192 cases were instituted in respect of cattle yards alone.

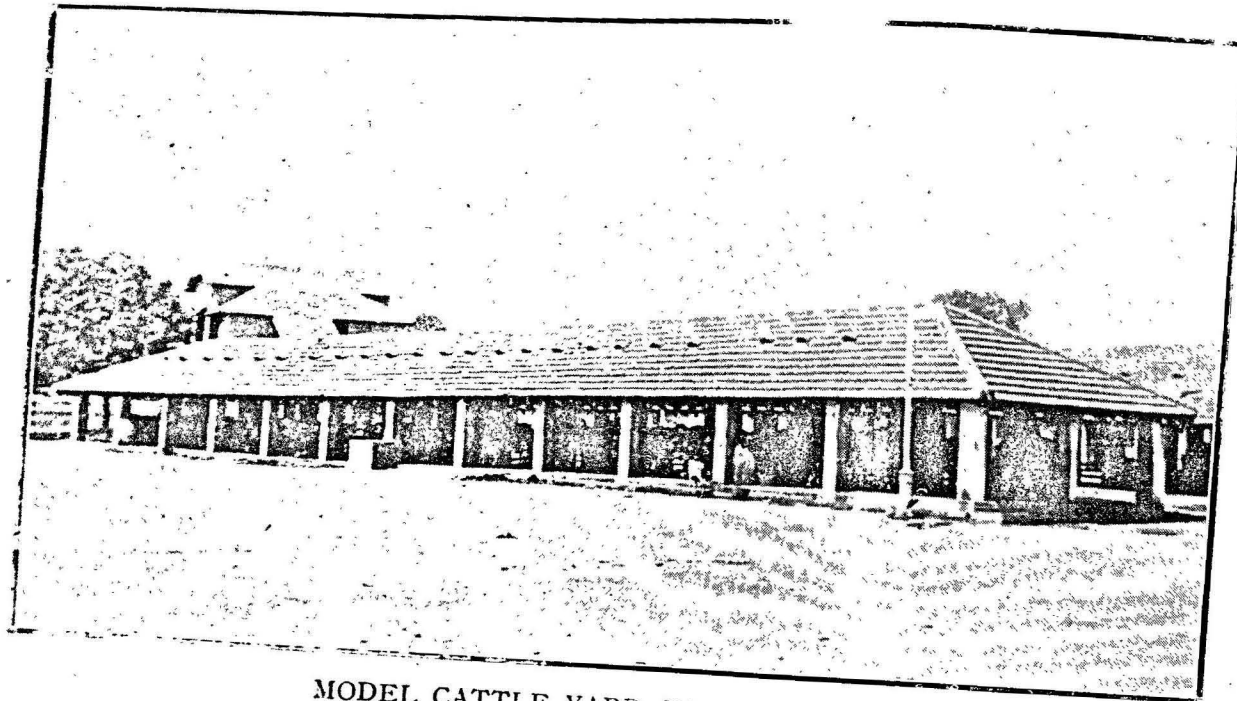
The Corporation maintained cattle yards at Basin Road, at Purasawalkam and at Chintadripet. 320 animals were housed in these three cattle yards. Proposals for extending these yards and constructing new cattle yards in the city were pending consideration.

Cart Stands:—14 licensed cart stands continued to exist. The Elephant Gate cart stand belonging to the Corporation was let on contract for Rs. 5,450 for 1937-38.

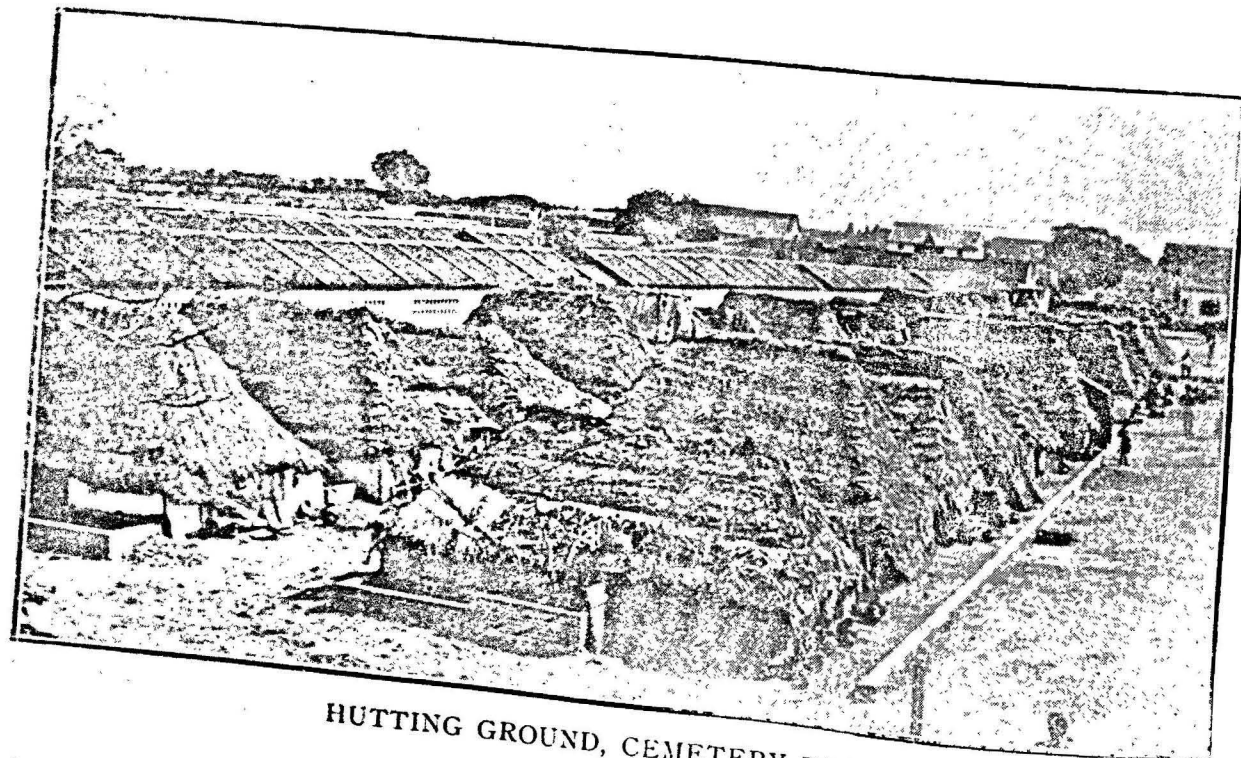
Dhoby Khanas:—The Corporation maintained two dhoby khanas at Chetpet and Robinson Park. There has been a great demand for additional dhoby khanas in the city. The Council sanctioned Rs. 6,000 in the budget for 1937-38 for the construction of additional dhoby khanas and further action was pending selection and approval of suitable sites.

Eating Houses:—817 licenses were issued during the year for eating houses. There has been a steady increase in the number of eating houses and the Health Department took particular care to see that no place was licensed that did not conform to the bye-laws. F. O. Ls were insisted upon in the case of every eating house within the sewered areas. A further increase in the number of these places is likely as a result of the continuous drive maintained against the sale of trash and other cheap food in the streets. Moreover, there seems to be an evergrowing demand for eating houses and hotels in the city. Except in a few large hotels in the city, the quality of food supplied is as poor as it is cheap. This is one of the evils to which the poor citizen consciously succumbs and which can be eradicated only by raising his economic standards.

Cheries and Hutting Grounds:—The new chapter of the Act providing for action in respect of private cheries and hutting grounds under



MODEL CATTLE YARD, BASIN BRIDGE.



HUTTING GROUND, CEMETERY ROAD.

section 257 A has not yet been tried. The preliminary step of declaring these areas as cherries and hutting grounds under section 247 A (a) with the sanction of the Council has been taken. A close examination of the provisions of this chapter in relation to the conditions prevailing in the city will reveal that the success in the reformation of these cherries ultimately depends upon the finances of the Corporation. In carrying out improvements to hutting grounds, the Health Department will urge every hut or house in such areas being provided with a separate tap and latrine as far as possible. This is necessary for preventing the outbreaks of water borne diseases.

Meat Supply:—The Slaughter Houses at Perambore continued to work satisfactorily. 4,59,941 sheep, 18,628 cattle and 1,437 pigs were slaughtered during the year. The Veterinary Superintendent of the Slaughter Houses examined the animals before slaughter and also inspected the carcasses after slaughter. The carcasses from the Slaughter Houses were conveyed by the owners themselves to the various markets and mutton stalls in the city. Surprise inspections were made by the sanitary staff to detect carcasses without municipal stamp. Permission was granted to slaughter 604 sheep at private places for religious and festival purposes. Corporation derived Rs. 85,845-4-3 from the Slaughter Houses.

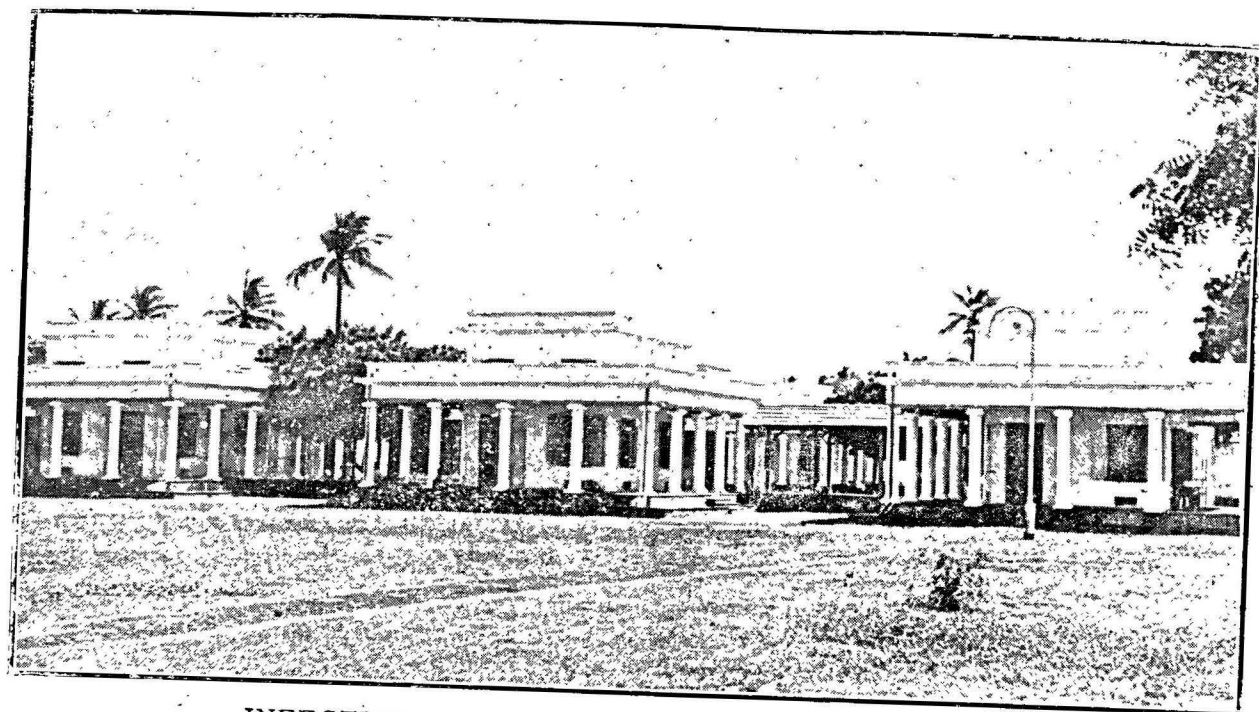
There were 284 mutton stalls in the city. Besides, mutton was sold in 38 private markets and 3 public markets. The mutton stall in the public market at Mambalam was removed and located in a separate shed on the other side of Sir Thyagaraya Road.

83 stray pigs were caught and brought to the Slaughter Houses where they were auctioned and subsequently slaughtered.

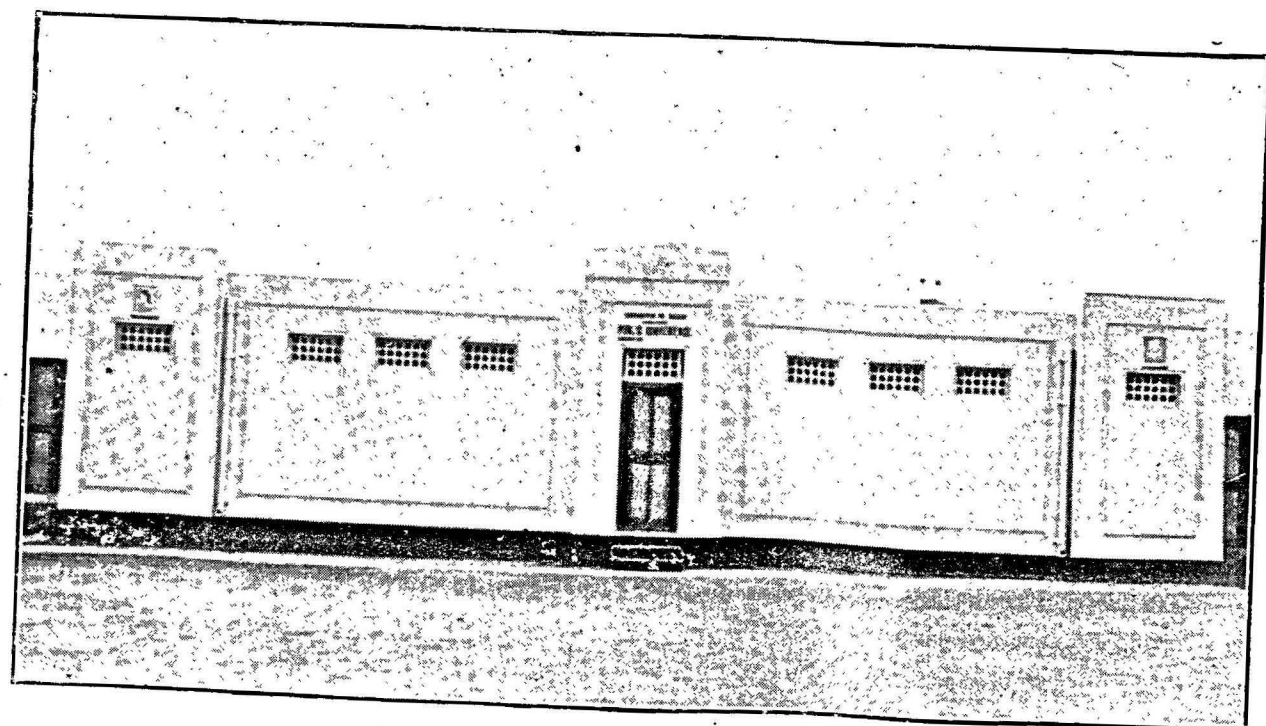
STATEMENT OF ANIMALS AND CARCASSES EXAMINED

Animals.	No. brought and examined.	Number rejected.	No. of carcasses examined.	Number condemned.	No. of organs condemned.
Sheep & Goats.	4,68,305	8364	4,59,941	25	11,100
Cattle.	19,211	583	18,628	2	9,313
Pigs.	1,532	95	1,437	20	908

Food Control:—The Corporation maintained 6 markets, viz., the Moore Market, the Smithfield Market, the Purasawalkam Vegetable Market, the Nungambakkam Market, the Mambalam Market and the Fruit Market. There were 41 private markets at the beginning of the year and a new market at Strahans Road was opened during the year. The Sanitary Inspector in charge of the markets made periodical inspections of all the public and private markets to ensure their proper maintenance. The divisional Sanitary Inspectors frequently inspected the private markets in their jurisdiction to see that the sanitary conditions were kept up especially in the matter of prevention of gang-way bazaars, provision of spittoons and general repairs to the flooring of stalls, regular washing and cleaning of drains and sufficient water supply and latrine accommodation. A F. O. L. of 16 seats was constructed in the Kotwal Bazaar. The Jam Bazaar Market was extended. Electric lights were provided in the Janda and the Chetti Garden Markets. The wholesale and retail flower vendors occupied a portion of the vacant stalls in the Corporation Fruit Market. During the year, market regulations were framed under section 308 of the Act. The license fee for private markets was fixed at 12½ % of the gross income of the owners. The Council has approved the policy of the municipalisation of markets. Further action is awaiting funds.



INFECTIOUS DISEASES HOSPITAL, TONDIARPET.



PUBLIC CONVENIENCE, EGMORE.

The Health Department carried on a vigorous and continued drive against the sale of articles of food on the road sides and unauthorised places. A motor lorry was specially put on this work. A list of articles seized and destroyed is appended to this report. In addition to this, 293 vendors were prosecuted and convicted for selling articles of food on road sides.

Weights and Measures :—The work relating to the enforcement of the bye-laws regarding weights and measures was in charge of the two Inspectors of Weights and Measures. They visited all the public and private markets in the city periodically and checked the weights, measures and scales used by the vendors. They also inspected the shops, bazaars, godowns and depots and intercepted the itinerant vendors for testing the scales, weights and measures used by them. Defective weights, measures and scales found in possession of any vendor were seized and confiscated and any person who actually used any of these was prosecuted. During the course of the year 590 seizures were made and 20 prosecutions instituted. It is gratifying to note that the use of non-standard weights, measures and scales was rare among the merchants and traders in the various markets. It was, however, commonly found that the petty vendors from the adjoining villages bringing curds, vegetables and other articles of food continued to use non-standard and crudely made weights, measures and scales. They could not be prosecuted, but such non-standard weights, measures, and scales were seized from them and confiscated.

Medical Relief :—The Corporation continued to maintain the two Infectious Diseases Hospitals at Tondiarpet and Krishnampet. Both these hospitals were fairly full throughout the year due to the prevalence of small-pox and cholera. 2,982 patients were admitted in both the hospitals during the year. From the month of August, arrangements were made to treat all the cholera cases at the Tondiarpet hospital while the Krishnampet hospital was reserved for the small-pox cases. There were 238 admissions for cholera and 40 for small-pox from the mofussil areas. Owing to the increase in work, extra nursing and medical staff were temporarily appointed in the two hospitals. Details of the cases treated in these hospitals are furnished in the statements to be found in the appendix.

23 out-patient dispensaries were maintained during the year. Of these, 19 were of Allopathic, 2 of Unani, one of Sidha and one of Ayurvedic systems. The Ayurvedic dispensary at Thousand Lights is intended only for ladies and children. In seven of the allopathic dispensaries, separate ladies' sections were maintained. Another allopathic dispensary exclusively for ladies and children was also maintained at the Child Welfare Centre, Perambore. 24,77,108 patients were treated in all the dispensaries during the year. A statement of the cases treated in these institutions is appended.

Two leprosy and skin clinics were conducted by the Corporation, one at Vyasarpady and the other at Ice House Road. The Medical Officer of the Corporation dispensary at Vyasarpady was in additional charge of the skin and leprosy clinic there. The Ice House Road Clinic was under the direct management of the Honorary Leprosy Officer, Rao Sahib Dr. P. Parthasarathy Naidu. The total number of new cases treated at both these clinics was 6,457 during the year. The Ice House Road Clinic was provided with a microscope. 4,624 injections were given for leprosy during the year.

Arrangements were made for the treatment of skin diseases and early cases of leprosy at all the Corporation dispensaries. The clinically doubtful cases were sent to the Ice House Road Clinic for microscopic examination. The total number of skin and leprosy cases treated in the Corporation dispensaries alone during the year was 84,775. A statement

showing the skin and leprosy cases treated at the various institutions will be found in the appendix.

A free venereal clinic was opened on 1-12-1937 at No. 55, Pulianthope High Road, Perambore. This clinic is fully equipped for scientific diagnosis and treatment. There is a microscope in the clinic and smears from cases of gonorrhoea are periodically examined under the microscope to see whether the patients are free from the infecting organism. At present blood smears of patients are sent to the King Institute, Guindy, for serological examination. Better facilities are expected to be provided for women patients during the ensuing year. A statement of the work done at this clinic is appended.

Poor House :—There were 162 inmates at the beginning of the year. 268 persons were admitted, 105 were discharged and 26 died during the course of the year. With the money provided in the budget for 1937-38 improvements were carried out with a view to provide increased accommodation. Treats were given as usual to the inmates on principal festival days out of the endowments of Dewan Bahadur C. V. Viswanatha Sastriar and the ment Officials' Party. Such of the inmates as were capable did light work in gardening.

His Highness the Maharaja of Travancore was pleased to give an endowment of Rs. 1,000. the interest accruing therefrom to be utilised for entertaining the inmates of the Poor House on His Highness's birthday every year.

The Council appointed an Ad Hoc Committee to consider the beggar problem in the city. The studied report of this committee was considered by the Council at its meeting held on 7-9-1937 and the following resolutions were passed:

"While approving of the report submitted by the Ad Hoc Committee on the beggar problem, this Council resolves that a home be constructed for the housing of 500 lepers and syphilitic lepers and about 50 paralytics and about 20 idiots or imbecile persons on the lines suggested by the Committee and further directs the Commissioner to submit a detailed estimate as regards the financial commitments involved in such a scheme."

"This Council resolves further to appeal to the Government of India, the Provincial Governments and to the Provincial Leprosy Board as well as to the public for substantial contribution towards the construction of the house above-mentioned and also the maintenance thereof".

"This Council further resolves to start a home to accommodate 100 destitute child beggars in which adequate instruction and education shall be given to the children and the expenses for this purpose may be met out of the Education Fund to the extent to which it is possible to do so".

"This Council further resolves that in providing the home above-mentioned, women and girls will be separated from men and boys dealt with under the scheme".

A scheme was drawn upon the basis of the resolution of the Council for constructing a home at a cost of 5½ lakhs of Rupees. The subject is pending consideration by the standing committees.

Anti-rabio Measures :—6,738 dogs and 6,440 bitches were seized during the course of the year and removed to the Lethal Chamber where 6,526 dogs and 6,390 bitches were destroyed by electrocution. 153 dogs and 43 bitches were restored to the owners on payment of the necessary fees.

10,582 dogs and bitches were captured between April and September. Efforts in this direction had to be relaxed from October owing to the inadequacy of funds to meet the expenditure and a supplemental demand for Rs. 2,000 was made. A motor van was used for conveying the dogs caught.

Zoological Garden:—The Zoological Garden continued to be under the control of the Health Department and in the charge of a qualified Superintendent assisted by a staff of Sergeants and Animal Keepers. During the year, several improvements were effected with the sum of Rs.13,250 provided in the budget for the purpose. The right of collecting the entrance fees from the visitors to the zoo for a period of three years was sold on contract for Rs. 59,500. The annual contract for the right of plying pleasure boats in the zoo lake continued till 31-3-1938. A detailed report on the administration of the zoo will be found in the Commissioner's Administration Report for 1937-38.

Publicity and Health Education:— Health propaganda was regularly conducted in every division of the city throughout the year with a view to inculcate civic conscience in the minds of the citizens. The attention of the public was drawn to the importance of personal and domestic cleanliness. To educate them about the ways and means of preventing diseases like tuberculosis, etc., and infectious diseases like cholera, etc., lectures with the aid of magic lanterns, cinemas, and radio talks were conducted. There were 887 magic lantern shows, 96 cinema shows and 1,155 talks during the year. Printed pamphlets on health subjects were freely distributed to the public during the epidemic seasons. A civic exhibition was, as usual, conducted in the Exhibition Grounds of the S. I. A. A. during the annual Park Fair.

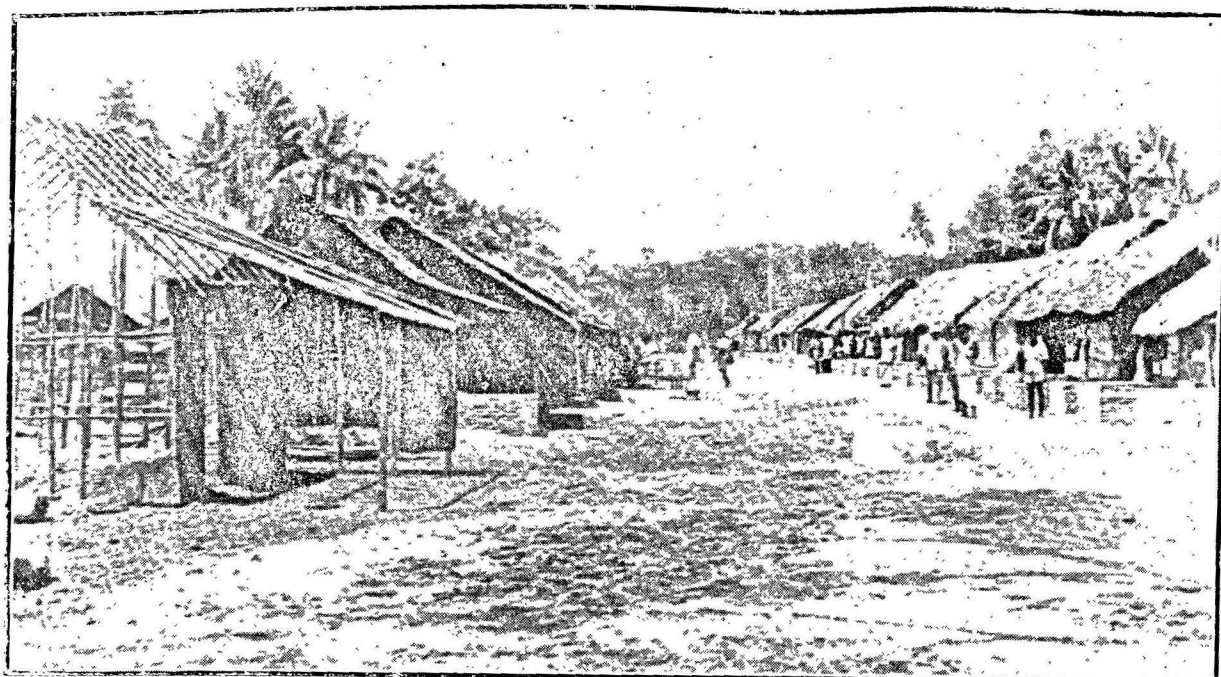
CONSERVANCY

The Drainage Superintendent continued to be in charge of the conservancy work in the city. Mr. W. L. Edwards went on leave for 2 months from 15-9-1937 and Sri A. Ramiah was appointed to act in his place as Drainage Superintendent. The Sewer Foreman and Sewer Superintendents continued to be under his control. Mr. V.J. Balasundara Doss, G.M. V. C., was the Veterinary Officer in charge of the veterinary work relating to the Cattle Depots and the Zoo.

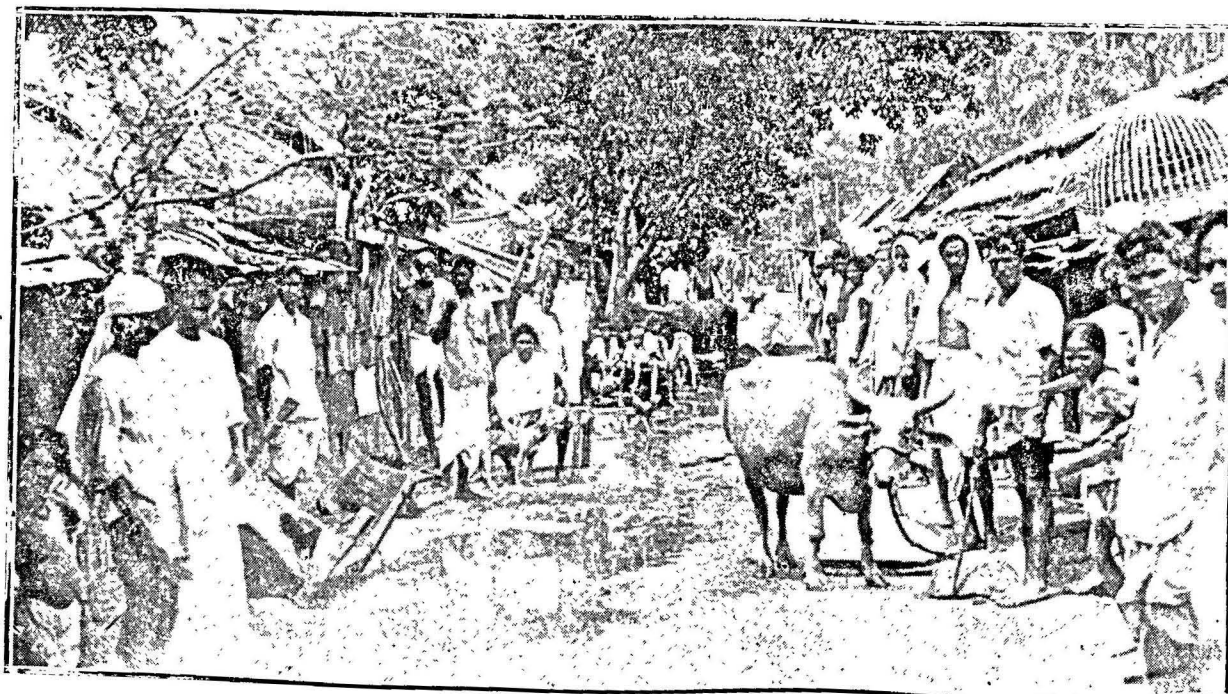
General:—The total expenditure on conservancy for the year 1937-38 was Rs. 10,79,261 (Rs. 55,187 capital and Rs. 10,24,074 ordinary) against Rs. 9,75,459 for 1936-37. The amount spent on wages for conservancy labour was Rs. 6,64,567.

Cleaning Staff:—There were 2,464 male coolies, 202 women coolies and 432 boy coolies for the cleaning of streets, drains, syphons, water tables and latrines. 30 adults and 60 boys were newly sanctioned from 1-4-1937. There were 160 peons to supervise their work. The following carts were engaged for the removal of rubbish, filth, sewage and silt from all the divisions.

No. of trollies, double and single draught carts for the removal of rubbish	...	420.
No. of night-soil carts	...	97.
No. of sewage and silt carts	...	59.



SLUM NEAR E (CATTLE) DEPOT, KRISHNAMPET. IMPROVEMENT IN PROGRESS.



SLUM NEAR E (CATTLE) DEPOT, KRISHNAMPET.

Separate gangs of coolies were formed for the special conservancy of slum areas.

Animals:—The number of bullocks on hand on 1-1-1937 was 815 as against 870 on 1-1-1936. 98 bullocks were purchased during the year for Rs. 10,466 making up a total of 913 bullocks. 144 bullocks died during the year as against 134 in the previous year, leaving a balance of 769 bullocks at the end of the year.

Of the casualties, during the year, 83 died of old age and general debility, 23 of tuberculosis, 4 of anthrax, 4 of piroplasmosis, 4 of broncho-pneumonia, 4 of bovine lymphangitis and 22 of other causes.

Foot and Mouth Disease:—There was no outbreak of foot and mouth disease among conservancy bullocks although the city was infected with it. There was only one case at Basin Bridge Conservancy Depot and all preventive measures were immediately adopted to prevent further spread.

Tuberculosis:—There were 23 deaths from tuberculosis. By the nature of their work, conservancy bullocks are easily exposed to tubercular infection and they contract this disease very quickly. All possible preventive measures were adopted. All the conservancy bullocks were periodically tested for tuberculosis with tuberculine tests. Every animal showing clinical symptoms of tuberculosis was immediately destroyed. All animals suspected of tuberculosis were immediately segregated at the Veterinary Isolation Hospital at Vyasarpady and tested with tuberculine. The reactors were destroyed at once.

Rinderpest:—There were no deaths from rinderpest during the year as all the bullocks were protected against it with sero-virus method.

Anthrax:—There were 4 deaths from anthrax, one at Basin Bridge Depot and 3 at Choolai Depot. The spread of the disease was effectively checked by adopting immediate preventive measures and by protecting other bullocks with anti-anthrax serum.

Piroplasmosis:—There were 4 deaths from piroplasmosis. All prompt measures were adopted to stamp out the disease.

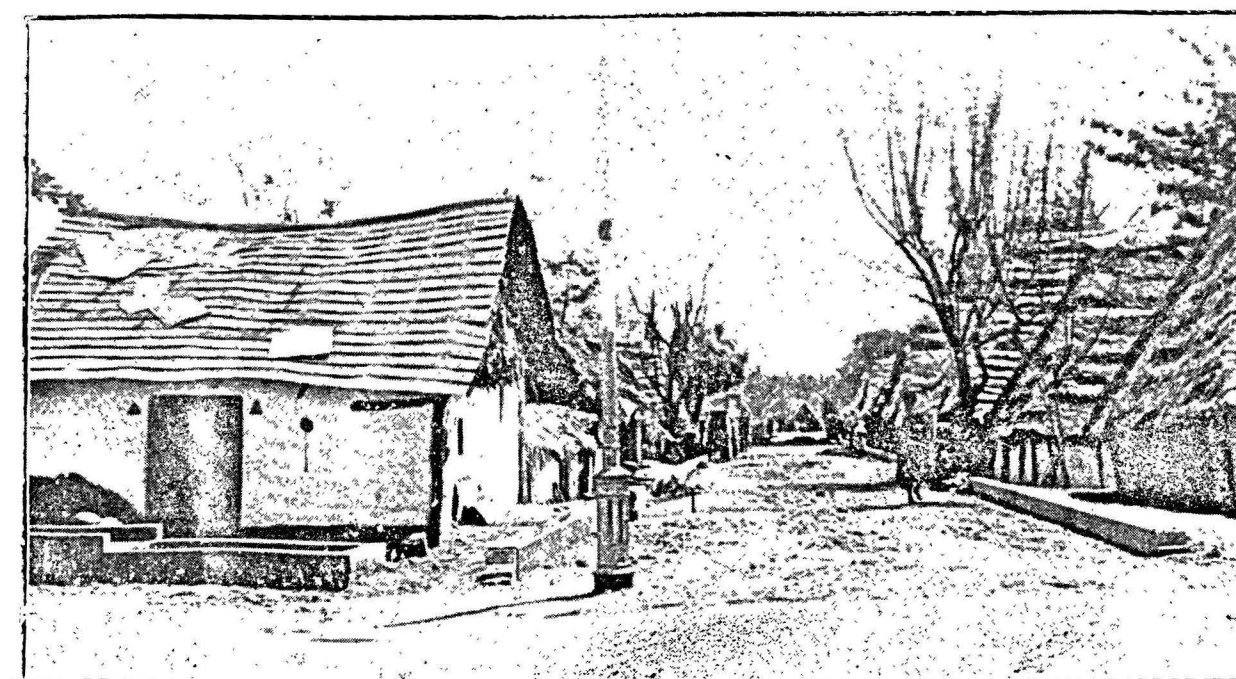
Bovine Lymphangitis:—There were 4 deaths from bovine lymphangitis. All the affected ones were immediately segregated and treated and thus the disease was brought under control.

Animals treated at the Conservancy Cattle Depots and at the Veterinary Isolation Hospital, Vyasarpady:—851 cases were treated for various illness in the conservancy cattle depots and 89 animals which were suffering from contagious diseases or required special attention and treatment were brought to the Veterinary Isolation Hospital and treated there.

Motor Lorries:—The Lorry Station was under the control of the Mechanical Engineer. Motor lorries required for the removal of rubbish and filth in the city were marched out daily from the Lorry Station under the direction of a Sanitary Inspector, who was posted there for the purpose. The charges for the supply of lorries were originally debited to the Health Department at 7 annas per mile for light lorries and Rs. 12 per day for heavy lorries; but they were subsequently reduced to 5 annas per mile and Rs. 10 per day respectively. The total amount debited to the conservancy grant during 1937-38 is Rs. 1,51,523-2-6. Six new lorries were purchased during the year at a cost of Rs. 19,745 (3 International and 3 Reo chassis).



VINAYAKAPURAM HUTTING GROUND. IMPROVEMENT IN PROGRESS.



VINAYAKAPURAM SLUM, WORK IN PROGRESS.

Tipping Platforms :—There were two Tipping Platforms, one at the Basin Bridge Depot and the other at the Langs Garden Pumping Station. Both of them worked satisfactorily.

Carts :—With the sum of Rs. 5,000 sanctioned in the budget for pneumatic tyred wheel carts, one night-soil cart was purchased and 30 double draught rubbish carts were converted into single draught rubbish carts and fitted with pneumatic tyres.

The Corporation Workshop manufactured the following:

27 iron hand-carts for Rs. 2,067.

1,227 dust-bins for Rs. 9,979.

300 night-soil buckets for Rs. 6,600.

The question of manufacturing an up-to-date model of dust-bin suitable to the varying local conditions has been engaging the serious attention of the department. Some time ago, corrugated zinc dust-bins with bottom were tried; but they were found to be unsatisfactory as the bottom gave way very soon. There was also the risk of the bins being stolen. Bins without bottom were so light that they were often removed from their places by stray cattle. During 1937 round reinforced concrete slabs were made to fit into the zinc dust-bins so that the bins may not be easily overturned by cattle or shifted by the public from their original places. These slabs also served as bottom to the bins.

Disposal of Rubbish :—About 5,93,653 cart-loads of rubbish were removed from the city during the year as against 8,82,147 in the previous year. Of these, 62,885 cart loads were burnt at the two Incinerators maintained by the Corporation after separating the earth and other incombustible materials. 3,35,485 cart-loads were dumped at the Korukupet, Ottery and Mylapore Dumping Grounds. 1,95,283 cart-loads were used for raising low-lands. By its resolution dated 2-3-1937 the Council gave permission to fill up low-lying lands in the city with rubbish provided each day's deposits were covered over by earth. Reclamation works which had been stopped for some time owing to the restriction imposed by a previous resolution against the use of rubbish for such works were restarted during the year. 19,247 cart-loads of incinerator ashes and screened earth were removed by private parties, free of charge, for raising low-lands.

Disposal of Filth :—The Corporation continued to maintain 3 Pail Depots and 2 Night-soil Depots for the disposal of filth. The Pail Depots at D'Mellows Road, Ice House Road and Langs Garden worked satisfactorily throughout the year; coal-tar had to be burnt at these depots to mitigate stench.

90,914 cart-loads of filth were removed from the city against 86,826 cart-loads removed last year. Of these, 58,027 cart-loads were flushed into the sewers at the pail depots and the rest entrenched in the two night-soil depots at Korukupet and Ottery. The amount realised by the sale of manure from the trenching grounds during 1937-38 was Rs. 5,850.

Public Latrines :—297 public latrines existed in the city during the year under report. Of these, 241 were of the flushout type and 34 were masonry ones. The remaining were sanded latrines. One modern public convenience was constructed at Redoubt Road, Egmore, during the year. All the public latrines were lime-washed. Special care had to be bestowed on the sanded latrines to ensure their continued cleanliness. 1,153 gallons of technocol and phenyle were utilised during the course of the year for the disinfection of these latrines and drains.

5,841 parabs of chunam were used near dust-bins, road-sides, street-corners and other places rendered untidy by the committal of nuisance.

Festivals :—During the yearly festivals at Mylapore and Triplicane, conservancy arrangements were specially provided for the convenience of the crowds gathering in large numbers at these places. The conservancy of the S.I.A.A. grounds during the annual Park Fair and Exhibition was, as usual, undertaken on payment of charges.

Private Scavenging :—The removal of rubbish and filth from several public institutions in the city was carried out by this department as per section 197 of the City Municipal Act. The total income realised by way of fees during 1937-38 was Rs. 24,528-15-7.

Nuisance :—The conservancy staff paid particular attention to the cleaning and disinfection of places where there was frequent committal of nuisance. The Police authorities prosecuted a few of the offenders with a view to abate this nuisance in the areas most affected. To warn the public against committal of nuisance, notice boards were put up in several parts of the city.

Labour :—In pursuance of G.O. No. 4,942 L & M dated 22-12-1931, the coolies who retired on account of old age and infirmity were granted bonus. 306 coolies occupied tenements in the Corporation Model Lines and 311 lived in huts on Corporation land. The labourers had their needs well attended to. Cases of grievance brought to the notice of the Health Officer and the Commissioner received the utmost consideration and were personally enquired into.

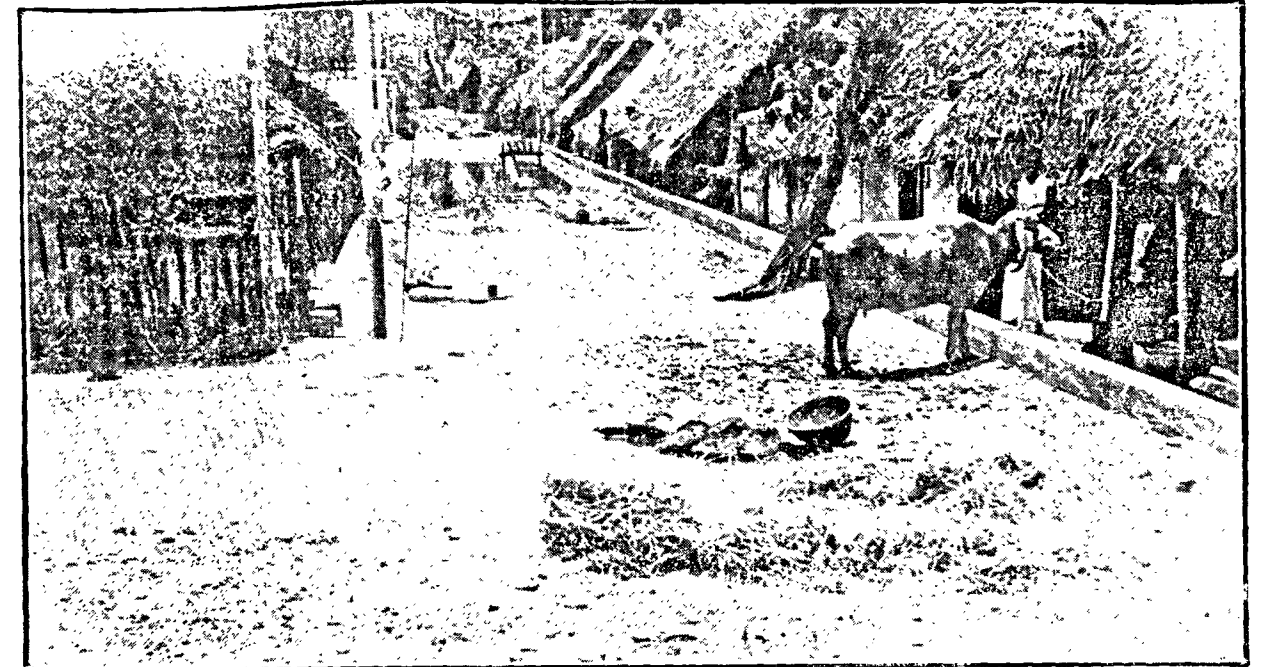
ANTI-MOSQUITO MEASURES

During the year under report the activities of the Malaria Section were very much intensified consequent on the additional staff appointed during the year. After the stegomyia survey was over in October, 1936, the staff (5 overseers and 5 coolies) was kept on to carry out the control measures against these mosquitoes in the surveyed area, i.e., portion of the city half a mile round the Madras Port limits. This staff was further augmented by additional 3 overseers and 3 coolies from November, 1937. The separate staff of one maistry and 2 coolies employed for combating mosquito nuisance in Thyagaroyanagar continued to work during the year and an additional maistry and a cooly were added on to it since November, 1937. House inspections were organised in unsewered, garden and other areas in the city where the mosquito nuisance is always severe and the special staff of 20 maistries and 40 coolies sanctioned during the year were utilised for this purpose from November last. The appointment of 4 additional gangs for stocking wells with larvicidal fish helped to bring about a better and more effective control of the wells than before. Greater attention was paid to the systematic and regular oiling of the covered and open drains, ditch drains, cesspools, gulley-traps and stagnation in public places etc., after the appointment of 2 additional oil gangs during the year.

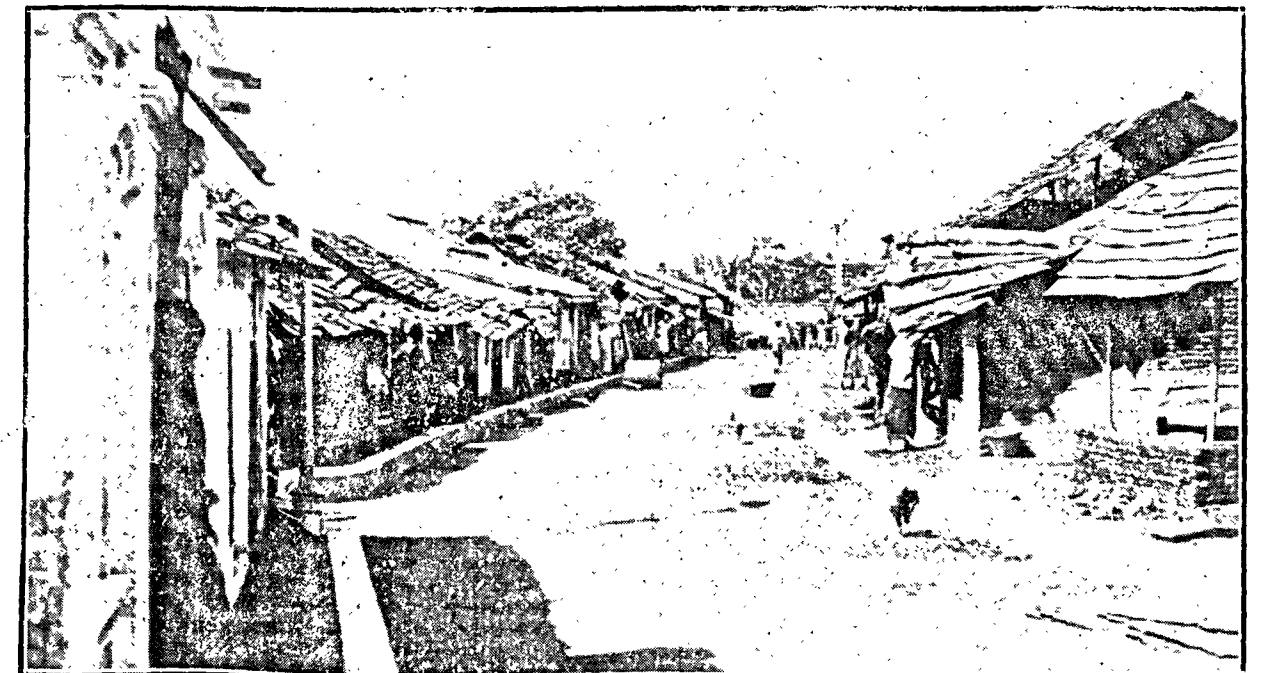
The original staff consisted of, as usual, one Medical Officer, 2 Supervisors, 6 maistries and 68 coolies. An additional Supervisor was appointed from November last along with the other extra staff to cope up with the increased activities of the section.

The various aspects of the anti-mosquito work are dealt with below :

Tanks and Ponds :—470 tanks and ponds existed at the beginning of the year. The method of control consisted in keeping them free from



RAMAKRISHNAPURAM HUTTING GROUND. IMPROVEMENT IN PROGRESS.



SCAVENGERS HUTTING GROUND, OLD SLAUGHTER HOUSE ROAD.

weeds, moss, floating matter and rank vegetation at the edges and stocking them with larvicidal fish. The owners were accordingly notified to this effect. They were also informed that the Corporation would undertake to do the periodical cleaning on payment of certain charges in advance. The owners of 182 ponds paid the charges and the work was executed by the Corporation malaria staff after collecting from them a sum of Rs. 1,943-2-0. The owners of 146 ponds made their own arrangements. It was found that such cleaning was unsatisfactory and not periodically done. 5 private ponds were cleaned free of charge on account of their receiving storm water from the surrounding areas. 9 Corporation tanks were also attended to by the staff. All the ponds and tanks were stocked with larvicidal fish.

As a result of action taken against the owners, 7 ponds were reclaimed during the year. Of these, 6 ponds belonged to private owners and one to the Corporation. Action was not taken in respect of ponds that were clean and free from larval breeding and those that were dry.

Wells:—During the year under report greater attention was paid to the control of wells in the city than in previous years. This was due to the additional staff appointed about the middle of the year. The total number of fish gangs was thus raised from 2 to 6. The inspection and stocking of wells with larvicidal fish was done at intervals of 3 months instead of 10 months.

Nearly 15,000 wells exist in the city and more wells are being sunk in areas where extension is going on. The staff examined the wells for the presence of mosquito larvae and stocked them with larvicidal fish. The result of the inspections so far made by the staff during the year is summarised in the statement below. It will be observed that there had been a considerable improvement in this direction.

	Percentage of wells with fish alive.	Percentage of wells with mosquito larvae.	Percentage of wells with anopheles larvae.
1st. round	52.4	8.7	5.1
2nd. round	75.6	6.3	2.5
3rd. round	85.3	5.3	2.0
4th. round*	89.9	2.8	1.2

*Incomplete round. The figure is prepared on the number of wells examined up to 31-12-1937.

During the previous year, 1936, the percentage of wells with fish alive was 41 and the percentage of wells breeding mosquito larvae was 17.6 and the percentage of wells breeding anopheles larvae was 11.6.

As pointed out in previous reports, the wells form the chief and permanent breeding places of *Anopheles stephensi* (malaria carrier), *Aedes aegypti* (vector for yellow fever, dengue and filariasis) and *Culex fatigans* (transmitter of filariasis). It is always found that wells not in daily use are commonly the breeding grounds of these mosquitoes. Absence of fish and foul condition of the water in the wells give rise to severe breeding. Sometimes the presence of floating matter in wells already with fish alive helps to favour the breeding. This is due to the larvae taking shelter under the floating matter and escaping the fish. The fish gangs removed the floating matter and stocked fish into every well. Bad wells were oiled with kerosine oil and stocked with fish after 10 days. 401 such wells received this attention and action was taken in respect of these wells for enforcing permanent measures such as filling or covering with Cuddapah slabs. During the year 702 wells were filled up, 229 wells covered with Cuddapah slabs and 656 wells provided with trap-doors. These figures include cases in which action was taken against the owners by the department.

Gambusia was put into wells as well as into ponds, tanks, garden cisterns and fountains. This larvicidal fish is a voracious larvae-eater and very useful for mosquito control and has been obtained from the fish pond in the compound of the Infectious Diseases Hospital, Tondiarpet, and from several ponds and tanks kept as nurseries in different parts of the city. It has now become one of the local fishes and can be said to be acclimatised to this place.

In view of the fact that dangerous types of mosquitoes breed in the wells it behoves that a general policy, as advocated in the stegomyia survey report, should be adopted to enforce, as a permanent measure, covering of all wells where tap supply of water is available. If a demand is made to use the water from any well, it should be provided with a pump. Sanction to dig out new wells should be refused in areas where there is already municipal water supply.

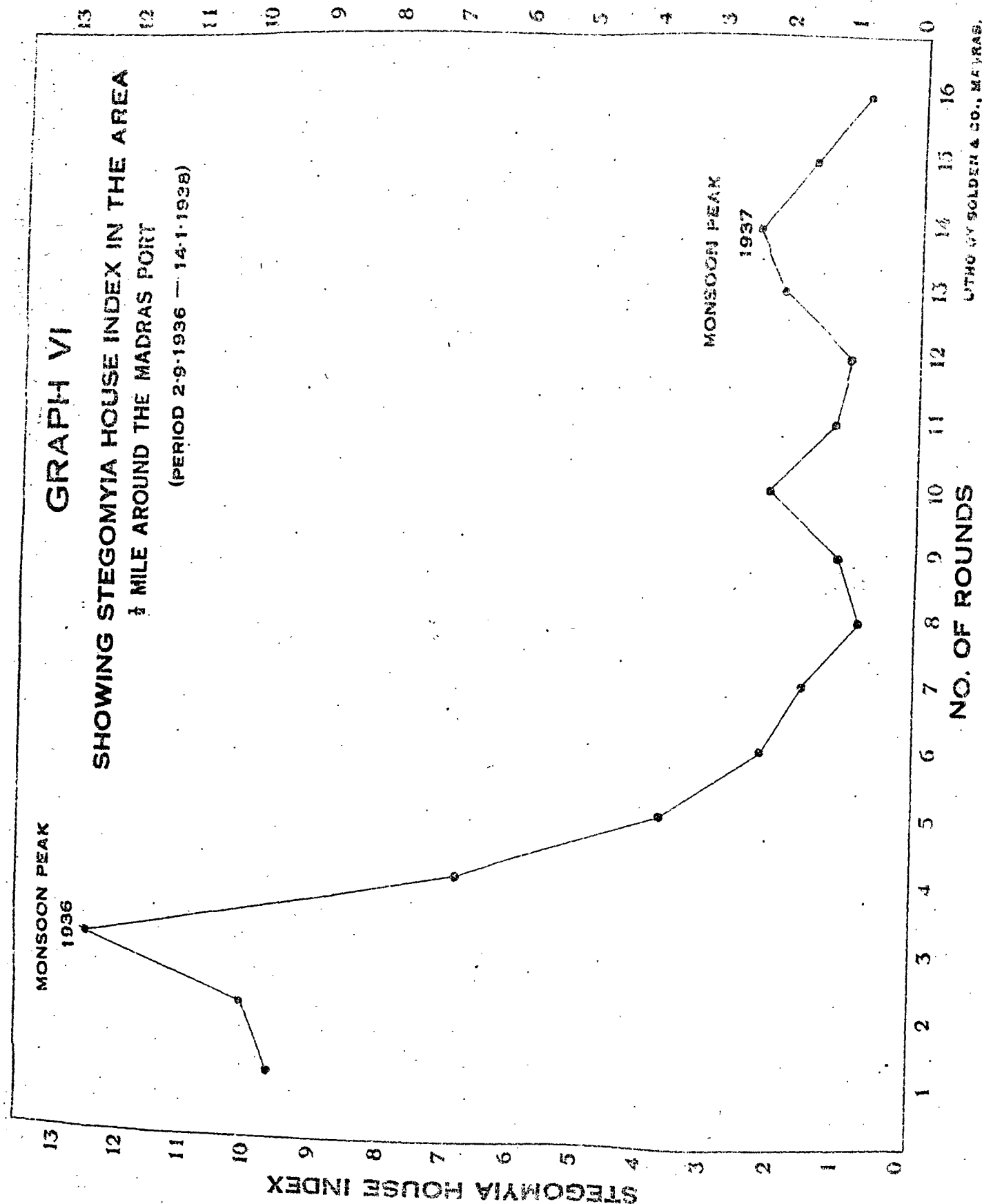
In addition to the stocking of wells with fish, the fish gangs inspected the entire premises during the course of their work and destroyed 1,373 breeding grounds of mosquitoes such as collections of water in broken vessels, tins, cisterns, tubs, drains etc. after showing them to the occupants.

Anti-stegomyia operations:—After the completion of the stegomyia survey in the portion of the city half a mile round the Madras Port limits from 2-9-1936 to 2-10-1936 (vide stegomyia survey report already published in the Administration Report for 1936) the staff (5 overseers and 5 coolies) were kept on to carry out the control measures in the surveyed area. This area was gone round once in a month by this staff. The addition of 3 more overseers and 3 more coolies to this staff from November, 1937, made it possible to cover the area once in 20 days. The area was divided into 8 blocks and a squad of one overseer and one cooly was in charge of each block.

This special area was inspected 16 times from the time of the survey upto 14-1-1938 and during the course of each inspection the control measures were brought into operation. Every premises was inspected by the staff and all wells, cisterns, drains, fire-buckets, ant-wells, storage of water etc., were examined for the presence of mosquito larvae. Larvae samples were collected from every breeding place which was destroyed in the presence of the occupier. Action was taken to enforce measures for future control as will be mentioned presently. Marked improvement has been noticed since the beginning of this special work. The mosquito and stegomyia house indices set forth below will prove this fact.

No. of rounds.	Period of inspection.	Mosquito house index.	Stegomyia house index.
1	2-9-36 to 2-10-36	14.0*	9.9*
2	3-10-36 to 8-11-36	13.4	10.3
3	8-11-36 to 16-12-36	16.3	12.8
4	16-12-36 to 24-1-37	9.4	7.0
5	25-1-37 to 4-3-37	7.5	3.8
6	4-3-37 to 5-4-37	5.6	2.3
7	6-4-37 to 14-5-37	2.9	1.7
8	15-5-37 to 13-6-37	1.7	0.8
9	14-6-37 to 13-7-37	1.7	1.1
10	14-7-37 to 12-8-37	3.1	2.2
11	13-8-37 to 11-9-37	1.9	1.2
12	12-9-37 to 12-10-37	1.3	1.0
13	12-10-37 to 12-11-37	2.6	2.0
14	13-11-37 to 4-12-37	3.0	2.4
15	4-12-37 to 23-12-37	2.0	1.6
16	24-12-37 to 14-1-38	1.2	0.82

* Survey Index.



Speaking of the stegomyia house index, it was 9.9 at the time of the regular survey. As the monsoons set in immediately after the survey the index rose to 10.3 and 12.8 in the subsequent two rounds. The carrying out of the control measures brought about a substantial reduction in the other subsequent rounds as will be seen from Graph VI. It is gratifying to note that the 'monsoon peak' of the year under report shows a reduction by 5 to 6 times as compared with the 'monsoon peak' in 1936. The stegomyia house index for each round was furnished to the Director of Public Health for his information.

The reduction in the number of mosquito breeding places in the special area during the period under report is seen from the statement below:

No. of rounds.	Mosquito breeding places. (including stegomyia).	Stegomyia breeding places.
1	1,238	959
2	1,532	1,184
3	1,793	1,264
4	1,176	888
5	720	351
6	569	238
7	365	227
8	161	81
9	182	118
10	387	241
11	217	163
12	156	118
13	311	225
14	377	304
15	238	188
16	148	96

The statement set forth below shows the improvements effected in the control of some of the important mosquito breeding places from the commencement of the stegomyia operations up to the time under report.

No. of Rounds.	Percentage of wells breeding.		Percentage of drains breeding.		Percentage of surface cisterns breeding.		Percentage of over-head tanks breeding.		Percentage of fire-buckets breeding.		Percentage of other water containers breeding.	
	Mosquito larvae.	Stegomyia larvae.	Mosquito larvae.	Stegomyia larvae.	Mosquito larvae.	Stegomyia larvae.	Mosquito larvae.	Stegomyia larvae.	Mosquito larvae.	Stegomyia larvae.	Mosquito larvae.	Stegomyia larvae.
1	15.1	7.0	0.3	0.2	5.3	4.5	1.5	1.3	22.5	22.1	Not available	7.5
2	12.1	5.5	0.5	0.2	9.9	6.5	3.3	0.7	13.7	13.7	8.6	4.7
3	13.7	8.2	0.5	0.4	10.7	9.2	2.3	1.6	2.0	1.6	6.8	4.7
4	12.2	6.7	0.5	0.3	9.4	6.8	2.6	1.9	7.2	4.1	3.0	2.6
5	15.0	5.1	0.4	0.1	3.9	2.8	1.9	1.0	10.7	6.4	1.3	0.9
6	12.4	3.9	0.5	0.09	2.9	1.4	5.3	2.7	1.4	0.9	1.1	0.7
7	4.2	2.2	0.2	0.05	2.6	1.8	2.1	0.9	...	...	1.5	1.1
8	4.7	2.0	0.1	0.03	0.9	0.4	0.7	0.7	0.9	...	0.4	0.3
9	4.2	2.4	0.1	0.03	1.0	0.7	1.6	1.1	...	...	0.4	0.4
10	3.9	1.1	0.1	0.06	4.4	2.03	1.9	1.2	...	...	2.0	1.6
11	3.5	1.9	0.1	0.06	1.4	1.3	1.9	1.0	...	...	0.9	0.8
12	2.6	1.8	0.1	0.06	1.2	0.85	0.8	0.6	...	...	0.9	0.8
13	3.8	2.0	0.1	0.02	2.2	1.3	1.7	1.3	0.4	0.4	2.1	1.7
14	2.0	1.0	0.1	0.03	1.5	0.83	2.9	2.9	0.8	0.4	2.6	3
15	1.3	0.6	0.08	0.03	1.9	1.3	0.9	0.9	...	...	1.4	1.2
16	1.5	0.6	0.1	0.06	1.1	0.6	0.4	0.4	3.3	2.8	0.7	0.5

To enlist the co-operation of the citizens, pamphlets in English, Tamil, Urdu and Telugu were printed and distributed in every premises in the surveyed area. The objects of the anti-stegomyia campaign were explained in these pamphlets. The mosquito breeding places were shown to the occupants before they were destroyed and the methods of prevention were explained to

them. During the subsequent inspections, printed advice memorandum containing the nature of breeding places and the methods of control was served on the owners or occupiers in whose premises larvae were found to breed. This had a salutary effect on them in carrying out the preventive measures. Nearly 1,303 such notices were issued. Public offices, firms etc. were addressed to carry out the necessary measures wherever breeding was noticed in their premises as in wells, fire-buckets, drains, over-head cisterns, flush-out tanks, ant-wells etc. To prevent breeding in the storage of water in brass and earthen vessels in private premises, general instructions were issued to renew the water once in 2 to 3 days and to keep such receptacles always covered with lids. As mentioned in the stegomyia survey report, water stored in pots, tubs, drums or cisterns and kept near flushout or dry latrines for the purpose of flushing out or washing the latrines was a common breeding ground of stegomyia mosquitoes. Special efforts were taken to discontinue this practice. In many instances, the pots, tubs and drums etc. were removed from the premises with the permission of the owners who were advised to supply water directly to the scavenger. In other instances, instructions were issued to cover the receptacles with lids and to empty them once in 2 to 3 days.

The anti-mosquito campaign in Thyagarayanagar continued during the year also and was similar to the anti-stegomyia operations conducted in the special area. One maistry and 2 coolies attended to this work augmented by one more maistry and one cooly since November, 1937. The staff paid weekly visits to all the private premises and public places. All wells, cisterns, drains, cess-pools, stagnations in pits and low-lands and collections of rain water in discarded tins, cans, bottles, pots etc., were prevented from becoming breeding grounds of mosquitoes.

A similar intensive anti-mosquito work was also organised in certain unsewered and garden areas in the city where the nuisance from mosquitoes is always severe. This campaign was started in the municipal divisions 20, 21, 22, 26, 27, 28, 29, 36, 37 and 40 from November, 1937, with a staff of 20 maistries and 40 coolies. All the premises were inspected by the staff and all breeding grounds of mosquitoes detected were destroyed. During the first inspection of the whole area, the mosquito house index was 36.4. It came down to 16.4 during the second inspection. It showed a further reduction from 16.4 to 9.5 during the last inspection at the end of the year. The number of mosquito breeding places that were destroyed by the staff during the house inspection work was 6,613 in the first round, 3,021 in the second round and 1,840 in the third round. During the course of this work, the staff cleared away from the premises 25,320 odd and unserviceable articles which would otherwise have collected rain water and become numerous breeding grounds of mosquitoes. As the campaign was started during the monsoon season, the residents of these localities had a great relief from mosquito nuisance.

Such mosquito control measures in private premises are needed throughout the city instead of in selected areas. The occurrence of the various breeding grounds within residential premises has been already brought to light in the stegomyia survey report as well as in this report. House inspection should therefore form part of the general anti-mosquito campaign.

Public drains, cess-pools, stagnation etc.—All the covered drains, open drains, ditch drains, cess pools and gulley traps in public places were petrolised once a week by the two petrolising gangs. The appointment of 2 additional gangs from May, 1937, made it possible for a more systematic and regular attention to be paid to all these places as well as to prevent the breeding in low-lands, ditches, excavations etc., in public places.

River Cooum and Buckingham Canal—The sluggish flow and the weedy margins of the River Cooum and Buckingham Canal give rise to breeding of mosquitoes which cause nuisance in the localities in which the river and the canal pass. The present staff is quite insufficient to attend

to these places regularly. A separate staff is necessary to clear away the weeds and moss from the margins periodically and to oil the edges weekly. Pools form on the banks after the rains and require attention also.

Low-lands—In addition to the 7 ponds reclaimed during the year, portion of low-lands were reclaimed in Dr. Vijayaraghavalu Road, in the Perambur Tank, behind Conran Smith Nagar, next to Record Office, near Kodambakam Road, at the junction of Kanda Pillai Street and Vydianatha Mudaly Street in Chetput, in Appasawmy Mudaly Street, in Venkatanarayana Road, near Greenaway Road and in front of the Slaughter Houses. Pits were filled up in Harinarayanapuram, Old Slaughter House Road, Mackays Garden, Washermanpet Hindu Burial Ground and Elaya Mudaly Street.

Malaria cases treated in Corporation Dispensaries—During the year under report, 9,767 malaria cases were treated in the several Corporation dispensaries as against 1,7697 in 1936.

Microscopical Examination of Blood smears—2,450 blood smears received from the Medical Officers of the Corporation dispensaries were microscopically examined for malarial parasites. Of these, 749 smears were positive, i.e., 30.6 per cent.

The following table gives the number of blood smears received from the Corporation dispensaries.

Name of the Dispensary.	No. of blood smears received.	No. of smears in which malarial parasites were found.			Percentage of smears positive.
		Benign Tertian	Malignant Tertian	Total.	
Washermanpet Dispensary.	335	75	18	93	27.8
Royapuram "	20	3	4	7	35.0
Mint "	108	29	10	39	36.1
Trevelyan Basin "	736	208	88	296	40.2
Mafuskhan "	187	37	10	47	25.1
Mannady "	115	23	6	29	25.2
Harbour "	19	7	5	12	63.1
Pulianthope (Allopathic) "	102	5	...	5	4.9
Perambur Dispensary "	21	7	2	9	42.9
Vyasarpady "	40	10	4	14	35.0
Baliah Naidu "	71	16	7	23	32.4
Koosapet "	67	5	1	6	8.9
Kilpauk "	57	4	4	8	14.0
Nungambakkam "	31	4	2	6	19.3
Mambalam "	8	...	22	100	31.6
Chintadripet "	316	78	...	1	7.7
Triplicane "	13	1	...	6	10.5
Pudupakkam "	57	4	2	1	10.0
Mylapore "	10	1	...	...	100.0
Teynampet "	27	...	...	1	41.7
Pulianthope (Unani), "	1	1	6	40	50.0
Choolai (Siddha) "	96	34	1	3	42.9
Thousand Light (Ayurvedic) "	6	2	...	3	...
Thayar Sahib St. (Unani) "	7	3	...	...	...
	2450	557	192	749	30.6

Cases of enlarged spleen among Corporation school children:—During the school year, 1937-38, the medical inspection staff attached to the Corporation schools detected 49 cases of enlarged spleen among children attending the Corporation schools as against 118 cases in the previous year. Of these, 46 cases were found among the children attending the Corporation schools situated in the north range as compared with 100 cases in 1936.

MEDICAL INSPECTION OF CORPORATION SCHOOLS FOR 1937-38

Staff:—The Council sanctioned the appointment of one honorary Medical Inspector and one honorary Medical Inspectress in the budget for 1937-38. They joined duty in August and September respectively.

Findings of Medical Inspection:—The average number of children on the rolls during the year was 20,576 in boys' schools and 15,549 in girls' schools. The average attendance during the time of the inspections was 16,812 among boys and 11,796 among girls. 18,199 boys and 12,988 girls were medically examined during the year as against 17,761 boys and 11,615 girls during the previous year. The percentages of children examined to the total number on rolls were 88.45 among boys and 83.53 among girls.

Out of the total number subjected to medical examination, 8,838 boys (48.56 per cent) and 4,722 girls (36.36 per cent) were ailing and required treatment. The percentages of defectives during the previous year were 51.13 among boys and 35.87 among girls.

There was general improvement in the health of the boys. Improvement was noticed in the nutritional condition of boys and the incidence of infectious diseases was low. The health of the girls was almost at the same level, only an increase of 4.9 per cent being recorded in the year.

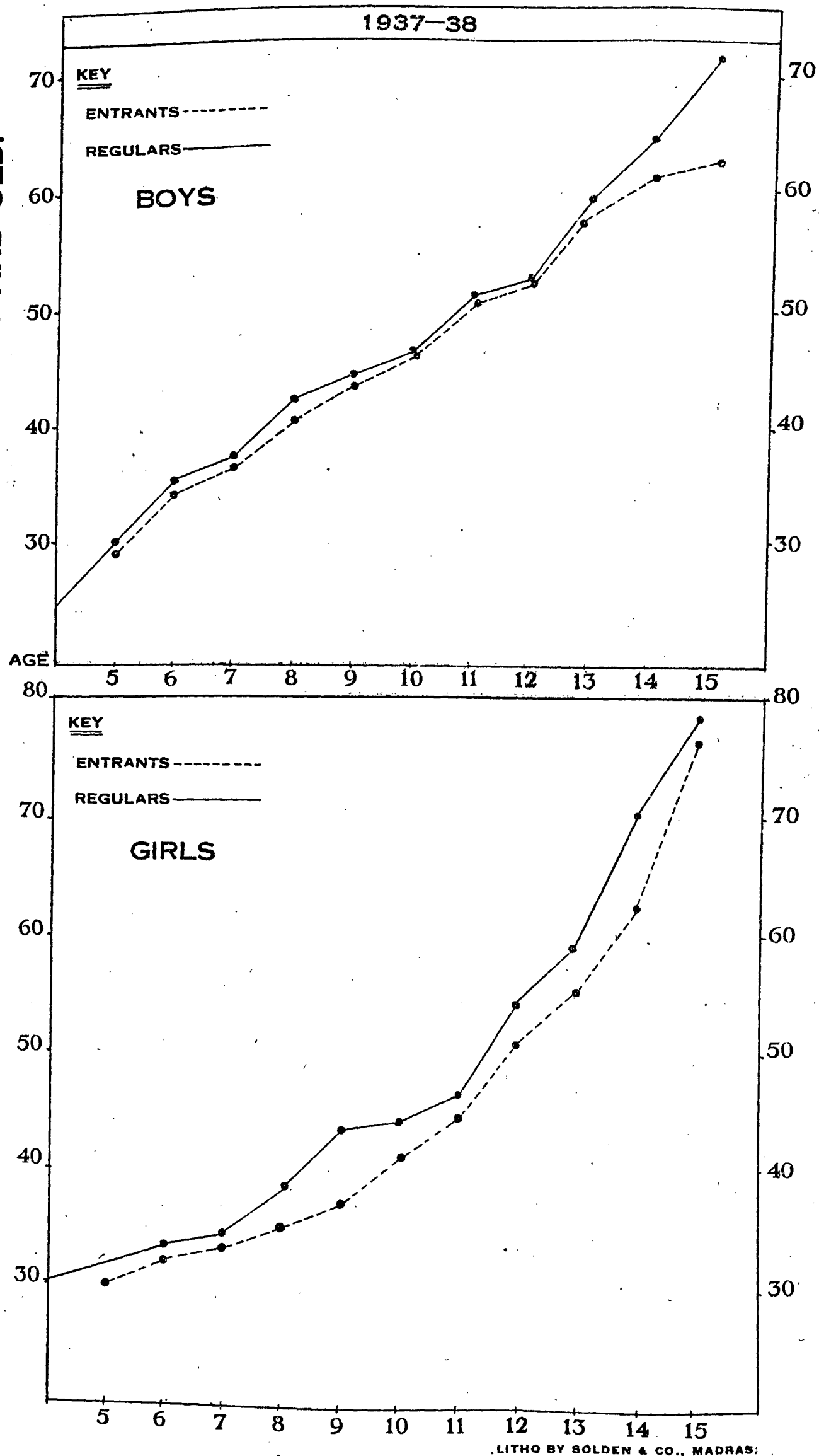
Cleanliness and Condition of scalp, body and nails:—1,306 boys (7.18 per cent) and 502 girls (3.87 per cent) were found to be wanting in cleanliness of person and clothing. The percentages for the previous year were 10.72 among boys and 4.83 among girls. The school staff were frequently reminded of their duty in paying attention to the personal hygiene of the children and such children as were found to be dirty were given baths in the school premises. It is gratifying to note that the number of children requiring such attention is dwindling.

Mal-nutrition:—2,266 boys (12.45 per cent) and 396 girls (3.05 per cent) were under-nourished and required attention. The corresponding percentages in the previous year were 14.33 and 2.60 respectively. As has been explained in the previous reports, under-nourishment was mainly due to lack of balanced diet and vitamins necessary for the proper growth and development of the children. Cod liver oil was supplied to them at the dispensaries and their parents were also advised regarding the necessity for suitable and nourishing food to their children.

Teeth and Mouth:—1,695 boys (9.31 per cent) and 1,050 girls (8.08 per cent) had dental and oral complaints. The percentages of defectives during the previous year were 9.24 among boys and 6.95 among girls. 1,566 children had stomatitis and were treated at the dispensaries. 190 of the children having tartar were advised scaling of tartar at the dental sections of hospitals; 461 were referred to the same sections for extraction of carious teeth.

Nose and Throat:—3,094 boys (17.00 per cent) and 2,510 girls (19.33 per cent) had nasal and throat diseases, the corresponding percentages of defectives for the previous year being 16.82 and 21.34 respectively. 4,436

GRAPH SHOWING COMPARATIVE WEIGHTS OF ENTRANTS AND OLD.



36

35

children had simple enlargement of tonsils without other complications and were treated at the dispensaries. 464 had the same defect with other complications and were advised to have the enlarged tonsils removed early. 431 children had enlarged glands of the neck and 243 had nasal catarrh. Suitable treatment was given to them at the dispensaries.

Eye Diseases:—364 boys (2·00 per cent) and 305 girls (2·35 per cent) had defects and diseases of the eyes. During the previous year, the percentages of defectives were 3·15 amongst boys and 2·88 amongst girls. All the minor complaints of the eyes were treated at the Corporation dispensaries. 144 children had conjunctivitis. 30 of the squinting cases were referred to the Eye Hospital for correcting errors of refraction.

Defective Vision:—94 boys (0·52 per cent) and 10 girls (0·08 per cent) had defects of vision, the corresponding percentages in the previous year being 0·93 for boys and 0·15 for girls. 46 had defects of a minor degree and were advised to take Cod liver oil to improve their general health and thereby have their vision rectified. 58 were referred to the Ophthalmic Hospital or the eye sections of other hospitals for correcting errors of refraction.

Ear Diseases:—24 boys (1·32 per cent) and 129 girls (0·99 per cent) had otitis, otorrhoea and other complaints pertaining to the ear. The corresponding percentages during the previous year were 1·59 among boys and 0·75 among girls. 56 children had otitis and 297 were having otorrhoea. Chronic and resistant cases were referred to the specialist for treatment.

Hearing:—5 boys (0·03 per cent) were short of hearing. No girls were defective in hearing during this year. The percentages during the previous year were 0·05 amongst boys and 0·03 amongst girls. Their defects were of the congenital type and hence they were given seats nearest the teachers.

Speech:—33 boys (0·18 per cent) and 2 girls (0·02 per cent) were having defects in speech. The percentages during the previous year under this head were 0·16 among boys and 0·03 among girls. 25 were stammerers and 9 had defects of articulation. One was dumb.

Circulatory System:—94 boys (0·52 %) and 26 girls (0·20 %) had diseases relating to heart or blood. The corresponding percentages during the previous year were 0·88 among boys and 0·20 among girls. Organic diseases of the heart were detected in 41 children while 18 had functional disorders. 54 had anaemia and were treated at the Corporation dispensaries.

Tuberculosis:—7 boys (0·04 %) and 5 girls (0·04%) had signs and symptoms of early tuberculosis of lungs and other organs. The percentages during the previous year were 0·13 and 0·06 respectively. The Medical Inspectors arranged lectures on the subject in the various schools and also had talks with the parents with a view to spread knowledge about this dire disease and impress on them the need for early diagnosis and treatment. All cases of fatigue, want of appetite, wasting, anaemia and irregular temperature were carefully followed up after necessary advice and prescriptions. All the twelve defectives were referred to the Tuberculosis Institute for treatment.

Respiratory Diseases:—236 boys (1·30 %) and 117 girls (0·90 %) as against 1·41 % and 0·74 % respectively in the previous year, had bronchitis and other non-tubercular diseases of the lungs. 332 children had bronchitis and 21 were having bronchial asthma. They were treated at the local dispensaries.

Abdominal Organs:—126 boys (0.69 %) and 51 girls (0.39 %) were found defective under this head. The percentages of defectives under this head during the previous year were 1.55 among boys and 0.43 among girls. Only 49 children were having enlarged spleen due to malaria. 46 of them were residing in the north range and three in the south range. They have been carefully followed up both by the school staff and the Medical Inspectors. The result of the treatment given to them is shown in the statement on "following-up" work. Cases of inguinal hernia and hydrocele requiring operative treatment were directed to the Government hospitals.

Bones and Joints:—325 boys (1.79 %) and 32 girls (0.25 %) had defects and diseases of the bones and joints. The percentages of defectives during the previous year were 1.91 among boys and 0.19 among girls. 337 children had deformed chest of varying degrees. The details of the defects are shown in the detailed table.

Nervous and Psychic Systems:—15 boys (0.08 %) and 3 girls (0.02 %) had defects under this head. 0.10 % of boys and 0.01 % of girls were defective during the previous year. 4 children had infantile palsy while the rest had functional disorders such as epilepsy etc.

Infectious and Contagious Diseases:—1,551 boys (8.52 %) and 834 girls (6.42 %) had infectious diseases including skin complaints. The corresponding percentages during the previous year were 10.90 and 5.15 respectively. 1,313 children had scabies; 509 children had signs and symptoms of leprosy. Of these 149 were new admissions and the rest were old cases already under treatment. They have been sent to the skin sections of the various hospitals in the city and the Corporation dispensaries. The details of the findings are given under separate head. Cases of eczema and other skin affections while under-going treatment at the local dispensaries, were isolated in the classes and given baths daily.

Other Diseases and Defects:—718 boys (3.95 %) and 277 girls (2.13 %) had diseases and defects not included in the other times. The percentages of defectives during the previous year were 4.95 among boys and 2.22 among girls. 164 children harboured intestinal worms. 152 had phimosis and were advised circumcision.

Deformities:—17 boys (0.09 %) and 21 girls (0.16 %) had deformities. During the previous year, the percentages of defectives under this head were 0.10 among boys and 0.11 among girls. The details of deformities have been shown in the table.

Number without marks of Vaccination:—93 boys (0.51 per cent) and 14 girls (0.11 per cent) had no visible marks of vaccination and were subsequently vaccinated.

Medical Treatment:—During the year under report, 13,391 children received medical attention, the details of which are shown in the treatment table. Minor ailments were treated at the dispensary nearest the school, while others requiring institutional or other special treatment were advised to resort to the Government hospitals. During the earlier part of the year, leprosy children attended the skin departments of the Government hospitals, the Corporation Skin Clinic, Ice House Road, and the Vyasarpady Dispensary. Subsequently, they were treated at the nearest Corporation dispensaries as arrangements were made to equip all the Corporation dispensaries with necessary drugs and appliances.

Leprosy:—509 children were on the leprosy list during the year under report. 360 were old cases detected previously and 149 were new

admissions. Systematic following up was continued during the year to ensure their regular and continuous attendance at the treatment centres. The parents of all these children were seen and given medical advice and those that had the disease were advised to get themselves treated. In addition, 162 homes of the children were visited to study their environmental conditions and to detect any others afflicted with the disease. 21 such persons were brought under treatment.

A bus was purchased during the year for taking the leprosy children to the treatment centres from schools situated at a distance. As a result of this arrangement, the children attended the clinics regularly.

The distribution of the disease according to sex was as follows:

Group.	Number defective.	Percentage to the total examined.	Percentage to the total leprosy cases
Boys	424	2.33	83.30
Girls	85	0.65	16.70
	509	1.63	100.00

Careful following-up revealed varying results. In two children the symptoms of the disease could not be seen and both were advised discontinuance of treatment. In 32 children improvement was noted after a prolonged course of treatment. 428 children continued treatment at the Corporation dispensaries and the Ice House Road Skin Clinic as they did not show any evidence of improvement. 34 children did not attend the treatment centres. Their parents remained indifferent in spite of repeated advice and persuasion. 12 who left the school after inspection could not be traced. One child was found suffering from leprosy in an infective stage and was excluded from the school.

Re-inspection and Following-up Work:—During the year, 232 re-visits were paid to the schools in addition to routine inspections. 30,628 re-examinations of children were made to note the improvement and change the course of treatment when necessary. Leprosy children were kept under observation throughout the year and the parents were invited to the schools frequently for being advised. The details of the results obtained are given below:—

Mal-nutrition:—Of the children who were under-nourished, 27 regained normal health after a course of Cod liver oil and tonics. 1,292 obtained benefit after the course while 833 had to continue treatment as no signs of improvement could be noted.

Teeth and Mouth:—56 children had their carious teeth extracted and 33 had tartar teeth scaled at the dental sections of hospitals. 490 cases of stomatitis were cured and 384 improved after treatment. 3 children had their tongue-tie clipped.

Nose and Throat:—127 had their tonsils removed by operation while 584 were treated at the dispensaries and cured. 1,191 improved after treatment. Two underwent treatment for nasal polypi.

Defective Vision:—3 children had their defective vision corrected after medical advice. 12 improved their vision after taking Cod liver oil.

Tuberculosis:—Out of 9 children who showed signs of pulmonary tuberculosis, three improved after treatment while the rest had to continue treatment as the improvement was slow.

Pandit Anandam's Medical Hall, Raghaviah Road, Thyagarayanagar, treated about 40,000 patients.

Saraswathi Sangam Dharma Oushadalaya, 28 Pidariar Koil Street, George Town, treated 20,923 patients.

Saraswathi Sangam Free Dispensary, Chintadripet, treated 28,124 patients.

Sri Kanyaka Parameswari Devasthanam Dispensary, Anna Pillai Street, George Town, treated 28,176 patients.

Sri Ramakrishna Mutt Charitable Dispensary, Brodies Road, Mylapore, treated 82,011 patients.

St. Thomas Convent Dispensary, San Thome, treated 25,417 out-patients and 743 in-patients.

Siddananda Free Dispensary, 330 Mint Street, George Town, treated 27,076 patients.

Siddha Vydia Sanga Dharma Vydia Salai, 61 Mannarsami Koil Street, Royapuram, treated 5,052 patients.

Triplicane Annadhana Samajam, Pilliar Koil Street, Thiruvateeswaranpet, fed 39,978 persons.

Venkatramana Dispensary, Cutcheri Road, Mylapore, treated 49,309 patients. In its branches at George Town, Triplicane and Mambalam 13,925 patients, 4,376 patients and 3,664 patients were respectively treated.

Unani Darush Shifa Free Dispensary, Triplicane High Road, treated 1,16,756 patients.

REPORT OF THE PUBLIC ANALYST FOR THE CITY OF MADRAS FOR 1937.

(1) During the year ending 31st. December, 1937, the number of samples received for analysis under the Madras Prevention of Adulteration Act, 1918, was 1,119 as against 1,039 in the previous year.

Of the 1,119 samples received, 1,094 were analysed and reported upon during the year under report. Report on the remaining 25 samples was pending on 31st. December, 1937. Among the 1,094 samples analysed, 848 samples were found to be genuine and the remaining 246 were certified as adulterated. The percentage of adulterated samples calculated on the total number of samples analysed during the year was 22.5 as against 23.9 during the previous year.

(2) The samples consisted of ghee, butter, milk, gingelly oil, ground-nut oil, cocoanut oil, coffee powder, tea and artificially prepared ghee substitutes. A statement of the samples analysed and the results of analysis during the year under report and the three previous years, namely 1934, 1935 and 1936 is given in Table I in the appendix.

(3) From Table I, it will be seen that 1,094 samples were analysed during the year under report while the corresponding figures for 1934, 1935 and 1936 were 986, 806 and 1,028 respectively. Among the samples examined, the percentage of adulteration was 22.5 during the year under report as against 35.7 in 1934, 32.9 in 1935 and 23.9 in 1936. It will be seen there has been a progressive decrease in the adulteration of the foodstuffs sold in the city.

A perusal of the table would show that since 1934, adulteration of the more important articles of food dealt with has gone down considerably. The degree of adulteration among the adulterated samples has also gone down considerably. In the case of ghee, adulteration now mainly consists of small admixtures scientifically made entailing enormously increased work for the Department in the detection of such scientific adulterations. Most of the adulterated samples of whole-sale and retail merchants being now of this kind, gross adulteration has become almost non-existent with such vendors and is met with only in ghee vended by hawkers. Other articles such as butter, milk etc., have all improved in quality. In salad oils such as gingelly and ground-nut oils adulteration is now almost negligible. If more deterrent fines had been imposed, the situation would have been even better.

(4) One point about butter and ghee requires mention. It is known that butter is largely imported into Madras from outside for making ghee either by the merchants or the consumers. No preservatives are generally added to such butter and in a short time such butter begins to smell very badly due to the decomposition of the proteins contained in it. The ghee prepared from this butter also retains the odour. Most dealers convert all their unsold stock of butter into ghee and hence in addition to bad smelling butter there is a lot of bad smelling ghee also sold in the city. The public generally presume such samples to be adulterated, whereas this need not be the case. Very many bad smelling butter and ghee samples would be genuine and many fresh and good smelling samples might be adulterated.

Samples of butter and ghee with the bad smell above mentioned are highly rancid. The acid value of ghee may be roughly used as a measure of its rancidity and also the decomposition the butter had undergone before being melted into ghee. Though such samples may not contain any admixture of foreign fat, the sale of such butter and ghee should be prohibited in the interest of public health—a measure which would be appreciated very much by the public.

The Government should fix a limit for the acid value of ghee and butter, transgression of which would make the articles liable to be destroyed. All bad smelling butter and ghee should be seized and analysed and, if the fixed limit is exceeded, destroyed without, however, subjecting the vendors to prosecution.

(5) The nature and extent of adulteration of the various articles dealt with are given below:

(i) *Ghee*:—484 samples were analysed during the year out of which 331 were found to be genuine and 153 were adulterated. The adulterants were almost entirely hydrogenated (hardened) oils and the extent of adulteration ranged from 15 to 95 per cent.

(ii) *Butter*:—122 samples were analysed of which 98 were genuine and 24 were adulterated. Of the 24 adulterated samples, 18 contained water in excess of the prescribed

limit of 20 per cent; 4 samples contained foreign fat (fat not derived from milk or cream) and 2 samples contained both excess water and foreign fat.

- (iii) *Milk*:—80 samples were analysed of which 47 were cow's milk, 30 buffalo's milk and 3 samples were declared as mixtures of cow's and buffalo's milk. Among 47 samples of cow's milk 17 were adulterated, among 30 of buffalo's milk 9 were adulterated and among 3 mixtures of cow's and buffalo's milk one sample proved adulterated. The adulterant in all these cases was added water which varied from 7 to 63 per cent in the different adulterated samples.

No deficiency of fat was noticed in any of the samples.

- (iv) *Gingelly Oil*:—263 samples were analysed and 24 were found to be adulterated with ground-nut oil, the percentage of adulteration varying from 10 to 90.
- (v) *Ground-nut Oil*:—71 samples were analysed and 17 were reported as adulterated. Of these, two were pure gingelly oil, 14 contained gingelly oil ranging from 10 to 90 per cent and one sample contained 40 per cent gingelly oil and 20 per cent cocoanut oil.
- (vi) *Cocoanut Oil*:—30 samples were analysed and all were genuine.
- (vii) *Coffee Powder*:—20 samples were analysed and all were genuine.
- (viii) *Tea*:—13 samples were analysed and all were genuine.
- (ix) *Other Articles*:—These included 10 ghee substitutes and 1 coffee substitute prepared from soya beans. One of the ghee substitutes contained 10 per cent ghee and hence declared adulterated as the sale of mixtures of ghee with other fats is prohibited. All the other articles including the coffee substitute were reported as genuine since their descriptions were correct.

(6) 5 samples of food not taken under the Food Adulteration Act were also analysed during the year. Of these, two were samples of bread-one from the Corporation Zoo and the other from the Infectious Diseases Hospital, Tondiarpet. One of these was of very poor quality and reported as such, while the other was good. Two samples of ghee were analysed on complaints from private individuals. One sample was alleged to contain pieces of lead, probably due to some molten lead falling into the ghee while the container was being soldered. The ghee was entirely free from any dissolved lead but was admixed with 30 per cent of foreign fat. The other ghee sample suspected by the purchaser to be adulterated proved on analysis to be genuine. One butter sample analysed on a similar complaint also proved genuine.

(7) Table II in the appendix gives a statement of the adulterated samples of 1937 and of the previous year or years dealt with in 1937.

The number of samples received and reported as adulterated during 1937 was 246, out of which convictions were obtained in 131 cases. In the case of 20 samples, the vendors were not prosecuted, but the articles,

having been seized under section 8 of the Food Adulteration Act, were produced before the Magistrates and destroyed as per their orders under section 12 of the Act. The remaining 95 cases were pending disposal on 31-12-1937. Out of 11 samples pending from 1936, 5 proved to be adulterated and certified as such during the year under report. Of the 5 prosecutions launched, 2 ended in convictions and the remaining 3 were pending disposal on 31-12-1937.

94 cases of adulterated samples were pending disposal on 1-1-1937 from the previous year. Of these 94, 76 ended in convictions, 6 were still pending disposal at the end of 1937, 8 cases were withdrawn as parties were not traceable and 2 ended in the acquittal of the vendors. In the remaining two cases no prosecutions were launched.

(8) It will be seen from Table II that the total number of convictions under the Prevention of Adulteration Act, 1918, was 209 as against 218 in the previous year. The total fines levied in 1937 amounted to Rs. 6,210. The corresponding figure for 1936 was Rs. 5,741. The average fine per conviction during 1937 was Rs. 30 as against Rs. 26 during 1936. Though the average fine imposed during 1937 was higher than during 1936, the fines are still far below the deterrent level. Very many of the convictions were for second and subsequent offences, for which the Act has provided a fine upto Rs. 500. But in no case did the fine exceed Rs. 100, the fines being much lower in the majority of cases. Adulteration of foodstuffs cannot be completely suppressed unless the Magistrates realise the importance of sufficiently deterrent fines and impose maximum fines for at least second and subsequent offences.

Before concluding, the Analyst would like to mention that during the year under report, an assistant was appointed who has since been undergoing training in food analysis. When he gets fully trained and when the new laboratory is ready for work, the much desired increase in the out-put of work would be possible.

V. VENKATACHALAM, M.A., A.I.C.,
Public Analyst.

REPORT OF THE WATER ANALYST FOR 1937

General:

The quality of the city's water supply continued to be the same as in the previous year. The lake water was strained through a thin layer of fine sand to arrest the suspended impurities and was then chlorinated efficiently with an average dose of 1.0 p.p.m. of chlorine. A "safe" water was thus supplied to the city throughout the year under report.

Though epidemiologically safe, the water supplied was not clear and colourless. It was found to be slightly yellowish and hazy almost throughout the year. A change in the method of filtration as suggested by the Health Officer in his last year's report, (vide page iii) should be effected early for supplying the city with a safe, clear and colourless water.

The average daily quantity of water filtered during the year amounted to 23.63 million gallons.

Meteorological Notes:

It will be seen from Table No. I that the cold weather period (January and February) was very sunny and fairly windy with an average mean temperature of 77.5 F and with practically no rainfall.

The hot weather period (March, April and May) had nearly the same average hours of bright sunshine and wind velocity as in the cold weather period; but the average temperature was higher. The total rainfall was 2.61 inches as against 1.38 inches during the same period in the previous year.

The south-west monsoon season (June, July, August and September) had considerably less hours of bright sunshine than during the two previous periods. Wind was also blowing at a moderately high velocity, the average temperature was nearly the same as that of the hot weather period and the total rainfall was 17.64 inches as against 15.61 inches in the previous year for the same period.

In the north-east monsoon season (October, November and December) the average number of hours of bright sunshine and the temperature were slightly less and the wind velocity slightly greater than during the previous season. The total rainfall during this period was 41.06 inches as against 24.63 inches for same period last year.

Scientific.

Red Hills Lake:—The total rainfall recorded for the year in the lake region was 62.72 inches as against 44.87 inches in the previous year. In November alone the amount of rainfall was 27.33 inches which was more than a third of the total rainfall recorded for the year (Table II).

The lake water was examined three times during the year i.e. in June, November and December. On all these occasions, the lake water was bacteriologically of fair quality (Table III). Chemically it contained a fairly large amount of organic matter of vegetable origin (Table IV).

Raw water, Kilpauk end:—The raw water drawn at the Kilpauk end of the raw water conduit also was of a fair quality bacteriologically. Lactose fermenters were present in 60 c.c. and upwards in 1.7%; in 20 c.c. and upwards in 5.4%; in 10 c.c. and upwards in 30%; in 5 c.c. and upwards in 44%, and in 1 c.c. and upwards in 19% of the samples examined. The average total colonies per c.c. growing on nutrient agar at 37° C after 48 hours was 811 (Table III).

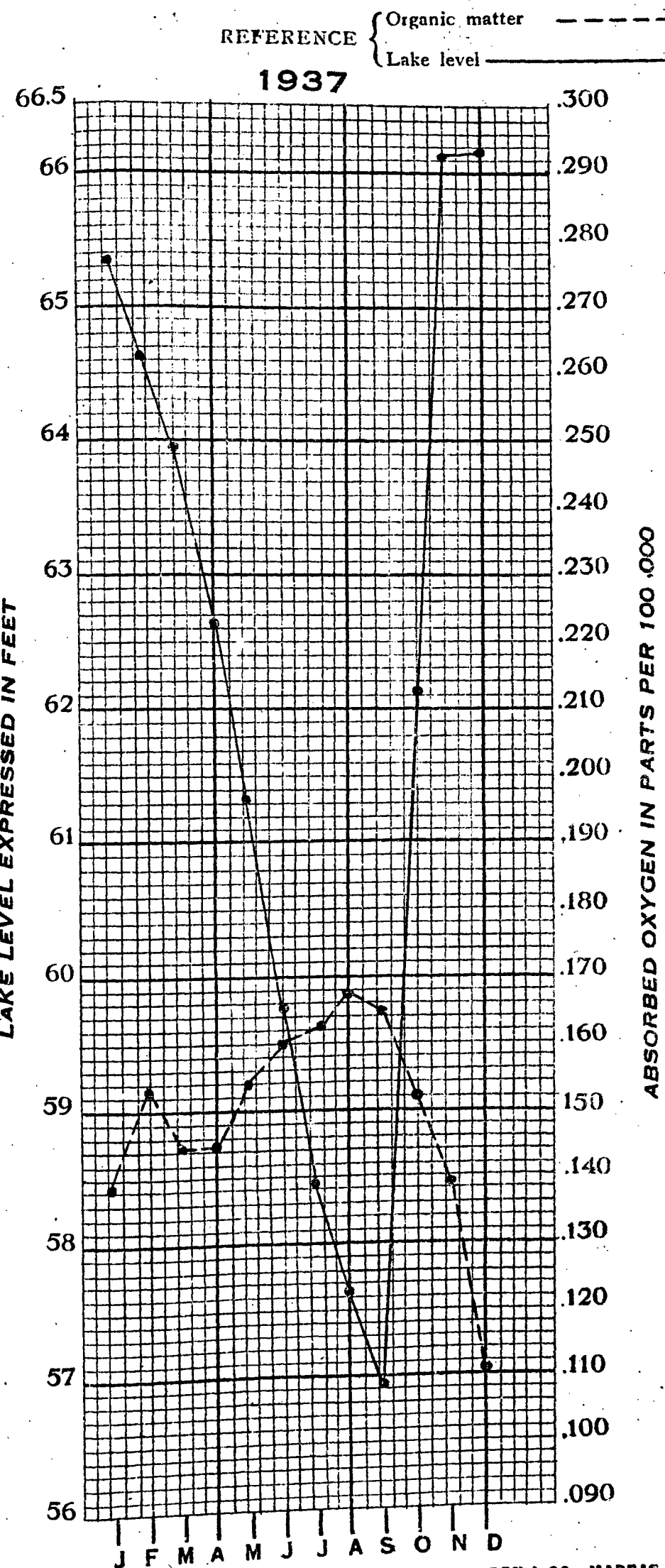
The chemical characteristics of the raw water were very similar to those found in the previous year, except for a slight increase in the amount of organic matter (Tidy's).

The figures for "ammoniacal N" varied from trace to 0.001 part; for "albuminoid N" from 0.028 to 0.057 part per 100,000 and for oxidisable organic matter from 0.110 part to 0.168 part per 100.00 (Table IV). The figure for oxidisable organic matter was highest in August and lowest in December while the lake level was lowest in September and highest in December (vide graph).

Filtrates from beds:—The method of treatment of the raw water was the same as in last year. The depth of fine sand in each filter was very low and the filters were working with no fixed rate of filtration, so that the chemical and bacteriological results of the filtrates from these beds were very poor. The yearly average percentage of first class samples (L.F. in $\frac{1}{60}$ c.c.) was 22.4; and the average colonies per c.c. was 588 (Table No. III).

Chemically, the figures for "ammoniacal N" varied from trace to 0.004 part; those for "albuminoid N" from 0.024 to 0.044 part; those for

GRAPH SHOWING THE RELATION BETWEEN
LAKE LEVEL AND ORGANIC MATTER
(ABSORBED OXYGEN FIGURES)
LAKE LEVEL EXPRESSED IN FEET



oxidisable organic matter (Tidy's) from 0.072 to 0.139 part per 100,000 (Table No. IV). The annual average percentage of reduction of organic matter over raw water was only 21.9 (Table V).

The dose of chlorine applied to filtered water was 1.0 p. p. m. till August and varied between 0.90 and 1.15 p. p. m. for the rest of the year (Table No. VI).

Test Tap at K.P.S.:- Samples drawn from the test tap at the Kilpauk Pumping Station were examined daily, as these represented the water that was delivered direct into the city mains. The number of first class samples was 90.8% and the average total colonies per c.c. was reduced to 318 (Table III). On the chemical side, all the figures showed a distinct reduction over those of the filtrates from beds (Table IV).

Distribution System :- On the bacteriological side, there was a fall in the number of first class samples (Table III). Chemically, an all-round reduction over the test tap samples was noticed.

Water Works, }
17-6-1938. }

S. V. GANAPATI, M. Sc., A. I. C.,
Water Analyst.

Annual Form No. 1--Births Registered by Divisions during the Year 1937.

N.B.--The population for each of the newly constituted divisions as per amended act not being available, figures under certain columns have not been furnished.

N. B.—The population for each of the newly constituted divisions as per amended Act not being available, the figures in certain columns have not

Divisions.	3												Total Deaths Registered during the year.
	Districts.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1	66	40	38	42	41	42	58	52	41	56	79	103	658
2	80	27	24	33	30	43	36	37	36	44	60	54	484
3	101	66	52	71	71	68	76	81	105	74	142	172	1079
4	118	63	78	76	72	69	89	89	101	101	137	182	1167
5	104	87	67	54	107	57	66	85	73	85	141	161	1087
6	27	23	25	20	28	29	21	32	26	31	31	33	326
7	42	48	46	41	41	36	43	47	56	53	87	67	577
8	15	12	19	12	22	17	14	16	23	23	19	27	212
9	59	41	42	43	23	38	30	27	35	47	50	59	510
10	86	26	32	23	37	26	27	39	35	36	41	43	401
11	62	73	57	47	64	47	50	60	60	77	74	88	759
12	33	28	26	21	26	27	36	25	13	26	37	41	389
13	67	61	56	56	76	66	69	85	74	87	88	106	891
14	65	47	58	58	69	76	76	70	66	80	75	90	810
15	57	75	68	60	68	51	74	72	58	61	77	87	808
16	40	33	41	34	41	39	32	28	41	26	37	52	444
17	97	84	67	72	82	87	61	81	71	72	101	133	1008
18	91	48	55	59	44	61	60	83	56	55	86	98	796
19	97	136	91	76	75	72	84	88	119	116	100	147	1171
20	70	60	46	43	55	48	51	61	51	40	54	110	681
21	72	62	56	47	54	56	55	55	52	66	75	101	749
22	23	39	17	30	37	30	26	34	28	35	30	57	356
23	72	60	68	51	71	63	70	62	65	63	97	94	836
24	35	30	28	26	47	42	39	35	26	26	40	46	420
25	65	53	57	57	62	44	46	52	43	51	70	74	674
26	36	42	61	45	58	60	46	40	54	56	77	83	669
27	33	22	28	43	34	32	40	33	36	32	33	409	445
28	46	22	65	27	39	34	34	33	37	23	39	56	342
29	43	26	29	23	14	31	28	33	25	26	33	42	743
30	70	54	50	44	43	46	58	64	66	66	63	117	789
31	66	49	68	54	52	55	63	62	58	68	99	99	646
32	38	31	52	28	39	46	41	46	53	54	54	64	439
33	34	42	21	27	43	3							

Annual Form No. V—Deaths registered according to class by divisions during the year 1937

N. B.—The population for each of the newly constituted divisions as per Amended Act not being available, the figures under certain columns have not been furnished.

Annual Form No. IX.—Deaths registered from "Plague" - Nil.

* Deaths in Government Royapuram and Government General Hospital of patients admitted from moffusil.

Annual Form No. XIX-Table of Deaths for 1937 arranged in accordance with the International List (Fourth Revision 1929)
as adopted for use in England, Wales, Scotland and Northern Ireland.

Classification	Causes of death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Infectious and parasitic diseases.	I. INFECTIOUS AND PARASITIC DISEASES.													
1	Typhoid Fever	7	12	2	7	9	7	15	11	7	10	5	4	96
6	Small Pox	3	8	8	12	11	20	21	31	21	19	10	32	196
7	Measles	1	...	1	1	...	1	2	1	...	1	...	...	8
9	Whooping Cough	6	...	4	7	3	8	9	12	4	6	7	8	79
10	Diphtheria	...	...	1	1	...	1	2	2	1	1	...	1	10
11	Influenza (including Influenzal Pneumonia)	...	1	...	...	3	...	...	...	...	...	...	...	5
12	Cholera	32	14	1	1	...	3	6	27	21	1	46	39	232
13	Dysentery.	171	102	91	75	88	88	76	97	87	93	121	145	1234
15	Erysipelas	...	1	2	...	...	1	1	...	...	1	...	...	6
16	Acute poliomyelitis	...	...	1	...	...	1	1	...	...	1	...	...	3
21	Rabies	1	2	...	3	2	10	1	7	...	2	...	2	13
22	Tetanus	3	9	9	4	5	...	8	...	4	9	4	6	78
23	Tuberculosis of the Respiratory system	88	85	84	81	76	79	90	77	96	100	104	144	1104
24	Tuberculous Meningitis	...	...	1	1	1	...	1	...	1	...	...	1	6
25	Tabes mesenterica	1	2	...	...	...	...	...	...	...	...	...	...	3
25-b	Other Tuberculosis of intestine and peritoneum	...	2	3	2	1	...	...	3	4	1	1	5	17
26	Tuberculosis of vertebral column	...	...	...	...	...	...	...	...	...	1	1	1	6
27	Tuberculosis of other Bones and joints	...	...	...	...	1	1	1	1	1	...	...	1	6

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Infectious and Parasitic diseases.	29	Tuberculosis of the gland and lymphatic system	...	...	1	...	2	...	3	2	1	...	...	12
	31	Tuberculosis of other organs	...	...	...	...	...	...	...	...	...	...	...	1
	33	Leprosy	4	8	2	2	2	2	1	5	5	2	4	39
	34	Syphilis	1	1	3	3	2	2	2	1	3	1	2	18
	34-a	Congenital syphilis	...	...	...	...	...	...	...	...	...	...	...	1
	35-2	Gonorrhoea	...	7	10	9	14	9	12	14	6	5	12	112
	36-a	Septicaemia	...	...	...	...	...	...	...	...	...	...	...	1
	36-a	Sapraemia	...	3	3	7	2	7	5	9	4	8	5	43
	36-b	Pyæmia	...	6	8	7	7	5	2	1	6	1	5	75
	36-b	Malaria	...	...	...	...	...	...	...	...	...	...	...	3
	38	Malarial cachexia	...	...	...	...	...	...	...	...	...	...	...	293
	...	Intermittent Fever	28	12	14	16	22	33	20	32	37	39	4	62
	...	Remittent Fever	3	6	5	6	6	6	4	5	6	6	4	...
	OTHER DISEASES DUE TO PROTOZOA.													
39	Kala-azar	...	2	1	2	2	...	2	3	1	3	1	3	15
40	Ankylostomiasis	...	2	...	...	...	...	1	1	...	...	...	...	19
42	OTHER DISEASES DUE TO HELMINTHS.													
	Filarial Elephantiasis	...	...	1	...	...	...	3	...	...	...	...	...	1
	Filariasis	...	...	...	...	...	1	3	...	1	2	1	2	18
	Worms	...	...	...	...	...	...	...	...	...	...	...	...	3
	Sprue	...	...	...	...	...	1	1	...	...	...	...	...	4
43-2	IL. CANCER AND OTHER TUMOURS.													
45	Cancer of the buccal cavity and pharynx	...	1	...	...	1	...	1	...	...	1	...	2	7

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Annual Form No. XIX-Table of Deaths for 1937 arranged in accordance with the International List (Fourth Revision 1929)
as adopted for use in England, Wales, Scotland and Northern Ireland.

Classification Number.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
46	CANCER OF THE DIGESTIVE ORGANS AND PERITONEUM.													
	Cancer of the liver	1	2	2	3	2	2	2	1	1	1	1	2	17
	Cancer of the rectum	...	1	1	1	1	...	4	1	1	...	1	2	13
	Cancer of the stomach	4	2	2	...	1	...	1	1	1	1	1	4	18
	Cancer of the other digestive organs and peritoneum	1	2	5	2	4	4	2	3	6	3	5	5	42
47	CANCER OF THE RESPIRATORY ORGANS.													
	Cancer of the larynx	1	...	1	1	3	1	1	1	...	...	...	...	7
48	Cancer of the cervix and Uterus.	3	1	3	1	5	4	1	1	2	4	3	7	35
49	CANCER OF OTHER FEMALE GENITAL ORGANS.													
	Cancer of the ovary	...	...	...	...	...	...	...	...	...	...	...	...	...
50	Cancer of the Breast	...	1	2	...	1	1	...	1	1	5	...	...	2
		...	1	...	...	...	...	...	...	...	...	...	4	16

Cancer and other Tumours.

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51	CANCER OF THE MALE GENITO-URINARY ORGANS.													
	Cancer of the Penis	...	...	1	...	...	...	...	...	1	1	2	1	6
52	CANCER OF OTHER OR UNSPECIFIED ORGANS.													
	Epithelioma	...	...	...	...	...	...	...	...	...	...	...	1	1
53	Cancer of other unspecified organs	...	...	...	...	...	...	...	...	1	...	2	1	3
54-a	Sarcoma of other organs	...	1	...	...	1	1	1	2	...	2	...	...	9
	Other tumours of uterus	1	1	2	1	...	1	1	1	...	...	...	...	9
55	Tumours of Lung	...	3	3	1	2	3	4	5	2	5	...	3	33
	Other Non-Malignant Tumours.	2	...	...	...	...	...	...	...	...	...	...	...	1
55-b	Tumours of un-determined nature	...	1	1	1	...	1	...	...	1	...	...	...	2
	Cerebral Tumours	1	...	...	1	...	1	...	...	...	...	...	...	4
56	III. RHEUMATISM, DISEASES OF NUTRITION AND OF ENDOCRINE GLANDS AND OTHER GENERAL DISEASES.													
	Rheumatic fever	1	...	1	...	1	2	...	1	2	1	1	3	13
57-(1)	CHRONIC RHEUMATISM OSTEO ARTHRITIS.													
	Chronic Rheumatism	2	...	1	...	...	...	...	1	1	1	1	2	7
59	(2) Chronic Rheumatoid Arthritis.	...	...	...	...	...	...	...	...	...	...	...	...	3
	DIABETES.	5	6	7	5	9	4	9	7	4	2	4	7	69

Cancer and other Tumours.

General diseases.

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Classification No.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
59	DIABETES—Contd.	...	1	2	...	2	4	6	3	...	1	...	1	20
	Diabetic Carbuncle	...	1	...	...	1	...	...	1	...	2	...	4	12
	Diabetic Coma	...	1	...	1	2	...	...	...	...	1	...	1	15
	Diabetic Gangrene	...	2	1	...	...	...	4	...	2	1	...	...	2
	Scurvy	...	15	12	13	26	21	18	41	53	44	46	45	353
63	Rickets	19	...	...	...	...	...	...	...	...	...	...	...	...
66-a	DISEASES OF THE THYROID AND PARATHYROID GLANDS.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Goitre	...	...	...	...	...	...	...	1	...	...	...	...	1
	Tetany	...	...	...	...	2	...	...	...	...	...	...	2	4
	66-d	...	...	...	...	...	1	...	1	...	1	2	1	8
	69-1	...	...	1	1	...	...	...	...	...	...	2	1	1
69-2	Toxaemia	...	...	...	...	...	...	...	...	...	...	...	1	1
70	IV. DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.	...	...	...	...	...	...	...	...	...	...	...	...	...
	ANAEMIA, CHLOROSIS.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Purpura Haemorrhagica	...	...	...	...	...	...	...	...	...	...	...	...	1
	71-a	...	...	...	...	...	...	...	...	...	...	...	...	32
71-b-2	Pernicious Anaemia	4	4	1	15	15	2	8	22	2	...	22	7	178
71-b-2	Anaemia	12	13	14	...	...	10	5	...	8	15	27	27	...

General Diseases.

72-a	LEUKAEMIA, ALEUKAEMIA.	...	...	...	...	...	...	...	...	...	...	...	...	5
	Leukaemia	2	...	...	...	1	...	...	2	...	...	...	1	2
72-b	Hodgkin's Disease	...	...	...	...	...	...	...	1	...	...	...	...	...
73-2	DISEASES OF THE SPLEEN.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Enlargement of Spleen	1	2	3	1	3	1	4	5	2	...	2	3	27
78-a	VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cerebral Abscess	2	...	...	...	1	1	...	...	...	...	1	1	6
	Encephalitis	2	1	1	...	2	1	...	2	...	1	1	2	13
	Cerebral Meningitis	...	...	...	...	...	...	2	...	...	...	...	...	2
	Other Meningitis (not including menigococcal meningitis)	2	2	1	1	1	5	2	2	3	4	3	6	32
82-a	CEREBRAL HAEMORRHAGE, APOPLEXY, ETC.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cerebral Haemorrhage	6	4	5	6	5	5	4	1	4	3	7	8	58
	Intra-Cranial Haemorrhage	3	...	3	...	...	1	...	3	3	3	1	1	18
	82-a-1	...	...	...	...	...	...	...	...	...	...	...	...	7
	82-a-2	...	1	...	...	...	1	...	...	2	1	1	1	6
	Apoplexy (Lesion unstated)	...	...	...	1	...	1	1	...	1	...	...	...	...
	82-b-2	...	25	28	23	21	12	15	16	28	19	25	38	272
	Cerebral thrombosis	22	2	...	...	1	1	2	1	1	3	...	2	13
82-c-1	Hemiplegia	...	...	...	...	1	...	...	...	...	...	...	1	4
82-c-2	Paraplegia	...	...	...	...	1	...	...	...	...	...	...	...	...
82-c-2	Infantile Paralysis	...	...	...	...	1	...	...	...	...	...	...	...	...
82-c-2	Other Paralysis of Origin	12	10	16	8	10	16	16	7	20	19	19	26	179

Diseases of the Nervous system and sense organs.

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Diseases of the Nervous system and sense organ.	OTHER FORMS OF INSANITY.													
	84-b Mania	.. 1	..	1	..	..	..	1	..	..	..	1	..	2
	Melancholia	..	..	..	..	..	..	..	..	..	..	..	..	2
	Other forms of insanity	.. 2	.. 1	.. 1	..	.. 2	4	1	1	1	1	2	4	20
	85 Epilepsy	..	..	..	..	..	..	..	..	..	..	..	..	1
86	Infantile convulsions (under 5 years of age)	32	32	28	36	33	39	39	50	49	53	63	79	533
OTHER DISEASES OF THE NERVOUS SYSTEM.														
87	Other Diseases of the nervous system	..	..	..	..	..	..	..	..	1	..	..	..	1
87-c	Fits (age 5 and above)	..	1	..	2	3	1	..	1	1	..	..	3	12
	Vertigo	..	..	..	1	..	..	..	..	..	..	..	..	1
	Neuraesthesia	..	..	..	..	..	..	..	..	..	..	..	1	1
88	Diseases of the eye and annexa.	..	1	1	..	..	..	1	..	..	1	..	1	5
89	Diseases of the ear and of the mastoid sinus	1	1	1	..	1	1	..	..	..	..	..	..	5

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Diseases of the circulatory system.												
VII DISEASES OF THE CIRCULATORY SYSTEM.												
90	Pericarditis	...	...	1	...	...	...	1	...	1	...	3
92	Chronic Endocarditis (Valvular Disease)	20	20	23	13	19	10	14	14	18	10	202
92-1	Aortic regurgitation	...	...	...	...	1	...	...	...	...	...	2
92-2	Mitral stenosis	1	...	...	...	...	...	...	...	...	...	1
DISEASE OF THE MYOCARDIUM.												
93-c	Myocarditis not distinguished as acute or chronic	19	18	19	17	33	20	20	14	14	18	241
DISEASE OF THE CORONARY ARTERIES, ANGINA PECTORIS.												
94	Angina Pectoris	1	1	1	...	...	...	1	...	...	...	5
	Coronary Thrombosis	3	1	1	...	...	...	...	1	...	...	8
OTHER DISEASES OF THE HEART.												
95-a	Auricular Fibrillation	...	...	...	...	1	1	...	1	...	...	1
95-b-2	Heart Disease (Undefined)	...	...	3	...	1	1	1	1	...	...	10
	Cardiac Asthma	...	...	...	2	...	1	1	...	1	...	1
	Cardiac Dropsy	1	...	...	...	...	1	...	...	1	...	8
96	Aneurysm	...	...	...	...	...	1	...	...	...	...	1
97	Arterio-Sclerosis	...	...	...	1	...	1	...	...	...	...	1
98	Gangrene	2	1	2	...	1	1	1	1	2	2	15
	Cancerum oris	1	...	...	...	...	...	...	...	3	...	8
	Gangrene scrotum	...	...	...	...	...	...	...	1	...	...	3

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Diseases of circulatory system.	99 OTHER DISEASES OF THE ARTERIES.	...	...	...	...	...	...	...	...	1	...	...	...	1
	DISEASES OF THE VEINS.	...	...	...	...	...	...	...	...	...	...	...	...	...
	100-1 Haemorrhoids	...	1	2	...	3	1	1	1	...	2	4	4	18
	100-2 Thrombophlebitis	...	...	...	...	...	...	...	...	...	...	...	...	1
	101 Other Diseases of the Lymphatic system	...	...	...	...	...	...	...	...	...	...	...	...	...
	102 Hyperpiesis	1	2	2	2	1	...	1	2	...	1	1	2	2
	103 Epistaxis	...	...	...	...	...	1	1	...	...	1	1	...	15
	Internal Haemorrhage	...	...	...	...	...	2	...	...	...	...	...	...	3
	VIII. DISEASES OF THE RESPIRATORY SYSTEM.	...	...	...	...	...	...	...	...	...	...	...	...	2
	BRONCHITIS.	...	...	...	...	...	...	...	...	...	...	...	...	...
106-a	Acute Bronchitis	5	8	6	3	4	4	7	6	2	5	3	8	61
106-b	Chronic Bronchitis	18	30	10	27	16	17	34	47	46	33	45	23	346
	Bronchiectasis	2	...	1	1	2	...	...	1	...	2	1	1	11

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Diseases of the Respiratory system.	1106-c	Bronchitis not distinguished as Acute or Chronic	12	10	14	19	18	14	11	15	10	36	32	210
	107	Broncho-Pneumonia	477	304	340	307	302	278	337	306	255	439	465	4189
	108	Lobar-Pneumonia	10	13	23	10	10	6	7	10	6	10	13	131
	109	Pneumonia (not otherwise defined)	...	...	...	...	...	...	...	...	...	...	...	...
	110-1	Empyema	1	...	1	...	...	1	4	2	...	...	3	12
	110-2	Other Pleurisy	1	1	1	4	3	1	4	2	2	3	4	28
		Pneumothorax	...	...	...	...	...	...	1	...	...	...	1	2
	CONGESTION AND HAEMORRHAGIC INFARCT OF LUNG, ETC.													
	111-2	Pulmonary Embolism	1	...	...	...	...	...	...	2	...	...	...	3
	112	Asthma	19	18	13	13	21	20	22	13	26	35	32	240
Digestive system.	114b-1	Gangrene of the Lung	...	...	2	...	2	1	...	...	...	...	...	3
	114b-2	Abscess of Lung	...	...	2	...	...	...	1	...	...	...	2	9
	Other diseases of the respiratory system													
	115-1	Diseases of the Teeth and Gums	1	...	...	...	...	...	...	...	2	...	2	14
	115-2	Ludwig's Angina	...	...	...	...	...	...	...	...	...	...	...	...
	115-3	Diseases of the Tonsils.	...	...	...	...	...	...	...	...	...	...	...	...
		...	1	...	...	...	1	...	...	2	...	...	1	3
		...	...	...	...	...	...	...	...	...	...	1	...	2
	...	...	...	...	...	...	...	...	...	...	...	...	...	5
	...	...	...	...	...	...	...	...	...	...	...	...	...	...

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116	DISEASES OF THE OESOPHAGUS. Dysphagia	...	...	...	1	...	...	...	...	...	...	...	1	2
	ULCER OF THE STOMACH OR DUODENUM.													
117-A	Ulcer of the stomach	5	5	4	6	3	6	8	3	6	6	2	7	61
117-B	Ulcer of the Duodenum	2	1	1	1	2	...	5	6	3	5	10	5	41
	Perforation of Duodenum	...	...	...	...	...	...	1	...	...	...	1	1	2
	OTHER DISEASES OF THE STOMACH.													
118-1	Gastritis	8	10	2	10	2	2	5	7	5	9	6	8	74
118-2	Dilation of stomach	1	...	...	...	...	...	1	...	...	1	...	...	3
	Dyspepsia (age 2 and over)	2	2	1	2	2	1	2	...	1	...	...	2	15
	Obstruction of Pylorus	...	...	...	...	...	...	...	...	...	1	...	2	3
	Stenosis of Pylorus	...	...	...	...	...	...	...	...	...	1	...	...	1
119 & 120-a	DIARRHOEA AND ENTERITIS. Other Diarrhoea and Enteritis.	59	49	29	33	62	41	38	58	38	44	64	68	584
119 & 120-a-1	Colitis	1	...	1	...	4	7	4	1	6	3	2	2	1
	Infantile Diarrhoea	25	7	14	4	29	27	20	47	41	25	18	21	278
	Intestinal colic	...	...	1	2	2	...	...	...	...	...	...	1	6

Diseases of the Digestive System.

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121	APPENDICITIS. Appendicitis Appendicular abscess	2	1	2	3	2	2	2	4	2	2	2	5	29
	HERNIA, INTESTINAL OBSTRUCTION.	...	...	...	...	...	...	...	...	...	...	...	...	2
122-a	Hernia	...	...	2	1	...	1	1	1	...	2	...	...	8
122-a-1	Strangulated Hernia	2	4	5	7	...	3	1	1	...	2	...	...	37
122-b	Intestinal obstruction	4	5	11	6	6	6	9	11	13	5	6	18	100
	Intussusception	...	1	1	...	...	...	...	...	2	3	1	...	8
	Paralytic ileus	...	...	...	...	...	...	...	...	...	2	1	...	3
	Volvulus	...	...	...	...	...	1	...	...	...	...	...	...	1
	OTHER DISEASES OF THE INTESTINES.													
123-1	Constipation, Intestinal stasis	1	...	2	1	1	...	1	...	...	1	1	3	9
123-3	Faecal Fistula	...	...	...	...	1	...	...	...	1	...	...	...	4
	Stricture of Rectum	...	...	...	...	...	...	...	...	1	...	...	...	1
	Fistula in Ano	1	...	...	...	1	...	...	1	...	...	1	1	5
	Haemorrhage of intestine	...	...	...	...	...	1	...	...	...	...	...	...	1
	OTHER DISEASES OF THE LIVER.													
124	Cirrhosis of the liver	17	13	18	14	13	18	19	19	20	13	27	30	221
125-1	Acute yellow Atrophy	1	...	...	...	1	...	...	...	...	...	...	...	2
125-2	Abscess of Liver	1	1	...	...	1	2	...	2	2	...	1	1	11
	Cholaemia	...	...	...	...	1	...	...	...	...	...	1	...	2
	Enlargement of Liver	2	3	2	2	3	1	3	4	1	4	6	5	36
	Hepatitis	4	4	4	2	6	5	5	6	3	1	3	3	42
	Jaundice	3	7	1	2	1	4	7	7	2	1	3	12	50

Diseases of the Digestive System.

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Genito-Urinary System.	OTHER DISEASES OF THE LIVER—Contd.													
	Acute infective Jaundice	...	...	...	...	...	...	1	1	1	1	...	...	3
	Cholecystitis	...	...	...	...	...	...	...	...	...	...	...	...	1
	DISEASES OF THE PANCREAS.													
	Acute Pancreatitis	...	...	...	...	...	1	...	1	...	...	...	...	2
	Peritonitis	2	6	6	1	4	6	7	11	7	3	1	11	65
	X. NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.													
	Acute nephritis	4	1	...	1	...	3	1	...	5	7	11	11	44
	Acute Bright's Disease	4	...	4	6	6	10	4	4	2	4	3	3	50
	Chronic nephritis	45	47	32	38	32	27	27	29	32	28	37	50	424
	Chronic Bright's Disease	2	...	3	1	4	...	1	2	2	1	3	6	25
	Albuminuria	...	...	...	...	...	...	...	...	1	...	...	...	1
	Nephritis not stated to be acute or chronic.	...	...	...	...	...	...	...	...	...	...	1	...	2
	Renal Dropsy	9	5	3	8	12	6	5	7	4	14	6	14	93
	Uraemia	9	3	2	4	1	4	6	1	2	6	5	6	49

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Diseases of the Genito Urinary System.														
Genito-Urinary System.	OTHER DISEASES OF THE KIDNEY AND ANNEXA.													
	Pyelitis	...	...	...	...	...	...	1	1	...	...	...	...	2
	Pyelo-nephritis	...	...	...	...	...	...	1	...	...	...	...	...	1
	CALCULI OF THE URINARY PASSAGES.													
	Renal calculus	...	...	...	...	1	...	...	...	...	...	...	...	1
	DISEASES OF THE BLADDER.													
	Cystitis	...	...	...	1	...	...	1	1	2	2	1	1	9
	Retention of Urine	...	...	...	...	...	...	1	...	...	3	...	...	11
	Vesico-Vaginal Fistula	...	...	...	...	...	...	...	...	...	...	...	2	2
	DISEASES OF THE URETHRA, URINARY ABSCESS etc.													
	Stricture of Urethra	...	1	...	2	1	...	...	1	1	1	...	...	5
	Extravasation of Urine	...	...	...	...	...	...	...	...	...	...	...	...	3
Genito-Urinary System.	DISEASES OF THE PROSTATE.													
	Adenoma of prostate	...	...	1	...	1	...	...	...	...	...	...	...	3
	Enlargement of Prostate	2	...	...	2	...	1	...	...	...	...	...	...	6
Genito-Urinary System.	DISEASES OF THE MALE GENITAL ORGANS													
	Abscess of scrotum	1	...	...	...	...	...	...	1	...	...	...	...	2
	Hydrocele	...	...	...	...	...	...	...	...	2	...	...	...	2

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139 (a) 2	DISEASES OF THE FEMALE GENITAL ORGANS.			1				1						2
	Pyosalpinx			1										1
	Removal of Uterus													1
139-b	Salpingitis					1								1
	Dysmenorrhoea and Endometritis						1							1
	XI. DISEASES OF PREGNANCY, CHILD-BIRTH AND THE PUERPERAL STATE.													
140	Septic Abortion	3	2		2		2	1	2	1			2	14
141-2	Abortion (unqualified)						1	2				2	1	7
	PUERPERAL HAEMORRHAGE.													
144-a	Placenta Praevia	1			1			2			1		1	6
144-b	Accidental Haemorrhage unqualified													
	Post-Partum Haemorrhage	1	1	2	2	1	1		2	1	1	1	1	7
	Retention of Placenta	1	1	1	1	4	1	2	2		2	1	1	13
145	Puerperal Sepsis	16	5	8	8	18	8	11	13	16	13	13	14	143

Puerperal State.

146-1	Eclampsia	2	1	2	3	3	1	5	3	2	4	2	9	37
146-2	Albuminuria of Pregnancy		1				2							3
	OTHER TOXAEMIAS OF PREGNANCY.													
147	Anaemia of Pregnancy	1			1		1	1				2	1	7
	Hyperemesis Gravidarum				1							1		2
	Other Toxaemias of pregnancy.	1				4	3	2	2	5	1	2	2	22
	OTHER ACCIDENTS OF CHILD BIRTH.													
149	Prolonged Labour			1										1
	Rupture of uterus	2	1			4				3				10
	Other Accidents of Child Birth.	1				1				1				3
	XII. DISEASES OF THE SKIN AND CELLULAR TISSUE.													
151	Carbuncle	2	5	3	1	2	10	12	5	4		6		50
152-1	Cellulitis	9	7	1	3	5	9	14	5	5	4	10	19	91
152-2	Acute Abscess and ulcer (unqualified)	5	4	8	6	11	6	12	5	9	5	6	11	88
153	Other Diseases of the Skin including Elephantiasis (unqualified)	2	1		1		2		1			1	3	12

Diseases of the skin.

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Diseases of the Bones and Organs of Locomotion.	XIII. DISEASES OF THE BONES AND ORGANS OF LOCOMOTION.													
	154 Osteomyelitis	1	...	...	...	1	3	...	...	...	1	1	1	8
	156-a Acute arthritis	2	...	1	...	...	...	...	...	1	...	...	...	4
	Chronic arthritis	...	...	...	...	...	...	...	1	1	1	...	...	3
Congenital Malformation.	XIV. CONGENITAL MALFORMATIONS.													
	157-b Meningocele	...	...	...	1	...	...	...	1	...	1	1	1	1
	Spina Bifida	...	...	...	...	...	...	...	1	...	...	...	...	5
	OTHER CONGENITAL MALFORMATIONS.													
Diseases of Early Infancy.	157-e(3) Imperforate Anus	...	...	...	...	3	1	1	2	2	1	2	2	13
	157-e(4) Diverticulum of Bladder	...	...	...	...	...	...	...	...	...	...	...	...	1
	157-e(5) Congenital Deformity	...	...	1	1	...	...	2	1	1	...	...	1	7
	XV. DISEASES OF EARLY INFANCY.													
Diseases of Early Infancy.	158 Congenital debility	6	2	1	1	5	3	...	5	9	8	15	15	73
	Hydranmios	...	...	...	1	...	...	...	...	...	...	...	...	1

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Diseases of Early Infancy.	159 Inanition	6	3	3	4	7	3	7	4	2	2	6	5	52
	Malnutrition	13	10	13	14	17	18	22	29	24	21	25	44	250
	Marasmus	27	21	21	20	33	26	35	31	28	28	26	58	354
	Premature Birth.	241	174	173	189	153	147	121	140	165	183	207	268	2161
Diseases of Early Infancy.	160 INJURY AT BIRTH.	1	...	1	...	1	...	...	...	...	...	2	3	8
	Other Injury at Birth													
	OTHER DISEASES PECULIAR TO EARLY INFANCY.													
	161-a Atelectasis	6	7	6	6	3	2	2	5	3	3	3	8	54
Diseases of Early Infancy.	Asphyxia neonatorum.	1	2	1	3	4	...	6	1	3	1	6	8	36
	Secondary Asphyxia.	1	2	4	3	3	4	5	3	1	...	5	4	35
	Infantile Biliary Cirrhosis.	8	6	8	7	7	9	9	12	11	6	15	15	113
	161-c Haemorrhage of New born.	1	...	...	...	...	...	1	2	...	1	...	...	5
Deaths from Violence.	(3) XVI. OLD AGE.													
	162 Old age.	251	237	214	209	215	206	279	298	246	300	437	594	3486
	XVII. DEATHS FROM VIOLENCE.													
	163 Suicide by Arsenic or Drug Poison.	...	...	1	...	2	1	1	...	1	...	...	...	6
Deaths from Violence.	Suicide by other solid or liquid...	1	...	...	...	...	...	1	...	...	...	...	...	2
	Poisonous and Corrosive substances.	...	...	...	...	...	...	2	2	1	1	...	3	13
	Suicide by hanging.	...	...	...	1	1	2	2	2	2	...	...	2	14
	166 Suicide by drowning.	...	...	...	...	3	3	2	...	...	...	...	...	...
Deaths from Violence.	168 Suicide by cutting or piercing Instruments.	...	...	...	...	1	1	1	...	...	...	...	...	3

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Annual Form No. XIX-Table of Deaths for 1937 arranged in accordance with the International List (Fourth Revision 1939).
as adopted for use in England, Wales, Scotland and Northern Ireland.

Classification No.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
174	SUICIDE BY OTHER MEANS. Homicide by cutting or Piercing Instruments	1	...	...	...	1	...	...	1	...	...	...	...	3
176	ATTACK BY VENOMOUS ANIMALS. Snake-bite.	1	1	1	...	...	1	1	...	...	...	...	1	2
177	Sting of scorpion.	...	...	...	...	...	1	...	...	...	...	...	...	4
181	Opium Poisoning.	4	5	3	7	2	4	3	4	1	1	4	5	1
183	Accidental Burns.	2	...	1	2	1	3	1	3	2	3	1	3	43
184	Accidental drowning. Gunshot.	...	...	...	...	1	...	...	...	...	...	...	...	21
186	ACCIDENTAL INJURY BY FALL, CRUSHING, Etc. Accidental injury by fall, crushing etc. Motor Accident Tram car accident Other Train accidents Cart accidents Gored by Bull	2	1	...	...	1	3	2	1	2	2	1	1	12
188	...	...	...	1	...	1	1	1	...	...	...	...	1	8
	Deaths from Violence.	...	...	...	...	...	...	...	...	...	...	...	...	2
	Deaths from Violence.	...	...	...	...	...	...	...	...	...	...	...	...	28

191	EXCESSIVE HEAT. Sunstroke	...	...	...	...	...	1	...	...	...	...	...	...	1
194-2	OTHER AND UNSTATED FORMS OF ACCIDENTAL VIOLENCE. Accidental cranial fracture Accidental fracture of spine Accidental fracture of other bones Other unstated forms of accidental violence Other unstated form of local and general injuries	2 1 ...	...	...	1 1 1	1 ...	1 2 ...	...	...	1	1	1	...	7 5 10 1 5
199	XVIII ILL DEFINED DISEASES. Sudden death (syncope)	...	1	...	...	...	...	...	...	...	...	...	...	1
200-1	CAUSE OF DEATH UNSTATED OR ILL-DEFINED. Heart failure Acute Abdomen Anasarca Ascites Coma Debility (Age 10 to 70) Dropsy Inanition (10 years and over) Oedema Pyrexia of uncertain origin Post-operative shock Surgical Shock Natural causes Unknown	45 2 1 23 1 2 181 1 3	38 ... 1 15 ...	41 1 1 4 16 ...	40 1 2 15 ...	40 1 1 3 33 ...	27 2 3 21 1 ...	38 2 ... 22 ... 113 3 1 1 1 1	25 2 1 7 1 33 3 1 134 1 1 1 2	46 1 1 7 1 36 1 1 110 2 1 1 1	40 1 ... 6 1 33 2 2 102 ...	55 ... 1 9 ... 59 ... 118 ...	57 3 1 6 1 44 191 2 2 3 8	492 14 6 51 5 350 8 8 1 1648 12 12 12 26

Annual Form No.—XX Comparing the deaths from some of the Principal diseases during the year with the deaths during the previous five years.

Years.	Cholera.		Small-pox.		Measles.		Plague.		Malaria.		Enteric Fever.		Other Fevers.		Dysentery and Diarrhoea.		Tuberculosis and other Pulmonary.		Respiratory diseases.				Injuries.		Deaths from Child birth.		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		
1932	5	0.03	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	2230	34.4
1933	62	0.1	837	1.3	44	0.07	...	...	140	0.2	90	0.1	2095	3.2	2670	4.1	156	0.2	855	1.3	5967	9.2	303	0.5	331	11.6	10950	16.9	24500	37.9
1934	166	0.3	131	0.2	7	0.01	...	...	193	0.3	145	0.2	2097	3.2	2008	3.1	151	0.2	971	1.5	5783	8.9	270	0.4	313	11.1	11424	17.7	23669	36.6
1935	145	0.22	59	0.09	7	0.01	...	...	167	0.26	186	0.29	2305	3.6	2320	3.6	177	0.27	1032	1.6	6254	9.7	198	0.3	295	11.4	11810	18.2	24956	38.6
1936	140	0.22	3	0.003	5	0.01	...	...	113	0.18	163	0.25	1799	2.8	2208	3.4	126	0.19	1010	1.6	6410	9.9	232	0.4	294	10.1	11157	17.2	23660	36.6
Mean of the last 5 years.	104	0.16	241	0.38	16	0.02	...	...	156	0.24	137	0.21	1987	3.1	2370	3.7	156	0.23	923	1.44	5985	9.2	254	0.4	302	10.5	11181	17.3	23918	36.3
1937	232	0.36	196	0.3	8	0.01	...	...	78	0.12	96	0.15	2036	3.1	2133	3.3	51	0.08	1155	1.8	6676	10.3	170	0.3	289	9.3	12505	19.5	25674	39.7

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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 Births 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.	
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	46.3	22,364	42.3	512	1.0	32	0.06	1367	2.6	1259	2.1	...	...	...	...	3268	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	1052	2.0	...	...	3931	7.4	8691	16.4	6806	286.8	4864	118.0	1321
1929	13,124	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	1281
1930	25,662	48.5	22,839	43.2	43	0.08	183	0.4	283	0.5	2097	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	33.8	153	0.2	24	0.04	277	0.4	1914	3.0	1347	2.1	...	...	2746	4.2	5743	8.9	6391	248.3	3767	50.3	1318
1932	21,996	43.3	22,290	34.4	5	0.08	176	0.3	165	0.3	1747	2.7	1403	2.2	10.002	...	2644	4.1	5509	8.5	6622	236.5	3609	48.2	1326
1933	28,531	44.1	24,500	37.9	62	0.1	137	1.3	140	0.2	2185	3.3	519	0.8	...	...	2670	4.1	5967	9.2	7540	264.4	4154	67.7	1380
1934	28,149	43.5	23,659	36.6	166	0.3	131	0.2	193	0.3	2242	3.4	1163	1.8	...	...	2008	3.1	6905	10.6	6424	228.2	3893	63.4	1378
1935	31,031	47.9	24,955	38.6	145	0.22	59	0.09	167	0.26	2491	3.89	807	0.9	...	...	2320	3.6	7463	11.6	6948	223.9	4380	71.3	1414
1936	28,189	45.1	23,660	36.6	140	0.22	3	0.005	113	0.18	1799	2.8	601	0.9	...	...	2208	3.4	7546	11.7	6318	216.5	3990	65.0	1415
1937	30,958	47.8	21,674	39.7	232	0.36	196	0.3	780	1.2	2036	3.1	518	0.8	...	...	2133	3.3	7831	12.1	6836	220.8	4911	74.9	1400

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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.	
	Inches.	Inches.	Inches.	Inches.	Inches.
1932	0.69	2.31	7.28	36.31	46.59
1933	3.42	0.98	5.20	30.58	40.18
1934	2.05	2.54	11.20	20.87	36.66
1935	0.57	1.23	14.26	24.28	40.34
1936	3.70	3.53	12.39	24.63	44.25
1937	0.07	4.72	15.53	41.06	61.38

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TABLE C.

Table of Births, Deaths and Infantile Death-rates for different communities in the city of Madras for 1936 and 1937

Race or caste.	Population according to the census of 1931.	1937						1936					
		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	35	9.8	18	5.0	2	57.1	47	13.1	22	6.1	3	63.8
Anglo-Indians	10,657	384	36.0	253	23.8	46	119.8	378	35.5	241	22.6	38	100.5
Indian Christians	39,884	1,564	39.2	1,124	28.2	304	194.4	1,425	35.8	1,077	27.0	342	240.0
Hindus	5,20,176	25,620	49.3	21,265	40.9	5,659	220.9	24,218	46.6	1,9551	37.6	5,102	210.7
Mohamedans	70,031	3,350	48.0	3,011	43.0	818	244.2	3,120	44.6	2764	39.5	833	267.0
Others	2,901	5	1.7	3	1.0	7	...	1	0.3	5	1.7	...	...
Total	6,47,230	30,958	47.8	25,674	39.7	6836	220.8	29,189	45.1	23,660	36.6	6,318	216.5

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TABLE D.

Table of Birth and Death rates of principal sub-divisions of Hindu Community for 1936 and 1937.

Name of Community.	Population.	1937.				1936.			
		Total Births.	Birth Rate.	Total Deaths.	Death Rate.	Total Births.	Birth Rate.	Total Deaths.	Death Rate.
Brahmins	58,761	2,126	36.2	1,219	20.7	2,138	36.4	1,278	21.8
Chetties	37,949	1,814	47.8	1,646	43.4	1,671	44.0	1,204	31.7
Vellala or Mudaliars	86,716	4,122	47.5	3,194	36.8	3,161	36.2	2,751	31.7
Baliya or Naidus	60,263	2,522	41.8	2,227	36.9	2,167	35.9	1,878	31.2
Vannia or Naickers	69,650	4,033	57.9	3,121	44.8	3,336	47.9	2,914	41.8
Adi-Dravidas	73,701	3,910	53.1	3,627	49.2	3,390	46.0	3,453	46.9
Patnavars	11,309	342	30.2	275	24.3	748	66.1	478	42.3
Yadaval or Idayars	17,022	852	50.0	622	36.5	1,077	63.3	998	58.6
Viswakarma Brahmins or Kammalars	15,870	700	50.4	600	38.3	848	54.1	737	47.0

TABLE E.

Table of Birth, Death and Infantile Death rates by months for 1936 and 1937

Months.	1937						1936					
	Total No. of Births.	Birth Rate.	Total No. of Deaths.	Death Rate.	Infantile Deaths.	Infantile Deaths 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	2137	39.6	2338	43.3	604	282.6	2114	39.2	1967	36.5	498	235.6
February	1865	34.6	1859	34.4	461	247.2	1820	33.7	1775	32.9	417	229.1
March	2245	41.6	1857	34.4	481	214.2	2051	38.0	1841	34.1	453	220.8
April	2686	49.8	1759	32.6	460	171.3	2176	43.0	1783	33.0	449	206.3
May	2542	47.1	1979	36.7	570	224.2	2376	44.1	1822	33.8	490	206.2
June	2540	47.1	1849	34.3	486	191.3	2195	40.7	1912	35.4	481	218.9
July	2600	48.2	1911	35.4	519	199.6	2452	45.5	2008	37.2	592	241.4
August	2685	49.8	2 14	39.2	601	223.8	2671	49.5	2020	37.4	566	211.9
September	2760	51.2	2021	37.5	565	204.7	2920	54.1	1786	33.1	517	177.0
October	2807	52.0	2026	37.5	531	189.1	2818	52.2	1824	33.8	499	177.1
November	2759	51.2	2642	48.9	681	246.8	2699	50.0	1948	36.1	558	206.7
December	3332	62.0	3320	61.5	877	263.2	2897	53.7	2974	54.5	798	275.4
Total	30958	47.8	25674	39.7	6836	220.8	29189	45.1	23660	36.6	6318	216.5

TABLE F.

Ratio of deaths among Children under one year of age per 1000
Live Births registered in each division for 1936 and 1937.

Divisions.	1937		1936	
	Infantile Mortality.	Infantile Death-rates.	Infantile Mortality.	Infantile Death-rates.
1	155	267.7	236	265.8
2	126	204.6	270	197.5
3	297	202.7	303	212.6
4	306	232.6	307	221.3
5	303	240.1	105	283.8
6	98	257.2	82	173.0
7	145	187.4	103	190.4
8	52	166.1	55	263.2
9	134	201.2	159	187.9
10	106	279.7	183	238.3
11	156	209.1	48	247.4
12	69	235.5	212	224.6
13	267	246.5	195	295.9
14	217	286.0	36	279.1
15	91	279.1	160	248.8
16	126	310.3	487	238.0
17	306	240.5	314	226.2
18	232	242.2	226	205.0
19	355	251.1	173	204.3
20	187	223.1	267	167.2
21	163	195.9	211	210.6
22	86	156.3	197	182.1
23	208	236.1	247	197.4
24	108	196.3	293	196.4
25	185	217.4	155	180.1
26	194	212.2	188	235.0
27	148	169.0	225	253.4
28	117	188.4	312	222.1
29	103	237.9	376	222.6
30	173	209.4	193	215.9
31	205	205.4	...	...
32	173	179.8	...	...
33	138	213.9	...	...
34	165	224.5	...	...
35	373	222.3	...	...
36	141	201.1	...	...
37	174	227.2	...	...
38	73	157.3	...	...
39	100	198.8	...	...
40	81	243.3	...	...
Total ...	6,836	220.8	6,318	216.5

TABLE G.

Table of Infantile Mortality by months in the year 1937.

1937.	Small-pox.	Measles.	Malaria.	Other fevers.	Dysentery and Diarrhoea	Premature Birth.	Debility.	Nervous system.	Respiratory sys- tem.	All other causes.	Total of 1937.			Total of 1936.
											Males.	Females.	Total.	
January	...	...	...	43	38	241	9	51	172	50	329	275	604	498
February	...	...	...	20	25	174	4	37	138	63	249	212	461	417
March	...	...	1	23	35	173	7	46	157	38	251	230	481	453
April	...	...	2	22	26	189	3	44	114	59	260	200	460	449
May	...	...	...	28	65	153	2	50	133	87	315	255	570	490
June	...	...	...	24	47	147	5	43	159	61	249	237	486	481
July	...	2	...	22	38	121	4	40	80	111	301	218	519	592
August	...	4	...	24	59	140	9	40	188	137	310	291	601	566
September	...	1	...	23	45	165	12	51	154	14	281	284	565	517
October	...	1	...	14	31	183	7	44	148	103	285	246	531	499
November	...	...	...	22	35	207	19	58	186	154	389	292	681	558
December	...	4	...	22	61	268	14	64	221	223	482	395	877	798
Total.	...	15	2	3	505	2161	95	568	2000	1200	3701	3135	6836	6318

TABLE H.

Table of percentage of Infantile Deaths from Principal causes in the year 1937.

Age Periods.	Small-pox.		Measles.		Malaria.		Other Fevers.		Diarrhoea and Dysentery.		Premature Birth.		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	...	...	...	...	...	...	7	.4	16	1.1	1219	82.1	12	.8	58	3.9	15	1.01	157	10.6	1484	21.7
7 days and under 1 month...	...	...	...	...	...	...	16	1.6	32	3.13	681	66.6	12	1.2	54	5.3	63	6.2	163	15.9	1021	14.9
1 month and under 4 months	4	.3	...	...	1	.1	70	5.1	105	7.6	252	18.2	37	2.7	184	13.3	440	31.6	291	21.02	1384	20.2
4 months and under 7 months	7	.6	...	...	...	...	70	6.4	139	12.0	9	.8	27	2.3	132	11.4	583	50.3	191	16.4	1158	16.9
7 months and under 10 months	4	.4	2	.2	2	.2	66	6.2	125	11.9	...	—	3	.3	89	8.4	586	55.8	174	16.7	1051	15.5
10 months and under 1 year.	...	...	...	...	...	...	58	7.9	88	11.9	—	—	4	.5	51	6.9	313	42.4	224	30.3	738	10.8
Total.	15	.2	2	.02	3	.04	287	4.2	505	7.4	2161	31.6	95	1.4	568	8.3	2000	29.3	1200	17.6	6836	—

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VACCINATION.

Statement showing the number of births (Divisional and Hospital) verified during the calendar year 1937 and the number of Infants vaccinated 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	734	268	12	15	66	40	663	228	382	69	52.0	25.7
2	473	295	5	8	41	24	432	271	223	97	47.2	32.8
3	796	655	20	90	122	63	674	592	382	106	48.3	16.2
4	750	570	32	35	115	85	635	485	467	382	62.2	67.0
5	800	475	20	24	112	75	688	400	577	318	72.1	66.9
6	281	74	2	...	47	13	234	61	58	9	20.6	12.2
7	583	182	18	19	93	27	490	155	295	70	50.6	38.5
8	195	99	...	1	21	18	171	81	90	22	46.2	22.2
9	353	243	3	12	41	25	312	218	158	78	44.8	32.1
10	269	118	3	10	42	20	227	98	95	22	35.3	18.6
11	479	271	9	21	66	45	413	226	219	76	45.7	28.0
12	188	60	6	4	35	6	153	54	67	17	35.6	28.3
13	740	297	15	32	146	49	594	248	365	91	49.3	30.6
14	520	231	8	12	93	43	427	188	271	54	52.1	23.8
15	218	128	2	4	41	12	177	116	69	28	31.6	21.1
16	331	125	5	7	59	26	272	99	135	29	40.8	23.2
17	1027	212	12	23	130	30	897	182	514	56	50.1	26.4
18	722	211	8	18	118	40	604	171	374	76	51.8	36.0
19	1106	315	17	30	172	56	934	259	660	109	59.7	34.6
20	586	219	11	14	105	47	481	172	378	94	64.5	42.9
21	599	239	14	22	86	24	513	215	356	113	59.4	47.3
22	272	346	12	28	35	36	237	310	157	95	57.7	27.5
23	543	356	23	13	79	54	464	302	333	199	61.3	55.9
24	267	224	12	4	38	29	229	195	121	72	45.3	32.1
25	512	380	14	18	54	47	458	333	308	110	60.2	29.0
26	429	466	3	18	74	68	355	398	126	167	29.4	35.8
27	156	636	2	79	24	59	132	607	69	68	44.2	10.2
28	351	254	7	8	42	34	309	220	229	121	65.2	47.6
29	297	136	...	6	48	30	249	106	191	40	64.3	29.4
30	646	165	27	10	103	38	543	127	266	77	41.2	46.7
31	615	330	39	19	148	30	467	300	241	109	39.2	33.0
32	432	405	11	37	71	58	361	347	308	86	71.3	21.2
33	407	208	22	11	51	23	356	185	270	105	66.3	50.5
34	525	190	16	10	91	53	434	137	275	101	52.3	53.2
35	975	605	24	70	75	29	900	576	538	216	55.2	35.6
36	566	293	15	24	77	36	489	257	269	123	47.5	42.0
37	422	129	13	27	59	20	363	109	195	40	46.2	31.0
38	322	102	12	10	20	14	302	88	185	21	57.5	20.6
39	388	138	9	10	57	26	331	112	203	66	52.3	47.8
40	264	101	8	17	62	20	202	81	99	33	37.5	32.7
Total	20139	10781	491	820	2962	1472	17177	9309	10518	3765	52.2	34.9

VACCINATION.

Statement showing the number of births verified in 1937 and the number of infants vaccinated under one year of age.

Year.	1	2	3	4	5	6	7	8
		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.
1935	{ Divisional { Hospital	19,628 8,990	2,741 1,254	3,699 2,878	13,188 4,858	10,193 2,955	77.3 60.8	1,568 579
1936	{ Divisional { Hospital	19,139 9,859	2,845 1,248	3,830 3,528	12,464 5,083	9,980 3,136	80.1 61.7	1,183 524
1937	{ Divisional { Hospital	20,139 10,781	2,962 1,472	3,755 2,901	13,422 6,408	10,518 3,765	78.4 59.0	1,481 724

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

Old Divisions.	Name of Areas.	Length of Sewers in feet laid during 1937.	Length of Sewers in feet laid up to 31-12-1937.	Percentage of Sewered Portions up to 31-12-1937	Percentage yet to be Sewered	Remarks.
1	Royapuram	1,080	42,696	88	12	
2	Tondiarpet	4,816	38,975	77	23	
3	Washermanpet	303	57,283	97	3	
4	Korrukkupet	2,116	30,459	73	27	
5	Harbour		30,771	94	6	
6	Muthialpet		27,001	97	3	
7	Kachaleeswaranpet		35,920	92	8	
8	Kothwal Bazaar		23,345	100		
9	Ammen koil		27,687	100		
10	Seven wells		29,305	100		
11	Sowcarpet		18,379	100		
12	Peddu Naickenpet		33,171	99	1	
13	Trevelyan Basin		32,171	97	3	
14	Explanade		10,586	90	10	
15	Park Town		21,534	95	5	
16	Peramboer	797	36,495	66	34	
17	Choolai	1,171	42,246	68	32	
18	Purasawalkam	834	54,659	99	1	
19	Vepery		44,337	85	15	
20	Egmore	1,343	98,338	96	4	
21	Kilpauk	11,233	53,076	70	30	
22	Nungambakkam	9,624	66,396	50	50	
23	Chintadripet		41,605	87	13	
24	Thiruwateeswaranpet	2,850	55,842	90	10	
25	Chepauk		22,506	91	9	
26	Triplicane	895	29,713	89	11	
27	Amir Mahal		28,768	87	13	
28	Mirsaibpet	1,550	96,998	97	3	
29	Royapettah	1,497	83,648	81	19	
30	Mylapore	1,193	94,915	92	8	
	Total ...	41,307	13,08,825	88-23	11.77	

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Statement showing the number of applications relating to licences
disposed of during 1937.

No.	Description.	Number of cases dealt with	Number sanctioned	Number refused.	Number pending.	Remarks.
1	Aerated Water Factory	42	41	1	...	
2	Bakery, Sweetmeat Bazaars, Coffee Hotels	463	458	5	...	
3	Candles and Soaps	27	27	...	...	
4	Cocconut fibre, Flax, Hemp and Jute	34	34	...	...	
5	Cattle Yards	2,290	2,064	20	206	
6	Bones, Hoofs, Hairs, Wool and Horns	7	7	...	...	
7	Cart stand	14	14	...	...	
8	Dairy Produce	480	478	2	...	
9	Flour	135	115	20	...	
10	Guilding, Condiment	201	186	15	...	
11	Hack-stable	49	49	...	...	
12	Dyeing	72	67	5	...	
13	Onions and Garlic	76	76	...	...	
14	Oil, Oil Mills	490	472	8	10	
15	Lodging Houses	112	107	4	1	
16	Markets	47	47	...	...	
17	Meat	284	156	123	5	
18	Spirits, Turpentine and Chemical Rosin	164	162	2	...	
19	Laundries	147	147	...	...	
20	Fish, Fins	21	19	2	...	
21	Skins, Hides and Leather	122	121	1	...	
22	Paddy Boiling	1	1	...	...	
23	Sugar	4	4	...	...	
24	Catgut, Offal, Tallow	4	4	...	...	
25	Snuff	76	73	3	...	
26	Cotton	32	32	...	...	
27	Eating Houses	1,041	817	42	182	
28	Swine	17	...	17	...	
29	Lime-kilns	20	8	12	...	
30	Beedy Manufacturing	...	...	...	...	
31	Manufacturing of Cigar or Cigarettes, Storage of Tobacco	...	...	...	...	
32	Camphor—storage and Boiling	1	1	...	...	
33	Shaving Saloons	7	7	...	...	
34	Husking of Paddy	1	1	...	...	
35	Groundnut Storage	2	2	...	...	
36	Grain storage	1	1	...	...	
37	Gold refining	1	1	...	...	
38	Poultry	3	2	1	...	
		6,488	5,801	283	404	

Statement of cases treated in the Corporation Dispensaries
during 1936 and 1937.

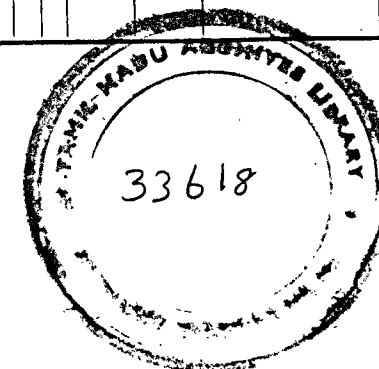
Serial No.	Name of the Dispensary.	The Year in which the Dispensary was opened.	Total No. of cases treated.		Total No. of operations performed.		Remarks.
			1936.	1937.	1936.	1937.	
1	Royapuram Dispensary	1924	91,069	91,410	211	197	
2	Washermanpet	1913	1,36,462	1,35,367	832	683	
3	Harbour	1929	1,58,900	1,70,504	249	364	
4	Mannady	1923	65,470	58,473	225	172	
5	Mafuskhan „ G.T.	1923	88,416	90,150	355	268	
6	Mint Street	1923	1,45,666	1,49,207	306	481	
7	Trevelyan Basin „ G.T.	1919	1,50,760	1,45,770	386	569	
8	Perambore	1928	53,655	60,827	247	135	
9	Vyasarpady	1929	59,214	63,025	4,363	3,708	
10	Kosapet	1929	70,503	82,484	838	1,047	
11	Baliah Naidu	1909	1,40,925	1,38,912	1,152	776	
12	Kilpauk	1919	1,18,007	1,11,155	1,080	677	
13	Nungambakkam	1923	84,300	81,961	156	137	
14	Chintadripet	1909	1,36,636	1,89,444	682	605	
15	Pudupakkam	1924	1,01,983	1,12,817	541	732	
16	Triplicane	1918	61,657	64,507	531	580	
17	Teynampet	1921	53,607	56,945	435	445	
18	Thyagarayanagar „ (shifted from Pulianthope)	1922	53,747	68,416	115	151	
19	Mylapore	1924	1,88,765	1,68,980	510	659	
20	Unani Dispensary, Pulianthope „ (shifted from Thyagarayanagar)	1930	74,478	63,173	101	134	
21	Siddha Dispensary, Chulai...	1931	1,34,751	1,41,154	159	155	
22	Ayurvedic Dispensary, Thousand Lights	1930	74,618	76,620	194	484	
23	Unani Dispensary, Thayar Sahib Street	1932	1,09,875	97,481	184	94	
24	C.W.C. Dispensary, Perambore	1936		55,326		523	

Statement of notices issued and disposed of together with

Section or By-law.	Substance of Section or By-Law.	Notice.					No. cancelled.
		No. pending on 1st January 1937.	No. issued during the year.	Total.	No. complied with		
					Voluntarily.	By prosecution.	
(1)	(2)	(3)	(4)	(5)		(6)	(7)
177	Control over house drains privies and cesspools ...	2	...	2	2	...	...
178 (4)	Occuynng or a lowing occupation of house with- out proper drainage ...	...	...	...	...	...	...
186	Failure to obey requisition to provide latrine or to remove latrine to another site and failure to keep them clean and proper order ...	218	794	1012	486	199	85
188	Failure to obey requisition to provide latrines for Market etc., or to keep them clean ...	1	...	1	1	...	...
189	Failure to construct latrines so as to screen persons using them from view ...	1	...	1	1	...	...
202 (4)	Keeping rubbish or filth for more than 24 hours etc. ...	1	...	1	1	...	...
202 (5)	Prohibition against allowing sewage to flow in street ...	4	...	4	4	...	...
260	Failure to obey requisition to repair, etc, tank or other place dangerous to passers by or persons living in neighbourhood ...	1	...	1	1	...	...
264	Failure to obey requisition to fill up, etc, tank or well, or drain of water, etc. ...	273	877	1150	800	75	27
269	Failure to obey requisition to enclose, clear or cleanse untenanted premises ...	18	105	123	89	10	18
270	Failure to obey requisition to clear or cleanse etc. building or land in filthy state or overgrown with prickly pear or other noxious vegetation ...	9	219	228	117	72	4
272	Failure to obey requisition to lime-wash or other- wise cleanse building ...	64	328	327	305	2	...
273	Failure to obey requisition to execute work or take other action with respect to insanitary building ...	621	2046	2667	1697	384	130
279	Prohibition in respect of lodging house ...	...	...	...	...	...	...
280	Unlawful keeping of pigs ...	...	...	...	...	...	...
283	Repairs to or demolishing of stable, cattle- shed etc. ...	5	33	38	25	2	...
284	Construction or maintenance of stable, cattle-shed, etc, contrary to Act or subsidiary legislation ...	...	26	26	23	...	...
286	Failure to remove carcass of animals ...	...	...	...	...	...	...
287 (3)	Use of place without licence or contrary to licences	1	...	1	1	...	...
293 (2)	Washing of clothes by washermen at unauthorised place ...	...	...	...	...	...	...
297	Slaughter of animals for sale of food or skinning or cutting up carcasses without licence or contrary to licence drying skin so as to cause a nuisance ...	...	...	...	...	...	...
299	Carrying on milk trade without licence or contrary to licence ...	...	...	...	...	...	...
303 (2)	Opening private market without licence or con- trary to licence ...	...	...	...	...	...	...
304	Keeping open private market without a licence or contrary to licence ...	...	...	...	...	...	...
309	Carrying on butcher's fish monger's or poulterer's trade without licence etc. ...	...	...	...	...	...	...
310	Sale of article in public streets after prohibition or contrary to regulations ...	...	...	...	...	...	...
334	Failure to obey requisition to cleanse or disinfect building or article ...	...	...	...	...	...	...
345	Failure to give information of small-pox ...	...	...	...	...	...	...
349 (6)	Keeping the latrines without sufficient water supply for flushing. ...	5	385	390	383	7	...
349 (13)	Use of place as a factory without licence or con- trary to licence ...	...	...	...	...	...	...
349 (16)	Use of place without licence or contrary to licence	...	...	...	...	...	...
349 (11)	Carrying on milk trade without cleanliness	...	...	...	...	...	...
(21)	Use of place without sanitary certificate or contrary to sanitary certificate ...	...	...	...	...	...	...

the statement of prosecutions instituted during the year 1937.

PROSECUTION.											No. pending, (17)	Remarks. (18)
No. pending (8)	No. of prosecutions pending disposal on 1st January 1937. (9)	No. instituted during the year. (10)	Total. (11)	No. convicted, (12)	Fines imposed, (13)		No. acquitted, (14)	No. withdrawn, (15)	No. in which parties were not found, (16)			
					Rs.	A. P.						
...	1	...	1	...	...	...	...	1	...	...		
...	0	...	...	...	...	...	...	...	...	...		
242	61	308	369	174	263	8...	2	137	...	56		
...	...	...	...	...	...	...	...	...	...	...		
...	...	...	...	...	...	...	...	...	...	...		
...	...	...	...	...	...	...	...	...	...	...		
...	1	25	26	11	9	12...	2	12	...	1		
...	...	...	...	...	...	...	...	...	...	...		
248	27	180	207	68	84	8...	1	108	...	30		
6	5	80	35	14	24	4...	1	16	...	4		
...	...	...	...	...	...	...	...	...	...	13		
35	18	76	94	62	73	4...	6	13	...	...		
20	...	2	2	1	...	8...	...	1	...	...		
456	41	367	408	208	296	...	1	136	...	63		
...	1	351	352	268	999	4...	2	20	...	62		
...	5	44	49	44	149	...	...	...	1	4		
11	187	1536	1723	1438	6093	8...	5	81	4	195		
3	...	1	1	1	...	4...	...	...	...	...		
...	...	...	...	...	1089	8...	2	63	1	21		
...	34	213	247	160	13	8...	...	9	...	...		
...	...	35	35	26	2	4...	2	...	...	...		
...	...	7	7	5	32	...	...	7	...	4		
...	2	21	23	12	1	8...	...	...	...	...		
...	1	0	1	1	56	...	1	13	8	1		
...	9	30	39	16	175	8...	3	2	...	7		
...	4	26	30	18	185	4...	...	37	8	25		
...	14	235	249	179	32	4...	...	4	...	2		
...	...	16	16	10	4	...	...	3	2	...		
...	...	12	12	7	...	...	...	...	...	...		
...	...	...	...	...	...	...	...	...	...	...		
...	97	401	498	352	1328	8...	4	98	13	31		
...	...	7	7	2	9	4...	...	5	...	...		
...	...	...	...	...	...	...	...	...	...	...		
...	12	150	162	106	124	...	2	26	...	28		



Statement of unwholesome articles of food destroyed during 1937.

Appams, Iddlies and other rice preparations	...	6,593	
		1,811	Baskets.
Beef	...	76	lbs.
Butter	...	4½	lbs.
Butter-milk	...	5	Pots.
Cheese	...	898	Tins.
Coffee and Tea	...	3,365	Kettles.
Curd	...	17	Pots.
Eggs	...	2,505	
Fish	...	1,555	
		1,716	Baskets.
Fruits	...	64,263	
		1,081	Baskets.
Goat-heads	...	36	
Grains	...	303	Measures.
		347	Baskets.
Milk	...	13	Measures.
Mutton	...	396	Visses.
Pork	...	50	lbs.
Preserved food-stuffs	...	2,408	Tins.
		242	Packets.
Sweet-meat	...	250	lbs.
Syrups and Aerated-waters	...	1,367	Bottles.
Trash	...	2,256	
		957	Trays.
		1,478	Baskets.
Vegetables	...	2,460	
		1,868	Baskets.

Statement showing the number of Skin and Leprosy cases treated at the various institutions during 1937 with results.

Serial No.	Name of Institutions.	Date of opening.	Number of Leprosy Cases.			Results.				Number of New Skin Cases excluding Leprosy.	Total No. of New Skin and Leprosy Cases.
			Infec-tive.	Non-Infec-tive.	Total.	No. Cured.	No. Symptoms free.	No. Improved.	No. Arrested.		
1	Ice House Road Skin and Leprosy Clinic	2-2-1934	229	270	499	...	4	230	265	4,532	5,031
2	Vyasarpady Skin and Leprosy Clinic	4-8-1931	61	59	120	...	3	...	48	1,306	1,426
3	Other Corporation Dispensaries	1935	62	322	384	...	20	...	139	84,391	84,775
	Grand Total	...	352	651	1,003	...	27	230	452	90,229	91,232

Services rendered at the Venereal Clinic of the Corporation of Madras at 55 Puliantope High Road, Perambur during 1937.

	Syphilis.		Soft Chancre.		Gonorrhoea.		Other Diseases of venereal origin.		Non-Venereal.			Total.	
	M	F	M	F	M	F	M	F	M	F	M	F	Total.
No. of cases under observation or treatment on 1st. December 1937.	...	...	...	...	...	...	...	...	...	...	...	...	...
No. of cases dealt with for the first time during the year under report suffering from :-													
SYPHILIS Primary	2	...	...	...	...	...	...	...	...	...	2	...	2
" Secondary	5	...	...	...	...	...	...	...	...	...	5	...	5
" Latent in 1st year of infection	...	...	...	...	...	...	...	...	...	...	...	...	...
" All later stages	3	...	...	...	...	...	...	...	...	...	3	...	3
" Congenital	...	...	...	...	...	...	...	...	...	...	...	...	...
SOFT CHANCERE.	...	...	3	...	...	...	...	...	...	...	3	...	3
GONORRHOEA 1st year of infection	...	...	...	...	22	2	...	...	...	...	22	2	24
" Later years of infection	...	...	...	...	13	3	...	...	...	...	13	3	16

[illegible]

Total No. of New Cases.

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Total Attendance up to 31st,
December, 1937.

400

Treatment given at the clinic ...	Arseno Benzene compounds.	Bismuth.	Mercury.	Antimony.	Other injections.	Total.
Total Number of injections ...	25	17	...	10	19	71

Pathological work done.	Microscopical.		Serological.	
	For Spirochaetes.	For Gonococci	Kahn Test.	Wassermann Test.
(a) Number of specimens examined at the clinic by the M.O.	...	57	...	...
(b) Number of specimens from patients of the clinic sent to an approved laboratory (King Institute).	...	...	17	11

(a) Number of specimens examined at the clinic by the M.O.
(b) Number of specimens from patients of the clinic sent to an approved laboratory (King Institute).

(a) Number of specimens examined at the clinic by the M.O.
(b) Number of specimens from patients of the clinic sent to an approved laboratory (King Institute).

Statement showing the number of cases admitted and discharged and of deaths under various diseases in the Tondiarpet Infectious diseases Hospital during 1937.

Details.	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.	Plague.	Other Diseases.	Total.
Patients remaining in the Hospital on 31st December 1936 at Midnight	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Patients admitted from 1st January 1937 to 31st December 1937.	399	402	52	885	2	1	50	3	...	1	5	...	...	...	...	...	374	2174
Total number treated	399	402	52	886	2	1	50	3	...	1	5	...	...	...	...	...	374	2175
Total number discharged	325	401	50	671	1	1	50	3	...	1	5	...	...	...	...	...	282	1790
Total number Died	73	...	2	204	1	...	...	...	...	...	...	...	...	...	...	...	91	371
Mortality rate per cent	18.3	...	3.8	23.0	50.0	...	...	...	...	...	...	...	...	...	...	...	24.3	17.1
Patients remaining in the Hospital on 31st December 1937 at Midnight	1	1	...	11	...	...	...	...	...	...	...	...	...	...	...	...	1	14

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Statement showing the number of cases Admitted and Discharged and of Deaths under various Diseases in the Krishnampet Infectious Diseases Hospital during 1937.

Details.	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.	Cerebro Spinal Meningitis	Diphtheria.	Other Diseases.	Total
Patients remaining in the Hospital on 31st December 1936 at mid-night	3	20	2	7	...	...	...	...	...	...	...	...	...	...	...	...	...	3	35
Patients admitted from 1st January 1937 to 31st December 1937	462	155	38	54	...	...	1	...	...	...	...	...	...	...	2	...	...	95	807
Total Number Treated	465	175	40	61	...	...	1	...	...	...	...	...	...	...	2	...	...	98	842
" Discharged	318	172	40	38	...	...	1	...	...	...	...	...	...	...	2	...	...	79	650
" Died	99	...	...	23	...	...	...	...	...	...	...	...	...	...	...	...	...	19	141
Mortality rate per cent	21.20	...	...	37.70	...	...	...	...	...	...	...	...	...	...	...	...	...	19.39	16.75
Patient remaining in the Hospital on 31st Dec. 1937 at mid-night	48	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	51

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Statement showing the Vaccinal Condition of patients for Small-Pox in the Tondiarpet Infectious Diseases Hospital during 1937.

Vaccinated.													Unvaccinated.							
Age.	Vaccinated successfully with marks visible.								Vaccinated with marks not visible.			Total.			Admissions.	Deaths.	Recovered cases.	Mortality per cent.		
	1	2	3	4	5	6	Total admitted.	Deaths.	Mortality percent.	Total admitted.	Deaths.	Mortality per cent.	Total admitted.	Deaths.					Recovered.	Mortality per cent.
Under 1 year.	...	2	...	...	...	...	2	...	...	...	...	...	2	...	2	...	4	2	66.6	
1 to 2 years.	...	6	...	...	...	...	6	...	...	3	2	66.6	9	2	7	22.2	4	2	66.6	
2 to 3 "	...	5	...	...	...	...	5	1	20.0	...	...	...	5	1	4	20.0	2	1	66.6	
3 to 4 "	...	...	...	1	...	...	1	...	...	...	...	...	1	...	1	...	...	1	...	
4 to 5 "	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	...	...	
5 to 10 "	5	7	9	17	...	...	38	...	...	11	6	54.5	49	6	43	12.2	18	10	44.4	
10 to 20 "	8	12	21	47	...	...	88	...	...	21	10	47.6	107	10	99	9.1	25	18	28.0	
20 to 40 "	24	32	45	144	...	...	215	...	...	9	6	66.6	224	6	218	2.9	64	40	37.5	
40 to 60 "	...	2	5	20	...	2	29	...	...	1	...	...	30	...	30	...	8	6	25.0	
60 & upwards.	...	...	...	2	...	2	4	...	...	...	...	...	4	...	4	...	...	...	...	
Total ...	37	66	80	201	...	4	388	1	20.0	46	24	52.1	434	25	409	5.7	131	51	38.9	

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Statement showing the vaccinal condition of patients admitted for Small-pox in the Krishnampet Infectious Diseases Hospital during 1937.

Age.	Vaccinated.											Un vaccinated.								
	Vaccinated successfully with marks visible.								Vaccinated with marks not visible.			Total.								
	1	2	3	4	5	6	Total admitted.	Deaths.	Mortality per cent.	Total admitted.	Deaths.	Mortality per cent.	Admission.	Deaths.	Recovered.	Mortality per cent.				
Under 1 year.	...	4	...	2	...	6	4	66.66	...	...	...	...	6	4	2	66.66	18	8	10	44.44
1 to 2 years.	1	4	...	2	...	7	...	...	2	1	50.0	...	9	1	8	11.11	8	6	2	50.0
2 to 3 "	...	2	...	...	...	2	...	...	2	...	...	...	4	...	4	...	3	5	3	62.5
3 to 4 "	...	2	...	...	...	2	...	...	4	1	25.0	...	6	1	5	16.66	3	2	1	66.67
4 to 5 "	1	4	...	1	...	6	3	50.00	1	...	...	...	7	3	4	42.86	3	1	2	33.33
5 to 10 "	4	7	2	9	...	22	1	4.55	11	1	9.09	...	33	2	31	6.06	9	...	9	...
10 to 20 "	13	33	11	30	1	88	6	6.82	37	12	32.43	...	125	18	107	14.4	21	8	13	38.1
20 to 40 "	18	42	22	45	7	134	18	13.43	36	12	33.33	...	170	30	140	17.65	14	8	6	57.14
40 to 60 "	1	3	2	8	1	15	2	13.33	1	...	...	...	16	2	14	12.5	1	...	1	...
60 & upwards	...	...	...	1	...	1	...	...	...	...	...	...	1	...	1	...	...	...	...	...
Total ...	38	101	37	98	9	283	34	12.01	94	27	28.74	...	377	61	316	16.18	85	38	47	44.71

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Statement showing the admissions in the Krishnampet Infectious Diseases Hospital according to nationality and sex during 1937.

Nationality.	Males.	Females.
Europeans	Nil	Nil
Hindus	335	203
Mohamadans	20	8
Others	146	95
Total	501	306

Statement showing the admissions in the Tondiarpet Infectious Diseases Hospital according to nationality and sex during 1937.

Nationality.	Males.	Females.
Europeans & Anglo Indians	21	16
Hindus	1,239	779
Mohammadans	68	24
Others	20	7
Total	1348	826

Medical Inspection of Corporation Schools. 1937-38.

STATEMENT No. I

No.	Defects.	Boys.						Girls.						Remarks.							
		Entrants.			Regulars.			Total of En- trants and Regulars.			Entrants.				Regulars.			Total of En- trants and Regulars.			
		No. Defective.	Percentage.	No. Defective.	No. Defective.	Percentage.	No. Defective.	No. Defective.	Percentage.	No. Defective.	No. Defective.	Percentage.	No. Defective.		Percentage.	No. Defective.	Percentage.	No. Defective.	Percentage.	No. Defective.	Percentage.
1937-38	1936-37	1937-38	1936-37	1937-38	1936-37	1937-38	1936-37	1937-38	1936-37	1937-38	1936-37	1937-38	1936-37	1937-38	1936-37	1937-38	1936-37	1937-38	1936-37		
1	Malnutrition	1090	13-72	15-79	1176	11-47	13-32	2263	12-45	168	2-31	2-78	228	3-26	2-46	396	3-05				
2	Dirty head, body and nails	652	8-21	13-23	654	6-38	8-98	1306	7-18	329	5-50	6-99	173	2-17	3-18	502	3-87				
3	Teeth and Mouth	699	8-80	10-11	996	9-71	8-64	1695	9-31	492	8-22	7-37	558	7-98	6-63	1050	8-03				
4	Nose and Throat	553	19-54	19-21	1541	15-03	15-17	3094	17-00	1167	19-50	22-20	1343	19-18	20-68	2510	19-33				
5	Eye diseases	170	2-14	3-49	194	1-39	2-92	364	2-00	134	2-24	3-22	171	2-44	2-61	305	2-35				
6	Vision	36	0-45	0-52	58	0-57	1-21	94	0-52	3	0-05	0-12	7	0-10	0-18	10	0-08				
7	Ear diseases	113	1-42	1-58	127	1-24	1-59	240	1-32	58	0-07	0-81	71	1-01	0-70	129	0-99				
8	Hearing	3	0-04	...	2	0-02	0-08	5	0-03	...	...	0-04	...	...	0-30	...	...				
9	Speech	17	0-21	0-14	16	0-16	0-17	33	0-13	...	...	0-02	2	0-03	0-05	2	0-02				
10	Circulatory System	47	0-50	0-84	47	0-46	0-91	94	0-52	5	0-08	0-14	21	0-30	0-24	26	0-20				
11	Tuberculosis	...	...	0-12	7	0-07	0-13	7	0-04	3	0-05	0-02	2	0-03	0-09	5	0-04				
12	Respiratory System	119	1-50	1-86	117	1-14	1-11	236	1-30	57	0-95	0-87	60	0-36	0-64	117	0-90				
13	Abdominal Organs	40	0-50	1-69	86	0-84	1-45	126	0-69	25	0-42	0-50	26	0-37	0-38	51	0-39				
14	Bones and joints	157	1-98	2-38	168	1-64	1-53	325	1-79	18	0-30	0-10	14	0-20	0-26	32	0-25				
15	Nervous and Psychic Systems	8	0-04	0-07	12	0-12	0-12	15	0-08	...	...	...	3	0-04	0-02	3	0-02				
16	Infectious and contagious diseases.	707	8-90	10-66	844	8-23	11-07	1551	8-52	360	6-01	5-18	474	6-77	5-12	834	6-42				
17	Other diseases and defects	311	3-91	5-39	407	3-9	4-65	718	3-95	10	1-82	2-20	168	2-40	2-23	277	2-13				
18	Vaccination	93	1-17	2-02	...	...	...	93	0-51	14	0-23	0-52	...	...	...	14	0-11				
19	Deformities	2	0-03	0-17	15	0-15	0-06	17	0-09	5	0-08	0-10	16	2-23	0-12	21	0-16				

APPENDIX TO STATEMENT No. I--1937-38

Group	No. on Roll		Average Daily Attendance		No. Examined		No. Defective		Percentage Defective	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Entrants.	20576	15549	16812	11796	7946	5985	4069	2077	51.21	34.70
Regulars.					10253	7003	4769	2645	46.51	37.77
Total ...	20576	15549	16812	11796	18199	12988	8838	4722	48.56	36.86

STATEMENT No. 2 HEIGHT AND WEIGHT TABLE.

Age.	Boys.		Girls.		Remarks.
	Average height in inches.	Average weight in Pounds.	Average height in inches.	Average weight in pounds.	
5	40.51	31.98	39.94	31.02	
6	42.15	35.49	41.04	36.95	
7	43.59	37.92	43.23	37.11	
8	45.62	40.98	45.22	41.11	
9	48.22	44.61	47.19	43.11	
10	49.70	48.91	49.01	47.06	
11	50.72	51.95	50.33	53.33	
12	52.41	53.88	52.39	54.26	
13	56.92	58.40	54.60	63.07	
14	57.06	64.89	58.98	66.13	
15	57.00	68.47	58.16	76.98	
16	59.93	76.29	59.30	82.48	
17	61.83	103.05	59.17	85.64	
18	62.30	90.25	58.63	91.16	
19	64.42	114.51	54.95	88.45	
20	65.00	118.00	57.53	82.96	
21	...	...	60.97	115.21	
22	...	...	61.00	115.50	One woman,
23	...	...	60.00	89.00	"
24	...	...	58.25	95.00	Two women.
25	...	...	59.25	105.50	One woman.
26	...	...	60.90	80.00	"
27	...	...	59.00	94.00	"
28	...	...			"
29	...	...	59.00	118.00	"
30	...	...	58.50	98.00	"

Quinquennial average of heights and weights of boys and girls.

No.	Age.	Average height of boys and girls.		Average weight of boys and girls.	
		Boys.	Girls.	Boys.	Girls.
1	5 years.	39.89	39.14	34.62	31.67
2	6 "	42.43	40.55	37.19	34.32
3	7 "	43.80	42.84	38.80	35.65
4	8 "	45.62	44.70	41.08	39.60
5	9 "	47.43	46.92	44.30	43.75
6	10 "	49.78	48.90	50.17	46.55
7	11 "	51.50	51.00	52.14	52.16
8	12 "	53.07	52.86	54.60	56.43
9	13 "	54.56	54.69	57.96	63.15
10	14 "	55.35	56.73	65.15	69.79
11	15 "	58.17	57.56	69.49	74.75

Treatment Table.

Group.	No. sent to Corporation Dis- pensaries.	No. referred to Government Hospitals.	No. referred to Ophthalmic Hospital and eye sections of other Hospitals.	No. referred to Tuberculosis Institute.	No. referred to Govt. Gosha Hospital.	No. of parents met.	No. of re-visits paid to Schools.	No. of re-examinations of children.	Remarks.
Boys	7477	962	66	9	...	2868	139	20713	
Girls	4163	662	48	3	1	1992	143	9915	
Total	11640	1624	114	12	1	4860	282	30628	

Teeth and Mouth Table.

No.	Defects.	Entrants.						Regulars.						Total defective of boys and girls.	
		Boys.			Girls.			Boys.			Girls.				
		No. sent to Government Hospitals.		No. Defective.	No. sent to Corporation Dispensaries.		No. referred to Government Hospitals.	No. sent to Corporation Dispensaries.		No. Defective.	No. sent to Corporation Dispensaries.		No. referred to Government Hospitals.		
		No. Defective.	No. referred to Government Hospitals.		No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.		No. sent to Corporation Dispensaries.	No. Defective.		No. referred to Government Hospitals.				
1	Dirty Teeth	...	127	40	52	51	...	32	164	65	71	49	...	35	391
2	Dental Caries	...	280	160	101	119	30	86	317	173	116	170	12	158	686
3	Stomatitis	...	365	365	...	320	320	...	543	543	...	338	338	...	1,566
4	Tongue Tie	...	1	...	1	3	...	3	9	...	9	2	...	2	15
5	Oral Sepsis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	Other Conditions	...	1	...	...	1	1	...	2	1	...	1	1	...	5

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 Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	
1	Nasal Catarrh	120	120	...	6	6	...	115	115	...	2	2	...	243
2	Nasal Polypus	1	...	1	1	...	1	...	...	...	...	...	...	2
3	Enlarged Tonsils	1385	1317	68	997	933	64	1268	1268	132	1118	918	200	4900
4	Granular Pharynx	2	2	...	...	...	...	2	2	...	...	...	...	4
5	Adenoids	62	...	62	1	...	1	74	...	74	6	...	6	143
6	Enlarged cervical glands	36	35	1	161	148	...	33	31	2	201	191	1	431
7	Bifid & elongated uvula.	1	...	...	2	...	...	5	...	2	7	...	...	15
8	Other Conditions	...	...	...	1	1	...	1	...	...	9	7	2	11

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

EYE TABLE.

No.		Entrants.				Regulars.				Total defective of boys and girls.			
		Boys.		Girls.		Boys.		Girls.					
		No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Govt. Ophthalmic hospital and Ophthalmic sections of other hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Govt. Ophthalmic hospital and Ophthalmic sections of other hospitals.	No. Defective.	No. sent to Corporation Dispensaries.		No. referred to Govt. Ophthalmic hospital and Ophthalmic sections of other hospitals.		
1	Conjunctivitis	37	37	...	47	47	35	34	1	25	25	1	144
2	Blepharitis	4	4	...	1	1	...	...	...	1	1	...	6
3	Granular lids	3	2	1	27	...	27	2	...	39	39	39	71
4	Corneal opacity	10	...	9	5	...	3	12	9	12	12	...	39
5	Corneal ulcer	1	1	...	...	...	...	1	...	...	...	...	1
6	Staphyloma	2	2	...	...	...	...	1	...	...	...	...	3
7	Dacryocystitis	...	...	...	...	...	...	1	...	...	...	...	1
8	Cataract	...	...	...	...	...	...	1	...	...	...	...	3
9	Xerosis	75	75	...	31	31	104	2	2	57	57	...	2
10	Stye	7	6	1	5	5	2	19	11	5	5	...	19
11	Squint	21	...	8	13	...	9	1	1	6	...	...	59
12	Keratitis	...	...	...	...	...	...	2	1	...	...	...	1
13	Ptosis	2	1	...	...	...	...	2	...	...	...	...	4
14	Other conditions	9	...	8	2	...	2	13	12	17	...	...	41
15	Defective vision	36	19	17	3	3	58	27	31	7	7	7	104

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 sections of hospitals.	No. Defective	No. sent to Corporation Dispensaries.	No. referred to Special sections of Hospitals.	No. defective.	No. sent to Corporation Dispensaries.	No. referred to Special sections of Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Special sections of Hospitals.	
1	Skin:--	382	382	..	253	253	..	359	359	..	319	319	..	1313
2	Scabies	43	42	1	3	3	..	33	32	1	5	5	..	84
3	Eczema	106	105	1	57	51	6	107	107	..	63	50	13	333
3	Tinea and Fungus	45	45	..	15	15	..	46	46	..	16	16	..	122
4	Lichen	..	..	..	2	2	..	..	..	..	1	1	..	3
5	Dermatitis	19	19	..	..	..	..	9	9	..	..	..	..	28
6	Pruritis	..	..	..	1	1	..	11	11	..	..	..	..	2
7	Psoriasis	13	13	..	..	..	..	299	290	9	61	61	..	34
8	Impetio	125	123	2	24	24	..	11	11	..	..	..	..	509
9	Leprosy	20	20	..	..	..	..	..	..	..	..	..	..	31
10	Other Conditions	..	..	..	..	..	..	..	..	..	..	..	..	4
	Other Infectious diseases:--	..	..	..	..	..	..	..	..	..	..	..	..	..
1	Malaria	3	3	..	1	1	..	..	..	..	..	..	..	8
2	Kala-azar	..	..	..	..	..	..	2	2	..	..	..	..	1
3	Hook-worm	6	4	2	..	..	..	..	..	..	..	..	..	5
3	Hook-worm	1	1	1	..	..	..	..	..	..	1	1	..	5
4	Influenza	1	1	..	3	3	..	..	..	..	..	..	..	5
5	Mumps	1	1	..	3	3	..	..	..	..	..	..	..	..
6	Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	..	..
7	Congenital Syphilis	..	..	..	..	..	..	..	..	1	..	..	..	..
8	Other Conditions	7	7	..	1	..	..	9	8	..	..	..	..	17

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

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 Government General Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government General Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government General Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government General Hospitals.	
1	Worms.	56	56	...	9	9	...	86	86	...	13	13	...	164
2	Wounds, cuts, ulcers etc.	116	116	...	56	56	...	108	108	...	60	60	...	340
3	Undescended Testis	4	...	...	...	...	...	10	...	...	...	...	...	14
4	Phimosis	7	...	57	...	...	...	95	...	...	...	...	...	152
5	Enlarged groin glands	8	8	...	2	2	...	15	14	...	2	2	...	27
6	Pyrexia	17	17	...	21	21	...	21	21	...	18	18	...	77
7	Boils and abscesses	13	13	...	7	7	...	14	14	...	25	24	...	59
8	Keloids	1	...	...	...	...	...	...	...	...	...	...	...	1
9	Warts	5	...	5	...	1	...	3	...	...	2	2	...	11
10	Leucodermic patches	11	1	6	...	1	2	16	8	...	5	1	...	37
11	Tumours	...	...	1	2	...	2	3	...	...	2	...	...	7
12	Obesity	2	...	...	...	...	...	1	...	...	...	...	...	3
13	Whitlow	...	...	...	...	...	...	1	1	...	5	5	...	7
14	Xeroderma	14	14	...	5	5	...	17	17	...	29	29	...	65
15	Dog bite	...	...	...	...	...	...	2	...	...	...	...	...	2
16	Sinus	...	...	...	...	...	...	1	...	...	...	...	...	1
17	Burns and Scalds	...	...	...	...	...	...	...	...	...	...	...	...	3
18	Other conditions	9	6	3	3	...	...	14	...	...	7	6	...	33

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

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Statement showing the details of defects found on Medical Inspection of Schools, 1937-38.

No.	Systems or Organs.	Diseases.	No. Defective.				Total defective of boys and girls.
			Entrants.		Regulars.		
			Boys.	Girls.	Boys.	Girls.	
1	Ear.	1. Otorrhoea ...	103	36	104	54	297
		2. Otitis ...	4	20	15	17	56
		3. Other ear diseases ...	6	2	6	1	15
		4. Defective hearing ...	3	...	2	...	5
2	Speech.	1. Stammering ...	11	...	12	2	25
		2. Lipping ...	5	...	4	...	9
		3. Dumb ...	1	...	...	...	1
3	Heart and Circulation.	1. Heart Disease (a) Organic ...	15	2	17	7	41
		(b) Functional ...	10	...	8	...	18
		2. Anaemia ...	19	3	18	14	54
		3. Other conditions ...	3	...	4	...	7
4	Lungs.	1. Bronchitis (acute and chronic) ...	115	51	111	55	332
		2. Other non-tubercular diseases (Asthma etc.) ...	4	6	6	5	21
5	Tuberculosis.	1. Pulmonary (a) Definite ...	...	...	1	...	1
		(b) Suspected ...	...	2	4	1	7
		2. Non-Pulmonary (a) Glands ...	...	...	1	1	2
		(b) Spine ...	...	1	...	...	1
		(c) Hip ...	...	...	1	...	1
		(d) Bones & Joints ...	...	...	...	...	...
		(e) Skin ...	...	...	...	...	...
		(f) Other forms ...	...	...	...	...	...
6	Abdominal Organs.	1. Enlarged Spleen ...	10	8	27	4	49
		2. „ Liver ...	...	...	2	...	2
		3. „ Liver and Spleen ...	1	1	...	...	2
		4. Hydrocele (a) Vaginal ...	7	...	9	...	16
		(b) Cord ...	5	...	3	...	8
		(c) Infantile ...	...	...	2	...	2
		5. Hernia (a) Inguinal ...	6	...	25	...	31
		(b) Umbilical ...	8	2	8	1	19
		(c) Femoral ...	...	...	...	...	...
		6. Stomach conditions ...	2	6	3	6	17
		7. Bowel conditions ...	...	8	4	13	25
8. Other conditions ...	1	...	3	2	6		
9. Generative disorders in girls ...	...	...	...	1	1		
7	Bones and Joints.	1. Bones (a) Fractures ...	1	...	...	...	1
		(b) Caries ...	...	...	...	...	...
		(c) Deformities ...	...	5	...	1	6
		(d) Diseases ...	...	1	...	...	1
		2. Joints (a) Dislocations & Sprains ...	...	2	...	3	5
		(b) Diseases ...	2	...	1	...	3
		(c) Deformities ...	1	...	2	2	5
		3. Rickets (a) General ...	...	...	...	...	...
(b) Deformed chest ...	154	10	165	8	337		
8	Nervous system.	1. Organic disease (Palsies etc.) ...	...	...	2	2	4
		2. Functional disorders ...	2	...	8	1	11
		3. Other conditions ...	1	...	2	...	3
9	Psychic system.	1. Mentally defective ...	...	...	...	...	...

Statement showing the details of defects found on Medical Inspection of Schools, 1937-38. (contd).

Statement showing			No. Defective.				Total defective of boys and Girls.
No.	Systems or Organs.	Diseases.	Entrants.		Regulars.		
			Boys.	Girls.	Boys.	Girls.	
10	Deformities.	1. General Deformity:— (a) Special deformity (b) Talipes (c) Shortened limbs (d) Congenital dislocation hip. (e) Ankylosis of joints (f) Amputated limbs (g) Genu Varum & Valgum (h) Supernumerary Fingers (i) Flat foot (j) Syndactily (k) Dwarf (l) Other conditions	... 1 1	... 1 1 1 1 2	... 3 ... 2 1 2 7	1 1 5 1 3 2 4 1 ... 1	1 6 6 3 3 ... 1 6 4 1 ... 10

Statement of "Following-up" work done showing the results of Medical advice, 1937-38.

Number.	Systems or Organs.	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.
1	...	Malnutrition	...	27	1292	833	
2	Teeth & Mouth.	Dirty Teeth	33†	30°	46°	7°	† Scaled. ° Cleaned. * Extracted.
		Dental Caries	56*	125	36	29	
		Stomatitis	...	490	384	299	
		Glossitis	...	1	...	...	
		Tongue Tie	3	...	...	...	
3	Nose & Throat.	Nasal Catarrh and Rhinitis	...	6	44	1	
		Enlarged Tonsils and Adenoids	127	584	1,191	981	
		Enlarged Cervical glands	...	21	139	88	
		Granular Pharynx	...	1	3	...	
		Nasal Polypus	2	...	...	...	
		Elongated uvula	...	2	...	...	
4	Eye Diseases	Conjunctivitis	...	93	13	8	
		Xerosis	...	2	112	81	
		Stye	...	12	2	...	
		Granular lids	...	7	22	25	
		Blepharitis	...	...	112	3	
		Staphyloma	...	...	...	...	
		Pterygium	...	...	3	10	
		Corneal opacity	...	...	...	...	
		Keratitis	...	...	...	...	
		Squint	1*	...	...	...	* Glasses worn.
		Sub-Conjunctival Haemorrhage	...	1	...	...	
5	Defective Vision	...	2*	10	2	34	
6	Ear Diseases	Otitis	...	35	5	...	
		Otorrhoea	...	81	46	57	
		Wax ear	...	5	...	...	
		Other conditions	1	...	3	1	
		Defective hearing	...	...	...	...	
7	Circulatory System.	Anaemia	...	3	22	18	
		Functional disease	...	5	1	...	
		Organic disease	...	...	1	14	
8	Tuberculosis	Pulmonary--	...	...	1	...	
		(a) Definite	...	...	2	5	
		(b) Suspected	...	...	...	4	
		Other forms	...	...	...	...	
9	Respiratory System.	Bronchitis	...	183	57	17	
		Asthma	...	1	7	8	
10	Abdominal Organs.	Enlarged Spleen	...	15	16	11	5. Indifferent. 2. Left.
		" Liver	...	...	1	1	
		" Liver and Spleen	...	...	1	1	

Statement of "Following up" work done showing the results of Medical advice, 1937-38.--contd.

Number.	Systems or Organs.	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.
	Abdominal Organs--contd.	Diarrhoea ...	...	4	2	...	
		Dysentery ...	...	4	2	...	
		Dyspepsia ...	...	8	2	3	
		Chronic constipation ...	...	6	...	...	
		Jaundice ...	...	1	2	...	
		Hydrocele ...	...	...	...	...	
		Inguinal Hernia ...	...	...	...	...	
		Umbilical Hernia ...	...	...	...	...	
11	Bones & Joints	Rickety Chest and General Rickets ...	...	...	171	40	
		Fracture ...	...	...	...	...	
12	Infectious and Contagious Diseases.	Scabies ...	...	727	218	85	
		Eczema ...	...	50	12	9	
		Tinea, Fungus and Ringworm ...	...	147	46	30	
		Leprosy ...	...	2	32	428	
		Lichen ...	...	19	29	31	
		Pruritis ...	...	4	8	...	
		Urticaria ...	...	...	...	...	
		Psoriasis ...	...	1	...	...	
		Hook-worm ...	...	5	2	1	
		Mumps ...	...	5	...	...	
		Whooping cough ...	...	2	2	1	
		Dermatitis ...	...	3	...	...	
		Influenza ...	...	...	...	...	
		Filariasis ...	...	...	...	...	
13	Nervous and Psychic Systems.	Facial Paralysis ...	...	...	3	1	
		Incontinence of urine ...	...	...	...	1	
14	Other diseases and defects.	Worms ...	...	45	...	...	
		Wounds, cuts, ulcers etc. ...	...	228	20	4	
		Boils and Abscesses. ...	1	35	2	5	
		Pyrexia ...	...	66	3	...	
		Phimosis ...	79	...	...	...	
		Leucodermic patches. ...	...	...	1	13	
		Burns, Scalds and Whitlow ...	1	7	1	...	
		Xeroderma ...	...	15	17	11	
		Enlarged groin glands ...	...	...	4	...	
		Warts ...	...	...	1	...	
		Dog bite ...	...	1	...	...	
		Tumours ...	...	...	...	1	
		Hypospadiasis ...	...	...	...	...	
		Ganglion ...	...	...	...	...	
		Cellulitis ...	...	...	...	...	
		Other conditions ...	...	3	2	2	

{ 34. Indifferent.
12. Left.
1. Infective excluded.

FOOD ANALYSIS: TABLE I

Nature of samples	Number of samples analysed in 1934	Percentage of adulterated samples in 1934	Number of samples analysed in 1935	Percentage of adulterated samples in 1935	Number of samples analysed in 1936	Percentage of adulterated samples in 1936	Number of samples analysed in 1937	Percentage of adulterated samples in 1937
Ghee & Ghee, Mixtures	460	44.5	340	44.4	523	28.9	153	31.6
Butter	114	27.2	44	29.5	98	37.8	24	19.7
Milk	105	41.9	90	50.0	74	28.4	27	33.8
Gingelly Oil	259	27.8	305	18.0	246	5.3	24	9.1
Ground-nut Oil	...	...	...	...	62	37.1	17	23.9
Cocoanut Oil	1	...	...	...	...	...	...	...
Coffee Powder	26	...	18	5.6	8	...	...	...
Tea	21	...	9	...	2	...	...	...
Ghee substitutes of vegetable origin	...	...	...	...	12	...	1	10.0
Other articles	...	...	...	...	3	33.3	...	...
Total	983	35.7	806	32.9	1,028	23.9	246	22.5

FOOD ANALYSIS: TABLE II

	Adulterated samples received and reported during 1937.				Adulterated samples of the previous years pending disposal on 1-1-1937.				Adulterated samples received upon in 1937.				Total, number of adulterated samples dealt with during 1937.				Average fine per conviction in 1937.		Average fine per conviction in 1936.	
	Number of samples.	Number not convicted:—acquittals, withdrawals, etc.	Number pending disposal on 31-12-37.	Number of convictions.	Number not convicted:—acquittals, withdrawals, etc.	Number pending disposal on 31-12-37.	Number of samples.	Number of convictions.	Number not convicted:—acquittals, withdrawals, etc.	Number pending disposal on 31-12-37.	Number of samples.	Number of convictions.	Total number of convictions.	Total number not convicted:—acquittals, withdrawals, etc.	Total number pending disposal on 31-12-37.	Total fines levied in 1937.	Average fine per conviction in 1937.	Average fine per conviction in 1936.	Number of convictions in 1936.	
Ghee and Ghee-mixtures.	153	79	19	55	65	55	76	12	5	5	5	2	2	2	220	136	136	24	60	Rs. 4,190
Butter	24	16	...	8	16	13	13	3	...	...	...	...	...	...	43	29	29	3	11	620
Milk	27	15	...	12	3	3	3	...	...	...	...	...	...	...	30	18	18	...	12	425
Gingelly Oil	24	13	...	11	2	2	5	2	...	...	...	...	...	...	26	13	13	2	11	365
Ground-nut oil	17	8	...	9	8	1	...	...	...	...	...	...	...	...	25	13	13	2	10	310
Coffee	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cocoanut oil	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ghee substitutes of vegetable origin	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
	246	131	20	95	94	76	12	6	3	345	209	32	104	6,210	0	0	30	218	26	Rs. 28

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TABLE I.
Showing the Meteorological Data for the City of Madras, 1937.
(Daily Averages)

Month.	Hours of Bright Sunshine.	Mean Temperature F	Velocity of wind in miles per day.	Total Rain fall (in inches) for the month.
January ...	9.1	75.8	291	0.07
February ...	10.1	78.3	252	...
March ...	9.8	81.1	250	...
April ...	8.7	82.9	263	2.61
May ...	10.1	87.8	305	...
June ...	6.8	88.9	315	2.11
July ...	4.6	84.6	251	3.42
August ...	8.5	76.6	254	6.91
September ...	7.3	84.0	245	5.20
October ...	6.1	80.5	223	10.00
November ...	4.2	76.9	351	23.81
December ...	8.5	69.0	258	7.25

TABLE II.
Showing the Monthly Lake Level and Rainfall in Sholavaram and Red Hills lakes for 1937.

Month.	Sholavaram Lake.		Red Hills Lake.			
	Total rainfall in inches.	Lake level in feet.	Total rainfall in inches.	Average lake level.	Average Temperature.	
					Maximum.	Minimum.
January 1937 ...	0.05	58.42	0.16	45.35	91.7	72.9
February ...	0.20	55.92	0.12	44.62	91.3	72.8
March ...	0.05	53.60	...	43.97	90.6	72.2
April ...	3.10	52.72	3.20	42.65	93.3	74.5
May ...	Nil.	51.62	...	41.30	102.4	81.2
June ...	Nil.	48.39	0.67	39.79	101.9	82.2
July ...	5.37	47.36	3.72	38.44	98.8	77.7
August ...	4.43	48.19	4.20	37.62	95.6	76.9
September ...	5.26	47.94	6.35	36.92	95.1	76.7
October ...	13.22	52.13	13.41	42.16	88.7	75.4
November ...	21.49	60.20	27.33	46.15	85.2	74.3
December ...	3.25	60.74	3.56	46.19	86.0	74.2

TABLE
Bacteriological Results

Bacteriological Results

1937.	Red Hills lake.										Raw-water Kilpauk end.											
Month.	Number of Samples.	Total colonies per c. c. on Nutrient Agar at 37°C after 48 hours.	Lactose Fermenters in.							Number of Samples.	Total colonies per c. c. on Nutrient Agar at 37°C after 48 hours.	Lactose Fermenters in.							Number of Samples.	Total colonies per c. c. on Nutrient Agar at 37°C after 48 hours.		
			—60 c. c.	+60 c. c.	+20 c. c.	+10 c. c.	+5 c. c.	+1 c. c.	+0.1 c. c.			—60 c. c.	+60 c. c.	+20 c. c.	+10 c. c.	+5 c. c.	+1 c. c.	+0.1 c. c.				
January	...	...	...	...	...	...	...	...	2	755	...	...	...	100.0	...	...	...	34	558			
February	...	...	...	...	...	...	...	...	4	770	...	...	...	25.0	75.0	...	...	32	632			
March	...	...	...	...	...	...	...	...	5	810	...	...	...	80.0	20.0	...	...	33	658			
April	...	...	...	...	...	...	...	...	5	814	...	...	...	80.0	20.0	...	...	37	583			
May	...	...	...	...	...	...	...	...	4	837	...	...	...	25.0	25.0	50.0	...	34	614			
June	1	890	...	100.0	...	...	...	...	5	838	...	20.0	40.0	40.0	...	...	...	40	551			
July	...	...	...	...	...	...	...	...	4	883	...	...	25.0	...	50.0	25.0	...	36	616			
August	...	...	...	...	...	...	...	...	4	900	...	...	...	50.0	...	50.0	...	43	657			
September	...	...	...	...	...	...	...	...	5	892	...	...	...	20.0	40.0	40.0	...	35	554			
October	...	...	...	...	...	...	...	...	4	825	...	...	...	50.0	50.0	...	...	40	596			
November	1	790	...	...	100.0	...	...	...	3	743	...	...	...	...	100.0	...	...	16	562			
December	1	500	...	...	100.0	...	...	...	4	668	...	...	...	50.0	25.0	25.0	...	28	474			

No. III.

Percentage Averages.

Filtrates from beds.							Test Tap Kilpauk Pumping Station.										Distribution System.							
Lactose Fermenters in.							Number of Samples.	Total colonies per c. c. on Nutrient Agar at 37°C after 48 hours.	Lactose Fermenters in.							Number of Samples.	Total colonies per c. c. on Nutrient Agar at 37°C after 48 hours.	Lactose Fermenters in.						
--60 c. c.	+60 c. c.	+20 c. c.	+10 c. c.	+5 c. c.	+1 c. c.	+0.1 c. c.			--60 c. c.	+60 c. c.	+20 c. c.	+10 c. c.	+5 c. c.	+1 c. c.	+0.1 c. c.			--60 c. c.	+60 c. c.	+20 c. c.	+10 c. c.	+5 c. c.	+1 c. c.	+0.1 c. c.
8.8	11.8	4.2	8.8	23.6	5.8	...	20	375	25.0	70.0	5.0	...	...	...	6	540	...	16.7	33.3	16.7	33.3	...	...	
12.5	9.4	28.1	28.1	15.6	6.3	...	19	337	68.4	31.6	...	...	...	...	1	640	...	...	...	100.0	...	...	...	
...	12.1	27.3	18.2	39.4	3.0	...	15	330	33.3	66.7	...	...	...	...	4	290	25.0	50.0	25.0	...	...	...	...	
16.2	16.2	32.4	10.8	19.0	5.4	...	21	270	76.2	14.3	9.5	...	...	...	...	...	...	...	...	...	...	...	...	
2.9	12.0	47.0	14.7	24.0	...	...	21	360	52.4	38.1	9.5	...	...	...	11	530	18.2	27.3	27.3	...	18.2	9.1	...	
15.0	22.5	37.5	12.5	10.0	2.5	...	21	369	80.9	14.3	4.8	...	...	...	6	567	50.0	16.7	33.3	...	...	...	...	
...	25.0	33.4	25.0	8.3	8.3	...	20	438	35.0	40.0	25.0	...	...	...	6	523	50.0	...	50.0	...	...	...	...	
11.7	11.6	20.9	27.9	18.6	9.3	...	24	394	45.8	33.3	20.3	...	...	...	10	428	50.0	30.0	10.0	...	10.0	...	...	
2.9	17.1	40.0	17.1	14.3	8.6	...	23	293	34.8	47.8	17.4	...	...	...	21	289	23.8	38.1	23.8	9.5	4.8	...	...	
5.0	15.0	27.5	22.5	20.0	10.0	...	22	328	77.3	4.5	18.2	...	...	...	6	658	...	16.7	...	66.6	...	16.7	...	
...	11.1	38.9	25.0	13.9	11.1	...	27	155	85.2	14.3	...	...	...	...	15	107	86.7	13.3	...	...	...	...	...	
14.3	14.3	28.6	7.1	7.1	17.9	10.7	37	114	97.3	2.7	...	...	...	...	10	175	90.0	...	...	...	10.0	...	...	

TABLE No. IV.

Chemical Results for 1937 (Results expressed in parts per 100,000.)

1937.	Red Hills lake.	Kilpauk end of Raw-water conduit.			Filtrates from beds.			Test Tap K. P. S.			Distribution System.		
Month.	Ammoniocal Nitrogen.	Albuminoid Nitrogen.	Absorbed oxygen.	Ammoniocal Nitrogen.	Albuminoid Nitrogen.	Absorbed oxygen.	Ammoniocal Nitrogen.	Albuminoid Nitrogen.	Absorbed oxygen.	Ammoniocal Nitrogen.	Albuminoid Nitrogen.	Absorbed oxygen.	Absorbed oxygen.
January	...	...	...	Trace	0.03	0.104	Trace	0.030	0.084	Trace	0.030	0.093	0.093
February	...	...	...	Trace	0.040	0.120	Trace	0.030	0.101	Trace	0.026	0.036	0.036
March	...	...	...	Trace	0.035	0.124	0.001	0.033	0.097	0.001	0.032	0.098	0.098
April	...	...	...	Trace	0.039	0.126	0.001	0.035	0.099	...	...	...	...
May	...	...	...	Trace	0.040	0.117	0.002	0.035	0.102	0.002	0.037	0.095	0.095
June	Trace	0.059	0.174	Trace	0.038	0.132	Trace	0.037	0.115	Trace	0.034	0.107	0.107
July	...	...	...	Trace	0.043	0.136	0.001	0.040	0.117	0.002	0.048	0.136	0.136
August	...	...	...	Trace	0.044	0.12	0.003	0.040	0.117	0.003	0.040	0.121	0.121
September	...	...	...	0.001	0.038	0.139	0.005	0.036	0.112	0.004	0.037	0.112	0.112
October	...	...	...	0.001	0.031	0.112	0.001	0.027	0.088	Trace	0.024	0.034	0.034
November	Trace	0.040	0.139	Trace	0.024	0.092	Trace	0.022	0.068	0.001	0.019	0.070	0.070
December	Trace	0.034	0.110	Trace	0.024	0.072	Trace	0.021	0.058	Trace	0.021	0.047	0.047

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TABLE No. V.

Percentage Reduction of organic matter (Tidy's 4 hours test) at different stages of the Water Purification System--1937.

Months.	Raw-water Kilpauk end.	Filtrates from beds.		Test Tap on the rising Main at the pumping station		Service taps in the distribution system.	
	Absorbed oxygen in parts per 100,000.	Absorbed oxygen in parts per 100,000.	% Reduction over R.W.	Absorbed oxygen in parts per 100,000.	% Reduction over R.W.	Absorbed oxygen in parts per 100,000.	% Reduction over R.W.
January	0.139	0.104	25.2	0.084	39.6	0.093	33.1
February	0.153	0.120	21.6	0.101	34.0	0.096	37.2
March	0.145	0.124	14.5	0.097	33.1	0.098	32.4
April	0.144	0.126	12.5	0.099	31.2	...	...
May	0.154	0.117	24.0	0.102	33.7	0.095	38.3
June	0.159	0.132	17.0	0.115	27.7	0.107	32.7
July	0.162	0.136	16.0	0.117	27.8	0.136	16.0
August	0.168	0.132	21.4	0.117	30.4	0.121	28.0
September	0.165	0.119	15.8	0.112	32.1	0.112	32.1
October	0.152	0.112	26.3	0.088	42.1	0.084	44.7
November	0.139	0.092	33.8	0.068	51.1	0.070	49.6
December	0.110	0.072	34.5	0.058	47.3	0.047	57.3

TABLE No. VI.

Applied dose of chlorine for filtered water.

1937.	Applied dose in parts per million.	Remarks.
January	1.00	
February	1.00	
March	1.00	
April	1.00	
May	1.00	
June	1.00	
July	1.00	
August	1.01	
September	1.15	
October	0.95	
November	0.90	
December	0.90	

TABLE No. VII.

Showing the length of runs of filters at work during 1937.

Bed No.	Total No. of runs during the year	Total No. of days Day-Hours.	Average No. of days per run.	Remarks.
1	10	233.16	23 $\frac{1}{3}$	
2	8	214.10	26 $\frac{3}{4}$	
3	10	220.00	22	
4	8	238.20	29 $\frac{3}{4}$	
5	9	213.00	23 $\frac{2}{3}$	
6	9	234.00	26	
7	8	236.20	29 $\frac{1}{2}$	
8	10	232.80	23 $\frac{1}{4}$	
9	9	243.10	27	
10	8	233.60	29 $\frac{1}{2}$	
11	8	211.16	26 $\frac{1}{2}$	
12	9	198.14	22	
13	4	112.20	28 $\frac{1}{4}$	
14	8	228.16	28 $\frac{1}{2}$	
15	9	194.40	21 $\frac{1}{2}$	
16	5	229.60	45	
17	8	214.22	26 $\frac{3}{4}$	

TABLE No. VIII.

Showing the quantity of water filtered during 1937.

Bed No.	Quantity of water in million gallons filtered at		Total quantity of water filtered in million gallons.	Remarks.
	8"	12"		
1	294.75	258.50	553.25	
2	296.50	198.50	495.00	
3	311.25	193.00	504.25	
4	308.00	225.75	533.75	
5	297.75	224.50	522.25	
6	328.00	210.50	538.50	
7	358.00	173.50	531.50	
8	309.50	229.75	539.25	
9	349.00	205.50	554.50	
10	323.25	214.75	538.00	
11	250.00	260.00	510.00	
12	261.50	203.50	465.00	
13	153.50	108.50	262.00	
14	342.50	172.00	514.50	
15	278.00	165.75	443.75	
16	99.50	526.25	625.75	
17	304.00	188.75	492.75	

ANNUAL REPORT OF THE CHILD WELFARE SCHEME,
CORPORATION OF MADRAS, FOR
THE YEAR 1937.

The Commissioner,
Corporation of Madras.

Sir,

I submit herewith my report of the Child Welfare Department for the year 1937.

During the year under report, on account of the increased activities of the department, the infantile mortality rate has been considerably reduced, and in fact, it was the lowest on record since the inauguration of the Scheme by the Corporation. That the Scheme is gaining popularity is evidenced by the increased number of attendance at the Ante-Natal Clinic at many centres, which are over-worked.

Staff:—During the year under report, the Scheme was worked by the Lady Superintendent assisted by five Lady Doctors, 3 Maternity Supervisors, 22 Health Visitors and 82 Midwives.

At present 3 centres covering an area on an average of about 6.9 sq. miles are placed under the charge of one Lady Doctor and so she is able to visit each centre only twice in a week. So Ante-Natal Clinics are held twice a week. Infants and Toddlers Clinics are held once a week during afternoon. Besides this work, Lady Doctors had also visited puerperal cases and attended urgent calls.

Out of 26 Health Visitors 1 died, 1 retired, 2 resigned and only 22 were on duty. Substitutes could not be appointed as qualified persons were not available. Owing to the inadequate number of Health Visitors, the Home Visiting work suffered considerably.

Ante-Natal Clinic:—In almost all the centres there was heavy attendance for Ante-Natal Clinics. The number of booked cases that sought medical advice and treatment had increased to 12356 which worked at 84 % of the total births as against 10661 (78 %) for the year 1936. Expectant mothers are advised to attend the Clinics from the 12th week of their pregnancy, but such of those who had trouble at a previous confinement are advised to attend even earlier and special attention was paid to them. There is still a noticeable indifference to early registration of pregnancy. With an adequate staff of Health Visitors this work of home visiting and advice could be further augmented and cases of pregnancy with definite signs of organic diseases could be kept under observation and aid rendered at maternity hospitals sufficiently early.

After the separation of the out-patient clinic from the Child Welfare Centres, the patients find it inconvenient to take advice and prescription at the Centre and proceed to take medicine to dispensaries located at a distance. There is a public feeling that dispensaries should be attached to every Centre and that there should be one Lady Doctor in charge of each Centre.

Maternity Service:—At the commencement of the Scheme, Maternity Service was made available to the public without any restriction; under the rules now in force, such service could be rendered only to the poor and to the lower middle class whose salary does not exceed Rs. 50 per mensem. During the year under review, 14589 cases of labour representing 47% of the total births were treated by the Department, as against 13651 cases (46.7 %) for the year 1936.

The Midwives paid 1,74,422 visits during 1937 as against 1,61,166 in 1936. To make the existing staff more efficient, 6 midwives were sent for Refresher Course at Rajah Sir Ramaswami Mudaliar's Lying-In-Hospital Royapuram, during the year under review. They were trained on up-to-date lines in Ante-Natal, Intra-Natal, Post-Natal and Children's care.

Maternal Mortality :—Out of a total number of 30,958 births in the City during the year 1937, 14,589 cases came under the care of the Scheme and in that, there were only 48 cases of Maternal mortality as hereunder mentioned.

Hospital	38
Private Doctor	3
Vydians	3
Barber Woman	1
Child Welfare Scheme	3
	48

This works out at 3 per mille which is the lowest on record as against 3.7 for the last year. Though the infantile mortality rate shows a definite tendency to decline, the maternal mortality rate practically remains stationary since 1933.

1937	3.0	per mille.
1936	3.7	"
1935	3.0	"
1934	3.4	"
1933	3.1	"

Infantile Mortality :—It is gratifying to note that the infantile mortality rate of 112.3 for the year under review as against 124.2 per mille of the previous year is the lowest on record in the history of the Scheme.

The total number of live births registered during 1937 was 13651. The mortality among live birth was 1533, as against 1787 for 1936. This low rate of mortality is due to the fact that the mothers were carefully looked after and treated during their ante-natal period.

1937	112.3	per mille.
1936	124.2	"
1935	138.2	"
1934	142.2	"
1933	142.7	"

Infantile and Toddlers Clinic :—Infants and Toddlers Clinic was conducted once a week at the centres by the Lady Doctors. Necessary examination and advice regarding their diet, health, etc was given. The total attendance at the the clinic was 9750 as against 7876 during the year 1936.

Milk Supply :—433 deserving babies were supplied with cow's milk during the year 1937 as against 418 for 1936. The total attendance was 1,04,589 as against 98,353 for 1936. It is hoped that the milk supply would be extended to the ante-natal mothers also, so that the health of the expectant mothers can be improved and thus the infants may have a better start in life.

Bath :—783 babies were given warm bath last year as against 977 during 1936.

Ambulance Car :—For cases of emergency to convey patients in labour an ambulance car is maintained by this department and the same is stationed at Ripon Buildings.

The old car which has served for over 10 years is replaced by a new car. The total number of calls answered is 726 as against 512 for 1936.

Health propaganda :—609 lectures were delivered in the various Child Welfare Centres as against 601 for 1936. Of those 278 lectures were delivered with aid of magic lantern, 31 were cinema lectures and 300 were out door lectures. The total attendance was 23,254 as against 25,458 for 1936.

11 talks on various subjects relating to Maternity and Child Welfare were broadcast during 1937. Pamphlets and maxims on the activities of the Scheme were also printed and distributed to the public.

Health Exhibition :—Health Exhibition was held at the South Indian Athletic Association grounds during Park Fair. The Maternity and Child Welfare activities were exhibited by means of models and charts of educative value which attracted the women folk. In this connection a gold medal was awarded to the Child Welfare Scheme for the models and a certificate of merit for the charts.

Conclusion :—As there is an unlimited scope for work covering a wide field, the present staff is inadequate to cope with the growing demand for the entire scheme. For this the Women Medical Officers, Health Visitors, and Midwives should be increased.

The work in George Town Centre has become very heavy and the work may be distributed by opening a new centre in Park Town. It is hoped next year at least one more centre would be opened in Park Town to relieve the congestion in George Town Centre.

Our thanks are due to the Commissioner, Health Officer, Corporation of Madras, Members of the Standing Committee (Health) and the Assistant Director of Public Health (Maternity and Child Welfare), Government of Madras, for the advice and guidance given as and when necessity arose and the co-operation of the staff.

MADRAS,

23-6-38.

H. V. KAMALAMMAL,

Lady Superintendent, Child Welfare Scheme.

STATEMENT No. I.

Centres.	How conducted.				Caste.		Remarks.
	By nurses of the C.W.S.	Taken over after the barber women conducted.	Taken to Hospital.	Total cases.	Mahom-medans.	Non Mahom-medance.	
Triplicane ...	1,756	67	61	1,884	727	1,157	Including 12 Twins.
Royapettah ...	541	51	51	643	77	566	" 4 Twins.
Mirsaiipet ...	1,108	60	84	1,252	228	1,024	" 13 Twins.
Nungambakkam.	309	17	28	354	63	291	" 2 Twins.
Egmore ...	757	56	55	868	112	756	" 4 Twins.
Pursawalkam.	1,064	40	55	1,159	44	1,115	" 6 Twins.
George Town.	1,597	59	82	1,738	32	1,706	" 5 Twins.
Choolai ...	1,173	76	150	1,399	60	1,339	" 6 Twins.
Muthialpet ...	1,054	84	91	1,229	304	925	" 13 Twins.
Washermanpet.	1,332	66	69	1,467	280	1,187	" 12 Twins.
Perambur ...	1,249	62	82	1,393	304	1,089	" 10 Twins.
Royapuram ...	1,091	54	58	1,203	128	1,075	" 7 Twins.
Total ...	13,031	692	866	14,589	2,359	12,230	

STATEMENT No. II.

Number of visits paid by the staff of the child welfare scheme during the year 1937.

Centres,	Visits paid by				Total
	Midwives.	Health Visitors.	Maternity Supervisors	Lady Drs.	
Triplicane	21,310	14,530	3,677	393	39,910
Royapettah	9,882	7,736	...	288	17,906
Mirsahibpet	13,158	11,381	...	335	24,874
Nungambakam	6,438	6,414	...	332	13,184
Egmore	11,493	9,652	...	306	21,401
Pursawalkam	14,871	9,628	...	378	24,877
George Town	20,268	6,293	4,658	335	31,554
Choolai	15,619	9,650	...	342	25,611
Muthialpet	14,180	8,833	...	319	23,332
Washermanpet	17,784	9,441	...	343	27,568
Perambur	15,926	8,748	2,684	314	27,672
Royapuram	13,493	8,625	...	381	22,499
Total ...	1,74,422	1,10,881	11,019	4,066	3,00,388

STATEMENT No. III.

Statement showing the number of Aanti-Natal Cases Registered and number of booked cases conducted by C. W. Scheme during 1937.

Centres.	Number of A. N. Cases registered by H. Vs.	No. of booked cases which attended A. N. clinics.	Number of booked cases conducted by						Total.
			C. W. Staff.	Barber Woman	Hospital.	Private Doctor.	Cases not Traceable.	Cases not Confined.	
Triplicane	1,300	1,286	826	74	203	28	96	59	1,286
Royapettah	631	493	248	73	98	11	25	38	493
Mirsaiipet	1,020	1,222	773	71	174	7	123	74	1,222
Nungumbakkam	426	305	129	60	60	2	34	20	305
Egmore	693	827	426	109	122	13	62	92	827
Pursawalkam	718	1,031	472	108	113	16	86	236	1,031
George Town	672	1,646	1,360	72	68	9	48	89	1,646
Choolai	938	984	473	65	136	4	173	133	984
Muthialpet	628	1,239	614	128	184	21	146	146	1,239
Washermanpet	564	1,319	673	109	181	2	158	196	1,319
Perambur	902	918	613	22	27	...	143	113	918
Royapuram	1,409	1,086	596	54	32	8	207	189	1,086
Total	9,901	12,356	7,203	945	1,398	124	1,301	1,385	12,356

STATEMENT

Anti-natal cases registered and diseases and ailments of pregnancy

Centres.	Constipation.	Dispepsia.	Scanty Urine.	Dysentery.	Bronchitis.	A. P. H.	Stomatitis.	Fever.	Leucorrhoea.	Albuminuria.	Anaemia.	Diarrhoea.	Debility.	Neuritis.	Ringworm.	Swelling.	Skin affection.	Asthma.
Triplicane	235	31		7	50		91	4		54	346					22	4	2
Royapettah	52	5	10	2	19		48			18	72		5		2		3	1
Mirsaibpet	261	8	183	3	26		69		3	10	116	8	6		6			2
Nungambakkam	114		30		9		12			9	24	1	25					
Egmore	370		62	11	35		39	1		14	90	17	56			8	3	
Purswalkam	259	7	96	11	8		47	3		66	93	11	28			11		3
George Town	259	70	18	22	23		158	29		53	159	44	71		18		63	
Choolai	204	29	97	7	9	1	115	14	7	53	98	12	76		16		9	
Muthialpet	212	17	34		20	3	85	1	1	44	98	11	87		15		10	1
Washermanpet	160		54	16	27	1	24		6	32	67	2	52	7	1		7	2
Perambur	166	33	34	11	39		4	1		20	86	5	47	1	1	7	5	2
Royapuram	543	30	34	8	11	2	5	1		38	105	4	69	4		7	4	3
Total	2,835	230	652	98	276	7	697	54	17	411	1,354	115	522	12	59	55	108	16

STATEMENT

Maternal Morbidity

Centres.	Anaemia.	Albuminuria.	Malaria.	V. D. H.	Bronchitis.	Dysentery.	Influenza.	Retained Membrane.	Adherent Placenta.	Retained Placenta.	Eclampsia.	Pneumonia.	T. B.	Ulcerated Vagina.	Retention of Urine.	Syphilis.	Asthma.	Diarrhoea.	Jaundice.
Triplicane	75	37	3	20	15	10	12		4		5	1	2		5		1		2
Royapet	22	2	1		3		1				1	1				1			2
Mirsaibpet	21	12		1		4				3	4	1				1			2
Nungambakkam	22				10		2				4	1							
Egmore	71	15		4	35	11	3		1		1			2	8		1		5
Pursawalkam	124	40	26	15	33	29	21	7	4	1	2	10	16	4	36	2	6		17
George Town	15	9	4	2	6	11	9		1		6			12	2	2	2	5	2
Choolai	19				3	21		1			1	1			2	3	3	20	1
Muthialpet	20	28	11		19	8	4				1					1		9	
Washermanpet	34	1		1	9	11					2					2	1	4	1
Perambur	5	5	5		5	5	2	1			1	1	3	3	1	1	1	8	1
Royapuram	30	20	8	2	6	11	6	1				2			5	2	2	9	1
Total	458	169	58	28	144	126	60	9	11	4	23	16	22	21	57	5	19	115	5

No. IV.

diagnosed and patients advised for treatment during the year 1937.

Varicose Veins.		Malaria.	Eclampsia.	Heart Burn.	V. D. H.	Giddiness.	Syphilis.	Ulcerated Vulva.	Gastritis.	Worms.	Morning Sickness.	Retention of Urine.	Breast Abscess.	T. B.	Normal.	Strangury.	Influenza.	General Anasarca.	Other diseases.	Pthiasis.	Paralysis.	Ear & eye Diseases.	Enteritis.	Not confined in 1936 but subsequently confined in 1937.	Total.	
					6						3	3			327		5								96	1,286
				1	4										175		1		8						66	493
				24	5	2	2								392		3		39	1	2				51	1,222
						7					25						1	4							42	305
		1	49	16		5					9				52		1		2						51	827
				13			1		1		22				218		1		7						72	1,031
16	54	2	4	14	10	4		2	6	8	2			1	347		25	32	56						87	1,646
	14	4		14	4				9					5		9	8	16	51						101	984
2	8		3	7	2			2	1		2			1	329	2	8	9	80						144	1,239
	12			2	4			4	4	1	1			4	512		16	1	107				3		191	1,319
1	4			9			1		4	1			1	1	247		12	1	58						116	918
	2			1				1	1	2						2	7		95	3		1			100	1,086
19	94	7	77	79	34		4	8	17	22	66	3	2	13	2,559	13	88	63	503	4	2	1	3	1,117	12,356	

No. V.

(Peripural) 1937.

Indigestion.	Gastritis.	Constipation.	Mastitis and Breast Abscess.	A. P. H.	P. P. H.	Skin Diseases.	Stomatitis.	Sepsis.	Ulcerated Vulva.	Fever & Hyperpyrexia.	After pains.	General Anasarca.	Debility.	Swelling.	Perinium tear.	Oedema.	Eczema.	L. P.	Other Diseases.	Total.
13		106	5	1	3	6	11		25	21	10	2	8						13	404
		17	1		1		3			4	16			3					2	81
				5					1	60	3	2	1	1	3				9	137
	1	7					4			7			4	2	6				1	83
5	1	106	1		1	18	56			6	134		38	16						549
43	2	139	13	3	3	12	44	1	1	50	82		15	27		25			89	931
	1	39				13	24		1	19	10		15			11				208
		2	3		3	3	6		3	35	2	5	19			10			6	187
		5	2	1	1	1	5			45	5		7			2			2	153
1		21	2	1	3	3	7	1	1	6	10	1	14	1	2				6	124
	3	55	2		2	6	18			16	22	6	30		4	8		4	21	300
62	8	497	27	11	17	62	178	2	32	351	294	17	152	51	15	56	1	9	153	3,345

STATEMENT No. VI
A

Maternal mortality (Puerperal) among cases treated by Child Welfare Scheme for 1937.

Centres.	Tuberculosis	V. D. H.	Adherent Placenta.	Eclampsia.	Titanus.	P. P. H.	Anaemia.	Heart-failure	Total.
Triplicane	...	1	...	...	...	...	...	...	1
Royapettah	...	...	...	...	...	...	...	...	...
Mirsaibpet	...	...	...	...	...	...	...	...	...
Nungambakkam	...	...	...	...	...	...	...	...	...
Egmore	...	...	...	...	...	...	...	...	...
Purasawalkam	...	...	...	...	...	...	...	...	...
George Town	...	...	...	...	...	...	...	...	...
Choolai	...	...	...	...	...	...	...	...	...
Muthialpet	...	...	...	...	...	...	...	...	...
Washermanpet	...	...	...	...	...	...	...	...	...
Perambur	...	...	...	...	...	...	1	1	1
Royapuram	...	...	...	...	...	...	1	...	1
Total	...	1	...	...	...	...	1	1	3

STATEMENT No. VI
B

Deaths among cases brought to the notice of the Child Welfare Scheme in 1937 but not under our treatment.

	Triplicane.	Royapettah.	Mirsaibpet.	Nungambakkam.	Egmore.	Purasawalkam	George Town.	Choolai.	Muthialpet.	Washermanpet	Perambur.	Royapuram.	Total.
1. In Hospital	5	...	1	...	2	4	5	5	3	2	7	4	38
2. Under Private Doctors	...	...	...	...	...	...	1	...	2	...	...	...	3
3. Under Vydians treatment	...	...	...	...	1	1	...	1	...	...	...	...	3
4. Under Barber Women	...	...	...	...	...	...	...	...	...	...	...	...	...
Total:	5	...	1	...	3	5	6	6	5	2	8	4	45

STATEMENT No. VI
C

Showing the causes of deaths among cases brought to the notice of the Child-Welfare Scheme but not under our treatment in 1937

Centers.	General Anasarca.	Fever.	Retained Placenta.	Adherent Placenta.	Eclampsia.	Cholera.	V. D. H.	Placenta Praevia.	Diarrhoea.	Sepsis.	Pneumonia.	P. P. H.	Dysentery.	Rupture of Uterus.	Anaemia.	Heart Failure.	Causes Unknown.	Total.
Triplicane	...	2	...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	5
Royapettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mirsaibpet	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Nungambakkam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Egmore	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	1	3
Purasawalkam	...	...	...	2	...	...	...	...	...	...	2	...	...	...	...	...	1	5
George Town	...	...	...	...	1	...	...	...	1	1	1	1	1	1	1	...	...	6
Choolai	...	...	...	...	2	...	...	...	...	1	...	2	...	...	...	...	1	6
Muthialpet	...	...	1	1	...	...	...	...	...	2	...	...	...	...	...	1	...	5
Washermanpet	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	2
Perambur	2	...	...	...	1	...	...	...	...	1	3	1	...	...	...	...	...	8
Royapuram	...	...	...	...	...	1	1	1	...	1	...	...	...	...	...	1	...	4
Total	2	2	1	5	7	1	1	1	1	4	4	1	7	1	2	2	3	45

Maternal Mortality Rate.

FOR CHILD WELFARE SCHEME

CITY.

1937 - 3.0 per mille.
1936 - 3.0 " "
1935 - 3.0 " "
1934 - 3.4 " "
1933 - 3.1 " "

1937 - 9.3 per mille.
1936 - 13.3 " "
1935 - 9.5 " "
1934 - 11.1 " "
1933 - 11.6 " "

STATEMENT No. VII.

Ages at death of Infants born during 1936 and kept under observation during the first year of life.

From 1st Jan. to 31st. Dec. 1936.	Total Infants born in 1936.	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.			
Triplicane	1,907	48	60	62	40	99	261	521	1,077
Royapet	620	28	23	10	9	15	57	67	468
Mirsaibpet	1,149	29	34	19	21	54	128	170	822
Nungambakam	377	19	12	7	9	15	43	20	295
Egmore	742	13	18	28	28	37	111	132	847
Purasawalkam	1,114	26	30	30	38	36	134	107	486
George Town	1,566	56	49	29	30	47	155	348	1,007
Choolai	1,244	41	43	45	27	54	169	61	973
Muthialpet	1,147	32	19	45	32	29	125	426	564
Washermanpet	1,518	46	43	37	43	33	156	182	1,134
Perambur	1,222	42	29	14	9	24	76	455	649
Royapuram	1,045	36	31	19	30	38	118	291	600
Total	13,651	416	391	345	316	481	1,533	2,780	8,222

INFANT MORTALITY RATE.

For Infants under the care of child welfare scheme.

City Rate.	per mille.
1937--112.3	1937--220.8
1936--12.2	1936--216.5
1935--138.2	"
1934--142.2	"
1933--142.7	"
"	"
"	"

STATEMENT No. VIII.

Causes of deaths among infants born in 1936 and kept under observation during the first year of life.

Centres.	Total Infants born in 1936.	Still born.	Died within 10 days.	Pneumonia.	Fever.	Enteritis.	Small-Pox.	Bronchitis.	Malnutrition.	Convulsions.	Whooping Cough.	Drugged with native medicine.	Dysentery.	Debility.	Measles.	Abscess.	Skin Disease.	Constipation.	Rickets.	Scabies.	Jaundice.	Causes unknown.	Diarrhoea.	Influenza.	Swelling.	Total Deaths.	Left City and not traceable.	Number of living Children traceable.
Triplicane	1907	48	60	3	83	...	1	2	4	13	4	...	7	2	...	9	5	1	1	...	1	8	58	...	...	261	521	1077
Rayapettah	620	28	23	...	8	13	...	7	...	...	1	...	1	1	...	1	1	...	...	...	...	1	...	...	...	57	67	468
Mirsaibpet	1149	29	34	4	33	8	6	1	...	10	1	...	210	...	...	...	...	...	...	...	...	8	11	...	...	128	170	822
Nungumbakkam	377	19	12	3	8	1	...	1	...	4	...	...	2	...	...	3	...	...	...	1	...	1	7	...	...	43	20	295
Egmore	742	13	18	1	37	35	2	...	1	11	2	...	1	1	...	2	...	...	...	...	...	...	...	...	...	111	132	486
Purasawalkham	1114	26	30	1	39	20	2	20	...	10	...	...	3	...	...	1	1	...	...	...	...	1	6	...	...	134	107	847
George Town	1566	56	49	5	17	8	3	12	5	6	2	17	10	...	...	...	...	...	...	...	...	8	10	3	...	155	348	1007
Choolai	1244	41	43	14	29	34	2	...	...	8	2	...	5	2	1	1	4	2	3	...	...	7	9	4	...	169	61	973
Muthialpet	1147	32	19	6	38	...	...	...	...	6	...	...	5	6	...	...	1	...	...	...	...	20	24	...	...	125	426	564
Washermanpet	1518	46	43	...	35	2	6	1	...	12	8	1	3	...	4	2	...	...	...	...	...	4	35	...	...	156	182	1134
Perambure	1222	42	29	...	17	...	1	...	2	1	...	...	1	...	2	...	...	...	...	...	...	6	17	...	...	76	455	649
Royapuram	1045	36	31	3	20	2	1	5	5	7	2	8	2	8	...	2	14	1	...	...	...	...	16	...	...	118	291	600
Total	13651	416	391	40	364	123	24	49	17	88	22	28	41	283	25	109	4	4	1	...	...	64	193	3	4	1533	2780	8922

STATEMENT XI.

Showing the details of Health Propaganda Work done by C. W. S. Staff in 1937.

Centres.	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.		Subjects.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	24	24	24	5	23	23	2,292	4	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

STATEMENT XI.

Showing the details of Health Propaganda Work done by C. W. S. Staff in 1937.

Centres.	New admissions.	Number of baths given to babies.	Average daily Attendance.
Triplicane ...	41	4,804	13·0
Royapettah ...	51	4,690	12·8
Mirsaibpet ...	45	3,092	8·0
Nungambakkam ...	92	5,265	14·4
Egmore ...	208	8,253	22·6
Pursawalkam ...	58	8,177	22·4
George Town ...	41	4,066	11·13
Choolai ...	41	4,411	12·08
Muthialpet ...	27	2,950	8·08
Washermanpet ...	55	7,069	19·0
Perambur ...	75	6,105	17·0
Royapuram ...	49	5,224	14·5
Total ...	783	64,106	174·99

N. B.—*Cases included in 40th Division in Rayapettah.

L: 5.511. M₇ N35
N32'

செப்பனிருபவர் பெயர்
 சி. தீர்த்தாசாமி
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