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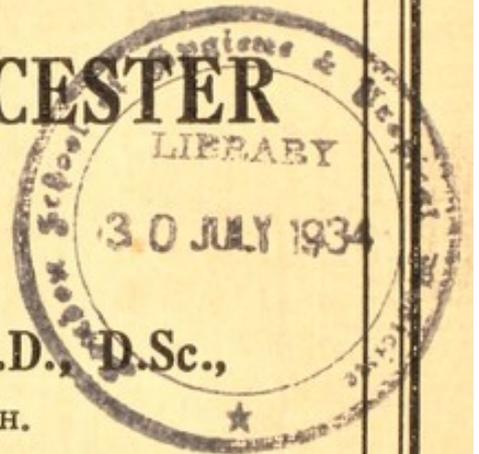


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THE EIGHTY-FIFTH
ANNUAL REPORT
UPON THE
HEALTH OF LEICESTER
FOR THE YEAR 1933

BY
C. KILICK MILLARD, M.D., D.Sc.,
MEDICAL OFFICER OF HEALTH.

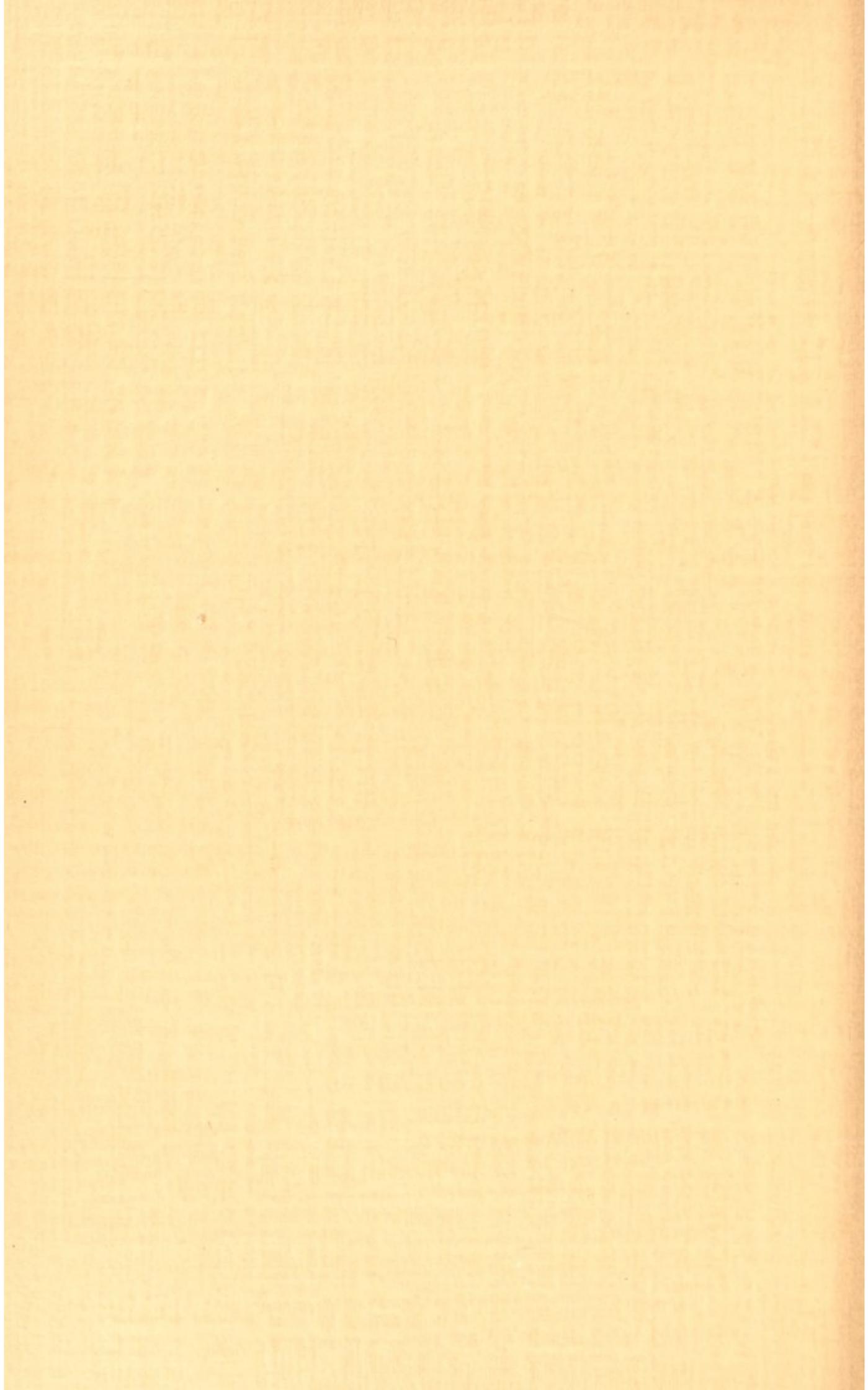


APPENDICES

INCLUDING

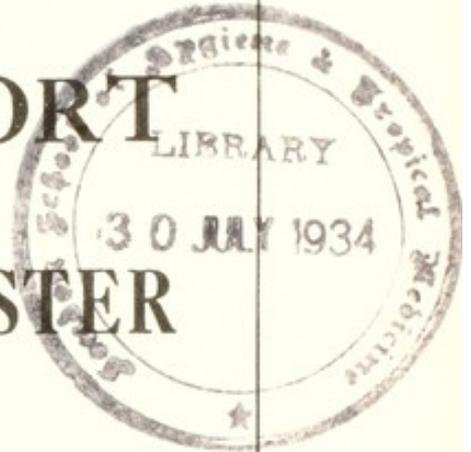
- I. REPORT of the TUBERCULOSIS OFFICER.
- II. REPORT on the ISOLATION HOSPITAL AND SANATORIUM.
- III. REPORT on the CITY GENERAL HOSPITAL.
- IV. REPORT of the MATERNITY and CHILD WELFARE MEDICAL OFFICER.
- V. REPORT of the CITY ANALYST.
- VI. REPORT of the CHIEF SANITARY INSPECTOR.
- VII. REPORTS of the V.D. MEDICAL OFFICERS.
- VIII. STATISTICAL TABLES.

LEICESTER :
THE BLACKFRIARS PRESS LTD., SMITH-DORRIEN ROAD.





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CITY OF LEICESTER

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ALD. W. E. HINCKS, O.B.E., J.P.

Vice-Chairman.

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.. CHAPPIN.	MR. HARRISON, J.P.	.. SWAINSTON.
DR. ASTLEY CLARKE, J.P.	.. JACKSON	ALD. T. W. WALKER, J.P.
MR. CORT.	.. JOHNSON.	MRS. WARNER, J.P.
.. EASTWOOD.	.. C. E. KEENE.	ALD. WILFORD, J.P.
MISS FORTEY, J.P., B.Sc.	.. MORRIS	

The Committee meets every alternate Friday in the Committee Room, Town Hall, at 3.30 p.m.

The Health Committee, together with the following co-opted members, not being members of the Town Council, constitute the Statutory Maternity and Child Welfare Committee :—Mrs. Banton, Mrs. Cooper, Mrs. Taylor, Miss E. J. Windley, B.A.

Accounts Sub-Committee.

MR. C. E. KEENE.	MRS. SWAINSTON.
MR. RICHARDS.	ALD. WILFORD.

Health Inspection Sub-Committee.

MR. CORT (Chairman).	ALD. HINCKS.
.. ADAMS.	MR. JOHNSON.
.. CHAPPIN.	.. MORRIS.
.. EASTWOOD.	.. PARBURY.
MISS FORTEY.	ALD. T. W. WALKER.
.. FRISBY.	MRS. WARNER.

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DR. ASTLEY CLARKE.	.. PARBURY.
MR. EASTWOOD.	.. RICHARDS.
MISS FORTEY.	ALD. T. W. WALKER.
MR. HARRISON.	.. WILFORD.
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MR. CORT.	MRS. SWAINSTON.
ALD. HINCKS.	

Assessment.

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MISS FORTEY.	" BANTON.
" FRISBY.	" COOPER.
ALD. HINCKS.	" TAYLOR.
MR. JOHNSON.	MISS WINDLEY.
" RICHARDS.	

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ALD. HINCKS.	MISS WINDLEY.
MR. PARBURY.	

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MISS FORTEY.	" BANTON.
" FRISBY.	" COOPER.
ALD. HINCKS.	" TAYLOR.
MR. PARBURY.	MISS WINDLEY.

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MR. ADAMS.	" RICHARDS.
DR. ASTLEY CLARKE	MRS. SWAINSTON.
MISS FORTEY.	ALD. T. W. WALKER.
MR. C. E. KEENE.	" WILFORD.
" MORRIS.	

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MR. CORT.	" RICHARDS.
MISS FORTEY.	MRS. SWAINSTON.
MR. JOHNSON.	ALD. T. W. WALKER.
" C. E. KEENE.	" WILFORD.

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MR. CORT.	" RICHARDS.
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MISS FORTEY.	MRS. SWAINSTON.
" FRISBY.	MRS. WARNER.
MR. HARRISON.	

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MISS FORTEY.	MRS. SIMPSON.
" FRISBY.	" SWAINSTON.
ALD. HINCKS.	" WARNER.
MR. C. E. KEENE.	

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" CORT.	ALD. HINCKS.
" EASTWOOD.	MR. PARBURY.

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" CORT.	MR. JOHNSON.
" EASTWOOD.	" PARBURY.
MISS FORTEY.	" RICHARDS.
ALD. HAND.	MRS. SWAINSTON.
MR. HARRISON.	" WARNER.

Staff of the Health Department

(As constituted January, 1934.)

Medical Officer of Health.

C. KILLICK MILLARD, M.D., D.Sc.

Assistant Medical Officers.

<i>Tuberculosis Officer and Assistant M.O.H.</i>	WYVILLE S. THOMSON, M.D., D.P.H.
<i>Assist. Tuberculosis Officer</i>	E. G. LAWRIE, M.B.
<i>Medical Supt. Isolation Hospital and Sanatorium</i>	J. C. H. MACKENZIE, M.B. (GLAS.), CH.B. (GLAS.), D.P.H. (LOND.).
<i>Resident Medical Officers</i>	{ E. M. WARD, M.R.C.S., L.R.C.P. J. H. F. PANKHURST, M.B., B.S., D.P.H.
<i>Medical Supt. City General Hospital</i>	E. C. HADLEY, M.D. (LOND.), F.R.C.S.E.
<i>Senior Resident Medical Officer</i>	A. M. McQUEEN, M.D.
<i>Resident Medical Officers</i>	{ J. H. WEIR, M.B. G. LANG, M.B., CH.B.
<i>Consulting Physicians</i>	{ J. V. C. BRAITHWAITE, M.R.C.S., M.R.C.P., M.B., B.S., M.D., R. M. CAIRNS, M.B., CH.B., M.D.
<i>Visiting Radiologist</i>	D. F. LAWSON, M.R.S.S., BC.H., D.M.R.E.
<i>Visiting Venereologist</i>	C. H. WILKIE, M.B., B.Sc.
<i>Visiting Anaesthetists</i>	{ D. JUSTIN DAVIES, M.B., B.S., M.R.C.S. P. MASON, M.R.C.S., L.R.C.P.
<i>Maternity and Child Welfare Officer</i>	E. B. B. HUMPHREYS, M.B.
<i>Orthopaedic Surgeon</i>	LESLIE MORRIS, M.D., F.R.C.S.

Secretary of Health Department.

WILFRID CARR, F.C.C.S.

Matrons.

<i>Isolation Hospital and Sanatorium</i>	Miss B. NESBITT.
<i>City General Hospital</i> .. .. .	.. L. K. MASTERS.
<i>Maternity Home</i> .. .. .	.. EDITH BRADSHAW.
<i>Day Nursery</i> .. .. .	.. ALICE M. MASON.

Clerical Staff.

<i>Chief Clerk, Sanitary Office</i>	T. P. POYNOR.	
<i>General Clerks—</i>		
F. KELLETT.	Miss D. R. POTTERTON.	Miss E. GALLIARD.
E. SLINGSBY.	.. K. M. TUSTAIN.	.. V. DAWN.
G. H. SEAL.	.. J. HORNER.	.. E. E. BATTLE.
<i>Tuberculosis Dispensary</i>	{ Miss J. HEATON. .. R. BREWARD.	
<i>Isolation Hospital and Sanatorium</i>	{ Miss V. ALLSOP. .. M. F. HALE.	
<i>City General Hospital—</i>		
<i>Steward</i>	E. H. BALL.	
<i>Asst. Steward</i>	S. WHATSIZE.	
<i>Clerks</i>	{ Miss HALLAM. L. HEATHERLEY. Miss J. THOMPSON.	
<i>Milk Depot</i>	{ Mrs. BREWIN. Miss A. JESSON.	
<i>Vaccination Officer</i>	J. H. LOCKWOOD	

Public Analyst's Department.

Public Analyst.. F. C. BULLOCK, B.Sc., F.I.C.
Laboratory Assistants { J. L. PINDER.
 C. HYDE.

Sanitary Inspectors.

Chief Inspector F. G. McHUGH, 1 2 3 4

Inspectors—

R. T. BLAYLOCK, 1 2 3 6	W. MUSTON, 1 2
H. CLOUGH, 1 2	J. W. NORTH, 1 2
M. C. CRIPPS, 1 2	W. J. PARKINSON, 1 2 5
H. ELKINGTON, 2 4	A. T. PRICE, 1 2
R. V. FIDDES, 1 2	E. THOMPSON, 1 2
T. HINES, 1 2	G. H. WATMOUGH, 1 2
W. C. LONG, 1 2	A. WELTON, 1 2
F. W. MURRAY, 6 7	J. YATES, 1 2

Health Visitors.

Superintendent.. Mrs. REED, 8 9

District Health Visitors—

Miss M. ASH, 8 10 11 12	Miss J. G. MASTERS, 8 9
„ H. S. BEATTIE, 8 11	„ E. R. MATTHEWS, 8 10 12
„ L. CHAMBERS, 8 10 12	„ S. H. G. PAYNE, 8 10 11
„ M. CONLON, 8 10 11 12	„ H. E. RICH, 8 10 11 12
„ E. M. CRAGG, 8 9 10 12	„ L. WALKER, 8
„ A. KAVANAGH, 8 10 11 12	„ E. WILFORD, 8 10 12
„ B. M. LANGTON, 8 10 11 12	„ E. L. WOLLASTON, 8 10 12
„ D. L. MALLISON, 8 10 11 12	

Manageress of Milk Depot Mrs. E. STANION, 9

Tuberculosis Nurses { Miss F. BEASLEY, 8 10 12
 „ E. MOUND, 8 10 12
 „ C. NEILL, 10

1. Holds Sanitary Inspector's Certif. Roy. San. Inst.
2. Holds Meat and Food Inspector's Certif. Roy. San. Inst.
3. Holds Certif. of Roy. San. Inst. for San. Science as applied to Buildings and Public Works.
4. Holds Sanitary Inspector's Certif. under Public Health (London) Act, 1891.
5. Holds Sanitary Inspector's Certif. San. Inspector's Assocn.
6. Holds Certif. of Royal San. Assocn. of Scotland for Meat Inspection.
7. Holds Certif. of Royal San. Assocn. of Scotland for Sanitary Science.
8. Holds Certif. of the Central Midwives' Board.
9. Holds Health Visitors' Certif. of the Roy. San. Inst.
10. Holds Certif. as fully Trained Nurse.
11. Holds new Health Visitors' Certificate.
12. Holds State Registered Nursing Certificate.

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SUMMARY OF STATISTICS

FOR THE YEAR 1933.

CITY OF LEICESTER.

Population at Census, 1931	239,169
.. (estimated) at Mid-year 1933	241,500
Marriages	2,218
Marriage-rate	18.36
Births	3,242
Birth-rate	13.42
Deaths (corrected for transferable deaths)	3,083
Death-rate	12.76
Deaths under One Year	242
Infant Mortality (per 1,000 Births)	74.64
Zymotic-rate (per 1,000 population)	1.05
Respiratory-rate	1.92
Cancer-rate	1.52
Tuberculosis-rate	1.25
Phthisis-rate	1.11

Area of City (in acres)	8,582
Number of persons per acre at Census, 1931	27.9
Number of persons per "structurally separate dwelling" at Census, 1931	3.80
Number of Inhabited Tenements, January, 1934	65,438
Number of Empty Houses, January, 1934	414
Number of Empty Cottages, January, 1934	171
Rateable value (1st November, 1933)	£1,649,980
General Rate for the year, 1933-34	13s. 2d. in the £
Produce of 1d. Rate (for 1932-1933)	£6,409

	England & Wales	118 Great Towns (Population exceeding 50,000) including London	London
Birth-rate	14.0	14.4	13.2
Death-rate	12.3	12.2	12.2
Infant Mortality (per 1,000 Births)	64.0	67.0	59.0

(Registrar General's Figures.)

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HEALTH DEPARTMENT,
GREY FRIARS,
LEICESTER.

18th June, 1934.

To the Chairman and Members of the Health Committee.

LADIES AND GENTLEMEN,

I beg to present my Annual Report on the Health of Leicester and on the various activities of your Committee for the year 1933. This is the thirty-third of these reports which it has been my privilege to present.

The official population for the year was 241,500.

The birth-rate continues to fall and the figure for the year (13.4) was the lowest hitherto recorded.

The death-rate was 12.7, being a fraction higher than in the previous year. The birth-rate and death-rate in Leicester have now almost reached the same level, which if it be maintained would mean, but for immigration, a stationary population.

The infant mortality was 74, a slight increase on the previous year. As the average for the Great Towns was only 67, this is hardly a satisfactory figure.

None of the zymotic diseases gave any special trouble during the year, though diphtheria was more prevalent than in the previous year and caused eleven deaths. Only one death was due to scarlet fever. Pneumonia, now coming to be regarded as a zymotic disease, was, as usual, a common cause of death, 229 deaths being attributed to it.

Special attention is now being given by public health authorities to the subject of rheumatism, and in a section of the report (see p. 15) the matter is discussed at some length, especially the influence of social conditions as predisposing to rheumatism. There is some reason to doubt whether the traditional view that there is a connection between rheumatism and dampness is really justified (p. 19).

A brief reference is made to the question of health certificates before marriage (p. 28). It seems very desirable that an exchange of such certificates between engaged couples should become an established practice.

The question of "vermin" is coming to be recognised of great importance, and reference is made to this on p. 37.

A part of the report deserving special study is the Appendices, which contain the reports of the chief departmental officers, and deal with the highly important work carried on in the various institutions and sub-departments controlled by your Committee.

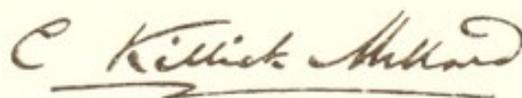
In the report on the work of the Isolation Hospital and Sanatorium the Medical Superintendent (Dr. J. C. H. Mackenzie) draws attention to the excellent results being obtained at the Institution in the treatment of puerperal fever. As a matter of fact there has been no death in the last 49 cases treated there.

Two specially noteworthy events of the year at the Isolation Hospital and Sanatorium were the erection and opening of the Chapel, and the resignation, after 26 years of most devoted service, of Miss E. A. Davies, R.R.C., the Matron. Miss Davies will always be an outstanding figure in the history of the Institution. The Chapel, indeed, is a permanent and worthy memorial to her work, because it was she who conceived the project, and she who was the moving spirit in carrying it through and raising the necessary and substantial funds for its erection. Further reference will be found in Appendix II, p. 77.

I wish to pay special tribute to the invaluable services rendered by the Health Department Secretary (Mr. Wilfrid Carr) of whose work it would be difficult to speak too highly. I am in a position to know better than anyone the vast amount of work which he manages to get through, and the able and thorough way in which he does it.

I am, Ladies and Gentlemen,

Your obedient Servant,

A handwritten signature in cursive script, reading "C. Killick Millard". The signature is written in dark ink and is underlined with a single horizontal stroke.

Medical Officer of Health.

Medical Officer of Health's Report

FOR THE YEAR 1933

PART I.

Statistical

Population.

The population of Leicester at mid-year, 1933, as estimated by the Registrar-General, was 241,500, as compared with 240,800 for the previous year, an increase of 700.

1932, as compared with 1931 (the Census year) showed a decrease of 500, the corresponding figures being :—

1931	..	241,300
1932	..	240,800
1933	..	241,500

The Registrar-General's method of estimating population is a complicated one, but is based largely upon the Burgess Roll, and small accidental fluctuations need not be taken as indicating any definite tendency. It is evident, however, that until the extension of the City's boundary takes place, which it is expected will be next year, no material increase of population is possible, as almost all available building land has now been built upon. Such new houses as have been erected during the last few years or as are now being built, are not more than sufficient to replace houses pulled down or to provide for the increase in families—as distinct from the increase in the number of persons—which is taking place.

Extension of the City Boundaries.

As was mentioned in the last report, the draft scheme which, with the concurrence of the County Council, it is proposed to carry out, provides for an increase of the area of the City of 8,397 acres, practically doubling it. The increase in population will be about 20,000, and the increase of rateable value something like £100,000; but, on the other hand, serious liabilities and responsibilities will have to be incurred, so that it is calculated that at first, at any rate, the extension will entail some burden on the rates, though it is hoped that this will not amount to more than 1d. or 1½d. in the pound.

The added area will include the whole of the parishes of Humberstone, Braunstone Frith; almost the whole of the parishes of Gilroes, Beaumont Leys, and Leicester Frith (much of the land in these parishes already belongs to the Leicester Corporation); and parts of the parishes of Thurnby, Evington, Lubbethorpe, Braunstone (in these last two parishes the Corporation own extensive housing estates), Anstey and Birstall.

Such a large extension will provide for the natural expansion of the City for very many years to come.

Overcrowding as revealed by the last Census.

As was shown in the last report, in referring to the results of the 1931 Census, there was some decrease in the number of houses with more than two persons per room as compared with the Census of 1921 (707 in place of 829). This is easily accounted for by the diminution in the average size of the family (from 4.28 to 3.61), there being fewer large families than formerly.

But if we consider the number of families and the number of "structurally separate dwellings" we find as follows:—

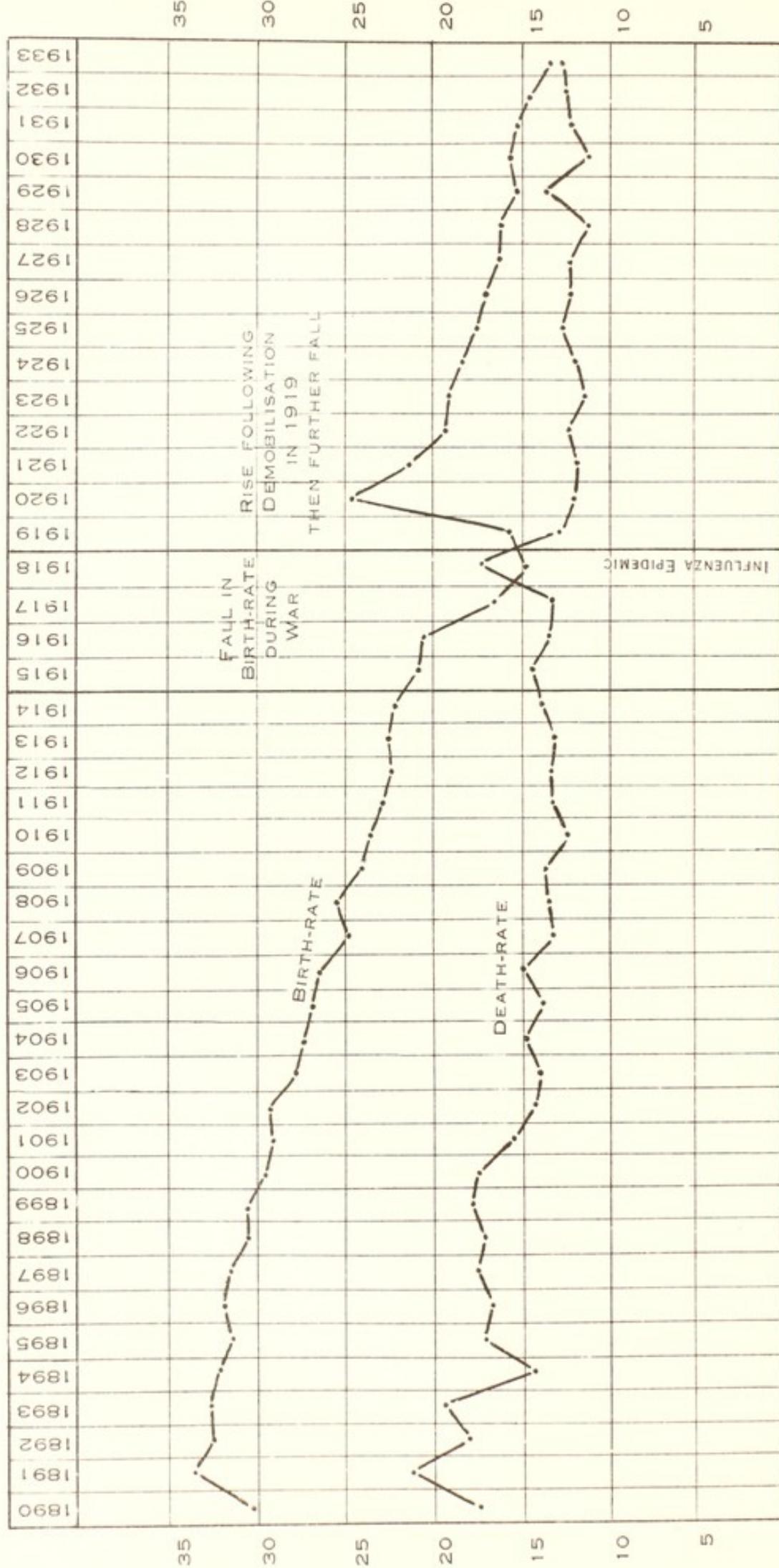
			No. of Families.	No. of Separate Dwellings.
Census, 1921	..	..	55,976	52,955
„ 1931	..	..	63,944	60,719

Expressed as a proportion of dwellings to families the figure is almost exactly the same, i.e. :—

				No. of Dwellings per 100 Families.
Census, 1921	..	..	..	93.6
„ 1931	..	..	..	94.9

GRAPH I

BIRTH AND DEATH RATES IN LEICESTER 1890-1933



So that in this respect there was no improvement—the pressure of families on houses in 1931 was as great as it was ten years before, in spite of all the new houses which had been built in the meanwhile. As the building of houses by the Corporation has fallen off during the three years since the last census, it is unlikely that the position is materially different now.

As was explained last year, this result is due to the fact that although the number of persons in the population has only increased by 5,026, the number of *families* has increased by no less than 7,968. But it is the number of families rather than the number of persons which determines the number of houses required. So that the continued shortage of houses is easily explained.

Marriages.

The number of marriages solemnised in Leicester during the year 1933 was :—

In Church of England	..	..	..	1,108
Elsewhere	..	..	..	1,110
				—
Total	..	..	..	2,218
				—

The **Marriage-rate** was 18.36, a slight increase on the figure for 1932. The figures for previous years are given in Table 10.

Births.

The corrected number of births for the year was 3,242 (M. 1,830, F. 1,702) compared with 3,583 in the previous year, a decrease of 341.

The **Birth-rate** was 13.42 as compared with 14.88. The birth-rate, therefore, continues to fall and was the lowest figure hitherto recorded. The figures for the previous year will be found in Table 10.

There are some, though not so many as formerly, who deplore the continued fall in the birth-rate as though it were a national disaster. On the other hand, there are many who, believing that the population of these islands is already too great and that any further increase is likely to entail a fall in the standard of existence, regard the fall in the birth-rate, even though it should fall below the level of the death-rate and so involve an actual reduction in the population, as something to be welcomed rather than deplored.

At one time it used to be said that an excess of population in these islands was necessary in order that the Mother Country could send the

surplus overseas to help to populate our colonies. But to-day we are faced with the fact that our colonies not only do not want but will not have our surplus population. They are, indeed, even glad to defray the cost of sending back those who have emigrated but have failed to find employment.

Still-births.

The number of still-births notified was 113, 81 of these being by midwives and 32 by doctors. The number of still-born children interred at the City Cemeteries was 169, so that 56 still-births apparently escaped notification.

On the basis of the number of interments, the still-births amounted to 5.2 per cent. of the children born alive.

Illegitimacy.

The corrected number of illegitimate births was 164, equal to 5.0 per cent. of the total births. This is about an average figure.

Deaths.

The number of deaths of persons properly belonging to Leicester (i.e., the number of registered deaths corrected by additions and subtractions in the usual way) was 3,083, of which 1,556 were males, and 1,527 were females. Figures for previous years will be found in Table 9.

The **Death-rate** per 1,000 population was ~~12.76~~^{12.76}. This also is slightly higher than in the three previous years.

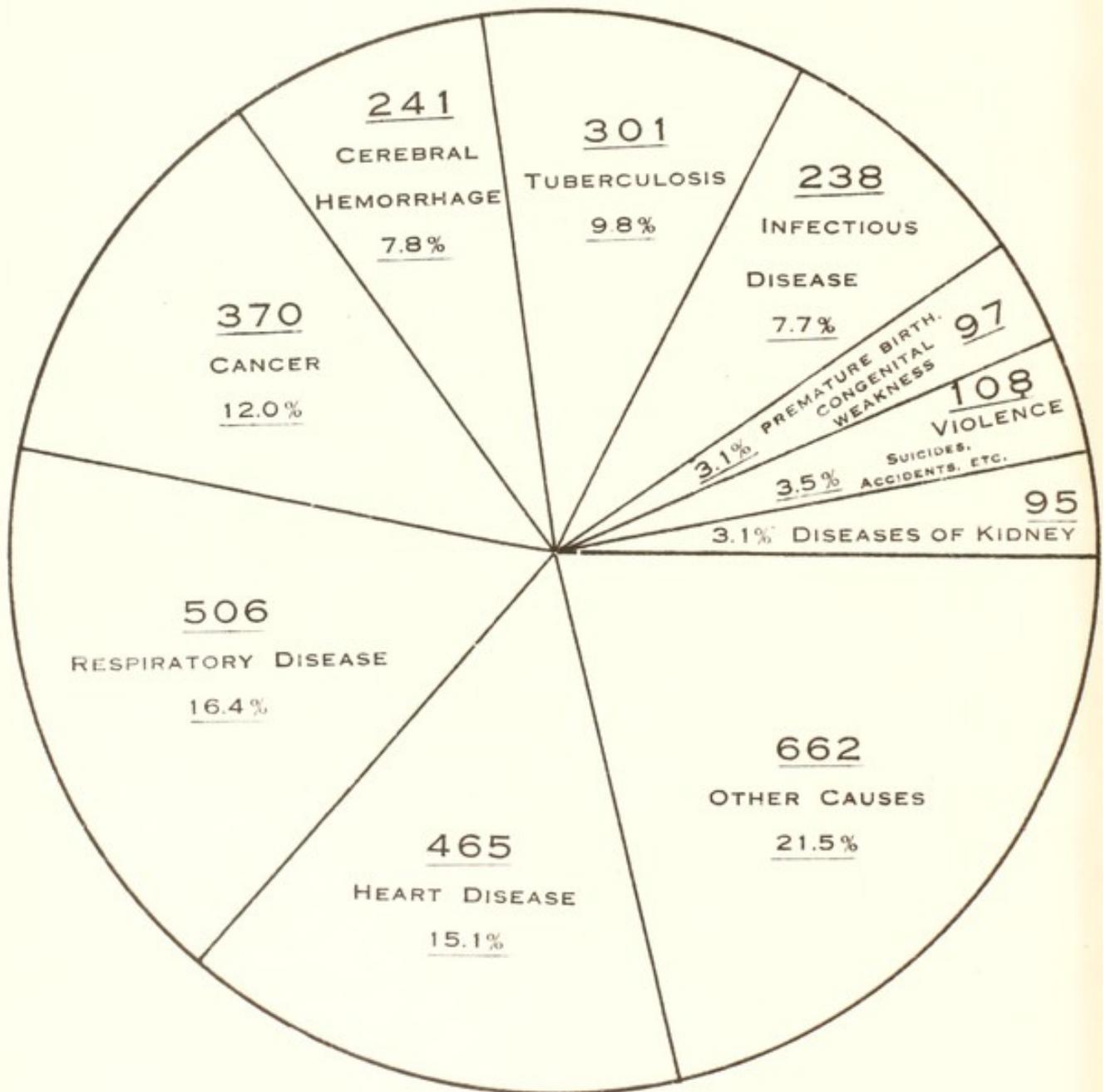
By reference to the accompanying Graph 1, the relation between birth and death rates for the City is seen at a glance for the past 43 years. As regards the birth-rate, this has been steadily falling, the only interruption being a steeper fall during the later years of the war, followed by a sharp but temporary rise following demobilisation after the war.

At first, the fall in the birth-rate was compensated by an almost equal fall in the death-rate, but latterly the death-rate has practically ceased to fall; and soon it may begin to rise.

This rise in the death-rate has been definitely foreseen. It has been more than once pointed out in these reports that owing to the continuous fall in the birth-rate the age distribution of the population was necessarily changing, the proportion of older people increasing, and of younger people decreasing. As the death-rate largely depends

GRAPH II

SHOWING PROPORTION OF DEATHS FROM
PRINCIPAL CAUSES, 1933



upon age, this must inevitably have the effect, other things remaining equal, of sending up the death-rate.

In past years, owing to the fact that the number of births was definitely in excess of the number of deaths, there was an excess of younger people in the population, and this conduced to an abnormally low death-rate. Now, we are losing this advantage.

Reference to the Graph will show that last year the birth-rate and death-rate more closely approximated than ever before, with the one exception of the abnormal year, 1918. It is probable that in the near future the birth-rate and death-rate curves for Leicester will cross, the birth-rate falling below the death-rate, although the extension of the City boundaries may postpone this event for a year or two. The reason for this is that the age distribution of the population in the new housing estates round Leicester—which will be brought into the City by the extension, and are populated largely by young married couples and children with comparatively few old people—is definitely favourable to a low death-rate.

It is usually rash to prophesy, but in this case there are solid statistical grounds which justify a forecast.

Even though the death-rate does come to exceed the birth-rate it does not follow that the population of the City will decline, because so long as Leicester continues to be commercially prosperous it will certainly attract population from other areas, so that immigration will exceed emigration.

But viewing the matter from the national standpoint—and needless to say the steady fall in the birth-rate is affecting the whole country in much the same way—a decrease in population probably will begin to take place before long. As indicated above, in the remarks on the birth-rate, this need not necessarily be a bad thing for the country, though the question is one on which opinions may differ.

Zymotic Mortality.

For the purpose of calculating this all the deaths shown in Table 8, excepting only deaths from pneumonia, are counted. The figure for the year was 1.05.

Infant Mortality.

The corrected number of deaths of infants under one year of age was 242. This is less than in the previous year, but owing to the reduction in the number of births, the infant mortality, which is

calculated per 1,000 births, was 74 as against only 70 in the previous year. The figure for the 118 Great Towns was 67, so that the Leicester figure cannot be regarded as satisfactory. The causes of death and ages in weeks and months of all deaths in infants are given in Table II. The chief causes were :—

Premature Births	..	..	..	..	..	54
Pneumonia	..	..	..	..	..	47
Diarrhoea and Enteritis	..	..	..	..	..	26
Convulsions	..	..	..	..	..	16
Bronchitis	..	..	..	..	..	15
Atrophy and Debility	..	..	..	..	..	14
Measles and Whooping Cough	..	..	..	..	..	12

102 out of the 242 deaths occurred in infants under four weeks of age.

COMPARATIVE WARD STATISTICS.

Leicester is divided into 16 Municipal Wards, being numbered from the centre outwards. Thus, the most central ward of all is No. 1—St. Martin's. This is also the smallest, both as regards area and still more as regards population. It is to-day largely a business area and the population is only just over 1,500. Next come three wards, also very central, 2, 3 and 4—Newton, St. Margaret's and Wyggeston. These cover some of the oldest parts of the City. Many of the houses are very old and small, the streets narrow and congested. These wards have long been looked upon as comprising the worst parts of Leicester. Our slum clearance scheme—the Green Street-Sandacre Street area—is situated in St. Margaret's Ward. Next comes a group of wards adjacent to the above and only a little better as regards the conditions. This second group comprises Wards 5, 6 and 7—Latimer, Charnwood and Wycliffe. Latimer comprises the streets on the right of Belgrave Road, north and south of the Great Northern Railway. Charnwood comprises a number of congested streets round the Midland Goods Station. Wycliffe lies immediately south of the above and includes many rather better class streets in the Sparkenhoe Street and Highfield Street areas.

The third group, Wards 8, 9 and 10, includes De Montfort (which includes good class districts like Princess Road and Regent Road, but also a poor class area of mean streets off Wellington Street), the Castle (Oxford Street, Asylum Street and Jarrom Street district), and West-cotes, the latter a comparatively modern residential and working-class

district. (There is little to choose between Ward 7, which comes in Group 2, and Ward 9 in Group 3.)

Then we have a fourth group, Wards 11, 12 and 13—the Abbey (which comprises Newfoundpool, an isolated and comparatively modern working-class district standing at a higher level than the rest of the ward, together with some fairly good streets off Woodgate and some poor streets behind St. Leonard's Church), Belgrave, an outlying working-class district of more modern construction, and West Humberstone, also an outlying working-class district.

The fifth and last group, Wards 14, 15 and 16—Spinney Hill, Knighton and Aylestone—are all outlying areas and constitute the best of the five groups. Spinney Hill includes a large number of good streets all round the Spinney Hill Park and in the Highfields area, almost all of the ward standing at a considerable altitude; Knighton includes Stoneygate, the chief residential quarter of Leicester, and Clarendon Park, a superior working-class district. Aylestone is a modern working-class area and includes the new Park (Saffron Lane) Corporation Building Estate and Old Aylestone, which is really a rural village.

In the last Annual Report the vital statistics for the various wards, worked out for five years, were given, and it was shown how consistently they agreed with the grouping of the wards, arranged in concentric order as above. Speaking generally the oldest parts of the town show the worst statistics. There are, of course, various explanations of this, one of the most important being that the poorest classes of the community tend to drift to the oldest and poorest neighbourhoods.

The vital statistics for each ward for 1933 will be found in Table 2.

PART II.

Zymotic and other Specific Diseases or Causes of Death

SMALLPOX.

No case of either minor or major smallpox occurred in Leicester during the year under review. The last cases of minor smallpox were in October, 1932. The disease has been practically absent during the year from the whole country with the exception of London, where it still lingers.

As regards major smallpox, no really serious visitation has occurred in Great Britain for nearly thirty years. It is true that importation of the disease have taken place occasionally, and in certain instances—e.g., the outbreak in connection with s.s. "Tuscania"—the circumstances were such that, for a short time, the situation looked distinctly threatening; but energetic preventive measures were taken and the outbreaks were quickly suppressed.

As regards the vexed subject of infant vaccination, the feeling seems to be definitely growing that the time has now come when the compulsory clauses of the Vaccination Acts might advantageously be repealed and compulsion replaced by a voluntary system.

Were such a step to be taken it would not make much difference to Leicester, where for forty-five years the proportion of children vaccinated has averaged only about ten per cent., and for the past ten years has been only five per cent. It would, however, relieve us of much useless work in connection with the administration of the Vaccination Acts.

In February of the present year the writer opened a discussion before the Medical Society of London on "The Present Position of the Vaccination Question." Several of those present expressed themselves as in favour of the abolition of compulsion.

VACCINATION RETURN FOR 1933.

Vaccinations Registered :—

Public	.. .. .	58	}	103
Private	.. .. .	45		
Exemption Certificates received	..	3,203		
Certificates of Insusceptibility	..	2		
Births registered (corrected number)		3,242		

There were no prosecutions for default.

The proportion of vaccination to births registered during each of the past five years was as follows :—

1929	..	5.1
1930	..	4.8
1931	..	4.4
1932	..	3.3
1933	..	3.2

When the town of Leicester revolted against the Vaccination Acts, so far at least as the compulsory clauses were concerned, and virtually abandoned infant vaccination, it was described as a "gigantic experiment," the results of which time would show. It was confidently believed by the orthodox that the result would be disastrous. Yet although nearly fifty years have now elapsed no disaster has occurred, nor has there even been any question of reverting to infant vaccination.

Vaccination as an emergency measure, however, including, of course, the vaccination of the Health Department and Hospital staffs, will continue to be, as it has always been, a recognised part of our defence against smallpox. Practically all doctors in Leicester, including the Medical Officer of Health, vaccinate themselves and their families.

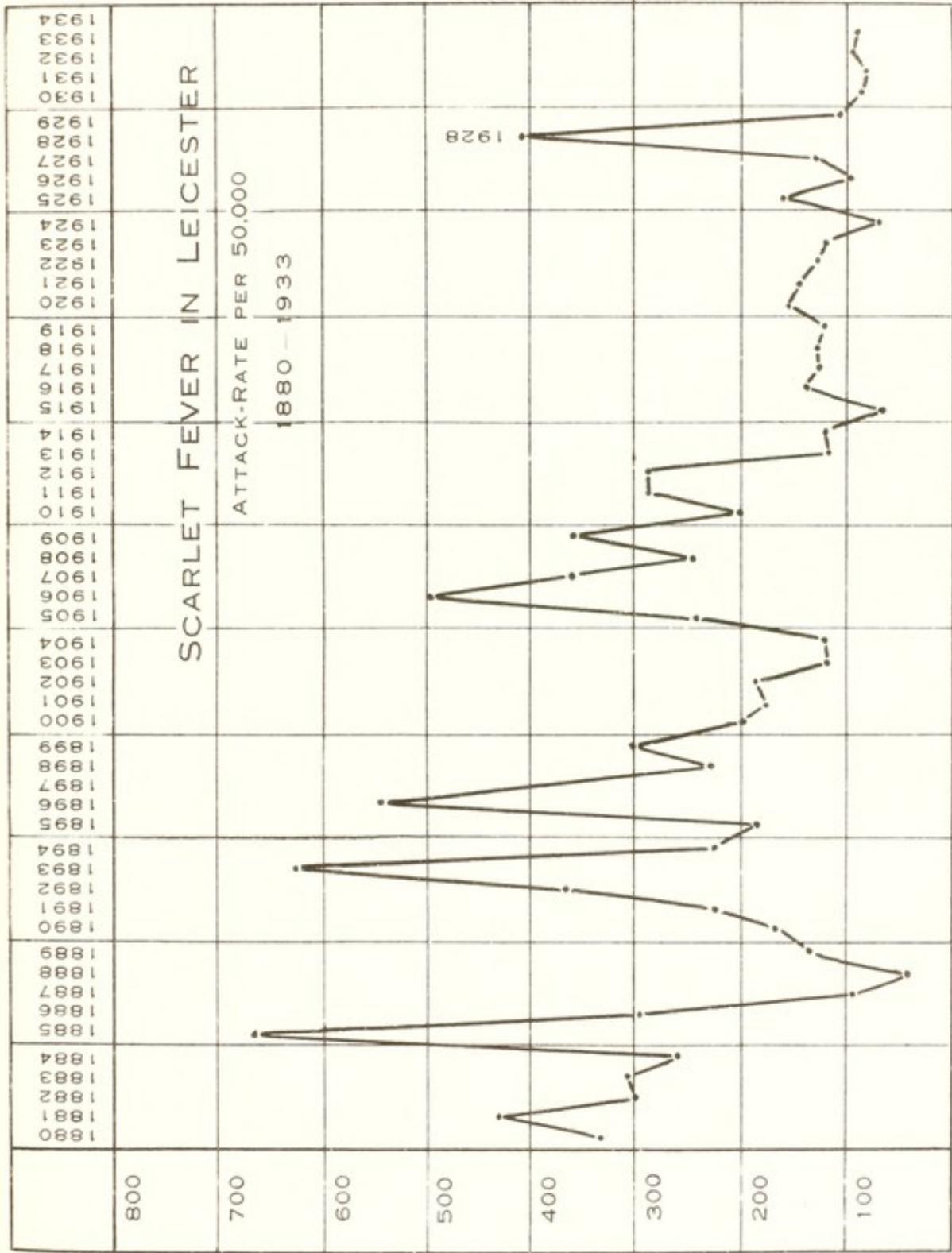
SCARLET FEVER.

Cases, 432. Deaths, 1.

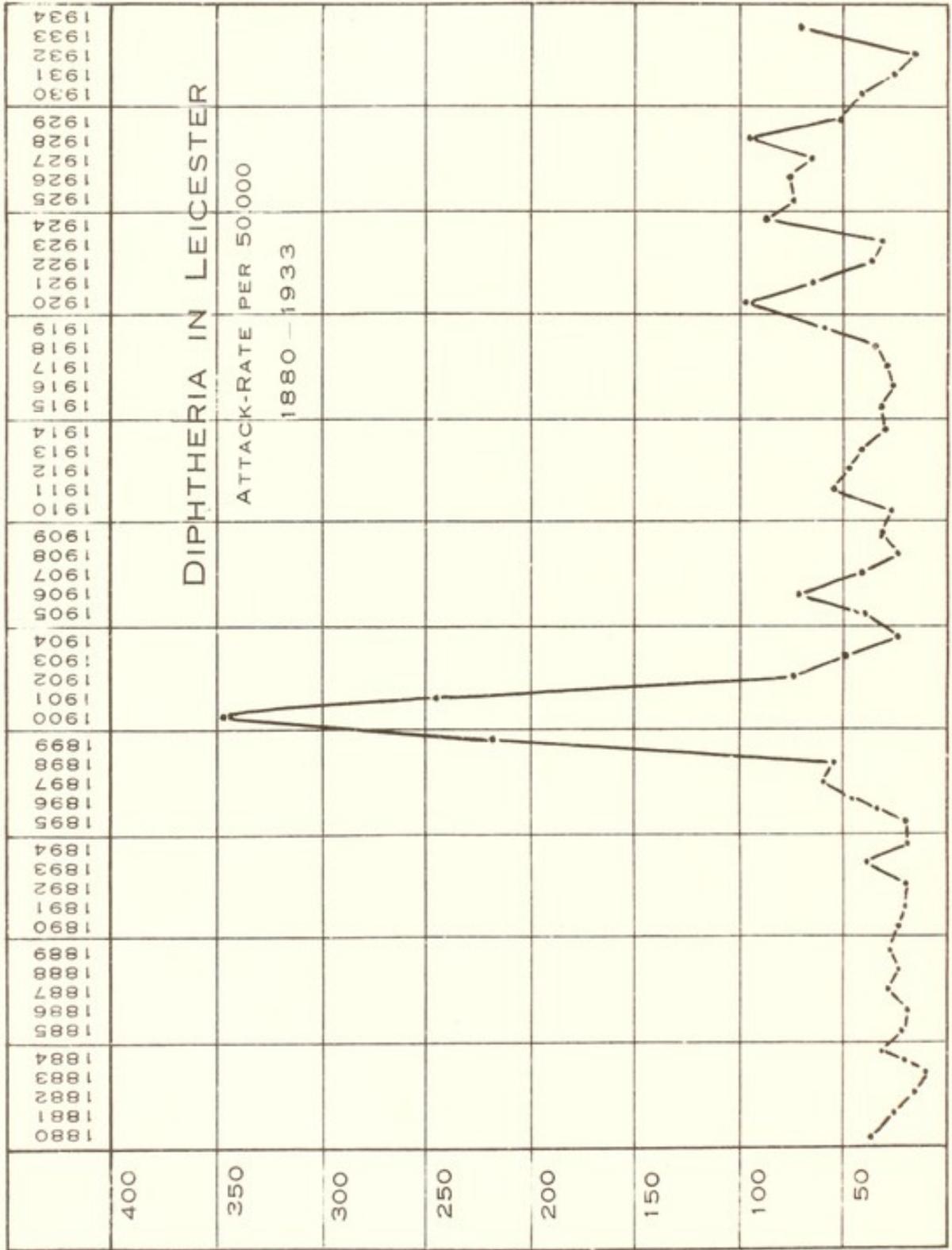
Removed to Hospital, 309. Proportion removed, 71 per cent.

The number of cases of scarlet fever reported during the year was almost the same as for the previous year (463). Reference to the accompanying Graph III, showing the attack-rate for the past 53 years, indicates how greatly the incidence of this disease has decreased in Leicester during the past 20 years. One naturally hesitates to prophesy what a disease may do in the future, but so far as the experience of the past goes, it certainly looks as if the decline was becoming permanent. There will, no doubt, be fluctuations—it is even possible that another epidemic may occur like that in 1928—which for the

GRAPH III



GRAPH IV



time being may upset all one's calculations, but there has been only one epidemic such as that in the past 20 years.

The fact that there was only one fatal case is very satisfactory.

DIPHTHERIA.

Cases, 338. Deaths, 11.

(Previous year : Cases, 76. Deaths, 5.)

Removed to Hospital, 335. Proportion removed, 99 per cent.

The year's record as regards diphtheria was less satisfactory than in the previous year, when the number of fresh cases was abnormally low, indeed the lowest on record. The position as compared with previous years is shown at a glance in the accompanying Graph IV. It will be observed that after four years of decline, the attack-rate has gone up again to nearly where it was in 1928.

Diphtheria is a most elusive disease, which is endemic rather than epidemic in this country, that is to say, it is continually present in every large centre of population, and the number of fresh cases occurring year by year, whilst there are considerable fluctuations, does not amount, as a rule, to what is usually understood as an epidemic. In Leicester a very definite epidemic did occur in the years 1899-1901, as is shown in the Graph, and during these three years, 3,378 cases were notified and 693 deaths occurred. Nothing at all approaching these figures has occurred during the 33 years which have since elapsed.

During the year under review the disease was not localised or limited to any particular part of the city. A record is kept of all school children attacked : these numbered 208, and occurred in 45 council and in two private schools. Classifying these, we find that in 23 schools only a single case occurred ; in 21 schools there were from two to five cases ; in two schools (Old Milton Street and St. George's) there were from eleven to fifteen cases ; in one school (Brunswick Street) there were 18 cases ; and in one school (Taylor Street, one of the most recently built schools) there were 21 cases. The total number of scholars on the books at the schools mentioned is : Old Milton Street 369, St. George's 279, Brunswick Street 277, and Taylor Street 775.

There is no doubt that school life, in which large numbers of children are necessarily brought closely into contact, affords an opportunity for the spread of infectious disease. This is inevitable even under the best conditions. But speaking generally, it has only rarely been the case that it has been thought necessary in Leicester to close a school on account of diphtheria.

In connection with the prevention of diphtheria, as with other infectious diseases, close and friendly co-operation exists between the Health Department and the School Medical Service.

All fatal cases of diphtheria are made the subject of special investigation and report by the Medical Officer of Health, with the particular object of finding out if any avoidable delay has occurred in reporting the case or securing its admission to hospital. The attention of medical practitioners has repeatedly been drawn to the importance, in the interest of the patient, of securing specific (antitoxin) treatment at the earliest possible moment. They have been urged not to attach undue importance to a negative bacteriological report if there are definite clinical signs of diphtheria. Often, indeed, it is wiser to send a case straight into hospital rather than to wait for the report on a throat swab. The latter course will often entail 24 hours delay. Even if a case should not prove to be diphtheria after admission to hospital, there is practically no risk of the patient contracting the disease, as passive immunity is conferred by the anti-diphtheritic serum which is administered.

It is only in really doubtful and slight cases that the delay entailed by the taking of a throat swab is justified.

Removal of Cases to Hospital.

The value of the specific treatment for diphtheria, which can be so much better given in hospital than at home, is so well recognised both by the medical practitioners in the city and by the public that practically all cases occurring are now sent to hospital. During 1933, out of 338 cases reported, all but three were admitted to Groby Road Hospital. This is equivalent to 99 per cent., and is the highest proportion hitherto recorded.

PNEUMONIA.

Cases notified, 347. Deaths, 229.
Removed to Isolation Hospital, 18.

Of the 347 notified cases, 211 were in males and only 136 were in females; whilst of the 229 deaths, 140 were in males, and only 89 in females. This excessive incidence of pneumonia on the male sex is even more striking than it appears since there are substantially more females than males in the population (115 females to every 100 males). It is a well-known fact, however, that males, especially between the ages of 15 and 40, are much more liable to be attacked by pneumonia, i.e., in the form known as lobar pneumonia. In

proportion to the cases notified, the case-mortality was about the same in the two sexes. Many slight cases probably escaped notification.

Whilst pneumonia has been known very occasionally to occur in localised epidemics, suggesting that it may sometimes act as infectious disease, it does not usually spread from the sick to the healthy, and it is customary for cases to be treated in the general wards of hospitals. There are some authorities who recommend that it should be regarded as a potentially infectious disease and treated in separate wards apart from other diseases. The time may come, therefore, when it will be thought advisable to admit cases requiring institutional treatment to Groby Road Isolation Hospital rather than, as at present, to the Royal Infirmary or City General Hospital.

The disease is definitely regarded as being due to a specific germ—the micro-organism usually regarded as the existing cause being known as the *Pneumococcus* of Fränkel. Other organisms, however, are also found to be present, e.g., Pfeiffer's Bacillus.

Although the disease may sometimes attack persons in apparently vigorous normal health it is more apt to attack those who are run down or debilitated, and especially persons suffering from chronic constitutional diseases such as diabetes, nephritis, or pulmonary tuberculosis. It may also supervene after accident or injury or exceptional exposure. It is frequently a terminal cause of death in the aged and infirm. Indeed, because death from pneumonia is usually swift and comparatively free from physical suffering, it has been called the "old man's friend."

The case-mortality from the disease varies greatly and depends largely upon the particular type of pneumococcus that is present. Four distinct types are recognised.

Thus, with types 1 and 2	..	..	..	25-30 per cent.
.. type 3	..	..	..	50 ..
.. .. 4	..	..	..	12 ..

The prognosis is particularly bad in the subjects of chronic alcoholism.

Pneumonia is broadly divided into lobar pneumonia, to which the above remarks chiefly apply, and which may occur at any age, and broncho-pneumonia, which is most common in young children. The latter form often occurs as a complication of measles and whooping cough. A certain number of such cases are admitted to the Groby Road Hospital, the figure last year being 18.

THE COMMON "COLD."

Undoubtedly, the common "cold"—or, to give it a better name, coryza—is a cause of a vast amount of illness. Although it does not often prove fatal in itself, it is indirectly responsible for heavy mortality by predisposing to and preparing the way for more fatal illnesses such as bronchitis and pneumonia.

Our knowledge of the etiology of this very common complaint is still most incomplete. We know that it tends to increase in prevalence as the winter advances, but an attack may occur at any time of the year. The belief that there is a connection between exposure to cold air and invasion by a "cold" is widely held but is of doubtful validity. Arctic explorers suffer little from "colds." It is highly probable that when we develop a "cold" after sitting in a hot, crowded and badly ventilated room and then going into cold fresh air outside, it is the hot room rather than the cold air which is to blame.

Many people are afraid that if they go out into the cold air without a hat on they will "catch cold," but there is no evidence—so far as the writer is aware—that those who habitually do not wear hats—members of the so-called "no-hat brigade"—suffer any more than do those who habitually wear hats. It is highly probable that they suffer less.

Similarly, those who habitually go about in cold weather without an overcoat are probably no more prone to "colds."

Coryza, or the common "cold," is undoubtedly a germ disease due to invasion of the upper respiratory tract by certain more or less specific bacteria. Infection, therefore, certainly plays a part, as also does that illusive something which we call personal resistance or immunity. It is common experience that one may frequently be in the company of someone suffering from a "cold" and not catch it, and then a little later on in the season, one may develop a bad "cold" without having knowingly been closely exposed.

A good deal of research work has been and is being done on the subject, and it is to be hoped that some day we may be able to do something effective to protect people against this scourge.

One aspect recently investigated in America was as to whether certain people may be regarded as being permanently more susceptible or more immune to "catching colds" than the average. Careful censuses have been made with groups of individuals, e.g., college students, the number of "colds" suffered from by each member of the group being recorded year by year. The results seem to show that whilst certain individuals in any given year may suffer more or less than the average, there was little evidence that this susceptibility or immunity was stable and would persist over a series of years.

As to the steps that can be taken to "ward off" a cold when one feels it coming on, most people have their own favourite prescriptions, but the fact that there is no unanimity as to what is the best thing to do should make us cautious in putting too much faith in any of them. If there is reason to think that a really "bad cold" is coming on, certainly the wisest step, when it is practicable, is to stay in bed. It is much wiser to "lie up" too soon than too late.

RHEUMATISM.

The group of affections included under the above name is now beginning to seriously engage the attention of public health authorities, and it is well that this should be so for they constitute between them one of the most serious factors in the production of ill-health. For this reason I have thought it well to deal with this subject at some length.

Nomenclature.

It is unfortunate that the one name "rheumatism" covers a number of very different, though possibly allied conditions. Thus, in practice, there is a wide gulf between a child suffering from "rheumatic fever" and an old man or woman with "rheumatoid arthritis."

Perhaps it will be well, therefore, to quote here the classification of Rheumatism adopted by Dr. Allison Glover, a recognised authority on this subject:—

- | | |
|----------------------------------|---|
| "A." The Acute Rheumatic Group | (1) Acute rheumatism
(2) Sub-acute rheumatism
(3) Muscular rheumatism |
| "B." The Fibrositic Group | (1) Lumbago
(2) Sciatica and brachial neuritis |
| "C." The Chronic Arthritic Group | (1) Rheumatoid arthritis
(2) Osteo-arthritis
(3) Gout
(4) Unclassified arthritis |

Group "A" occurs chiefly in childhood, whilst "B" and "C" are commonest in adults.

For the practical purposes of prevention and treatment Group "A" on the one hand, and Groups "B" and "C" on the other, constitute two essentially different problems, and it will be well therefore to deal with them separately.

1. RHEUMATISM IN CHILDHOOD.

Neither the name "rheumatic fever" nor "acute rheumatism" is quite satisfactory because there may be no rise of temperature, i.e., no "fever," and many of the cases are not what is usually understood by acute, being insidious and continuing with recurrent attacks for long periods. Since the affection of the heart is such an outstanding characteristic, the term "cardiac fever" has been suggested, but here again the objection may be raised that in some cases the heart is not affected, whilst in others the most obvious symptom relates to the nervous system, viz., the condition known as chorea, or St. Vitus' Dance.

So for the present the best name is probably the one used above, viz., "Rheumatism in Childhood," with the proviso that it is not necessarily limited to childhood.

Rheumatism in childhood has, in recent years, been made the subject of two Government Reports, one issued by the Ministry of Health in 1927, entitled "Acute Rheumatism in Children in its Relation to Heart Disease" (Reports on Public Health and Medical Subjects No. 44), and the other issued by the Medical Research Council, also in 1927, entitled "Child Life Investigations. Social Conditions and Acute Rheumatism."

Both are important and authoritative documents, and in view of the interest now being taken in this subject it will be well to make some further reference to them.

1. Ministry of Health's Report.

This begins with a Prefatory Note by Sir George Newman, in which he says :—

"The national importance of rheumatism cannot be doubted. It is, in its various forms, one of the most insidious, disabling and mortal of all the great diseases. . . . The gravity of acute rheumatic fever in children lies in two facts. First, it is a serious illness in itself, which entirely disables the child ; and secondly, it tends to produce permanent injury to the heart, which may terminate life prematurely or produce life-long invalidity. It is only by the early, continuous and thorough treatment of this infection that we can hope to save life or prevent crippling. There is, perhaps, no more striking example of the importance of dealing with the beginnings of disease."

Sir George goes on to point out that of all patients in hospital suffering from heart disease, the cause is definitely acute rheumatism

in approximately 90 per cent. of those under ten years of age. The proportion falls, however, with increase in age, and after middle age, other causes, viz, arterio-sclerosis, Bright's disease, syphilis, and senility begin to play an important part. But before the age of forty almost every death from heart disease (except a few due to congenital causes) may be attributed directly to rheumatic infection.

The number of children who receive in-patient treatment for acute rheumatism, chorea, and rheumatic carditis is estimated to exceed 2,000 per annum in London alone. But Sir George doubts if there is sufficient accommodation available to give adequate treatment even for children in the acute stages on account of the shortage of hospital beds. Owing to this, children admitted to general and children's voluntary hospitals cannot be retained long enough to ensure a sufficient period of convalescence to prevent relapse or heart-involvement.

Etiology of Acute Rheumatism.

There is still much uncertainty as to the factors which influence the incidence of acute rheumatism. The general view now is that it is a "germ" disease, and there is considerable evidence that the causal organism is a specific streptococcus either acting alone or in conjunction with some other organism. Some authorities believe that this streptococcus is of a highly specialised strain belonging to what is known as the *viridans* group, but the evidence is not conclusive.

From the point of view of prevention a most important question arises: Is the disease infectious or contagious? It appears to be established that the disease tends to run in families to some slight extent, i.e., it has been found to be rather more common in the parents and brothers and sisters of a rheumatic child. This might point to inheritance of the disease or of some special tendency, or it might indicate similarity of environment, and not necessarily be due to actual contagion.

Referring to this question, Poynton and Schlesinger in their book on "Recent Advances in the Study of Rheumatism," write as follows:—

"The question of contagion naturally arises from these observations. Such a theory needs very careful investigation, particularly as a wide-spread campaign is now in progress against the disease. At present the medical world is not even agreed as to the exact nature of rheumatic infection. To declare it contagious without sufficient proof would do much harm by unnecessarily raising a scare amongst the public, and when housing resources are so often inadequate, add con-

siderably to the difficulties of the practical management of the rheumatic patient. The experience of the London hospitals is definitely against the theory, for although rheumatism is so common that it is not unusual for one third of the patients in a children's ward to be suffering from various stages of the disease, there is no evidence whatever that the infection spreads to others who are not rheumatic."

On the other hand, local epidemics have occasionally been reported, especially in institutions, which have been somewhat suggestive of contagion.

In this respect there would seem to be an analogy with such diseases as cerebro-spinal fever and poliomyelitis which are both believed to be "germ" diseases ; both occur sometimes in epidemics, but neither of them appears to be infectious from the sick to the healthy under ordinary circumstances. Until recent years both these diseases were freely treated in the wards of general hospitals—and indeed are still often so treated—yet without spread to other patients.

Social Conditions.

Another important question is as to the effect social conditions may have in influencing the incidence of the disease. This was made the subject of special investigation by the Medical Research Council, and the results are embodied in their report, "Social Conditions and Acute Rheumatism," already referred to. The findings of this report were given in my Annual Health Report for 1931, but it will be well to briefly recapitulate them.

Two series of cases were taken and compared : (1) a series of rheumatic cases ; and (2) a series of non-rheumatic cases drawn from the same social class and reasonably comparable.

Maternal Care.—This was found to be significantly less good in the rheumatic than in the control families.

The degree of subjection to exposure.—This was greater in the rheumatic group—as might be expected owing to the inferior maternal care—but the exposure suffered by the children was apparently not gross.

Clothing.—The rheumatic families appeared to be less well clothed than the control families, but the standard of clothing was on the whole remarkably good.

Habits of the parents.—As regards the character of the parents, the proportion with alcoholic tendencies was definitely greater in the

rheumatic group ; also general condition as regards health was significantly worse.

Housing Conditions.—Not much difference was found beyond the fact that there appeared to be a slightly higher proportion of rheumatic families living in badly lighted rooms, but the difference “cannot be considered significant.”

Sanitation.—The Glasgow observers found a decidedly higher proportion of rheumatic families living in houses where the sanitary arrangements were not good, but this difference could not be detected in the London data, where the sanitary conditions were on the whole good in both types of families.

Elevation.—Some evidence to show that a higher proportion of rheumatic families live in houses under fifty feet above sea-level.

Social Status.

“There appeared to be no difference of any significance between the social standing of the rheumatic families and that of the control families, nor in their general conditions of life, the proportions living under bad conditions being identical in the two types of family.

“The cleanliness of the rheumatic children appears to be equal to that of the non-rheumatic, and no evidence of a higher proportion of verminous children could be found among the rheumatic families.”

On the other hand, in Kensington, where acute rheumatism has been a notifiable disease for over three years, the Medical Officer of Health (Dr. J. Fenton), who has given special attention to this subject, finds that there is a much heavier incidence of the disease in North than in South Kensington, the social conditions in the latter being much superior. He states in his Special Report on the Rheumatism Scheme for Kensington for 1930-31, “The enlarged statistics, therefore, continue to support the view of Dr. Alison Glover, who holds that the incidence of acute rheumatism increases directly with poverty, malnutrition, overcrowding and bad housing, and do not support those who hold that the incidence is greater in the artisan class, or in those just above the poverty line rather than in classes below that line.”

Dampness.

Dr. Fenton further states that he can find no definite connection between acute rheumatism and dampness, or between rat infestation or soil and rheumatism.

The Medical Research Council's Report (p. 96) states : "Dampness, which has generally been credited with playing a large part in the causation of rheumatism was only slightly more frequent in the houses of the rheumatic families than in those of the others."

In this connection it is noteworthy that acute rheumatism is fairly common in Egypt, a country characterised by its exceptionally dry climate at most periods of the year.

It may also be mentioned in this connection that the men in the trenches during the Great War, who often lived for months at a time under conditions of the most extreme dampness, did not suffer from rheumatism as would have been expected if the old view about dampness and rheumatism had been correct.

Seasonal Influence.

The incidence of acute rheumatism, like that of pneumonia, scarlet fever, and several other diseases, would appear to increase in autumn and be higher in winter than in summer.

Tonsillitis and Acute Rheumatism.

One important point in connection with the etiology of the disease is the fact that a large proportion of cases give a history of an attack of tonsillitis preceding the onset of acute rheumatism. This fact is well attested, and it is generally supposed that the infection of acute rheumatism gains admission to the system through the tonsils during the attack of tonsillitis. For this reason removal of the tonsils has been recommended as a safeguard against acute rheumatism. Unfortunately, the results of tonsillectomy have been rather disappointing in this respect, and acute rheumatism has frequently been found to develop in spite of a previous operation for the removal of both tonsils and adenoids, although there is some evidence that the attacks have been less severe than when the tonsils have not been removed. Removal of the tonsils is often recommended *after* an attack of rheumatism has already occurred, presumably with a view to preventing re-infection, but unless the tonsils are clearly abnormal such a course is of doubtful value. At the present time the operation of removal of the tonsils, whether in rheumatic or other cases, is being less frequently advised than was formerly the case.

Experience of Poor Law Institutions.

The belief that bad hygienic conditions play an important part in predisposing to acute rheumatism is supported by the fact that whilst

the disease is comparatively rare amongst the well-to-do classes, it is also rare amongst children in poor-law institutions where, presumably, the general hygienic conditions—food, clothing, housing and care—are better than amongst the houses of the poor. Certainly, this experience is against the view that the disease is due to bad heredity.

It is rather surprising that it has not been found possible to demonstrate much, if any, connection between acute rheumatism and overcrowding, nor with bad lighting or ventilation ; and dampness, which as has already been stated, is usually credited with playing a large part in the causation of rheumatism, is, according to the latest investigations, a not very important factor.

Steps to be taken to Combat Acute Rheumatism.

Coming now to the practical steps which may be taken by local authorities to combat acute rheumatism, these may be discussed under three main headings :—

1. Improvement of Housing Conditions ;
2. Provision of Rheumatism Supervisory Centres or Clinics ;
3. Provision of Institutional Treatment.

1. Taking the last mentioned first, it is now recognised that it is most important that any child attacked by the disease should be at once put to bed and kept at rest under skilled supervision for a prolonged period which may run into several months. Such treatment can rarely be provided in the houses of the poor so that some form of institutional treatment is essential. Voluntary general hospitals can very rarely spare beds for this purpose. A few special voluntary homes for these cases exist here and there but are quite insufficient for the needs. So that the duty devolves upon local authorities to provide the necessary accommodation, either in *ad hoc* homes or hospitals, or in municipal general hospitals. It is the latter solution which has been adopted in Leicester. During the year under review, two wards at our City General Hospital, each accommodating thirty patients, have been reserved for these cases and no difficulty has been found in filling them. A good many cases have been sent in from the Out-Patient Department of the Royal Infirmary, and others by private practitioners. It is too soon yet to talk about results, but it may safely be said that the experiment is well worth trying and certainly hopeful.

Provision of Rheumatism Supervisory Centres.

In addition to in-patient treatment it is clearly desirable that some form of out-patient treatment should be provided, and to meet this

need there is a movement for the establishment of special out-patient clinics which are known as Rheumatism Supervisory Centres. These are in charge of skilled medical practitioners or consultants who take a special interest in rheumatism. Sessions are held as often as necessary, say, once a week. The functions of such a centre are as follow :—

(1) To assist in the early diagnosis of rheumatism in children, and to help to secure institutional treatment where necessary.

(2) To exercise continuous supervision for as long as may be necessary over patients who have been discharged from institutional treatment, and over cases who have reached the chronic stage, whether they have been to an institution or not.

(3) To act as a "clearing house" for rheumatic cases for the district.

It will often be best for such a centre to be held at or in conjunction with an existing hospital. In Leicester the Royal Infirmary would probably be the most suitable institution.

Co-operation of General Practitioners.

A third step which should be taken is to invite the close co-operation of all medical practitioners. The fact that beds have been provided justifies the Health Committee in inviting such co-operation. The great importance of early recognition of the disease, even in the slightest case, needs to be emphasised.

2. CHRONIC RHEUMATISM.

Having devoted so much space to acute rheumatism it must suffice to make a comparatively brief reference to the chronic forms of the disease, of which chronic arthritis (rheumatoid arthritis and osteoarthritis) is the chief.

This was made the subject of a special report by Dr. J. Alison Glover for the Ministry of Health (No. 52, 1928).

Chronic arthritis is responsible for a vast amount of suffering, invalidity and incapacity for work, and it makes an immense drain upon National Health and Unemployment Insurance Funds. In contra-distinction to the acute form of rheumatism, which is commonest amongst the young, it chiefly affects middle aged and old people, and (apart from gout) it is commoner in women than in men. Its causation is very obscure and probably many factors may play a part. In a certain proportion of cases some hidden septic focus is to blame

and the removal of this may effect a speedy cure, though not always. Apart from this the affection is apt to be very resistant to treatment.

The treatment of chronic arthritis involves various forms of *physico-therapy*, i.e., the application of heat, light, electricity, water (various forms of baths and douches), combined with massage, physical exercises, etc. All this entails complicated and costly apparatus and equipment, as well as highly skilled supervision and attendants.

For this reason the efficient treatment of chronic arthritis is necessarily expensive and calls for specially equipped institutions. Various spas have specialised in the treatment of chronic arthritis and have spared no expense in their equipment, but their charges have to be correspondingly high and this largely puts them beyond the reach of the weekly wage-earners.

To meet the needs of the latter the British Red Cross Society have, in recent years, established a most admirably equipped centre at Peto Place, London, a description of which was given in my Annual Report for 1931.

Many of the large voluntary hospitals in the country are doing excellent work, including our own Royal Infirmary, which has a separate department for physico-therapy under the charge of a special medical officer. This department is well equipped as regards the application of heat, light, electricity and massage, but exigencies of space make it difficult to do much in the way of hydrotherapy (application of water).

A suggestion has been made that an installation of Turkish, Russian and other forms of medicated baths should be provided in Leicester by the Corporation.

In Germany the treatment of rheumatic diseases has been carried much further than in this country. In addition to numerous spas there are certain general hospitals which are specially equipped for rheumatic diseases, e.g., the Rudolph Virchow Hospital at Berlin, and the Barmbeck Hospital at Hamburg. There are also certain special hospitals known as "arthritis units" which are located at a spa, such as the Landesbad at Aix-la-Chapelle. In addition, many insurance organisations have established special clinics in various centres. An example of this is the Dresden District Sick Funds Organisation. Baths and massage have been included among the benefits to members for a number of years, and in one year the amount spent on this one item exceeded one-third of the total druggists' bills.

Patients are referred to the department for specified forms of treatment by their (insurance) medical practitioner, and remain under

his control throughout the course of treatment. No treatment is given without instructions from the medical practitioner. The medical director only sees patients specially referred to him for advice.

The department is divided into the following five sections :—

- A. Hydrotherapy and massage, including hot-air treatment ; this section is stated to be particularly popular among the patients who are often anxious to continue the milder forms of treatment even when the need from a medical point of view no longer exists.
- B. Light treatment.
- C. Electro-therapy and diathermy (the latter much employed).
- D. Gymnastics and medico-mechanical section.
- E. Inhalatorium.

In one year there were 150,454 attendances, and 202,656 treatments were given, made up as follows :—

Baths and massage	..	..	..	89,578
Light	..	..	..	48,359
Electrical	..	..	..	47,187
Gymnastic, etc.	..	..	..	8,423
Inhalation	..	..	..	9,109
				202,656
				Total 202,656

Similar arrangements exist at Mainz, Strasbourg, and Berlin.

Notification of Acute Rheumatism.

The experiment of making acute rheumatism a notifiable disease is being, or has been, tried in certain places, notably Kensington, Paddington and Holborn in London, and also in Edinburgh. Whilst there is a good deal to be said for such a step it is too soon, as yet, to come to any definite conclusion as to its value.

In Kensington the number of cases notified has been as follows :—

1927-28	..	95 cases.
1928-29	..	105 ..
1929-30	..	95 ..
1930-31	..	66 ..
1931-32	..	41 ..
		402
Total	..	402

The Medical Officer of Health for Kensington suggests that a partial explanation of the falling off is that at the outset the figures would include a number of cases of recurrent attacks not previously notified.

Acute rheumatism is also notifiable in Norway and in Denmark.

CANCER—MALIGNANT DISEASE.

The deaths from all forms of cancer during 1933 numbered 370, of which 176 were in males and 194 in females. This is a slight increase on the two previous years, but not more than in 1930 when the figure was 372. The rate per 100,000 population was 153.

For the past seven years, whilst the cancer deaths have remained high, they have not shown the same tendency to increase as was the case until the last few years. This is something to be thankful for.

Cancer Control Clinic.

As was reported in last year's report, the Leicester Cancer Control Clinic, which was started in 1927, was closed in May, 1933, owing to the smallness of the numbers attending. This step was taken with regret, because there is no doubt that the clinic did provide excellent facilities for anyone having symptoms suggestive of malignant disease to obtain the best possible advice free of cost. The failure of the public to make more use of these facilities is probably attributable to a psychological factor—the reluctance so many people feel to facing up to the possibility that they may be suffering from cancer. Such people often can only be persuaded with difficulty to consult even their own doctor, but to go to a "Cancer Clinic" must be even more repugnant, and seem calculated, as they think, to confirm a secret dread. In reality, of course, the clinic (in a majority of the cases which did make use of it) had the reverse effect, the patients going away happy in the assurance that the fears which were oppressing them were without foundation.

This reluctance of people to be told the truth, if they fear that the truth will spell disaster, is only natural, but is very unfortunate as regards the early diagnosis of cancer, for the one chance of escape for those who are attacked is prompt and efficient treatment, even though a serious operation is involved. In many cases, however, thanks to radium and X-rays, a major operation may not be necessary.

Bendien Reaction Serum Test.

At the same time as the decision to close the cancer diagnostic clinic was arrived at, the Health Committee, acting on the advice of

the Cancer Advisory Committee (a voluntary body composed of leading medical specialists with some lay members) decided to provide facilities for employing a new serum test—devised by Dr. Bendien and modified and improved by Dr. Cronin Lowe—for the early diagnosis of malignant disease. Arrangements were therefore made with the Royal Infirmary for specimens of blood serum from suspected cases to be sent to the Royal Institute of Public Health in London, who were undertaking the application of this test, the cost to be defrayed by the Health Committee.

This arrangement came into operation at the end of May, 1933, and from that time, up to the end of the year, a period of seven months, 18 specimens were sent. The test must be regarded as being still somewhat in the experimental stage, and its utility has still to be assessed.

TUBERCULOSIS.

The number of fresh cases notified and deaths registered during 1933 was as follows (corresponding figures for previous years in brackets):—

	Cases.	Deaths.
Pulmonary tuberculosis (phthisis) ..	438 (442)	269 (240)
Other forms	74 (69)	32 (33)
Total	512 (511)	301 (273)

The number of fresh cases notified was the lowest hitherto recorded, but this does not necessarily mean that tuberculosis was really less prevalent. The number of deaths showed an increase.

Calculated per 1,000 of the population, the phthisis death-rate for 1933 was 1.11, and the tuberculosis death-rate was 1.24. Both these figures are higher than in the previous year.

The reduction in the number of fresh cases notified is probably to some extent accounted for by changing views as regards the nature of pulmonary tuberculosis in childhood. Some of the lung cases in children formerly regarded as being tubercular in origin are not now so regarded, and this necessarily affects the notification returns. Reference was made to this at some length in the report for 1931.

Further and fuller reference to tuberculosis and to the work being done by the Health Committee in connection with tuberculosis will be found in the Reports of the Tuberculosis Officer (Appendix I) and of the Isolation Hospital and Sanatorium (Appendix II).

VENEREAL DISEASE.

Venereal diseases are, of all diseases, the most preventible. This is a statement which can be made without any hesitation or reservation. The manner in which they are communicated from person to person is well understood—there is no question of “healthy carriers” in this case—and there is no reasonable doubt that but for the frailty of mankind venereal diseases would entirely cease to exist. If all men and women could be persuaded to observe the dictates of morality, both gonorrhoea and syphilis would quickly die out. Unfortunately, it is a big “if.” The sex instinct is one of the most imperious, and human nature, at any rate in this connection, is notoriously weak. But if we have faith in the future of humanity we must at least look forward to the possibility of these diseases being eradicated.

Public Lectures.

In the meantime, a Health Committee must do all that is practicable to enlighten the public as to the physical dangers which laxity of morals and promiscuity inevitably engender, and here reference may be made to four public lectures on V.D. given by Dr. C. Hamilton Wilkie (two in December, 1933, and two in February of the present year) to males and females separately. These were well attended. The subject was dealt with very frankly and slides made from photographs of cases illustrating the disastrous physical effects produced by V.D. were exhibited.

Reference may also be made to the fact that the film, “Damaged Lives,” after being shown privately to the Watch Committee and their consent obtained, was publicly shown in Leicester. This is a carefully prepared propaganda film calculated to make a powerful appeal, and is sponsored by the British Social Hygiene Council. It was witnessed by many thousands of the public, and the effect, I believe, must have been very beneficial.

Although prevention is infinitely better than cure, much can be done by efficient treatment to minimise the damage to health caused by V.D., and for particulars of the work which is being carried on in the Male and Female V.D. Clinics at the Royal Infirmary and St. Mary's Home, reference must be made to the full and detailed reports of Dr. Bessie Symington and Dr. C. Hamilton Wilkie in Appendix VII.

Here it will suffice to give the number of fresh cases from the City presenting themselves for treatment at the Royal Infirmary during 1933 :—

			Syphilis	Gonorrhoea	Not V.D.	Total New Cases
Males	..	..	43	149	160	352
Females	..	..	70	83	85	238
			—	—	—	—
Totals	..		113	232	245	590
			—	—	—	—

The fresh cases from the County were as follow :—

Males	..	..	26	61	67	154*
Females	..	..	47	37	34	118
			—	—	—	—
Totals	..		73	98	101	272
			—	—	—	—

The above figures show a slight decline on the previous year as will be seen by reference to Table 13.

Health Certificates before Marriage.

A very desirable innovation, which is long overdue, and which would have some influence in preventing the spread of venereal disease, would be the interchange of health certificates before marriage. Dr. C. Hamilton Wilkie mentioned at a meeting of the V.D. Sub-Committee that he had had a case of a young man suffering from acute gonorrhoea who was just about to get married, and stated that owing to the bond of professional secrecy he had no power either to stop the marriage or to warn the prospective bride or her parents. There are doubtless many cases, not perhaps in the acute stage of V.D., but incompletely cured when marriage takes place, without the innocent party having any suspicion of the fact, and with disastrous consequences afterwards. An exchange of health certificates before marriage would do much to minimise this most serious evil which is, perhaps, one of the worst tragedies connected with V.D., viz., the infection after marriage of an innocent partner. This tragedy is probably much more frequent than is commonly suspected.

Definite steps ought to be taken to encourage the interchange of health certificates ; a special form of certificate should be drawn up by some representative body in which some very leading questions would be inserted as to sexual health. Of course, the existence in the family of other constitutional diseases besides V.D.—epilepsy, tuberculosis, insanity, etc.—would also be carefully inquired into. It is the obvious

* There was only one case of soft chancre from the County.

duty of each party to such a vital step as marriage to make a full declaration of everything as regards physical health likely to affect the health and well-being not only of the partner but also of any offspring resulting from the marriage. It should clearly be the right of each partner to have this information before the irrevocable step is taken. Some day one may hope that such interchange of certificates will not only be customary but compulsory. In the meanwhile, the clergy might do much to introduce this reform if they would tactfully inquire if health certificates have been exchanged before they agreed to publish banns. They may not at present have power to require it, but the mere making of such a suggestion would go a long way to bringing the reform about.

If I may make a personal allusion, I would say that I myself have had four children married, and in each case an exchange of health certificates, as indicated above, took place between the young people and their prospective partners for life.

DENTAL CARIES—DECAY IN THE TEETH.

The amount of ill-health caused directly and indirectly by bad teeth is too well recognised to need emphasis. Hitherto, lack of knowledge of the real causes of decay in teeth has deterred us from taking adequate preventive measures against this great evil.

The Medical Research Council has been carrying out important research work for several years past, and for this purpose has been employing Mrs. M. Mellanby, a skilled research worker. The third volume dealing with her work has now been published,* and the conclusions arrived at are so important that it seems desirable to make some reference to them here.

Briefly, Mrs. Mellanby regards dental caries as being primarily due to imperfect formation of the teeth. She is able to show statistically, after examining very large numbers of teeth, that those teeth with obvious gross defects in shape and structure of the enamel are far more liable to decay than perfectly normal teeth. Perfectly normal teeth are rare. These defects in the enamel have been given the name of "hypoplasia," and the affected teeth are called "hypoplastic."

The next step was to demonstrate by experiments on young animals that hypoplasia was produced in the growing tooth by a diet deficient in the particular vitamin known as D.

Acting then on the belief that a similar cause was at work in the human subject, Mrs. Mellanby has been carrying out experiments on

* Medical Research Council, Special Report Series No. 191.

groups of young children who have been given diets varying in their calcifying properties and richness in vitamin D.

The results showed that apparently it is possible, by giving an appropriate diet, to influence the amount of caries in subsequent years. It is admitted that the experiments will need confirmation on a larger scale before we can be quite sure of our ground, but the following provisional conclusions are arrived at :—

“In order to reduce substantially the incidence of dental disease, especially in temperate zones, it is necessary to introduce large changes in the diet and habits of pregnant and lactating women, of infants, and of children during the whole period of dental development and, indeed, during the whole life. The consumption of milk, eggs, cheese, animal and fish fats, and vegetables must be greatly increased, and the consumption of cereals correspondingly diminished, and for the very young abolished. Breast-feeding must be general and prolonged even up to a year or more, provided a supplementary diet is given after about six months, which should include some iron and vitamin C. Cod-liver oil or some other source of fat-soluble vitamins should be given to all infants and children.

“These, then, are the general principles of feeding which will certainly result in the formation of more perfect teeth and surrounding tissues, more regularly arranged in well-grown jaws. With better structure of dental tissues and increased resistance to bacterial invasion there is every reason to believe that both dental caries and pyorrhoea will cease to be the scourge they are at the present time.”

It is only right to say that these conclusions are not in agreement with the school of thought—of which Dr. Sim Wallace may be regarded as the leading exponent—which teaches that the most hopeful line of action for preventing dental caries is to give children that kind of food which will give the teeth plenty to do and which by its physical nature will automatically cleanse the teeth. To this school of thought soft “pappy” food is bad, whilst hard crusts, apples, etc., are good. Personally, I must admit that the theory underlying this “hard tack” policy has never seemed to me to be quite adequate to explain dental caries, but there are some difficulties also in the way of accepting the Medical Research Council’s theory of deficiency of Vitamin D as a complete explanation.

In this connection the experiences of the inhabitants of the lonely island of Tristan da Cunha are very interesting. The native diet there

consists *almost exclusively* of potatoes, milk, fish and sea-birds' eggs with animal flesh very occasionally, and a limited supply of apples. They have no flour or other cereals, and no sugar or groceries except what are sent out to them (not more than once a year) as an act of charity. Obviously, the diet is an extremely meagre one, and often the inhabitants are very short of food, yet the teeth of the inhabitants have been shown to be most remarkably free from caries—more so, we are told, than almost any other civilised community. The milk and fish and eggs would all be rich in Vitamin D., whilst the fact that no cereals are grown on the island is also significant.

Dental Clinic.—The work of the Dental Clinic carried on, by arrangement with the School Medical Service, for M. and C. W. cases, is reported on in Appendix IV.

SCABIES TREATMENT CENTRE.

The use of a hot bath is of great assistance in the treatment of this unpleasant and contagious affection. Facilities are provided in the basement of the Health Offices. The treatment given is supervised by the Medical Officer of Health.

The following figures show the number of cases treated in recent years :—

			Children	Adults	Total
1929	..	..	29	3	32
1930	..	..	25	4	29
1931	..	..	30	3	33
1932	..	..	51	9	60
1933	..	..	46	9	55

The reason for the increase in the past two years is not known. Cases are chiefly sent to us from the School Medical Service and by private medical practitioners.

PART III.

Administrative and General

HEALTH SURVEY BY MINISTRY OF HEALTH.

In January of the year under review the Ministry of Health carried out a detailed survey of all the Health Services in Leicester. For this purpose a Medical Inspector (Dr. C. J. Donelan) visited Leicester and was here for about a week. For the purpose of Maternity and Child Welfare work Dr. Jane Turnbull, and for the purpose of V.D., Colonel L. W. Harrison, D.S.O., M.B., were associated with Dr. Donelan, and they also visited Leicester for the purpose.

A brief reference to the official survey was made in the last Annual Report, but it was not until August, 1933 (some time after that report had appeared), that the report on the Survey was received.

It began by saying that "so far as could be gathered from a general survey, the (Leicester) Council were maintaining a reasonable standard of efficiency and progress in these (public health) services ;" but that there were several matters to which the Ministry thought it necessary to draw the Council's attention.

None of these was of a serious character, some were quite minor matters ; practically all of them had been discussed with the Medical Inspector at the time of his visit, and most of his suggestions had been already acted upon by the time the official report of the Ministry arrived. Incidentally, the Ministry expressed their approval of the proposal that cases of surgical tuberculosis at present treated at the Groby Road Sanatorium should be transferred to the new orthopaedic wards at the City General Hospital, and conversely that the cases of pulmonary tuberculosis at present being treated at the City General Hospital should be transferred to the Groby Road Sanatorium. This proposal, it may be mentioned, cannot be carried out until further bed accommodation is provided at Groby Road.

The Ministry also noted that in Leicester the School Medical Service is organised separately from the rest of the health services of

the city and suggested that at some future time, when changes in staff made it practicable, the Council should consider the amalgamation of the staffs and services.

There is something to be said for such a proposal, but there is also a good deal to be said on the other side, and in a city of the size of Leicester the arguments against are possibly stronger than those for. Reference to the work of the School Medical Officer's Department is made below (p. 40).

HOUSING OF THE WORKING CLASSES.

The following table shows the number of new houses which have been erected in Leicester during the past thirteen years by private enterprise and by the Corporation.

Number of New Houses Erected.*					
		By Private Enterprise		By Housing Committee	Total
		Without Subsidy	With Subsidy		
1921	..	21	87	392	500
1922	..	114	—	260	374
1923	..	135	—	84	219
1924	..	336	70	114	520
1925	..	298	239	513	1,050
1926	..	374	303	1,036	1,713
1927	..	726	265	1,590	2,581
1928	..	481	523	587	1,591
1929	..	348	680	396	1,424
1930	..	583	—	505	1,088
1931	..	632	—	372	1,004
1932	..	792	—	584	1,376
1933	..	1,085	—	62	1,147
		—	—	—	—
Total for 13 years		5,925	2,167	6,495	14,587

N.B.—Of the 6,495 houses erected by the Corporation, 2,238 were outside the City boundary.

It will be seen that in the 13 years during which post-war building has been taking place a grand total of 14,587 new houses have been built: 6,495 by the Corporation, partly inside and partly outside the City, and 8,092 by private enterprise all within the City. A large number of houses have also been built by private enterprise just outside the City.

* Figures supplied by the City Surveyor and City Housing Architect.

Shortage of Houses in Leicester.

There is still a great shortage of houses to let in Leicester at rentals within the reach of the lower paid section of the community, and by the latter term we include labourers and others not earning more than 50/- per week. It is generally agreed that it is unreasonable to expect such men to pay more than ten shillings a week for rent—even that is at least one fifth of the wages, and this is allowing nothing for tram or bus fares. For those whose *average* income, allowing for short time, etc., is less than 50/-—and there are thousands in this category—even 10/- is too much. Yet the supply of three-bedroomed houses to be had at 10/- (or even at 12/- or 13/-) is far below the demand. There are nearly always, I am informed, many more applicants than houses to let (I am speaking of the cheaper working class house), with the result that couples with large families—this being usually regarded as a point against them—experience very great difficulty in finding accommodation. Often they can only do so by taking anything they can get, and by paying what can only be regarded as an exorbitant rent. And so we arrive at the paradox that married people with large families—who for that reason have least margin for rent but the greatest need for a good house—are also for that same reason—viz., the fact that they have a large family—obliged to pay more for rent, and have to put up with an inferior and often quite inadequate house. This is a real and crying evil, but the remedy for it is neither simple or easy.

Overcrowding in Leicester.

Some reference to this has already been made on page 2. We may be thankful that overcrowding in Leicester is not comparable in amount with what exists in many places, including some of the London boroughs. But that very fact makes it all the more incumbent upon Leicester to abolish this evil—we certainly cannot make the excuse that the magnitude of the problem puts it beyond the City's resources.

There is a consensus of opinion amongst all who are interested in housing and slums that overcrowding is the worst feature of the problem. I have often had occasion to stress this, so here I will merely content myself with a quotation from a little brochure* which I have just been reading :

“So far we have said nothing of overcrowding. Overcrowding is, in its magnitude as well as in the difficulty of dealing with it, the worst of the evils connected with the housing problem. . . . Both physically and morally it has disastrous

* “Housing,” by C. M. Lloyd, M.A., published by the Fabian Society.

effects. It is not confined to insanitary houses ; it was common, long before the abnormal shortage of accommodation, in houses otherwise healthy enough, for it is obviously a result, in part at least, of poverty. There are, as there always have been, hundreds of thousands of workmen with large families unable to pay the rent required for an adequate number of rooms."

The above quotation, the truth of which cannot be gainsaid, makes it clear why the mere demolition of old houses under Clearance Area procedure is no adequate remedy for overcrowding. In any given Clearance Area, only a small minority of the houses are found to be overcrowded. The proportion in our Green Street—Sandacre Street Area was only fourteen per cent.—so that for every hundred houses pulled down and replaced by new houses only fourteen overcrowded houses were dealt with. Moreover, as very many overcrowded families are not living in areas which can possibly be dealt with as Clearance Areas, some other method of procedure is clearly necessary. I would here merely repeat that overcrowding is a great evil ; that it presents a most difficult problem ; that it is closely bound up with poverty on the one hand, and shortage of low-rental houses on the other ; and that the problem is still awaiting a satisfactory solution. It is certainly an argument in favour of the policy of reconditioning old houses that such houses can usually be let at rents substantially below the (economic) rents of new houses.

Housing, Poverty and Mortality.

An interesting study has recently been made by Dr. Percy Stocks, Medical Statistical Officer in the General Register Office, Somerset House, based on data published annually by the Registrar-General, the object being to trace the relationship between housing, poverty and mortality. That such a relationship exists is, of course, well-known, though it is not easy to separate the effect of the two first mentioned factors—housing and poverty—because people suffering from poverty naturally gravitate to the worst type of housing. But Dr. Stocks has been able to arrive at certain tentative conclusions. Thus he finds that there is a closer association of the number of persons per room with increased mortality than of the number of persons per acre. Indeed, up to middle age the importance of overcrowding of persons per room is twice as important as overcrowding of persons per acre. The largest increase in mortality as overcrowding increases is found at ages one to five, so that it is in these early years that the greatest benefit from improved housing is to be found. This, of

course, is what we have long believed and stated, but it is satisfactory to have official confirmation of it.

The policy of "Save the Children from the Slums" has long been advocated for Leicester in these reports. From the point of view of public health it is far more important to rehouse families with children than it is to disturb elderly couples.

THE QUESTION OF "VERMIN."

Considerable attention is now being given by Health Authorities to the unsavoury subject of bug-infested houses. Until recent years medical officers of health felt a reluctance (I can at least speak for myself) even to mention a word so redolent of unpleasant associations! Certainly it is the case that no member of the insect world in this country, unless perhaps it be the louse, has a more sinister and unenviable reputation.

Under ordinary circumstances, to be "lousy," or to live in a bug-infested house, implies a serious social reproach, though there are exceptional conditions where the unfortunate individual is the victim of circumstances, to be pitied rather than blamed. To some extent this is true of people living in old and dilapidated houses, though latterly, perhaps, we have been inclined to be a little too indulgent. A clean tenant who is really determined to wage war relentlessly on bugs will usually become master of the situation. I can adduce concrete evidence of this. At the same time, it must be admitted that it is very difficult to entirely eradicate these pests, and any help which the local authority can give in assisting people to get free from this nuisance ought to be readily given. Bugs are stated to be able to withstand long periods of abstinence from food. This is, no doubt, true in winter time or when the temperature is low, but in summer time and in warm weather, when they cease to be dormant and become, indeed, very active, it is probable that they are much more dependent on a food supply. This certainly appears to be the case when kept in captivity. This question of vermin is of greater practical importance than ever before because in rehousing large numbers of tenants in new houses in connection with slum clearance, steps must be taken to ensure, as far as possible, that "vermin" are not taken into the new houses along with furniture, bedding, etc.

Another matter which hitherto has not received sufficient attention is the possibility of disseminating bugs through the sale of old materials, especially wood-work, from houses demolished under slum clearance schemes. A common practice is for the owners, when called upon to demolish houses, to employ a house-breaker who will often execute the

necessary work in exchange for the old materials. These he naturally disposes of to the highest bidder. The wood-work is largely sold to be chopped for firewood. Much of it is liable to harbour not only live bugs, but also their eggs, which are so minute that they easily escape detection, especially if concealed in cracks and crevices.

The chopped firewood is retailed to householders who, unsuspecting the danger, take it into their houses where the eggs hatch out. In this way it is easily understandable how one infested house demolished may be the means of introducing this pest into many other houses.

The most effective remedy would be for the Corporation to be themselves responsible for this work of demolition, or alternatively, to purchase the old material themselves. All wood-work could then be burnt on the spot, whilst bricks and old mortar could be carted away to some tip and not used until a sufficient time had elapsed to render it safe to do so. Certainly bricks are a less source of danger than wood because old bricks are not likely to be taken into a house.

A valuable memorandum on the bed bug has recently been issued by the Ministry of Health.

Now that so much more attention is being given to this subject it is probably that more efficacious methods of eradication will be devised.

SLUM CLEARANCE.

1. Leicester has one Clearance Scheme completed, the Green Street-Sandacre Street Area, comprising 224 dwelling-houses, and nine other buildings including four lodging houses, with an area of approximately three acres. This Scheme, the official representation for which was made on 3rd October, 1930, was approved by the City Council on 28th October, 1930. The process of demolition is not yet quite completed. It is intended to utilise part of the vacant site as a bus park, but this has still to be done. The remainder of the site is still vacant.

2. A second Scheme, the Redcross Street Area, comprising 112 dwelling-houses, was approved by the City Council on 31st May, 1932. The public inquiry by the Minister of Health was held in September last (1933), but demolition has not yet (June, 1934) begun as the new houses are not yet ready.

3. A third Scheme, and by far the largest—the Wyggeston Ward Scheme, covering an area of some 48 acres—has been launched during the present year. It deals with the district between Bedford Street and Belgrave Gate. It will comprise 420 dwelling-houses to be dealt

with by Clearance Area procedure, and the rest of the area is to be dealt with by Improvement Area procedure (Section 7). Fuller particulars will be forthcoming in next year's report.

UNEMPLOYMENT IN LEICESTER.

The close connection with employment and health justifies a reference to that social sore—unemployment. Happily, Leicester is better off in this respect than many other industrial centres; indeed, Leicester has probably had less unemployment than almost any other large town.

Nevertheless, a large number of both men and women have been, and still are, out of work, and suffering much distress in consequence. To some extent, no doubt, their health has been adversely affected in consequence.

The following figures have been supplied to me by our local Employment Exchange :—

	<i>11th Jan.,</i> 1932.	<i>9th Jan.,</i> 1933.
Wholly unemployed claimants and non-claimants	8,120	10,853
Temporarily stopped claimants ..	4,303	6,784
Totals	<u>12,423</u>	<u>17,637</u>
	<i>27th June,</i> 1932.	<i>26th June,</i> 1933.
Wholly unemployed claimants and non-claimants	8,969	7,802
Temporarily stopped claimants ..	6,960	4,158
Totals	<u>15,929</u>	<u>11,960</u>
	<i>19th Dec.,</i> 1932.	<i>18th Dec.,</i> 1933.
Wholly unemployed claimants and non-claimants	9,584	6,799
Temporarily stopped claimants ..	6,407	4,275
Totals	<u>15,991</u>	<u>11,074</u>

	<i>29th May,</i> 1933.	<i>23rd April,</i> 1934.
Wholly unemployed claimants and non-claimants	8,505	6,764
Temporarily stopped claimants ..	3,415	4,130
	<hr/>	<hr/>
Totals	11,920	10,894
	<hr/>	<hr/>

The Manager of the Employment Exchange (Mr. G. I. H. Parkes) writes (April, 1934) :—

“Except for holiday periods, Easter and August, when there were slight increases, the unemployment position showed a steady improvement up to the middle of November last. For the first time since the spring of 1930 the number of unemployed men and women then fell below 10,000. The register increased between November and the first week in January, but subsequently decreased week by week until Easter, 1934.

“At the present time a further steady improvement in the building and engineering trades has resulted in the position being considerably better than it was at the corresponding period of 1933.”

SCHOOL MEDICAL SERVICE.

In Leicester the School Medical Service is administered separately from the Health Department. This has been the case ever since the former was first inaugurated 26 years ago. Dr. Allan Warner, at that time Resident Medical Officer at the Isolation Hospital and Deputy Medical Officer of Health, was appointed the first School Medical Officer and has held office ever since. Under his able administration, supported by a progressive and far-sighted Education Committee, the department has grown continuously until to-day it rivals the Health Department in the magnitude of its work and the number of staff employed.

I have before me Dr. Warner's Annual Report for 1933, and I will only say that as usual it is a record of a great amount of good work done for the health of the school children of Leicester.

The Ministry of Health, in the special Survey Report referred to on page 33, make the suggestion that “at some future time, when changes in staff make it practicable, the Council should consider the amalgamation of the staffs and services” (i.e., the Health Department and School

Medical Service). That opportunity will come before very long so that reference to the question even now is hardly premature. It is a matter which merits, and will, no doubt, receive very careful consideration from both the Health and Education Committees, but there is one fact to which I, as Medical Officer of Health, can testify, and that is that the existing arrangement has worked quite satisfactorily. The development of the School Medical Service has progressed most remarkably, as stated above, and the relationship and co-operation between the two departments has been all that could be desired. There has been no friction, and I think I may also say that there has been practically no overlapping.

LIGHT CLINIC.

That ultra-violet light ("artificial sunshine") has a definite place in therapeutics in suitable cases may now be taken as definitely established, even though it may not do all that enthusiasts claimed for it when it was first introduced. Most new remedies have had extravagant claims made for them in the first instance, and it is only after prolonged experience that their true value can be assessed.

Certain affections of infancy and early childhood have proved to be specially suitable for treatment by ultra-violet rays, e.g., cases of rickets, malnutrition and debility.

A special light clinic was provided by the School Medical Department at Richmond House, acting in conjunction and co-operation with the Health Department, in 1930, so that it has now been in operation for three years. The Health Committee bear their share of the cost (according to use), but the management of the clinic is in the hands of the School Medical Department, the medical supervision being given by Dr. T. A. Carson, under Dr. Allen Warner.

The following particulars are taken from Dr. Warner's Annual Report for 1933 :—

"Two long-flame Arc-lamps are used, the course of treatment lasts three months, the patients attend twice weekly and the maximum exposure is forty minutes. After an interval of three months another course is generally given."

Particulars of the results of treatment will be found in Dr. Humphrey's report in Appendix IV.

MILK SUPPLY.

Speaking generally, the milk supply of Leicester may be regarded as fairly satisfactory with the important exception, common to about

all milk supplies other than graded milk, viz., that we cannot guarantee its freedom from tubercle bacilli of bovine origin. Even in this respect, however, the figures for the past year were definitely better than ever before, for although the number of samples of milk submitted to the inoculation test was the largest hitherto—171 as against 122, previously the highest figure—in only one sample were tubercle bacilli found. If we could be sure of this satisfactory figure being maintained we should indeed have cause for gratulation. The drop has been so sudden, however, that we must not be too sanguine. The figures for the previous years are set out below :—

1926	..	..	48	7	14.6
1927	..	..	73	4	5.5
1928	..	..	120	6	5.0
1929	..	..	120	9	7.5
1930	..	..	86	4	4.6
1931	..	..	120	13	9.8
1932	..	..	122	12	10.8
1933	..	..	171	1	.6
			—	—	—
Total	..		860	56	Average 6.5
			—	—	—

As regards dirt in milk, though this is very objectionable, it is not a positive danger like tubercle bacilli. It certainly shows improvement and no case was reported upon for gross contamination. This indicates that milk producers are now exercising more care, at least as regards the removal by filtration of visible dirt which has gained access to the milk, or, as one likes to think, by more careful and cleanly methods of milking, so keeping dirt out of the milk.

As regards bacterial counts, which depend chiefly upon (a) the amount of dirt gaining access to milk during milking and (b) the efficiency of the sterilising of utensils—milk pails, churns, coolers, bottles, etc., the results of the bacteriological examinations made by the City Analyst (see Table D, page 136) show that the figures for the past year were reasonably good as compared with the year before.

Pasteurisation of Milk.

Although there is still some difference of opinion, the consensus of expert opinion amongst sanitarians seems to be coming round to the view that the most satisfactory way to secure a universally "safe" milk is by compulsory pasteurisation. The opposition of the milk trade—or more correctly of a section of the milk trade—should not be allowed

to outweigh the definitely expressed opinion of those whose primary concern is the public health. That there are practical difficulties must, of course, be admitted, but most difficulties are capable of being overcome, and other countries have succeeded in overcoming the difficulties in the way of pasteurisation.

METEOROLOGY.

The rainfall and mean temperature for each month of the year under review are given in Table 24. The outstanding feature of the year was the unusually fine and hot summer and the very low rainfall—only 21 inches against an average of 27 inches during the previous ten years. The hot summer was very delightful and, in the absence of any epidemic, was certainly conducive to good health. The latter feature—the low rainfall—followed, as it has been, by abnormally low rainfall during the present year, 1934, is causing serious anxiety to water authorities throughout the country. Leicester is very fortunately placed compared with many places owing to the large supply which we are able to draw from the Derwent Water Board. But even in Leicester it has been necessary to impose certain restrictions, and to appeal to the public to be as sparing as possible in the use of water.

CREMATION.

The number of cremations taking place at the Leicester Crematorium during the year was 122, as compared with 94 in the previous year. This brings the total number of cremations carried out, since the opening of the Crematorium in 1902, to 1,273, but during the first 13 years only 142 cremations were carried out. The apparatus was then entirely remodelled and a new type of furnace (coke burning) installed. This was brought into use in August, 1914, and from that time until 31st December, 1933, 1,131 cremations have been carried out.

Of the 122 cremations during the year under review, 64 were from the City, the rest being from surrounding areas. Up to three years ago a large number of cremations were of bodies from the Nottingham area, but now that Nottingham has its own crematorium, these cases naturally go there. This caused a temporary reduction in the number of cremations at Leicester, but allowing for this the number is steadily increasing year by year. During the past year, 1933, the number of cremations had practically overtaken the highest number reached (in the year 1929) before the Nottingham Crematorium was opened. The number of cremations from Leicester was easily the highest hitherto recorded.

Disposal of the Ashes after Cremation.

Since the creation of the "Garden of Remembrance" at the Gilroes Cemetery, the method of disposal of the ashes by scattering has grown rapidly in favour, and it is now the most popular method. Last year the figures were :—

Scattered in "Garden of Remembrance" ..	77
Otherwise disposed of (in graves, niches, etc., at Gilroes)	9
Removal for disposal elsewhere	36
	—
	122
	—

Classification of Persons Cremated during the year.

Professional :

Clergymen and Ministers	4
Solicitor	1
Medical Practitioners	3
Schoolmasters	7
Various	4
Trade and Commerce	22
Weekly wage earners	8
Women (housewives, etc.)	47
Children	3
Various occupations	17
No occupation (independent means)	6
	—
	122
	—

Cremation throughout Great Britain.

There are now 24 British crematoria and the total number of cremations carried out last year was 7,480, as compared with 6,315 and 5,195 in the two previous years, an increase of 18 per cent. in twelve months.

Full details of the working of the Leicester Crematorium will be found in the annual report of the Superintendent Registrar (Mr. A. C. Addison) from which the above facts have been extracted.

Amongst other interesting items, Mr. Addison mentions that during the year it happened three times that three cremations occurred on the same day, and on one day there were four, the latter constituting a record.

PUBLIC INSTITUTIONS OF LEICESTER FOR THE CARE OF THE SICK.

A brief statement is given below of the public institutions for the care of the sick in Leicester.

I. VOLUNTARY.

Leicester Royal Infirmary.

This is a first-class general hospital, with 475 beds (297 surgical), which serves the needs of the City and County and surrounding districts. It is admirably equipped, including an up-to-date radiological department. The institution possesses 498 milligrammes of radium which is not only available, free of charge, for patients in the institution, but can be hired out under certain conditions. Patients are admitted on a subscriber's recommendation.

The Royal Infirmary is the premier charitable institution for the care of the sick in the district.

The Leicester Faire Hospital.

Intended to meet the needs of those who prefer to pay for their accommodation, but are not able to afford the usual fees of private nursing homes. It has 40 beds, and patients pay both for residence and for operations according to an approved scale. The terms are very moderate.

The Fielding Johnson Private Hospital.

This was the gift to the City of the late Mr. T. Fielding Johnson. It is a high-class, completely equipped, private hospital run on a self-supporting basis, doing the work usually done by private-venture nursing homes. It can accommodate 48 patients, including maternity cases. It is controlled by a Committee, on which the medical profession are well represented. The fees (for residence and nursing) are considerably higher than at the Faire Hospital.

Highfield Hospital.

Fourteen beds. This is really a nursing home, managed by a Committee and partly supported by voluntary subscriptions. The fees paid by patients are much the same as those at the Faire Hospital.

The Leicester and Leicestershire Maternity Hospital, Causeway Lane.

During the year an important extension scheme has been completed which has provided a new administrative side and greatly improved accommodation for the staff, besides increasing the number of beds by 16, bringing the total up to 36. The Institution has always been very popular and well managed, and now that it has been so greatly improved structurally, it takes its place as a first-class maternity institution. It caters for women of the working class, and is available for both City and County. It receives grants from both the City and County Council, but is chiefly supported by patients' payments supplemented by a voluntary subscription list.

II. MUNICIPAL.

The Isolation Hospital and Sanatorium, Groby Road.

Provides accommodation for 340 beds, as follows :—

Infectious Diseases	..	..	142
Tuberculosis	..	..	148
Anstey Lane Branch Hospital	..		50
			—
			340
			—

The Anstey Lane Branch Hospital is used for smallpox when that disease is present in the City. At other times, it is used for chronic pulmonary cases in children.

The Groby Road Institution stands in the front rank of similar institutions and is thoroughly up-to-date. It possesses a very completely equipped radiological and ultra-violet light department.

A scheme for a new Nurses' Home has just passed the City Council, and this is to be followed by a further scheme to provide 100 additional beds for patients.

For further particulars see Appendix II.

Convalescent Branch Sanatorium:

In connection with the Groby Road Sanatorium there is a convalescent home or branch sanatorium, "Home Place," Holt, Norfolk, which provides accommodation for 26 patients in delightful surroundings near the sea. This institution was purchased and equipped by a voluntary fund (Health Week Committee Fund), but is maintained by the Corporation as a supplementary institution for the treatment of tuberculosis.

The City General Hospital, Gwendolen Road.

This institution was formerly the Poor Law Infirmary for Leicester, but in April, 1930, it was taken over by the Corporation and appropriated as a public health hospital. It now takes its place as a first-rate general hospital working in co-operation with and supplementing the work of the Royal Infirmary. There are 506 beds (excluding balcony beds), and all classes of diseases (other than mental cases), both medical and surgical, and at all ages, are admitted. There is a maternity block of eight beds, and recently an excellent orthopædic department (56 beds) has been created under a special orthopædic surgeon. Structural alterations have recently been carried out to those wards which are being devoted to orthopædic cases.

Patients are admitted on the recommendation of a medical practitioner and are assessed for payment according to their means.

A visiting consultant staff has been appointed and the resident staff strengthened.

For fuller particulars see Appendix III.

The City Maternity Home, Westcotes Drive.

This institution provides accommodation for 26 beds. It is delightfully situated in its own grounds. The fees for ordinary patients are very low and only partly cover the cost. Private patients are admitted at fees calculated to cover the whole cost. Patients from the County are admitted so far as there is room, but at somewhat higher fees than from the City. In connection with the institution an ante-natal clinic is held twice a week.

City Mental Hospital, West Humberstone.

The number of beds is about 1,000, and paying cases are admitted in addition to ordinary cases.

An Out-Patient Clinic for Nervous Ailments is held on Thursday afternoons, when cases referred by their medical attendant are seen and advised.

Institution for Mental Defectives, Leicester Frith.

This institution is situated in park-like surroundings about three miles out of Leicester. It provides excellent accommodation for 277 patients, males and females. It is controlled by the Mental Deficiency Committee of the Corporation.

THE LEICESTER AND COUNTY SATURDAY HOSPITAL SOCIETY.

This Society, besides making large financial grants to the Royal Infirmary, maintains several Convalescent Homes, the most recent and also the most important being Overstrand Hall, near Cromer. At present this provides 50 beds for women, but an additional wing to provide 50 beds for men is about to be erected. This Institution, which has only just been opened, is beautifully situated in spacious grounds, surrounded by trees and spreading lawns, near the sea, and may be described, without exaggeration, as the "last word" in Convalescent Homes. When the new wing is completed the present Convalescent Home for men at Desford will be closed.

The Society also maintains a Children's Convalescent Home—Roecliffe Manor—on the Charnwood Forest.

The Society's funds are derived from the voluntary weekly contributions of wage-earners in the City and County, which, during the year 1933, totalled the truly magnificent sum of £49,555. This was £1,472 in excess of the previous year, and easily created a new record.

Report on the Tuberculosis Dispensary for 1933

By WYVILLE S. THOMSON, M.D., D.P.H., Edin.,
Tuberculosis Medical Officer.

Premises.

The Tuberculosis Dispensary, situated at 59, Regent Road, is the centre for dealing with all work in connection with Tuberculosis in the City. The premises to which removal was made from the Health Department, in Grey Friars, in February, 1930, are much larger than those formerly occupied. Though not so centrally situated and rather noisy owing to the large amount of traffic now diverted this way, they are proving very satisfactory.

Staff.

There has been no change in the Medical Staff, the medical work having been carried on by Dr. Thomson with the half-time assistance of Dr. Lawrie. No change during the past twelve months has taken place in the nursing staff, which consists of three fully trained nurses, each being responsible for the visitation of one third of the City.

The clerical work is still in the capable hands of Miss Heaton, who is assisted by Miss Breward.

Notification Register.

Tuberculosis being a notifiable disease, all persons suffering from it must be notified, and their names entered in the register. The notification Register is kept thoroughly up to date. As soon as a patient dies, the name is removed from the Register. Similarly when a patient recovers, and can no longer be regarded as suffering from Tuberculosis, the name is removed. Then, if a patient removes to another area (when the Medical Officer of Health for that area is notified) the name is removed from the Register. The result is that only those living in the City, suffering from tubercular disease, are retained on the Notification Register.

The following are the figures on the Notification Register on December 31st, 1933 :—

PULMONARY.			NON-PULMONARY.			TOTAL CASES
Males	Females	Total	Males	Females	Total	
1,301	1,398	2,699	150	134	284	2,983

Notifications.

The number of persons notified as suffering from Tuberculosis during the past year was 512—practically the same as in 1932 when 511 were notified. The pulmonary notifications numbered 438 (the lowest figure ever recorded) being 4 less than in 1932, but the non-pulmonary numbered 74, 5 more than in 1932.

Of the 438 pulmonary notifications, 84 were reported by your Tuberculosis Officer and 18 of the 74 non-pulmonary cases.

Eighty-three per cent. of all patients notified had either been examined at the Dispensary and reported on to their doctors, or had had their sputum examined by the Tuberculosis Officer and reported on, before notification.

The following table gives the numer of notifications since 1918 —

1918	....	Pulmonary, 746 ;	Non-pulmonary, 82 ;	Total, 828
1919	....	.. 658 ;	.. 47 ;	.. 705
1920	....	.. 572 ;	.. 59 ;	.. 631
1921	....	.. 497 ;	.. 105 ;	.. 602
1922	....	.. 566 ;	.. 43 ;	.. 609
1923	....	.. 692 ;	.. 71 ;	.. 763
1924	....	.. 725 ;	.. 65 ;	.. 790
1925	....	.. 606 ;	.. 77 ;	.. 683
1926	....	.. 650 ;	.. 77 ;	.. 727
1927	....	.. 700 ;	.. 80 ;	.. 780
1928	....	.. 668 ;	.. 117 ;	.. 785
1929	....	.. 657 ;	.. 77 ;	.. 734
1930	....	.. 582 ;	.. 66 ;	.. 648
1931	....	.. 511 ;	.. 61 ;	.. 572
1932	....	.. 442 ;	.. 69 ;	.. 511
1933	....	.. 438 ;	.. 74 ;	.. 512

The following table gives the sex and age period of those notified during 1933 :—

Age Periods	0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 & up	Total
Pulmonary												
Males ..	1	—	1	6	22	31	48	37	42	28	12	228
Females ..	1	2	1	7	34	40	61	28	25	6	5	210
Non-pulmonary												
Males ..	1	11	7	9	1	2	5	2	1	1	—	40
Females ..	2	6	8	4	7	1	3	2	1	—	—	34

Deaths.

The deaths for 1933 are rather higher than last year, there being 269 Pulmonary and 32 Non-pulmonary—a total of 301.

For 1932 the figures were : Pulmonary 240 and non-pulmonary 33, total 273.

There has therefore been an increase of 30 deaths, of which 29 were due to Pulmonary disease and 1 to non-pulmonary disease.

Thirty-three children under 15 years of age are included in the 301 deaths. Of these 12 died from Pulmonary and 21 from non-pulmonary tuberculosis. Two more children, just over 15 years of age, died from pulmonary tuberculosis.

Last year the deaths of children under 15 years totalled 23 (5 pulmonary and 18 non-pulmonary). There has therefore been an increase of 10 deaths of children (7 pulmonary and 3 non-pulmonary) in 1933 as compared with 1932. This is disappointing as of recent years the tendency was towards a steady decline in deaths of children of school age.

Adolescent phthisis, which is generally acute and rapid, shows no signs of diminution. During 1933, 84 persons (53 females and 31 males) over 15 years of age and under 30, died of Pulmonary Tuberculosis. It is especially for such cases that we wish for prolonged Sanatorium treatment together with Artificial Pneumothorax and regular refills, as this method of treatment undoubtedly offers the best prospects of recovery.

In view of the greatly improved housing conditions and higher standard of life of the working classes, we may confidently look for a gradual decline in the deaths from tuberculosis. But in order to accelerate this, greater provision should be made for the institutional treatment of advanced and highly infective cases, who, where they are

a source of danger to others, should be retained in institutions until they die.

The number of deaths from tuberculosis in previous years is given in Table 5 (see Appendix VIII).

An analysis of the **Pulmonary** deaths which occurred during 1933 shows, in the first portion of the following tables those who had had institutional treatment, the stage of the disease when first examined and the length of time elapsing between notification and death. In the second portion of the table similar information is given about those who had not had institutional treatment. In the third portion details are given of those who were never examined at the Dispensary—chiefly patients in other institutions, e.g., Mental Hospital, Royal Infirmary, &c. Included here are also those better class patients who did not desire examination at the Dispensary.

ANALYSIS OF DEATHS.

PULMONARY CASES HAVING HAD INSTITUTIONAL TREATMENT.											
Stage when first examined			Died within one month of notification	Within two months	Within three months	Within six months	Within twelve months	Within 18 months	Within two years	Within three years	Lived three years or over
T.B. - ve cases	10	.. ..	—	1	—	—	—	—	3	2	4
T.B. + ve	Stage I.	51 ..	1	—	—	2	3	9	3	8	25
T.B. + ve	Stage II.	86 ..	5	2	8	16	13	13	8	5	16
T.B. + ve	Stage III.	48 ..	15	6	6	9	8	2	—	—	2
Total	195	.. ..	21	9	14	27	24	24	14	15	47

Of the total of 195, recorded in this table, 154 had received treatment at Groby Road Sanatorium and 41 at the City General Hospital.

PULMONARY CASES NOT HAVING HAD INSTITUTIONAL TREATMENT.											
Stage when first examined			Died within one month of notification	Within two months	Within three months	Within six months	Within twelve months	Within 18 months	Within two years	Within three years	Lived three years or over
T.B. - ve cases.	7	.. ..	—	—	1	1	2	1	—	—	2
T.B. + ve	Stage I	8 ..	—	—	—	—	1	—	1	1	5
T.B. + ve	Stage II.	6 ..	1	4	—	—	1	—	—	—	—
T.B. + ve	Stage III.	10 ..	1	2	3	—	3	—	1	—	—
Total	31	.. ..	2	6	4	1	7	1	2	1	7

PULMONARY CASES NOT EXAMINED AT OR IN CONNECTION WITH THE DISPENSARY.

TOTAL	Died within 1 month of notification	Within two months	Within three months	Within six months	Within twelve months	Within 18 months	Within two years	Within three years	Lived three years or over
24	14	1	1	—	—	1	—	4	3

These tables account for 250 deaths. In addition there were 19 deaths of patients who had never been notified as suffering from tuberculosis. This gives the total of 269 pulmonary deaths.

An analysis of the **Non-Pulmonary** deaths shows that a large proportion (20 out of 32) were due to an acute form of Tuberculosis viz., Tuberculous Meningitis. A considerable portion of these had been in contact with a notified case of Pulmonary Tuberculosis.

Of the remaining 12 surgical deaths, 4 were due to Tuberculosis of Bones and Joints and 8 were due to Abdominal Tuberculosis.

Dispensary Register.

In the Dispensary Register (not to be confused with the Notification Register) are entered the names of all patients examined at or in connection with the Dispensary. Many of those examined are, of course, found to be non-tubercular. Others have to be examined

repeatedly before one can come to a definite decision. As soon as a negative decision is arrived at, the name is crossed off the Register. Similarly (as in the case of the Notification Register) the names of those patients who remove to other areas outside the City boundary are taken off, and an intimation is sent to the Medical Officer of Health of the district to which they remove. Also on the death of a patient the name is removed, so that the Register, which is kept thoroughly up to date, contains the names of all tubercular patients as long as they are under dispensary supervision.

“Recovered Cases.”

From the Register are also removed the names of those patients who have “recovered.” During the year 1933, the names of 410 patients were removed for this reason. This number consisted of 373 Pulmonary Cases who had remained free from signs of active disease for not less than five years, and 37 non-pulmonary cases who had remained free from active trouble for not less than three years.

The following tables made out for the Ministry of Health from information contained in this Register for the year 1933, and containing information as to the condition of patients previous to 1926, and for each subsequent year, should prove of considerable interest.

ANALYSIS OF CASES ON DISPENSARY REGISTER.

DIAGNOSIS	Pulmonary				Non-Pulmonary				Total				Gr'd T's.
	Adults		Children		Adults		Children		Adults		Children		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A. New Cases examined during the year:—													
(a) Definitely Tuberculous ..	150	151	1	6	8	9	14	12	158	160	15	18	351
(b) Diagnosis not completed ..	—	—	—	—	—	—	—	—	20	13	14	16	63
(c) Non - Tuberculous ..	—	—	—	—	—	—	—	—	151	172	49	32	404
B. Contacts examined during the year:—													
(a) Definitely Tuberculous ..	3	6	—	1	—	—	2	—	3	6	2	1	12
(b) Diagnosis not completed ..	—	—	—	—	—	—	—	—	1	2	5	10	18
(c) Non - Tuberculous ..	—	—	—	—	—	—	—	—	53	103	168	150	474
C. Cases written off Dispensary Register:—													
(a) Recovered ..	98	110	90	75	2	4	16	15	100	114	106	90	410
(b) Non - Tuberculous ..	—	—	—	—	—	—	—	—	240	306	227	194	967
D. Number of Cases on Dispensary Register on December 31st:													
(a) Definitely Tuberculous ..	770	780	318	291	45	53	70	60	815	833	388	351	2387
(b) Diagnosis not completed ..	—	—	—	—	—	—	—	—	45	30	32	33	140
1. Number of cases on Dispensary Register on January 1st				3,143				7. Number of consultations with medical practitioners. (a) Personal (b) Other				93 534	
2. Number of cases transferred from other areas and cases returned after discharge				141				8. Number of visits by Tuberculosis Officers to homes of patients for the purpose of examination, &c.				388	
3. Number of cases transferred to other areas and cases "lost sight of" ..				448				9. Number of visits by Nurses to homes for Dispensary purposes ..				7,560	
4. Cases written off during the year as dead (all causes)				254				10. Number of : (a) Specimens of sputum, etc. (b) X-ray examinations made in connection with the Dispensary				1,600 694	
5. Number of attendances at the Dispensary ..				12,093				11. Number of "recovered" cases restored to the Dispensary Register ..				3	
6. Number of Insured Persons on Domiciliary Treatment on December 31st				284				12. Number of "T.B. plus" cases on Dispensary Register on December 31st				811	

PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in summary form (a) the condition at the end of 1933 of all patients remaining on the Dispensary Register and (b) the reasons for the removal of all cases written off the Register. This table is arranged according to the years in which the patients were first entered on the Dispensary Register as definite cases of pulmonary tuberculosis, and their classification at that time.

Condition at the time of the last record made during the year to which the return relates.	Previous to 1926.				1926.				1927.				1928.				1929.									
	Class T. B. plus.				Class T. B. plus.				Class T. B. plus.				Class T. B. plus.				Class T. B. plus.									
	Group 1.	Group 2.	Group 3.	Total (Class T. B. plus).	Group 1.	Group 2.	Group 3.	Total (Class T. B. plus).	Group 1.	Group 2.	Group 3.	Total (Class T. B. plus).	Group 1.	Group 2.	Group 3.	Total (Class T. B. plus).	Group 1.	Group 2.	Group 3.	Total (Class T. B. plus).						
Disease arrested.	Adults (M)	8	1	9	3	2	—	5	6	2	—	8	17	11	2	—	13	21	2	—	23					
	Adults (F)	41	9	4	13	11	2	1	3	16	3	—	6	31	5	4	—	42	11	4	—	15				
Disease not arrested.	Children	64	3	1	—	4	38	—	—	57	—	—	—	70	—	—	—	65	3	—	—	3				
	Adults (M)	4	17	10	2	29	—	4	2	5	4	—	9	3	2	10	—	—	23	12	—	—	35			
Children	16	14	5	2	21	2	5	4	9	3	3	3	5	14	3	1	18	3	14	3	1	—	18			
Children	15	5	1	1	7	3	—	—	—	12	1	—	1	11	2	—	2	22	—	—	—	—	—			
Condition not ascertained during the year	..	130	22	10	1	33	34	2	1	4	50	1	2	3	38	3	9	1	20	2	4	—	6			
Total on Dispensary Register on Dec. 31st	..	314	78	32	6	116	98	14	10	1	25	162	19	12	5	36	175	37	28	2	67	173	74	25	1	100
Discharged as recovered.	Adults (M)	—	—	—	—	475	16	1	2	1	4	19	1	1	—	2	14	2	—	—	—	—	—	—	—	
	Children	—	—	—	—	488	21	2	1	—	3	16	—	—	—	—	20	3	—	—	—	—	—	—	—	
Lost sight of or otherwise removed from Dispensary Register	Adults (M)	—	—	—	—	810	49	—	1	—	1	49	—	—	—	—	31	—	—	—	—	—	—	—	—	
	Children	—	—	—	—	1702	125	22	13	6	41	142	13	7	6	26	98	16	2	1	19	68	24	7	—	31
Dead.	Adults (M)	—	—	—	—	1379	24	25	35	32	92	53	21	37	16	74	18	18	28	15	61	14	27	42	16	85
	Children	—	—	—	—	1049	24	15	24	30	69	33	6	25	25	56	17	17	22	11	50	13	12	27	12	51
Total written off Dispensary Register	..	—	—	—	—	402	6	—	2	—	2	6	—	—	1	1	4	—	—	1	1	5	2	1	—	3
..	..	—	—	—	—	6305	265	65	78	69	212	318	41	70	48	159	202	56	52	28	136	100	65	77	28	170

(a) Remaining on Dispensary Register on 31st December.

(b) Now on Dispensary Register and reasons for removal therefrom.

NON-PULMONARY TUBERCULOSIS.

Condition at the time of the last record made during the year to which the return relates.	Previous to 1926.				1926.				1927.				1928.				1929.				
	Bones and Joints.	Abdominal	Other Organs	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs	Peripheral Glands.	Total.	
Disease arrested.	M	1	-	-	1	1	-	-	-	1	1	-	-	-	1	1	-	-	-	-	1
	F	3	-	-	3	1	-	-	1	2	3	1	-	1	5	1	-	-	-	-	1
Children		8	1	-	9	2	2	1	1	6	1	1	-	1	3	4	2	-	2	2	7
Disease not arrested.	M	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	F	2	-	-	2	1	-	-	-	2	1	-	-	-	3	2	-	-	-	1	2
Children		3	-	2	5	-	-	1	-	4	4	-	-	-	1	3	-	-	-	-	3
Condition not ascertained during the year		-	-	-	-	1	-	-	1	3	1	1	-	1	3	4	-	-	-	-	2
Total on Dispensary Register on Dec. 31st		17	1	5	23	5	2	4	1	12	9	2	-	3	14	15	3	2	3	23	17
Transferred to Pulmonary		-	-	-	1	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-
Discharged as recovered.	M	-	-	-	26	2	-	-	-	2	-	-	-	-	1	1	-	-	-	1	1
	F	-	-	-	48	-	-	-	-	3	1	1	-	-	4	3	4	-	-	1	5
Children		-	-	-	58	7	1	-	1	9	3	7	4	4	18	3	2	-	6	11	7
Lost sight of or otherwise removed from Register	M	-	-	-	85	8	3	3	9	23	6	4	1	2	13	7	3	2	3	15	15
	F	-	-	-	98	4	1	2	-	7	2	2	-	1	5	1	1	1	1	4	4
Dead.		-	-	-	154	-	-	-	-	2	1	-	1	-	6	2	3	-	1	6	2
Total written off Dispensary Register	M	-	-	-	175	-	-	1	-	1	-	-	-	1	1	1	1	-	-	2	3
	F	-	-	-	644	21	5	6	10	42	13	14	7	8	42	15	15	3	13	46	32
GRAND TOTALS		-	-	-	667	26	7	10	11	54	22	16	7	11	56	30	18	5	16	69	49

(a) Remaining on Dispensary Register on December 31st.

(b) Not now on Dispensary Register and reasons for removal therefrom.

Condition at the time of the last record made during the year to which the return relates.	1930.					1931.					1932.					1933.					
	Bones and Joints.	Abdominal	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs.	Peripheral Glands.	Total.	
Disease arrested.	Adults (M)	3	1	1	—	5	2	2	2	7	2	—	—	—	2	1	—	—	—	1	1
	Adults (F)	2	—	1	—	3	2	—	—	2	—	—	—	—	—	—	1	—	—	—	2
Disease not arrested.	Children	5	2	—	4	11	3	3	—	6	3	2	1	7	13	—	—	—	3	—	3
	Adults (M)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	—	—	—	—	6
Condition not ascertained during the year	Adults (F)	3	—	—	—	3	1	—	—	2	2	1	2	—	5	3	—	3	1	—	7
	Children	3	—	—	1	4	5	—	—	5	6	—	—	1	8	14	1	3	4	—	22
Total on Dispensary Register on December 31st	..	17	3	2	7	29	15	8	3	31	20	4	4	10	38	21	4	6	10	41	41
Transferred to Pulmonary	..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Discharged as recovered.	Adults (M)	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Adults (F)	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lost sight of or otherwise removed from Dispensary Register	Children	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Adults (M)	—	—	—	2	4	5	2	—	9	3	2	—	1	6	1	1	—	—	—	3
Dead.	Adults (F)	—	1	1	—	3	2	1	—	3	—	1	—	—	1	—	—	—	—	—	—
	Children	2	1	—	1	4	1	2	—	3	—	1	—	—	1	—	—	1	—	—	1
Total written off Dispensary Register	..	4	7	1	5	17	9	5	—	17	3	4	—	1	8	1	1	1	1	4	4
GRAND TOTALS	..	21	10	3	12	46	24	13	3	48	23	8	4	11	46	22	5	7	11	45	45
(excluding those transferred to Pulmonary)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(a) Remaining on Dispensary Register on December 31st.

(b) Not now on Dispensary Register and reasons for removal therefrom.

Other tables, giving information relating to age periods, sex, occupations, &c., will be found on pages 176-180.

Tuberculosis Dispensary as the "Centre for Diagnosis."

The Tuberculosis Dispensary continues to hold its place as the "Centre for Diagnosis," and doctors have no hesitation in sending patients whenever they have any doubt as to the presence or absence of Tuberculosis. Notes from 96 different doctors requesting an opinion on 534 cases were received and dealt with during the past twelve months. In addition, many patients, not under medical attention, called on their own initiative desiring to know whether they had consumption.

An investigation has shown that 83 per cent. of all notified cases had either been sent to the Dispensary for an opinion or had had their sputum sent for examination, before they were notified.

The Ministry of Pensions regularly send their cases for examination, in many of whom an opinion is desired as to the presence or absence of Tuberculosis, but as might be expected, the number of these examinations has fallen considerably during recent years.

Clinical Examinations.

Altogether 4,335 clinical examinations were made as compared with 3,837 the previous year. Particulars are as follow :—

	Men	Women	Children	Total
First examinations	367	438	438	1,243
Re-examinations	1,034	1,178	880	3,092
	—	—	—	—
Totals	1,401	1,616	1,318	4,335
	—	—	—	—

"Contact" Examinations.

A strong effort has been made to increase the number of examinations amongst "Contacts" of tubercular persons. In 1932, 231 "Contacts" were examined. In 1933, this number was rather more than doubled, 468 being examined. We are still concentrating on this work and it is hoped that this number may be still further increased. By regular examination and re-examination of "Contacts" it is possible not only to obtain patients in an early stage of the disease, when the prospects of recovery are good, but one occasionally finds the original infecting source, when all steps possible are taken to prevent others being infected.

One example might be given to illustrate this point. A child, 4 years of age, was sent to me with swelling of the ankle-joint—undoubtedly a case of Tuberculosis of the bones of the foot (confirmed radiologically). The child, though not infectious, had undoubtedly been infected. How, or from whom had she got the infection? There were no other known cases of Tuberculosis in the house. The mother, who brought her, stated that she herself was quite well and it was with difficulty that I persuaded her to let me examine her chest. There, however, was the source of the trouble. I found signs of active disease in one of the lungs and she then acknowledged to having some cough and expectoration. On examining the sputum I found considerable numbers of tubercle bacilli. She, undoubtedly, though she thought she was in good health, had infected this child and might easily have infected her other children. Once she realised what a danger she was to her own family she was quite prepared to accept all possible means of preventing further infection.

It is such cases as this that makes one realise how important it is to search amongst the "contacts" whenever a new case of Tuberculosis is discovered.

Bacteriological Examinations.

Bacteriological examinations to the number of 1,600 have been made for the tubercle bacillus, as compared with 1,450 in 1932. Of these 523 were examined for doctors in practice in the City, and the remainder were obtained from patients examined at the Tuberculosis Dispensary. Sputum examination, if there be any expectoration, forms part of the complete examination of every patient sent for an opinion, before reporting to a doctor.

The following figures give the results of examinations :—

Nature of Specimen	Positive	Negative	Total
Specimens of Sputum :—			
From Practitioners	97	426	523
From Patients examined at the Dispensary	350	720	1,070
Specimens other than sputum ..	—	7	7
Total ..	447	1,153	1,600

Radiological Examinations.

All Dispensary patients in whom it is considered advisable to have X-ray examination are sent to the Sanatorium for this. During

the past year radiological examinations were made in 694 cases. The value of this means as an aid to diagnosis in doubtful or difficult cases, cannot be overestimated. It is also of great value in showing whether progress is satisfactory or otherwise.

Patients Passed for Sanatorium Treatment.

The Medical Superintendent of the Sanatorium (Dr. Mackenzie) and the Tuberculosis Officer meet at the Dispensary each Monday afternoon and interview and select from those patients examined during the previous week cases for Sanatorium Treatment. During the past year 462 patients were passed for a course of Sanatorium Treatment: 361 adults (of whom 4 were surgical), 9 children (surgical cases), and 92 children (pulmonary cases). In 1932 the total was 389, being 369 adults (of whom 7 were surgical), 13 children (surgical cases) and 7 children (pulmonary cases).

Anstey Lane was re-opened on April 10th for the treatment of pulmonary cases, most of whom can be regarded as "pre-tubercular." An average of about 25 children are regularly receiving treatment there.

Twelve of the adult pulmonary cases had previously received treatment at Sanatorium as children.

Unfortunately, owing to our limited accommodation, many patients who desired admission or re-admission to Sanatorium had to be refused. The waiting list is carefully studied each week before deciding whether a patient can be admitted (or re-admitted) to Sanatorium. Often we have had to keep patients on the waiting list for months, to the serious detriment of their health, before they could be admitted to Sanatorium.

During the past year, if delay in admission was likely to prove injurious, instead of putting names on the waiting list, when we have known that a considerable time must elapse before the patient could be admitted to Sanatorium, we have preferred to recommend their admission to the City General Hospital, pointing out that that institution now is under the care of the Health Committee, just as is the Sanatorium.

Patients Passed for Admission to City General Hospital.

In June, 1931, it was decided by the Health Committee that cases of Tuberculosis could only be admitted to the City General Hospital if recommended by the Tuberculosis Officer. Previous to this, a recommendation by the general practitioner was all that was required, and it occasionally happened that patients who had never been notified as suffering from Tuberculosis, and were therefore unknown to this Department, were admitted. During the past year the Tuberculosis

Officer has recommended 155 tubercular patients for admission to the City General Hospital. This number includes cases of acute illness requiring immediate attention, as well as others who could not be accepted for treatment at Groby Road Sanatorium. It is satisfactory to report that it has always been possible to have patients admitted immediately to that institution. On their discharge a report on their condition is sent to the Tuberculosis Officer by the Medical Superintendent.

Patients on Dispensary Treatment.

Medical benefit is available for most patients by means of the State Insurance, Public Medical Service, &c., so that only those patients not so provided for are dealt with at the Dispensary. During the year 155 patients received weekly treatment at the Dispensary, and at the end of the year there were 65 patients attending the Dispensary each week. All other patients are advised to attend periodically for advice.

Those children who have had a course of treatment and been discharged from Sanatorium are advised to attend the Dispensary once a week in order that they may be kept under careful supervision. When fit for school an intimation is sent to the School Medical Officer.

Attendances.

The total number of attendances of patients at the Tuberculosis Dispensary during the year was 12,093 (as compared with 12,458 in 1932) a weekly average of nearly 250.

Domiciliary Treatment.

Those insured persons under the State Insurance who, for one reason or another, do not receive Sanatorium treatment, besides others discharged from the Sanatorium, are recommended for "Domiciliary Treatment" under their panel doctors. An intimation to this effect is sent to the doctor, and quarterly reports on the patient's condition are sent by the doctor to the Tuberculosis Officer. During the year 423 patients received Domiciliary Treatment, and at the end of the year 284 insured persons were receiving such treatment. Seven hundred and fifty-three quarterly reports were sent in regarding patients under Domiciliary Treatment.

Visits.

There are three nurses on the Dispensary staff who spend about one third of their time indoors and two-thirds outdoors visiting newly-notified cases besides all those patients whose names are on the Dispensary Register. As one nurse is constantly required for the indoor work, only two nurses can be visiting at a time. They give advice, both verbal and printed, to each patient and obtain full particulars as

to the home conditions, contacts, &c. Their total visits for the year amounted to 8,037 as compared with 7,991 in 1932. In order to ensure regular visitation to each patient the card index system was adopted for each nurse.

The number of visits paid by the Medical Officers for the purpose of examination was 388 as compared with 315 in 1932.

Sleeping Shelters.

Six ex-Sanatorium patients have had the use of sleeping shelters, one for over 7 years, one for over 3 years, one for over 2 years, one for over twelve months and 2 for under twelve months.

Most of the original sleeping shelters, which had been in use for many years and were completely worn out, were replaced by new ones obtained from the Papworth Industries.

Unfortunately those persons most requiring shelters very often have not the necessary ground on which they could be erected.

Additional Nourishment.

The Health Committee grant milk to necessitous cases, under arrangements made by the Ministry of Health. They can do so up to a sum not exceeding £2 per 1,000 of the population per annum.

In April, 1927, the Committee decided to purchase only Grade A (T.T.) milk and this has been obtained ever since for this purpose.

Mr. Councillor C. E. Keene has again dealt with the applications for milk. He attends at the Dispensary every alternate Friday and reviews each case every four weeks. I desire here to record my appreciation for the very thorough way in which he deals with them.

During the past year 139 persons were granted milk (as compared with 141 in 1932) free of charge, at a total cost of £391 8s. 9d. Last year the total expenditure was £393 4s. 5½d., and for 1931 the figure was £406 18s. 3½d.

At the end of the year 65 patients were in receipt of a daily allowance of free Grade A (T.T.) milk.

Nursing of Bedridden and Surgical Cases.

The Health Committee, by an arrangement with the District Nursing Association, provides the services of a nurse to assist bedridden cases of Pulmonary Tuberculosis and those Surgical cases in need of dressings, &c. This work is under the general supervision of the Tuberculosis Officer, and each patient having the services of a district nurse is periodically visited by one of the Tuberculosis Health Visitors. During the past year 84 received assistance in this way. Altogether, 4,942 visits were paid at a total cost of £247 2s. The figures in the previous year were 4,834 costing £241 14s.

After-Care.

Many of the previous headings such as visits, use of sleeping shelters, additional nourishment, nursing of bedridden cases, &c., might well have been included under the term "After-Care." A very important branch of the work consists in looking after patients after their discharge from Sanatorium.

The After-Care Committee, of which Alderman Hincks is the Chairman, meets once a quarter and deals with the reports from the Tuberculosis Officer and each of the nurses.

We have at the present time 2,527 patients with signs of tubercular disease on our Dispensary Register. Our endeavour is to keep in touch with each of these patients by visitation by the nurses and regular examination at the Dispensary as long as their names remain on the Register.

It is found that patients very much appreciate these visits, and the knowledge that they are not allowed to drift after leaving Sanatorium stimulates them to help themselves. They seek advice in many different directions, and the nurses have been able to help and encourage them in many different ways. Twenty-five patients were given the use of air-rings.

A difficult problem is finding suitable work for tubercular patients. One cannot blame employers for hesitating to engage them. Many of them are only fit for light work and cannot be depended upon to turn up with the same regularity as healthy individuals. Light outdoor work, such as would be desirable for tubercular persons, is extremely difficult to obtain and is almost always unremunerative, so for a married man with dependents it is out of the question. Yet we know that in many cases a return to arduous indoor work is simply asking for trouble.

This problem of suitable work, difficult in normal times, is at present very much accentuated when so many able-bodied men are out of work.

Thanks to a gift of £50 from the Pageant Fund and another £50 raised by Miss Davies, formerly Matron of the Isolation Hospital and Sanatorium, we have again been able to give limited assistance to necessitous tubercular patients previous to or during their treatment in Sanatorium. In addition to this, the nurses have received numerous parcels of clothing, boots, &c., and these they have distributed to those patients whom they considered most in need of them. Our grateful thanks have been expressed to the donors.

We have also received from Mr. Lidster a number of toys which were distributed amongst the poorer-class children, by whom they were much appreciated.

WYVILLE S. THOMSON.

Report on the Isolation Hospital and Sanatorium for the year 1933

By J. C. HAMILTON MACKENZIE, M.D. (Glas.), D.P.H. (Lond.)
Medical Superintendent.

I herewith submit the Annual Report on the work of the Hospital for the year 1933.

Table A at the end of this Report shows the number of cases of the various diseases admitted, discharged and died.

In the following tables the crude figures have been adjusted by allowing for altered diagnosis.

SCARLET FEVER.

GENERAL STATISTICS.

Cases discharged	..	..	..	..	..	..	286
Altered diagnosis	..	..	..	..	..	..	24
Verified cases	..	..	..	..	..	..	262
Deaths	..	..	..	..	..	..	1
Case mortality	..	..	..	..	..	0.38 per cent.	
Cross Infection (with Measles)	..	..	..	..	..	..	1

Concurrent Double Infections on admission :

Scarlet Fever and Chickenpox	..	..	..	..	..	..	1
Scarlet Fever and Whooping Cough	..	..	..	..	..	..	3
Scarlet Fever and Diphtheria	..	..	..	..	..	..	1
Scarlet Fever and Erysipelas	..	..	..	..	..	..	1
Return cases	..	..	..	..	..	..	2
Return case rate	..	..	..	..	..	0.76 per cent.	

COMPLICATIONS.

Otorrhoea	..	..	..	..	..	..	18
Albuminuria	..	..	..	..	..	..	3
Rhinorrhoea	..	..	..	..	..	..	10
Endocarditis and Pericarditis	..	..	..	..	..	..	1
Minor Sepsis	..	..	..	..	..	..	10
Secondary tonsillitis	..	..	..	..	..	..	1
Secondary adenitis	..	..	..	..	..	..	5

It will be noted that 262 cases of Scarlet Fever were discharged with one death ; this death was due to Anaphylaxis following the administration of antitoxin intravenously.

Considering the number of concurrent double infections admitted to Hospital, we are again fortunate in our low rate of Cross Infection ; one cross infection with measles occurred, the infecting case being admitted in the year 1932.

Throughout the year the type of scarlet fever admitted to Hospital was mild, and the complications accordingly low.

The complication case rate was 18.7 per cent., otorrhoea was the outstanding complication ; of the 18 cases only six occurred "de novo" after admission to Hospital, the remaining 12 cases had a previous history of otorrhoea.

The most severe complication was one case of endocarditis and pericarditis : when the acute stage had cleared up the child was transferred to the Heart Clinic at the City General Hospital for prolonged recumbent treatment.

Treatment :

Number of cases receiving intravenous antitoxin	..	25
„ „ complications	.. .. .	6
„ „ cases receiving intramuscular antitoxin	..	145
„ „ complications	.. .. .	11

During the year the policy of administering scarlet fever antitoxin intravenously as a routine measure was discontinued. This was due to the fact that there has been some change in the manufacture of scarlet fever antitoxin, indicated by the increased number of immediate severe reactions following the intravenous administration of the antitoxin.

Reviewing the number of reactions from March, 1932, to March, 1933, there was an increase from 17 per cent. in the first six months to 45 per cent. in the second six months.

The immediate severe reactions following the intravenous use of antitoxin are due to protein substances contained in the antitoxin. Susceptibility to this "foreign" protein varies in every individual. The most severe reaction to the protein is anaphylactic shock. During the year 1933 one child died from anaphylactic shock, and this was the determining factor in discontinuing the routine use of intravenous anti-toxin.

Throughout the year antitoxin was given intramuscularly without severe reactions. This route is undoubtedly safe and the incidence

of complications in the present group of cases is no higher than that of the intravenous route.

There is no doubt that the intravenous route provides the most striking and dramatic recoveries, but until the manufacture of scarlet fever antitoxin has become more stabilised, the intramuscular route is safer.

The cases to which antitoxin was not given were admitted late in the disease, i.e., the fifth or sixth day.

The period of residence in Hospital was not unduly increased by the use of intramuscular antitoxin. It was found possible to discharge the patients in 18 to 20 days.

The policy of examining "serum treated" cases one week after discharge was maintained. This method virtually constitutes an Out-Patient Department and provides useful information. No further complications were found at the Out-Patient Department and no cases returned to Hospital. The return case rate of 0.76 per cent. indicates that there was no dissemination of infection from the "early discharge" cases.

DIPHTHERIA.

Cases discharged	..	..	..	..	..	..	312
Altered diagnosis	..	..	..	..	..	..	59
Verified cases discharged	..	..	..	..	..	..	253
Deaths	..	..	..	..	..	..	10
Case mortality	..	..	..	..	..	3.9 per cent.	
Cross Infections	..	..	..	..	..	..	Nil

Concurrent Double Infection.

Diphtheria and Measles	..	..	..	..	..	..	1
Diphtheria and Scarlet Fever	..	..	..	..	..	..	1

COMPLICATIONS.

Paralysis of Heart (a) Severe	..	..	..	..	..	..	9
Paralysis of Heart (b) Slight	..	..	..	..	..	..	22
Paralysis of Palate	..	..	..	..	..	..	9
Paralysis of Ocular Muscles	..	..	..	..	..	..	6
Broncho-pneumonia	..	..	..	..	..	..	1
Tracheotomy	..	..	..	..	..	..	10
Recovered	6

Schick tests.

Positive	31
Negatives	43

Active Immunisation	13
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Table showing Mortality in Severe Cases.

Type of Disease.	Number of Cases.	Deaths.	of the Group.
Group A. Early	8	2	36 per cent.
Late ..	3	2	
Group B	22	0	0
Laryngeal ..	29	6	20 per cent.

Group A. *Early.* Malignant, with thin rapid spreading membrane.

Late. Extensive membrane, with late toxic symptoms, admitted after third day of disease.

Group B. Moderately toxic cases.

Laryngeal. Respiratory symptoms predominate.

As noted above 253 verified cases of Diphtheria were discharged ; there were ten deaths.

The above table demonstrates the type of disease in which death occurred.

A noteworthy feature of the year was the high incidence of laryngeal diphtheria ; 29 cases being discharged with six deaths. Tracheotomy was performed in ten cases, six recovered ; of the four cases which died, one was complicated with broncho-pneumonia, one had severe faucial diphtheria in addition to the laryngeal condition, and the remaining two were late cases in which tracheotomy was performed, as an emergency, to relieve distress.

As formerly, intensive serum treatment, of Group A and Group B cases was carried out during the year, early Group A (malignant) and late Group A (extensive membrane) were given on an average 100,000 to 150,000 units of anti-diphtheria serum intravenously, this was occasionally supplemented with 20,000 to 50,000 units intramuscularly.

The total dosage of serum was given on the day of admission. The policy of interrupted doses, in my own opinion, being wasteful and unsatisfactory, consequently care and attention was given to assessing the initial dosage of serum for each case.

Schick tests were performed on observations cases of diphtheria. To cases which clinically and bacteriologically showed no evidence of diphtheria, and Schick test was positive, active immunisation was offered ; 13 such immunisations were carried out.

Active immunisation is now given by toxin antitoxin floccules, this I find to be a most satisfactory preparation for the purpose ; apart

from the high antigenic value of the preparation, it has the advantage of minimising local reactions, particularly in adults.

MEASLES.

Cases discharged	..	..	..	..	..	..	..	39
Altered diagnosis	..	..	..	..	..	..	..	2
Verified cases discharged	..	..	..	..	..	..	..	37
Deaths	..	..	..	..	..	..	..	4

COMPLICATIONS.

Broncho-pneumonia	..	..	..	..	..	..	..	15
Laryngismus stridulus	..	..	..	..	..	..	..	1
Acute otitis media	..	..	..	..	..	..	..	2
Chronic otorrhoea	..	..	..	..	..	..	..	6
Minor sepsis	..	..	..	..	..	..	..	1

DEATHS.

1. Girl aged 3 years. Admitted with measles and broncho-pneumonia. Evidence of rickets: died 3 days after admission.
2. Boy aged 11 months. On admission had measles, broncho-pneumonia and rickets. Died 2 days after admission.
3. Boy aged 6 years. Measles, pneumonia and laryngismus stridulus. Died 8 days after admission.
4. Girl aged 3 years. Measles and broncho-pneumonia. Died 12 hours after admission.

OPERATIONS.

Mastoid operation	1
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With a limited accommodation for infectious diseases, we could admit to the hospital only selected cases of measles. At times, our accommodation was overtaxed, but by arrangement with City General Hospital, it was possible to admit some cases to the latter hospital. The selected cases were of necessity, debilitated children, and complicated cases of measles; inability to nurse the child at home was another indication.

An attempt was made to admit all children with broncho-pneumonia complicating measles; the majority of these children had evidence of rickets, a constitutional disease producing devitalisation of the mucous surfaces, consequently producing a suitable "soil" for broncho-pneumonia as a complication. Ultra-violet light and suitable dietary were given to the above children to correct the rachitic tendency.

No specific antiserum is yet available for the treatment of measles, but blood serum from convalescent adults has met with considerable success in attenuation of the disease. Convalescent serum was not employed in the year under review, but a scheme is on hand in the current year for the use of this measure.

PUERPERAL FEVER.

Total cases discharged	.. .. .	19
Deaths	.. .. .	Nil

ANALYSIS OF CASES.

Puerperal sapraemia associated with retained tissue	..	18
Puerperal pyrexia associated with perineal sepsis	..	1

COMPLICATIONS.

Phlegmasia alba dolens	.. .. .	7
Pyosalpinx	.. .. .	1
Pelvic cellulitis	.. .. .	1
Pulmonary embolism	.. .. .	1
Urinary infection	.. .. .	7

The number of cases of this disease treated in this hospital has gradually risen in the past seven years, the figures being 1, 4, 7, 13, 14, 14 and 19 respectively. It is very satisfactory to record that no deaths occurred in the 19 cases treated in the year under review.

The routine method of treatment in all cases of sapraemia was curettage of the uterus, followed by intra uterine glycerine drainage after the method of Remington Hobbs. Scarlet fever antitoxin was given when necessary.

Notes of all cases discharged were sent to the M. & C.W. Officer in order that the patients and babies would be "followed up."

Fourteen babies were admitted with mothers and breast feeding was satisfactorily maintained.

CEREBRO SPINAL FEVER.

Cases admitted as Cerebro Spinal Fever	.. .. .	11
Cases verified as Cerebro Spinal Fever	.. .. .	6

Diagnosis altered to :

Tuberculous meningitis	.. .. .	(fatal) 4
Intestinal toxæmia	.. .. .	(recovered) 1
Deaths from Cerebro Spinal Fever	2

COMPLICATIONS.

Chronic meningitis	(recovered) 1
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The numbers of cases of the above disease treated in the past six years have been 2, 7, 9, 15, 8 and 6 respectively. The usual treatment with polyvalent anti meningococcal serum was given, combined with daily drainage of the theca by lumbar or cisternal punctures.

Other Infectious Diseases discharged during the year 1933.

Disease.	Recovered.	Died.	Total.
Erysipelas	45	5	50
Whooping Cough	8	0	8
Whooping Cough and Pneumonia	7	1	8
Chickenpox	36	—	36
Pneumonia (lobar)	3	—	3
Acute Poliomyelitis	1	—	1
Scabies	3	—	3

TUBERCULOSIS.

Table E at the end of this report shows the analysis of the cases discharged during the year.

The treatment of pulmonary tuberculosis is slowly but surely evolving to a more rational basis. Much light has recently been thrown on the pathology of the disease by the improved modern X-ray film. It is now possible to visualise the disease process, free from the nebulous and confusing science of physical signs.

We have learned that pulmonary tuberculosis varies in its type with the age of the patient ; we have learned that each type requires individual consideration, and we have learned that the basis of all treatment is rest.

In the year under review an intensive campaign was directed at the treatment of the adolescent and young adults. It is recognised that in this age group (15 to 25 years) pulmonary tuberculosis is a very acute disease, rapidly spreading and forming soft wall cavities in the lungs.

In the adolescent it is extremely difficult to get the so-called "early" case in Hospital. This difficulty is associated with the disease process : in the earliest stage of the disease the patient will not admit to feeling ill, there is rarely any cough, and it is almost impossible to detect any sign of disease in the lungs by physical examination. Cavitation is already established in the lung when this "early" case is admitted, and cavitation at this stage can only be diagnosed by the X-ray examination.

Treatment of the adolescent resolves itself into collapsing and healing cavities, thus preventing extension of the disease and hæmorrhage.

Experience has taught us that the best way to treat this virulent type of disease is by prolonged rest of the affected lung, either by prolonged recumbency, or better, by collapsing the lung.

Artificial pneumothorax provides our most valuable weapon. Bilateral pneumothorax may be employed in selected cases, and phrenic avulsion is a valuable adjuvant where it has been impossible to establish a useful pneumothorax.

During the year 1933, by arrangement with the Tuberculosis Officer, patients with adolescent disease were admitted as emergency cases.

It was found impossible to accommodate all the adolescent cases in the Sanatorium Ward ; Ward 10 Annexe and Ward 2 were used as extensions from the Sanatorium block for males and females respectively.

The following table shows the work which was carried out in the pulmonary tuberculosis wards throughout the year.

Special Treatment for Pulmonary Tuberculosis.

Artificial Pneumothorax :

New cases induced Unilateral	..	..	..	..	30
" " " Bilateral	..	..	..	..	3
					—
	Total	..	..	..	33
					—
Refills (In-patients)	..	..	..	..	905
" (Out-patients)	..	..	..	..	939
					—
	Total	..	..	..	1,844
					—
Air replacements	..	..	..	..	80
" " Out-patients	..	..	..	..	7
Phrenic Avulsions	..	..	..	..	16
Gold injections	..	..	..	..	123
Blood examinations	..	..	..	..	412

Observation Cases.

The important work of establishing a diagnosis in doubtful cases seen at the Dispensary was carried on throughout the year. Fifty-two such observation cases were admitted to the Hospital, and in nine cases the diagnosis of pulmonary tuberculosis was established.

Convalescent Sanatorium, "Home Place," Holt.

Table D at the end of the report gives an analysis of the cases discharged from the Sanatorium.

This beautiful seaside mansion, which was opened in May, 1929, for convalescent cases transferred from the Groby Road Hospital, continued its useful function of improving the well-being of the patients.

During the year under review the terms of treatment were four, each of three months' duration. The first and third terms were allocated to women and children, and the second and fourth to men and boys.

This Convalescent Home serves its optimum purpose when the cases are discharged directly from Groby Road Sanatorium to Holt, but unfortunately it was not always possible to draw the full complement of patients from Groby Road Sanatorium at the beginning of each term ; however, the remaining vacancies were filled from suitable cases selected by the Tuberculosis Officer.

Non-Pulmonary Tuberculosis.

The work of these Wards continued, as formerly, under the supervision of our Consulting Orthopædic Surgeon, Mr. Leslie Morris, F.R.C.S. In connection with this work 91 plaster splints were made. An Out-Patient Department for non-pulmonary cases was held on the first Monday of every month—75 attendances were registered.

X-RAY DEPARTMENT.

	In-patients.	Out-patients.
Chest films	787	798
Lipiodal examinations	35	—
Films of bones and joints	139	147
Screen examination (chest)	568	886

It will be noted that there is a marked increase in the chest films, both in in-patients and out-patients. The chest films taken in 1932 for in-patients and out-patients were 498 and 588 respectively.

The value of serial radiography in assessing the healing of pulmonary disease cannot be over-estimated.

During the year 1933 all cases of pulmonary tuberculosis were reviewed every three months ; the most essential information of the review coming from the X-ray film. It is now fully recognised that serial radiography is the best method of controlling the treatment of this disease. Hence the increase in in-patients' chest films.

Lipiodal chest examinations were carried out in 35 cases. The majority of these cases were in Hospital for observation, and the lipiodal examination was necessary to differentiate between tuberculosis and bronchiectasis.

The increase in out-patient films, 588 to 798, comes from the Tuberculosis Dispensary, and will be dealt with more fully in the Tuberculosis Officer's report.

It will be further noted that the screening of out-patients has increased from 284 to 886 ; this increase is due to :—

- (a) Increase of out-patients receiving pneumothorax refills.
- (b) Better radiological control of the collapsed lung.

As will be gathered from this report the X-ray unit in a Sanatorium becomes more and more an essential feature. The finer details of our information are only available when the X-ray equipment is of the highest standard.

It is essential that the films of each individual must be comparable and this can only be attained by a high power unit, where chest films can be taken with a very short exposure. We are fortunate in our X-ray unit in this Hospital, and the apparatus continues to give excellent and valuable results.

Ultra-Violet Light Department.

Carbon Arc and Mercury Vapour Light Baths :

Surgical T.B. cases	541
Other cases	150
Staff	62
	—
	753
	—

Laboratory Report.

		Positive.	Negative.
Swabs for Diphtheria :			
(a) from practitioners	986	146	840
(b) from hospital wards	2,678	388	2,290
	—	—	—
	3,664	534	3,130
	—	—	—
Sputum examined for tubercle bacilli			
(a) Out-patients	180	64	116
(b) from hospital wards	3,161	1,114	2,047
	—	—	—
	3,341	1,178	2,163
	—	—	—
Cerebro Spinal Fluids examined			18
Pleural Fluid			21
Widal Reactions			11
Blood Counts			14
Blood Cultures			4
Fæces examined for T.B.			11
Urines examined for T.B.			9
Test Meals			2

Urines examined microscopically	..	..	..	..	69
Media manufactured in laboratory (tubes)	..	..	..	..	4,100
Sterile Swabs supplied to Health Office	..	..	..	..	1,100
Post-mortem examinations	..	..	..	..	51

ANIMAL EXPERIMENTS.

Specimens from Isolation Hospital.

Pleural Fluids	..	..	..	..	..	27
Virulence in Diphtheria	..	..	..	..	..	22
Pus	..	..	..	..	..	18

Specimens from Health Department.

Milk	172
------	----	----	----	----	----	-----

Specimens from Convalescent Homes	11
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Specimens from City General Hospital	10
--------------------------------------	----	----	----	----	----

Specimens from Leicester Royal Infirmary	1
--	----	----	----	----	---

The number of specimens examined in the laboratory reached its highest peak in the year 1933. The increase is mainly in swabs for diphtheria and sputa for tubercle bacilli. Diphtheria swabs have increased from 632 in 1932 to 3664 in 1933. The increase corresponds with the epidemic of diphtheria in the city. Sputa examined for tubercle bacilli have increased from 1846 in 1932 to 3341 in 1933. The increased number of specimens come from the hospital wards, and is a reflection on the more adequate control of treatment by bacteriological examination.

The Medical Superintendent and the Senior Resident Medical Officer continued to hold Home Office licences for animal experimentation. The number of such experiments has increased from 148 in 1932 to 261 in the year under review.

Staff.

After giving long and valued services to the Hospital, Miss E. A. Davies retired on 31st August, 1933. As a mark of appreciation of her services, the Health Committee presented her with a bureau, and the Hospital Staff with a grandfather clock.

Miss B. N. Nesbitt, First Assistant Matron, Monsall Fever Hospital, Manchester, was appointed Matron of this Hospital and commenced duty in September, 1933.

Staff Illness.

Scarlet Fever	..	..	..	..	1 maid (recovered)
Diphtheria	..	..	..	..	1 nurse ,,
Tonsillitis	..	..	..	..	6 nurses ,,
Scabies	..	..	..	..	2 nurses ,,

Immunisation of Nursing Staff against Diphtheria.

The Schick test was performed on 23 nurses. Eighteen gave positive reactions and they were actively immunised against the disease with toxin antitoxin floccules (TAF).

Building and Equipment.

A Chapel was erected in the Hospital grounds, and opened on 3rd June, 1933. All funds for the Chapel were raised by voluntary subscriptions, mainly through the efforts of Miss E. Davies. The Chapel is a beautiful piece of architecture, and fits in well with the decorative scheme of the Hospital grounds. We are deeply indebted to Mr. J. S. Fyfe, who acted as Honorary Architect.

Kitchen.

Two cold storage rooms (Frigidaire) were erected, one for milk store, and the other for meat store. A new steam cooker was fixed in the kitchen to replace one which was obsolete and unsafe. Seven Thermo food carriers were purchased to take dinners and suppers to the wards.

Heating System.

Continuing the policy of previous years, the obsolete fireplaces in Ward 1 were removed, and additional steam radiators with automatic thermostatic control were erected.

A hot plate and a Stott Water Boiler were erected in the kitchen of Ward 5.

The sterilisation of sputum and sputum cups has for many years been troublesome, but a satisfactory sputum steriliser and sputum mug washer was erected during the year. The apparatus has been fully tested and gives very satisfactory results.

Orthopaedic Department.

Concomitant with the establishment of a comprehensive orthopaedic scheme in the city, the need of a department for the construction of splints arose. During the year a unit was established in the Hospital for the construction of orthopaedic appliances. A milling and buffing machine was erected in the engineer's workshop in order to perfect the Splint Department.

Grounds.

During the year the grounds continued to maintain their high standard of floral decoration and utility. A small lawn with a border of shrub was laid out on the south side of the Chapel.

J. C. H. MACKENZIE,
Medical Superintendent.

ISOLATION HOSPITAL AND SANATORIUM. TABLE A.
Number of Patients Admitted, Discharged and Died during 1933.

DISEASE.	Remaining 31st December, 1932 (As diagnosed on admission)	Admitted during Year. (As diagnosed on admission)	Discharged during Year.	Died during Year.	Remaining 31st December, 1933 (As diagnosed on admission)
Scarlet Fever ..	10	309	286	1	32
Diphtheria ..	19	339	302	10	46
Enteric Fever ..	—	—	—	—	—
Measles ..	9	32	37	3	1
Erysipelas ..	1	54	48	6	1
Cerebro-Spinal Fever ..	2	7	5	3	1
Puerperal Fever ..	1	22	19	—	4
Other Diseases ..	6	109	90	21	4
Smallpox ..	—	—	—	—	—
Smallpox Contacts ..	—	—	—	—	—
Tuberculosis :—					
Observation Cases ..	—	52	50	—	2
Adults ..	96	274	220	53	97
Surgical ..	29	16	14	1	30
Children ..	—	88	45	2	41
Discharged Soldiers ..	2	8	7	—	3
	—127	—438	—336	—56	—173
Total ..	175	1310	1123	100	262

ISOLATION HOSPITAL AND SANATORIUM.

TABLE B.

Patient Days during 1933-1934.

	For 12 months ending Dec. 31st, 1933.	For 12 months ending March 31st, 1934.
Smallpox	—	—
Smallpox Contacts	—	—
Scarlet Fever	7316	8152
Diphtheria	13927	15582
Enteric Fever	—	59
Cerebro-Spinal Meningitis	114	45
Puerperal Fever	994	976
Other Infectious Diseases	4109	4166
Tuberculosis :—		
Adults	41266	42085
Discharged Soldiers	1544	1312
Children	7600	10220
Surgical Cases	10221	9955
Observation Cases	1717	1629
	88808	94181
SUMMARY.		
Infectious Diseases	26460	28980
Tuberculosis	62348	65201
Total	88808	94181

GROBY ROAD SANATORIUM.

TABLE C.

As required by the Ministry of Health.

A.—Average Number of Beds available for Patients during the year 1933.

	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Total
	"Sanatorium" Beds	"Hospital" Beds	Disease of Bones and Joints	Other Conditions	
Adult Males	30	36	6	..	72
Adult Females	20	51	6	..	77
Children under 15 ..	32	..	15	..	47
Total	82	87	27	..	196

B.—Return showing the Extent of Residential Treatment during the Year 1933.

			In Institution on Jan. 1	Admitted during the year.	Discharged during the year.	Died in the Institution.	In Institution on Dec. 31
Number of Patients	Adults.	M.	54	155	136	28	45
		F.	54	143	105	26	66
	Child-ren.		19	53	30	2	40
Number of Observation Cases	Adults.	M.	..	30	28	..	2
		F.	..	22	22	..	..
	Child-ren.		..	35	15	..	20
Total			127	438	336	56	173

TABLE D.

As required by the Ministry of Health.

“HOME PLACE,” HOLT.

A.—Average Number of Beds available for Patients during the year 1933.

	Observation.	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Total
		“Sanatorium” Beds.	“Hospital” Beds.	Disease of Bones and Joints.	Other Conditions	
Adult Males
Adult Females
Children under 15
Total	26

B.—Return showing the Extent of Residential Treatment during the Year 1933.

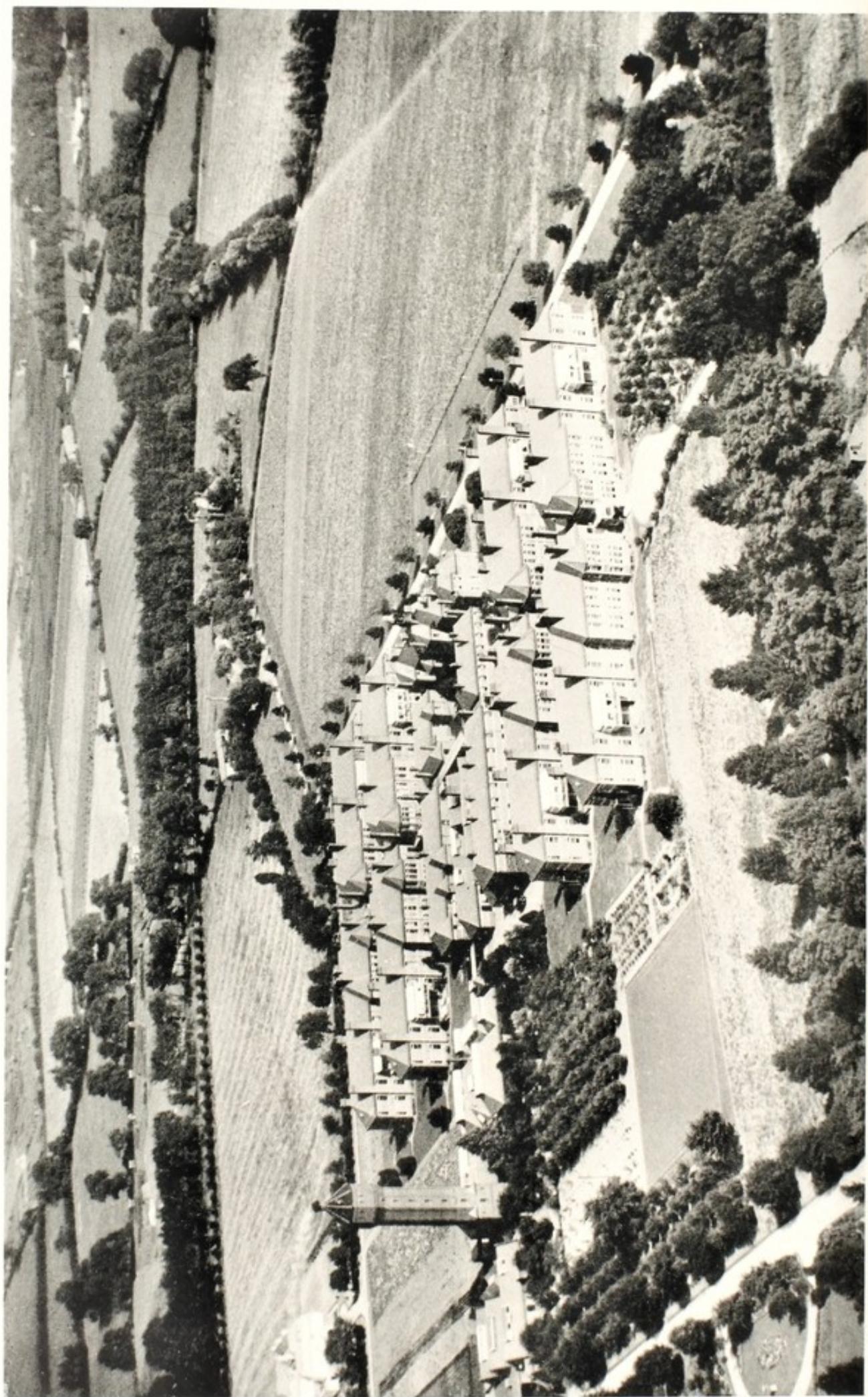
			In Institution on Jan. 1.	Admitted during the year.	Discharged during the year.	Died in the Institution.	In Institution on Dec. 31.
Number of Patients	Adults.	M.	..	43	43	..	..
		F.	..	40	40	..	..
	Child-ren.		..	25	25	..	..
Number of Observation Cases	Adults	M.	..	..	..	..	..
		F.	..	..	..	..	..
	Child-ren.	M.	..	..	..	..	..
		F.	..	..	..	..	..
Total ..			..	108	108	..	..

TABLE E. As required by the Ministry of Health.
RESULTS OF TREATMENT. GROBY ROAD SANATORIUM.
For the year 1933.

Classification on admission to the Institution.	Condition at time of discharge.	Duration of Residential Treatment in the Institution.												TOTAL	
		Under 3 months.			3-6 months.			6-12 months.			More than 12 months.				
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.		
PULMONARY TUBERCULOSIS.	Class T.B. minus.	Quiescent	10	15	-	4	5	-	3	1	-	-	-	-	38
		Not Quiescent ..	14	21	33	8	11	13	2	2	3	-	-	-	107
		Died in Institution ..	-	1	-	-	-	-	-	-	-	-	-	-	1
	Class T.B. plus Group 1.	Quiescent	-	1	-	1	-	-	-	-	-	-	-	-	2
		Not Quiescent ..	14	12	-	10	6	-	2	3	-	-	-	-	47
		Died in Institution ..	-	-	-	-	-	-	-	-	-	-	-	-	-
	Class T.B. plus Group 2.	Quiescent	-	2	-	-	-	-	-	1	-	-	-	-	3
		Not Quiescent ..	38	24	-	44	14	-	10	8	-	-	-	-	138
		Died in Institution ..	-	-	-	-	-	-	-	1	-	-	-	-	1
	Class T.B. plus Group 3.	Quiescent	-	-	-	-	-	-	-	-	-	-	-	-	-
		Not Quiescent ..	6	4	-	8	7	-	1	4	-	-	-	-	30
		Died in Institution ..	18	19	1	5	3	-	5	2	-	-	-	-	53
NON-PULMONARY TUBERCULOSIS.	Bones and Joints.	Quiescent or Arrested	-	1	-	-	-	-	-	-	1	1	-	1	4
		Not Quiescent ..	-	-	-	2	-	1	-	2	2	1	1	1	10
		Died in Institution ..	-	-	-	-	-	-	-	-	-	-	-	-	-
	Abdominal.	Quiescent or Arrested	-	-	-	-	-	-	-	-	-	-	-	-	-
		Not Quiescent ..	-	-	-	-	-	-	-	-	-	-	-	-	-
		Died in Institution ..	-	-	-	-	-	-	-	-	1	-	-	-	1
	Other Organs.	Quiescent or Arrested	-	-	-	-	-	-	-	-	-	-	-	-	-
		Not Quiescent ..	-	-	-	-	-	-	-	-	-	-	-	-	-
		Died in Institution ..	-	-	-	-	-	-	-	-	-	-	-	-	-
	Peripheral Glands.	Quiescent or Arrested	-	-	-	-	-	-	-	-	-	-	-	-	-
		Not Quiescent ..	-	-	-	-	-	-	-	-	-	-	-	-	-
		Died in Institution ..	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE E 1. As required by the Ministry of Health,
 "HOME PLACE," HOLT.
 For year 1933.

Classification on admission to the Institution.	Condition at time of discharge.	Duration of Residential Treatment in the Institution.												TOTAL
		Under 3 months.			3-6 months.			6-12 months.			More than 12 months.			
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
PULMONARY TUBERCULOSIS. Class T.B. minus.	Quiescent	6	3	-	-	-	-	-	-	-	-	-	-	9
	Non-quiescent ..	7	15	23	-	-	2	-	-	-	-	-	-	47
	Died in Institution ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Class T.B. plus Group 1.	Quiescent	-	-	-	-	-	-	-	-	-	-	-	-	-
	Non-quiescent ..	8	9	-	-	-	-	-	-	-	-	-	-	17
	Died in Institution ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Class T.B. plus Group 2.	Quiescent	-	-	-	-	-	-	-	-	-	-	-	-	-
	Non-quiescent ..	22	10	-	-	-	-	-	-	-	-	-	-	32
	Died in Institution ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Class T.B. plus Group 3.	Quiescent	-	-	-	-	-	-	-	-	-	-	-	-	-
	Non-quiescent ..	-	1	-	-	-	-	-	-	-	-	-	-	1
	Died in Institution ..	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX III.

Report on the City General Hospital Leicester, for the year 1933

By

ERNEST C. HADLEY, M.D., B.S. (Lond.), F.R.C.S.E., etc.
Medical Superintendent, General Surgeon, Lecturer and
Internal Examiner to Nurses.

This Hospital, which was opened for the reception of patients on September 28th, 1905, was "appropriated" by the Health Committee of the Leicester City Council under the Public Health Acts, 1875 to 1926, as extended by Section 14 (2) of the Local Government Act, 1929, on April 1st, 1930, from which date the hospital was re-named the "City General Hospital."

The area served by the Institution is :—

City of Leicester. Population—estimated 1933—241,500.

County of Leicester. To a limited extent, viz., County Public Assistance, and County Orthopædic and Surgical Tuberculosis cases.

The mode of admission and conditions of eligibility for treatment were altered from the date of appropriation, suitable cases being accepted at the discretion of the Medical Superintendent, on the recommendation of the patient's own doctor, a condition of admission being that the patient is normally resident within the City of Leicester ; it should be noted, however, that arrangements have been made with the County Authorities by which cases from the County can be treated, provided that the Medical Officer of Health for the County, or the Public Assistance Officer of the County, authorise and recommend such patients for treatment.

It should be noted also that, by arrangement with the Saturday Hospital Society and City General Hospital Committees, Saturday

Hospital Fund contributors resident in the City are now eligible for admission as patients to this Hospital without any financial call being made upon them, and arrangements can be made for Saturday Hospital Fund contributors living in the County to be admitted on the same terms as City cases through Mr. Wm. H. Abell, Secretary of the Saturday Hospital Society.

Medical practitioners of the City have for some time now been notified that Acute General Medical, General Surgical, Orthopædic and Surgical Tuberculosis, and also Maternity Cases, are eligible for admission as In-patients. Phthisical Cases should be referred to the Tuberculosis Medical Officer, and Infectious Cases to the Medical Superintendent of the City Isolation Hospital, in the first instance. Full details as to how to deal with special cases can be found on the back of the Recommendation Forms which have been issued and are in use amongst all medical practitioners in the City. Special attention should here be drawn to Section IV at the back of these Recommendation Forms, which deals with the accommodation provided for chronic and senile cases.

During the past year every doctor recommending a patient for admission has been written to (on the discharge or death of his patient) giving him a private and confidential report in the form of brief clinical notes, and any features of special interest, such as mode of treatment, copies of X-Ray and laboratory reports or post-mortem findings, etc., and this procedure, from letters received, appears to have been much appreciated by many of the Medical Practitioners of the City.

The General Features of the Hospital have been dealt with in detail in previous reports. The following is a brief survey of the structural additions and alterations which have been carried out during the past year, all with a view to modernising and equipping the Hospital in order to offer the most up-to-date methods of treatment for all classes of cases, which is so essential in a General Hospital serving so large a population. The statistics relating to various of the departments will show, when compared with those of previous years, that the alterations, additions and expenditure incurred already show signs of being fully justified.

(a) **X-Ray Department.**

The whole of the plant, apparatus, and equipment in this Department has been subjected to thorough overhaul, but no extensive alterations have been carried out yet as plans are being considered for building a new department, to include all types of Radiological

treatment. The main changes here are in connection with the Staff, and are dealt with under this heading.

(b) Operating Theatre.

The floors of the Theatre on the upper floor, and of the new Theatre which has been equipped downstairs (adjoining Ward IX) for use in Orthopædic work, have been relaid.

(c) Open-air Verandahs.

Wards 5 and 7 on the Male side, and 9 and 11 on the Female side, have during the past year been extended and provided with open-air verandahs. Ward 5, the Male Orthopædic and Surgical Tuberculosis Ward, has now an open-air verandah along the whole length of one side, and across the total width of the Ward at the far end, i.e., facing South-East, thus providing out-door accommodation for 18 beds. On Ward 7, immediately above, a balcony of corresponding dimensions (i.e., to contain six beds) runs along the bottom of the Ward, again, facing South-East. Similarly on Wards 9 and 11 on the Female Side. An additional Sanitary Annexe has been provided for each of these Wards. In this way the patients on the Wards in question can be wheeled outside during the day and thus derive the maximum benefit from the excellent situation of this Hospital.

(d) Laundry.

Re-conditioning and re-installation of new machinery is in progress.

(e) Kitchen.

Installation of new plant and re-organisation of this Department is progressing satisfactorily.

Staffing of Hospital.

I. Medical Staff.

- (a) *Resident* : 1 Medical Superintendent and General Surgeon.
1 Deputy Medical Superintendent.
2 Resident Medical Officers.
- (b) *Visiting* : 1 Orthopædic Surgeon.
2 Visiting Physicians.
2 Visiting Anæsthetists.
1 Consultant V.D. Specialist.
1 Radiologist, Visiting.
1 Radiographer, Resident.

II. Resident Nursing Staff.

- 1 Matron.
1 1st Assistant Matron.
1 2nd Assistant Matron and Home Sister.
1 3rd Assistant Matron and Sister Tutor.
1 Night Superintendent.
1 Assistant Night Sister.
1 Maternity Sister.
1 Theatre Sister.
14 Ward Sisters.
2 Relief Sisters.
66 Probationer Nurses.

N.B.—Probationer Nurses are in training for four years, during which period they are expected to pass the Preliminary and Final State Examinations, and also that of the Central Midwives Board. The remainder of the Resident Nursing Staff are all fully qualified State Registered Nurses and hold the C.M.B. certificate.

III. Resident Domestic Staff.

- 1 Head Laundress.
2 Lodge Porters and Portress.
15 Maids.

IV. Other Non-Resident Staff.

- 7 Male attendants.
1 Laboratory Assistant.
2 Masseuses.
2 Teachers for City General Hospital Council School.

Total Resident Staff.

113

The Medical Staff has been increased by the appointment of a Deputy Medical Superintendent. Dr. A. M. Macqueen, M.D., formerly Senior Resident Medical Officer, was appointed to this

position on June 1st, 1933, bringing the total Resident Medical Staff up to 4.

The work in the X-Ray Department is carried out by a resident Radiographer (female) which appointment commenced on February 15th, 1933. The Department is now supervised by the Consultant Radiologist, who attends weekly, and reports on films taken. A great improvement in the work of this Department has taken place as a result of these appointments.

In the Pathological Department there is now a male Laboratory Assistant, whose appointment took place on November 28th, 1932.

Visiting Staff.

On June 1st, 1933, the following additional appointments were made, the attendances recorded cover the period of six months :—

Position.	No. of Attendances
2 Visiting Physicians : Both attend once a week and at other times as requested	25 23 — 48
2 Visiting Anæsthetists : The work is divided equally as far as possible, and both attend as requested	14 27 — 41
1 Consultant V.D. Specialist : Attends once a month, and on request	3 — 3
1 Consultant Radiologist : Attends once a week, and at other times if required	24 — 24

Specialised Services supplied by the Hospital :—

- i. Orthopædic.
- ii. Massage and Ultra-violet Light Treatment.
- iii. X-Ray.
- iv. Ante-natal.
- v. Venereal Disease.
- vi. Rheumatic and Heart Cases.
- vii. City General Hospital Council School.

Accommodation provided by Hospital :—

	Excluding Balcony Beds (which are not recognised as Permanent Accom- modation).	Including B. Beds.
(a) For Men	254	290
(b) „ Women	223	259
(c) „ Children	32	32
	—	—
Total	509	589
	—	—

Classification of Accommodation showing, also, number of beds occupied on December 31st, 1933, i.e., approximate average number of beds occupied on various Wards.

Classification of Wards.	No. of Wards Assigned.	BEDS.							
		Men.		Women.		Children.		Total.	
		Provided.	Occupied.	Prov.	Occ.	Prov.	Occ.	Prov.	Occ.
1. Medical ..	6½	86	40	101	47	—	79	187	166
2. Surgical ..	3	64	27	28	28	—	4	92	59
3. Chronic Sick ..	2	31	30	31	24	—	6	62	60
4. Children ..	1					32	25	32	25
5. Venereal ..	Part of Med.Wds.	10	—	10	3	—	—	20	3
6. Tuberculosis ..	1½	32	22	14	13	—	8	46	43
7. Maternity ..	2			8	5	—	3	8	8
8. Orthopædic ..	2	31	11	31	7	—	42	62	60
Total ..	18	254	130	223	127	32	167	509	424

GENERAL STATISTICS.

	1933	Previous Year.
Admissions during year	2685	2471
Discharges during year	2123	1915
Deaths during year	536	564
Deaths within 7 days of admission	209	244
Number of Patient Days	137455	142709
Average duration of residence (in days)..	64.2	49.6
Average number of beds occupied ..	376.6	390.2
Highest number of beds occupied—		
(On 3/2/33)	491	—
(On 15/4/32)	—	484
Lowest number of beds occupied—		
(On 22/10/33)	315	—
(On 29/9/32)	—	323
Post-mortem Examinations held	78	74
Inquests held	16	12
Operations performed	188	136
X-Ray films exposed	2182	1092
Total confinements	134	145
Laboratory figures—		
Pathological investigations	1828	1274
Wasserman blood tests	457	454

SUMMARY OF YEARLY RETURN OF CASES.

	Remaining on 31/12/32	Admitted during year	Discharged during year	Died during year	Remaining on 31/12/33
Men	162	1025	802	263	122
Women	128	941	743	188	138
Children (under 16 years)	108	719	578	85	164
Totals	398	2685	2123	536	424

Transfers from Other Institutions and Cases sent in by other Local Authorities.

	Re- maining 31/12/32	Ad- mitted	Dis- charged	Died	Re- maining 31/12/33
Leicester Royal Infirmary					
Male	—	47	28	12	7
Female	—	45	29	4	12
Total	—	92	57	16	19
City Isolation Hospital					
Male	1	8	6	1	2
Female	—	10	5	1	4
Total	1	18	11	2	6
Westcotes Maternity Home					
Mothers	—	11	10	1	—
Infants	—	11	9	2	—
Total	—	22	19	3	—
School Medical Service					
Male	—	16	14	—	2
Female	—	12	10	—	2
Total	—	28	24	—	4
County Health Dept.					
Male	—	27	16	2	9
Female	—	12	8	—	4
Total	—	39	24	2	13
County Public Assistance Dept.					
Male	1	—	—	—	1
Female	—	4	4	—	—
Total	1	4	4	—	1

Cases in which Saturday Hospital Society assumed responsibility :—

1932. 364 Patients at a cost of £228 17s. 6d.
 1933. 594 Patients at a cost of £489 11s. 6d.

OPERATION TABLE.

(a) GENERAL SURGERY.

Class of Case.	Operation under General Anæsthetic.	No. Performed.
I. General Diseases.	Amputations :—Foot	1
	Leg	1
	Stump	2
	Thigh	1
	Thumb	1
	Cellulitis :—Incisions and drainage ..	1
	Prepatella Bursitis	1
	Empyema :—Rib resection	6
Tracheotomy	1	
II. Digestive Sytem	Appendicectomy	8
	" and Intussusception	1
	" and division of Ad- hesions	1
	Appendix perforated	1
	Laparotomy and division of adhesions	1
III. Hernia	Radical Cure	5
	Strangulated	1
IV. Urino-Genital	Circumcision	2
V. Gynaecology and Midwifery	Breast Abscess :—Incised and drained	10
	Cæsarian Section	1
	Curettagé	16
	Dilatation of Cervix	1
VI. Diseases of Ear, Nose and Throat	Mastoidectomy	1
	Teeth Extraction	1
	Tonsillectomy	4
VII. Injuries	Manipulation and plaster	1
	Reduction of Dislocation	1
	Reduction of fracture	1
VIII. Various	Abscess of :—Arm—incised	2
	Neck—incised	5
	Neck and head—incised	1
	Removal of :—Glands in neck	3
	Lipoma of leg	1
	—	84
	—	—

OPERATION TABLE—*continued.*

(b) ORTHOPAEDIC SURGERY.

Class of Case.	Operation under General Anæsthetic.	No. Performed.	
I. Diseases of Bones and Joints	Abscess of spine :—Incision and drainage	1	
	Amputation :—Leg	1	
	Arthrotomy :—Foot	1	
	" Hip	2	
	" Knee	2	
	Bone Graft :—Tibia	2	
	Excision of Elbow	1	
	" Hip	1	
	Exploration of Metatarsal	1	
	Open reduction of Knee	1	
	Osteomyelitis of Tibia :—Incision ..	2	
	Osteotomy of Femur	3	
	" Tibia :—Winnett-Orr	3	
	Removal of Sequestra :—Right Femur	1	
	Sections for examination	2	
	Scraping Sinus of dorsum	1	
	" Humerus	1	
	Spinal Graft—Albée	2	
	II. Deformities :— (a) Congenital	Amputation of Foot	1
		C.D.H. Manipulation and Plaster ..	16
Osteoclasis		3	
Talipes—Correction and tenotomy ..		1	
(b) Various		Arthrodesis Foot	2
		Arthrotomy Shoulder	1
		Correction of chronic equino-varum	1
		Lengthening of Tendon Achilles ..	1
		Transplantation of Tendon Achilles	1
		Pes Planus—wrenched	1
		Tenotomy of Feet	2
		" Subcutaneous	1
		Osteotomy of Femur	1
		Stabilisation of Foot	1
		Torticollis—Tenotomy	1
		Hallux Valgus	1
		Moulding Tibiæ	1
Manipulation and Re-plaster ..	9		
III. Injuries	Manipulation of Fractured Femur ..	1	
	Reduction of ditto	1	
IV. Miscellaneous	Excision of Corns and Manipulation of Feet	1	
V. Plasters only	Arm	2	
	Foot	5	
	Hip	3	
	Knee	1	
	Legs	10	
VI. Removal of Sutures, etc.	Elbow	1	
	Foot	3	
	Hand	1	
	Knee	1	
	Leg	1	
		104	

LABORATORY REPORT.

Examination of Sputum for Tubercle bacilli	767
Complete Blood Counts	183
Red ditto	48
White ditto	42
Blood films	29
Blood Cultures	15
Blood Sedimentations	133
Blood Sugar Curves	5
Blood Sugar Estimations	12
Blood Ureas	38
Blood Icterus index	5
Blood Van den Berghs	5
Examination of Swabs (also aural and nasal) for K.L.B. ..	104
Examination of Throat Swabs for organisms	25
Examination of smears (vaginal, urethral, etc.)	64
Examination of Fluids (pus, pleural fluids, etc.)	76
Examination of Cerebro-Spinal Fluids	21
Examination of Hairs for ringworm	27
Examination of Fæces for occult blood	8
Fractional Test Meals	36
Urines, microscopically examined	16
„ chemically and microscopically examined	58
„ examined for Tubercle bacilli and other organisms..	59
„ „ „ Urea Concentration Test	12
Microtome Sections	32
Mounted Specimens	5
Miscellaneous investigations	3
Total	1828

SPECIMENS SENT TO OTHER INSTITUTIONS.

To Leicester Royal Infirmary :—

Blood films	2
Agglutination Tests (Widals, etc.)	6
Cerebro-spinal fluids	12
Fæces for occult blood	2
Microtome Sections	8
WASSERMAN BLOOD TESTS	457

Total **487**

To City Isolation Hospital :—

Fluids, for Guinea-pig inoculation, etc.	13
Fæces for occult blood	1
Specimens for mounting	5

Total **19**

To Royal Institute of Public Health :—

Bendien Tests	5
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TUBERCULOSIS REPORT.

Tuberculosis, both in the form of Surgical Tuberculosis and also Phthisis, have always been treated at this Hospital, but on July 22nd of this year, 1933, the Institution was definitely approved by the Ministry of Health for the treatment of Tuberculosis. Most of the phthisical patients were advanced cases for whom there is no accommodation at the Groby Road Sanatorium. For these cases 46 beds are assigned and the following tables show the number of patients passing through them during the past year. In addition, there are two Orthopaedic Wards, containing, in all, 62 beds, and a large number of these are occupied by long-stay cases of Surgical Tuberculosis.

NUMBER OF TUBERCULOSIS PATIENTS ADMITTED FOR TREATMENT—PULMONARY AND NON-PULMONARY.

	Remaining 31/12/32	Admitted	Discharged	Died	Remaining 31/12/33
Adult Males . .	43	118	97	40	24
„ Females	16	82	50	29	19
Children, Male and Female	13	55	28	7	33
Grand Total . .	72	255	175	76	76

The Return showing Residential Treatment in Institution has been divided into two groups, as, for the first half of the year, previous to the Hospital being approved for the Treatment of Tuberculosis, the cases were not classified according to the Ministry of Health standards, and they have therefore been grouped as far as possible in the same way as cases in the second half of the year.

TUBERCULOSIS RETURN FOR 1933.

Pulmonary T. B. cases discharged during first half of year.	Condition at time of discharge.	Duration of Residential Treatment in Institution.												TOTALS.			GRAND TOTALS.	
		Under 3 months.			3-6 months.			6-12 months.			Over 12 months.			M.	F.	Ch.		
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.					
Quiescent	5	3	-	-	-	-	2	1	-	1	-	-	8	4	-	12		
Non-Quies.	14	15	-	2	6	1	1	-	-	-	-	-	17	21	1	39		
Died in Inst.	14	12	-	1	1	-	3	1	-	3	1	-	21	15	-	36		
Total of Pul. T. B. for first half year		33	30	-	3	7	1	6	2	-	4	1	-	46	40	1	87	
PULMONARY TUBERCULOSIS.																		
T. B.—		Quiescent	2	1	1	1	2	-	-	-	-	-	-	3	3	1	7	
T. B.—		Non-Quies.	1	4	-	-	1	1	1	-	-	-	-	2	5	1	8	
T. B.—		Died in Inst.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T. B.+I.		Quiescent	2	-	-	-	-	-	-	-	-	-	2	-	-	2		
T. B.+I.		Non-Quies.	-	1	-	-	-	-	-	-	-	-	-	1	-	1		
T. B.+I.		Died in Inst.	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
T. B.+II.		Quiescent	2	-	-	1	-	-	4	-	-	-	7	-	-	7		
T. B.+II.		Non-Quies.	15	1	-	7	-	-	4	-	-	-	26	1	-	27		
T. B.+II.		Died in Inst.	6	-	-	-	-	-	-	-	2	-	8	-	-	8		
T. B.+III.		Quiescent	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
T. B.+III.		Non-Quies.	2	3	-	2	3	-	3	-	-	-	7	6	-	13		
T. B.+III.		Died in Inst.	5	9	2	1	3	-	1	-	-	-	7	12	2	21		
Total of Pulmonary			35	19	3	12	9	1	13	-	-	2	-	-	62	28	4	94
NON-PULMONARY TUBERCULOSIS.																		
Bones and Joints.		Quiescent	3	-	3	2	-	2	3	-	2	3	11	-	10	21		
Bones and Joints.		Non-Quies.	5	1	3	2	-	4	2	1	3	-	9	3	10	22		
Bones and Joints.		Died in Inst.	2	-	-	-	-	-	2	-	-	-	4	-	-	4		
Abdominal.		Quiescent	-	1	-	-	1	1	-	-	-	-	-	2	1	3		
Abdominal.		Non-Quies.	-	1	-	-	-	-	-	-	-	-	-	1	-	1		
Abdominal.		Died in Inst.	-	1	2	-	-	1	-	-	-	-	-	1	3	4		
Other Organs.		Quiescent	1	-	-	-	-	1	1	-	-	-	2	-	1	3		
Other Organs.		Non-Quies.	-	2	1	-	-	1	-	-	-	-	-	2	2	4		
Other Organs.		Died in Inst.	-	1	2	-	-	-	-	-	-	-	-	1	2	3		
Peripheral Glands.		Quiescent	-	-	1	-	1	-	-	-	1	-	1	1	1	3		
Peripheral Glands.		Non-Quies.	1	-	-	1	-	-	-	-	-	-	2	-	-	2		
Peripheral Glands.		Died in Inst.	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total of Non-Pulmonary			12	7	12	5	2	10	8	1	5	4	1	3	29	11	30	70

MATERNITY DEPARTMENT.

Number of Maternity Beds provided	8
" " " Cases admitted during year	134
Average duration of stay (in days)	18
Number of cases delivered by Midwives	126
" " " " " " Doctors	8
" " " notified as Puerperal Fever	—
" " " " " " Pyrexia	—
" " " " " " Ophthalmia Neonatorum	3
" " Maternal Deaths	2
" " Infant Deaths in children born in this Hospital	—
" " Infants stillborn	11

Transfers from Westcotes Maternity Home.

		Admitted during Year.		Discharged during Year.		Died during Year.
Mothers ..		11		10		1
Children ..		11		9		2

Fatal Cases.

Adult.—Woman of 32 years. Case of Diabetes Mellitus, Acute on subacute Nephritis. Became acutely maniacal two days after admission. Induced abortion six days after admission, resulting in macerated foetus. Died eight days after. Post-Mortem confirmed diagnosis of Nephritis and Diabetes Mellitus.

Infants.—Male child born at Westcotes ; admitted when 14 days old with Spina Bifida ; made good progress for a short time but gradually deteriorated to fatal termination at age of eleven weeks.

Female child born at Westcotes : admitted with Mother, who was a case of Suppurative Mastitis. Developed Acute Broncho Pneumonia and died eleven weeks after admission at age of thirteen weeks.

Other Maternal Deaths.

1. Case of notified Pulmonary Tuberculosis previously treated here. Age 21 years. Admitted one week after confinement. Died 16 days after admission. Tuberculous Laryngitis in Puerperium. Rapidly fatal termination.

2. Admitted one hour after confinement as case of "Bronchitis." Died two days later. Age 27 years. Tuberculous Laryngitis in Puerperium. Not previously notified as case of Tuberculosis. History of chest trouble of long standing, and loss of voice during pregnancy. Also gave family history of tuberculosis.

Subsequently Fatal Case.

Apart from the two cases of T.B. Laryngitis in Puerperium who died at this Hospital, there was also a case of a woman of 30 years admitted 17 days after confinement (at Westcotes Maternity Home), complaining of sore throat. Patient gave history of Pleurisy some time previous, and sore throat both before confinement and immediately after. Diagnosed "Tonsillitis" on admission here. Family history of Tuberculosis positive. Patient had tubercle bacilli in sputum, and X-Ray examination revealed advanced disease in both lungs. Patient, who was not a resident of Leicester, was taken to her own home eight days after admission, where she afterwards died, the condition proving rapidly fatal as in those cases dying at this Hospital.

CLASSIFICATION OF CASES TREATED during the twelve months Jan. 1st to Dec. 31st, 1933.

MEDICAL CASES.

I. General Infections.

Chorea	7	Malaria	2
Diphtheria, Faucial	13	Measles	37
" Laryngeal	1	Ophthalmia Neonatorum	3
" Nasal	1	Pertussis	13
Dysentery,	2	Rheumatism, Acute	29
" Bacillary	1	" Subacute	8
Erysipelas	9	Scarlet Fever	4
Influenza	104	Varicella	25

II. Respiratory Diseases.

Asthma	22	Oedema of Lungs	1
Ayerza's Disease	1	Phthisis	177
Bronchiectasis	6	" Pneumonic	4
Bronchiolectasis	2	Pleurisy, Dry	9
Bronchiolitis	7	" Diaphragmatic	2
Bronchitis, Acute	88	" with Effusion	10
" Acute on Chronic	1	Pleuritis	1
" Chronic	70	Pneumokoniosis	4
" Chronic and		Pneumonia, Broncho	180
Emphysema	16	" Hypostatic	8
Catarrh, Bronchial	1	" Lobar	44
" Chronic Pulmonary	3	" Septic	1
Congestion, Pulmonary	11	Pulmonary Embolism	2

III. Diseases of the Heart and Circulation.

Aortic Aneurysm	3	Congenital Heart	1
" Disease	10	Coronary Thrombosis	1
" Disease, double	2	Dilatation of the Heart	1
" Incompetence	1	Endocarditis	5
" Regurgitation	4	" Acute Rheumatic	
Aortitis, specific	2	Malignant	1
Arterio Sclerosis	23	" Malignant	2
Auricular Fibrillation	15	" Rheumatic	14
Cardiac Failure	2	Fatty Degeneration of Heart	5

Diseases of the Heart and Circulation—Continued.

Hyperpiesis	15	Myocardial Degeneration ..	3
Mitral and Aortic Disease ..	2	Myocarditis	52
" Disease	8	Pericarditis	5
" Disease, double	1	" and Endocarditis ..	1
" Incompetence	4	" Adhesive	2
" Regurgitation	5	Tachycardia	1
" Stenosis	21	Valvular Disease of Heart ..	4

IV. Diseases of the Nervous System.

Acute Transverse Myelitis ..	1	Meningitis, Lepto	1
Aphasia	1	" Meningococcal ..	2
Brachial Neuritis	2	" Pneumococcal ..	1
Cerebellar Embolism	2	" Streptococcal ..	1
Cerebral Abscess	1	" Tuberculous	3
" Arterio Sclerosis	1	Neuralgia, intercostal ..	2
" Embolism	7	Neurasthenia	28
" Haemorrhage	29	Neurosis	5
" Lesion	1	" Anxiety	4
" Softening	3	" Fear	1
" Thrombosis	57	Neurovascular Oedema ..	1
Cerebro-Spinal Syphilis ..	1	Neurosyphilis	8
Concussion of Brain	2	Paralysis Agitans	1
Disseminate Sclerosis	10	Parkinsonianism	3
Encephalitis, Chronic	2	Parkinson's Disease	2
Epilepsy	39	Petit Mal	2
Epileptic Amnesia	1	Psychoneurosis	1
" Psychoneurosis	1	Progressive Muscular Atrophy	2
Facial Palsy	1	Spastic Paraplegia	6
General Paralysis of the Insane	4	Subarachnoid Haemorrhage..	2
Haematomyelia	1	Syringomyelia	1
Hemiplegia	8	Tabes Dorsalis	12
Menière's Disease	1	Tumour of Brain	2
Meningismus	3		

V. Mental Disorders.

Dementia	4	Mania, Acute	9
Hysteria, Acute	3	Melancholia	4
Imbecility	6	Mental Deficiency	9
Incipient Dementia Praecox ..	1	" Deterioration	6
Insanity	39	Suicidal	6
" Delusional	1		

VI. Metabolic and Endocrinal Disorders.

Diabetes Insipidus	1	Goitre, Exophthalmic	4
" Mellitus	26	Gout	2
Diabetic Gangrene	5	Jaundice	1
Goitre, Colloidal	1	Pituitary Dysfunction	1
" Cystic	1	Thyroid Enlargement	1

VII. Nutritional Complaints and Congenital Defects.

Deficient Vitality at Birth ..	6	Mothers admitted to feed babies	2
General Mental and Physical Deterioration	1	Multiple Congenital Deformities	2
Icterus Neonatorum ..	1	Prematurity	2
Infants admitted with Mothers (For feeding)	24	Senile Decay	43
Malnutrition	17	„ Gangrene	8
Marasmus	1	Spina Bifida	4

VIII. Intoxications, Poisonings, etc.

Alcoholism	7	Plumbism	2
Arsenical Jaundice	1	Salomella Food Poisoning ..	1
Delirium Tremens	1	Thyrototoxicosis	2
Gas Poisoning	1		

IX. Kidney Diseases.

Albuminuria	3	Nephritis, chronic Interstitial	24
Enuresis	1	„ chronic	1
Haematuria	1	„ Parenchymatous	1
Nephritis, acute	10	„ Orthostatic ..	2
„ subacute	2	Pyelonephrosis	19
„ chronic Hydraemic	1	Uraemia	

X. Affections of Bones, Joints and Fibrous Tissues.

Lumbago	2	Streptococcal Arthritis ..	1
Myositis	3	Traumatic „ ..	2
Osteo-Arthritis	20	Rickets	18
Rheumatoid Arthritis ..	12	Sciatica	3

XI. Digestive System.

Atonic Dyspepsia	2	Gastric Ulcer	4
Catarrhal Jaundice	5	Gastritis	13
Colitis, Mucous	1	Gastro-enteritis, Acute ..	47
„ Ulcerative	1	Gastro-intestinal catarrh ..	4
Diarrhoea	2	Hyperchlorrhidria	1
Diatetic errors	1	Intestinal stasis	16
Duodenal Ulcer	4	Leucoplakia Linguae ..	1

XII. Skin Diseases.

Alopecia Areata	1	Pemphigus, Acute Syphilitic	1
Carbuncles	16	Pityriasis Rosea	1
Cellulitis	9	Purpura	2
Dermatitis	7	Pyodermatitis	1
Eczema	10	Scabies	10
Erythema Nodosum	4	Seborrhoea of Scalp	2
Furunculosis	11	Sycosis Barbae	5
Impetigo	6	Tinea Capitis	11
„ of Scalp	4	„ Tonsurans	1
Leucodermia	1	Urticaria	1
Lupus Vulgaris	2		

XIII. Blood Diseases.

Achlorhydria	1	Anaemia, Secondary	5
Anaemia, Microcytic	1	Hyperglycaemia	1
„ Pernicious	13		

SURGICAL CASES.

I. Alimentary System.

Abdominal Tuberculosis ..	4	Haematemesis	2
Acute Ileo-caecal		Haemorrhoids	4
intussusception	1	Hernia, Femoral	1
Appendicitis, Acute	11	" Inguinal	5
Carcinoma, Caecum	3	" Radical Cure	5
" Colon	7	" Richter's	1
" Liver	11	" Scrotal	1
" Oesophagus	6	" Strangulated	2
" Pancreas	1	" Ventral	2
" Peritoneum	1	Incontinence of Faeces	1
" Pylorus	2	Malignant growth obstructing	
" Rectum	10	Bile Duct	1
" Stomach	9	Multiple Emboli	1
Cholecystitis	10	Pancreatitis	1
Cholelithiasis	1	Partial obstruction of Pelvic	
Chronic intestinal obstruction	2	Colon	1
Cirrhosis of Liver	4	Peritonitis, Syphilitic	1
Colonic obstruction	1	" Tuberculous	2
Gall Stones	2	Pyloric Stenosis	1
Gall Stone Colic	1	Pyloro-duodenal adhesions	1
Gastroptosis	1	Tabes Mesenterica	2

II. Urino-Genital System.

Abcess of Scrotum	1	Prostatitis	1
Balanitis	6	Pruritus Ani	1
Carcinoma, Bladder	3	Pyelitis	10
" Penis	1	Pyelonephrosis	1
Cystitis	10	Renal calculus	2
Enlarged Prostate	13	" Colic	1
Epithelioma of Penis	2	Retention of Urine	8
Gangrene of Penis	1	Soft Chancre	1
Gonorrhoea	8	Supra-pubic Cystotomy	4
Hydrocele	3	Syphilis	48
Hydronephrosis	2	Tuberculous disease of Sacrum	1
Ischio-rectal fistula	1	" " " Kidney	6
Malignant Prostate	2	Undescended Testis	1
" Tumour of Parotid	2	Urethral Calculus	1
Neoplasm of Kidney	1	" Stricture	1
Phimosis	4	Urethro-scrotal fistula	1

III. Affections of Mouth, Nose, Ear and Throat.

Adenitis, Cervical	11	Laryngitis, Tuberculous	3
" Tuberculous	4	Malignant Tonsil	1
Alveolar Abscess	6	Nasal Obstruction	1
Carcinoma, Cervical glands		Naso-pharyngitis	1
" neck	1	Oedema Glottis-Tracheotomy	1
" Mouth	1	Otitis Media	21
Cerumen Ear	3	Otorrhoea	3
Epithelioma, Jaw	3	Otosclerosis	1
" Lip	1	Parotitis, Suppurative	1
" Nose	1	Peri-tonsillar abscess	4
" Tongue and		Post-aural abscess	1
Fauces	1	Tinnitus Aurium	3
Extraction of Teeth	26	Tonsillectomy	4
Faucitis, Septic	6	Tonsillitis,	12
" Streptococcal	1	" Follicular	4
Gingivitis	1	" Suppurative	4
Laryngitis	5		

IV. Affections of the Eyes.

Blepharitis	4	Meibomian Cyst	1
Conjunctivitis	7	Ophthalmia	1
" Phlyctemular	1	" Neonatorum	3
Corneal Ulcer	2	Optic Atrophy	1
Dachrocystitis	3	Orbital Abscess and paralysis	
Ecchymosis	1	upper division of nerve ..	3
Mastoiditis, acute	2	Wound of Conjunctive	1

V. Affections of Bones and Joints.

Alber's Schonberg Disease	1	Fractures, Ulna	1
Anterior Poliomyelitis	20	Fracture dislocation of	
Bursitis, Pre-patella	1	shoulder	3
" Supra-patella	1	Genu Valgum	4
Charcot's joint	3	" Varum	2
Congenital Dislocation of Hip	10	Hammer Toe	2
Coxa Vara	1	Osteomyelitis	11
Double Equino Varum	3	Paget's Disease	1
" Pes Cavus	2	Perth's Disease Hip	2
" " Planus	4	Post A.P.M. Deformities	2
Fractures, Clavicle	1	Sacro-iliac Strain	2
" Colles	4	Sarcoma of Tibia	1
" Femur	22	Slipped Epiphysis	1
" Fibula	2	Spondylitis Deformans	4
" Humerus	1	Talipes	5
" Jaw	1	Torti-collis	1
" Metatarsals	1	Tuberculous Elbow	1
" Nose	1	" Hip	15
" Os Calcis	1	" Knee	12
" Patella	1	" Osteitis R.	
" Radius	1	Tarsus	1
" Radius and Ulna	1	" Pubic Bone	1
" Ribs	3	" Rib	1
" Scapula	1	" R. Great Toe	1
" Spine	1	" Sacro-iliac joint	1
" Tibia	5	" Spine	16
" Tibia and Fibula	6	" Wrist	1

VI. Respiratory System.

Carcinoma of Mediastinum	3	Mediastinal Tumour	2
" " Pleurae	1	" Lymphosarcoma	1
Empyema	6	Pleurodynia	3
" Streptococcal	1	Sarcoma of Lung	1
Hydropneumothorax	1		

VII. Maternity and Gynaecological.

Abortions	24	Endometritis	2
Abscess, Chronic Pelvic	1	Epithelioma of Vulva	1
Albuminuria of Pregnancy	2	Erosion of Os	1
Amenorrhoea	1	Hydatidiform Mole	1
Anaemia of Pregnancy	2	Hyperemesis Gravidarum	2
Ante-partum haemorrhage	2	Interstitial Nephritis in	
Carcinoma, Breast	13	Pregnancy	1
" Cervix Uteri	1	Leucorrhoea	2
" Ovary	4	Mammary Abscess	2
" Uterus	1	Mastitis	1
Cervicitis	1	" suppurative	6
Confinements	134	Metritis, Chronic	1

Maternity and Gynaecological—Continued.

Metrorrhagia	2	Puerperal Pyrexia	1
Milk Retention	1	Pyelitis of Pregnancy	2
Ovarian Cyst	1	Recto-vaginal fistula	1
Pelvic Thrombosis	1	Ruptured Peritoneum	1
Perineal Tear, and general septicaemia	1	Salpingitis, chronic	2
Phlegmasia Alba Dolens	1	" Gonorrhoeal	1
Phlebitis, puerperal	1	Sapraemia	2
Placenta, adherent retained ..	2	Subinvolution of Uterus	1
" praevia	1	Tuberculous Laryngitis in Puerperium	3
Pregnancy	32	Uterine Fibroids	1
Prolapsus Uteri	1	" Haemorrhage	1
Puerperium	4	Vaginitis	1
Puerperal mania	3	Vomiting of Pregnancy	1

VIII. Miscellaneous.

Abrasions, minor superficial ..	8	Minor injuries, various	17
Abscesses, various	13	Paresis Arm	1
" Tuberculous—of chest and neck	1	Phlebitis	2
Adenitis, axillary	2	" with general septicaemia	1
" inguinal	5	Septic sores	1
Bruises	2	" finger	2
Burns	5	" foot	3
Carcinoma Lymph Gland arm ..	1	" knee	2
Concussion	2	" knee with staphylococcic septicaemia ..	1
Convulsions	3	" toe	5
Contusions	9	Syncope	1
Coryza	1	Ulcer of Foot	3
Cut Throat	3	" Leg	10
Gangrene of Foot	8	" Leg—Varicose	16
" Toe	2	Unhealed Abdominal Wound ..	1
Heat Exhaustion	2	Whitlow	4
Inflamed Leg	4	Wounds, lacerated and various ..	7
Lymphangitis	5		

IX. Malignant Growths.

Carcinoma, Bladder	3	Lymphosarcoma, Mediastinal ..	1
" Breast	13	Malignant growth obstructing Bile Duct	1
" Caecum	3	" Tumour Mediastinum	1
" Cervical glands neck	1	" " Parotid	1
" Cervix uteri	1	" Prostate	2
" Colon	7	" Tonsil	1
" Liver	11	Sarcoma, Lung	1
" Lymph gland arm	1	" Tibia	1
" Mediastinum	3	Epithelioma Jaw	3
" Mouth	1	" Lip	1
" Oesophagus	6	" Nose	1
" Ovary	4	" Penis	2
" Pancreas	1	" Tongue and Fauces	1
" Penis	1	" Vulva	1
" Peritoneum	1		
" Pleurae	1	Total	88
" Pylorus	2		
" Rectum	10		

**CAUSES OF DEATHS—January 1st, 1933, to
December 31st, 1933.**

I. Alimentary System.

Abdominal Tuberculosis ..	2	Carried forward ..	22
Chronic Gastro-intestinal		Hernia, Strangulated ..	2
Catarrh ..	2	Multiple Emboli ..	1
Cirrhosis of Liver ..	1	Pancreatitis ..	1
Colitis, ulcerative ..	1	Stomatitis, Gangrenous ..	1
Gall stones ..	1	Tabes Mesenterica ..	1
Gastric Influenza ..	1	Tuberculous Peritonitis ..	1
Gastritis ..	1		—
Gastro-enteritis, acute ..	13		29
			—

II. Respiratory System.

Ayerza's Disease ..	1	Carried forward ..	81
Bronchitis, Acute ..	3	Pneumonia, Broncho ..	55
" Acute on Chronic ..	1	" Hypostatic ..	7
" Chronic, with ..		" Influenzal ..	5
Emphysema ..	16	" Lobar ..	13
Phthisis ..	55	Tuberculous Laryngitis ..	2
" Pneumonic ..	3	" " in ..	
" and Tuberculous ..		Puerperium ..	2
Elbow ..	1		—
			615
" " " Kidney ..	1		—

III. Nervous System.

Acute Transverse Myelitis ..	1	Carried forward ..	62
Cerebellar Embolism ..	1	Meningitis, Meningococcal ..	2
Cerebral Abscess ..	1	" Pneumococcal ..	1
" Haemorrhage ..	25	" Tuberculous ..	3
" Softening ..	3	Neuro-Syphilis ..	1
" Thrombosis ..	26	Paraplegia and Myelitis ..	1
Disseminate Sclerosis ..	2	Parkinson's Disease ..	1
Encephalitis, Chronic ..	1	Tabes Dorsalis ..	2
Menière's Disease ..	1		—
Meningitis, Lepto ..	1		73
			—

IV. Circulatory System.

Anaemia, Pernicious ..	3	Carried forward ..	34
Aortic Aneurysm ..	1	Hyperpiesis ..	3
" Disease, Double ..	2	Mitral Disease, Double ..	2
" and Mitral Disease ..	1	" Incompetence ..	1
" Regurgitation ..	1	" Regurgitation ..	1
Aortitis, Specific ..	1	" Stenosis ..	9
Arterio Sclerosis ..	11	Myocarditis, chronic ..	29
Auricular Fibrillation ..	2	Pericarditis, acute adherent ..	1
Cardiac Failure, acute ..	1	" and Endocarditis ..	1
Dilatation of the Heart ..	1	Valvular Disease of Heart ..	2
Endocarditis, acute ..	3		—
" " Rheumatic ..	5		83
Fatty Degeneration of Heart ..	2		—

V. Bones, Joints, Deformities, etc.

Colles Fracture and Arterio		Carried forward ..	16
Sclerosis ..	1	Tuberculous Disease of Sacrum ..	1
Fracture of Femur ..	11	" " " Spine ..	1
Rheumatoid Arthritis ..	1		—
Sarcoma of Tibia ..	1		18
Tuberculous Disease of Hip ..	1		—
" " " Pubic ..			
Bone ..	1		

VI. Urino-Genital System.

Enlarged Prostate	7	Carried forward	24
Hydrocele	1	Supra-pubic Cystotomy	1
Neoplasm of Kidney	1	Uraemia	13
Nephritis, acute	3		—
" Chronic Interstitial	11		38
Retention of Urine	1		—

VII. Nutritional Diseases and Congenital Defects.

Deficient Vitality at Birth	5	Carried forward	21
Diabetes Mellitus	9	Prematurity	1
Diabetic Gangrene	3	Senile Decay	21
Exophthalmic Goitre	1	" Gangrene	8
General Mental and Physical		Spina Bifida	2
Deterioration	1		—
Icterus Neonatorum	1		53
Influenzal Debility	1		—

VIII. Malignant Growths.

Carcinoma, Bladder	2	Carried forward	50
" Breast	7	Epithelioma, Jaw and glands	
" Caecum	2	of neck	1
" Cervical glands		" Lip	1
neck	1	" Nose	1
" Colon	5	" Penis	1
" Liver	9	" Tongue and	
" Mediastinum	3	Fauces	1
" Mouth	1	Lymphosarcoma, Mediastinal	1
" Oesophagus	4	Malignant growth obstructing	
" Ovary	1	Bile Duct	1
" Pancreas	1	" Parotid and Secondary	
" Peritoneum	1	Mediastinal	
" Pleurae	1	growth	1
" Prostate	1	" Prostate	2
" Pylorus	1	Sarcoma, Lung	1
" Rectum	6		—
" Stomach	4		61

IX. Miscellaneous.

Cervical Adenitis, and double		Carried forward	10
Otitis Media	1	Septicaemia, General	6
Cut Throat, Suicidal	1	Due to : Alveolar Abscess 1	
Dysentery, Bacillary	1	Staphylococcic	
Gangrene of Foot	4	Septic Knee 1	
" Leg	1	Phlebitis 1	
Pemphigus, Acute Syphilitic	1	Cellulitis 2	
Senile Dementia	1	Perineal Tear 1	

—

16

GRAND TOTAL .. 536

ERNEST C. HADLEY,
Medical Superintendent.

Report on Maternity and Child Welfare

for the year 1933.

By E. B. BERENICE HUMPHREYS, M.B., Ch.B., Edin.,
Maternity and Child Welfare Medical Officer.

The statutory Maternity and Child Welfare Committee (appointed under the provisions of the Maternity and Child Welfare Act, 1918), consists, in Leicester, of the full Health Committee, together with four co-opted members.

Actually, the work is carried out by a Sub-Committee of ten members of the Health Committee, together with the four co-opted members, which meets each month.

Health Visitors.

There are fourteen District Health Visitors, with Mrs. Reed as Superintendent Health Visitor, and their names and qualifications are set out on page vi.

Each Health Visitor has a district and is responsible for the home visiting of all known children under five years of age in her district. Certain well-to-do homes are not visited, if the Health Visitor has reason to believe that her services would be superfluous ; if she is in doubt as to this, she usually leaves her card, indicating how the mother may obtain the help of the Department, should she desire it. The actual number of homes not visited is small, as will be seen from the fact that the number of first visits to children under one year was 3,029, while the corrected number of live births was 3,242.

All homes of infants whose births are notified to the Medical Officer of Health are visited as soon as possible after the tenth day in cases notified by midwives, and after the fourteenth day in cases where a doctor is known to be in charge of the case. Thereafter, the frequency of the visits is determined by the existing and subsequent condition of the child, the mother and the home, and, to some extent, by the amount of time at the disposal of the health visitor.

The following is a statistical report on the work done by the Health Visitors during 1933 :—

(Corresponding figures for the previous year are shown in brackets)

Number of first visits to children under one year old	3,029	(3,437)
Number of revisits to children under one year old	15,635	(16,250)
Number of visits to children one to five years old	12,384	(11,609)
Number of visits to cases of Ophthalmia Neonatorum	76	(101)
Number of first visits to ante-natal cases ..	404	(422)
Number of other visits to ante-natal cases ..	510	(674)
Number of other visits (no access)	4,420	(4,596)
" " " " (not classified) ..	1,296	—
	<hr/>	<hr/>
Totals	37,754	(38,089)
	<hr/>	<hr/>
Attendances at Schools for Mothers and Infant Welfare Centres	1,118	(1,159)
Attendances at Ante-Natal Clinics	120	(121)

It will be noticed that the total figures approach very nearly to those of the previous year. The marked increase, during 1932, in the number of visits to children over one year old has been maintained. In spite of the amount of attention which it is often necessary to bestow upon the newly-born infants, every effort is made to keep the ex-babies and "toddlers" under supervision. Most of the visits paid to ante-natal cases are at the request of the Maternity and Child Welfare Medical Officer, and are concerning absentees from the ante-natal clinics, or to ensure that provision has been made for the forthcoming confinement. The unclassified visits include those paid in connection with Infant Life Protection (in future, these will appear separately), which will be dealt with under a separate heading.

SCHOOLS FOR MOTHERS AND INFANT WELFARE CENTRES.

There were no new Centres opened during the year, though the need for re-organisation, in view of the re-housing of certain sections of the population, and the extending of the city boundaries, is being kept in mind. There are sixteen Centres in Leicester, and also the Infants' Milk Depot, at which mothers may attend and bring their

children under five years of age, and a complete list of Centres is set out below :—

Name.	President.	Day of Meeting.
Western Road	Mrs. Beale	Monday
Curzon Street	Mrs. Mantle	"
Clipstone Street	Miss Weston	"
Aylestone Road	Miss Windley	Tuesday
Bedford Street	Mrs. Millard	"
18 King Street (Milk Depot)	—	"
Cavendish Road	Mrs. Johnson	"
Wesley Hall	Mrs. Taylor	"
Coleman Road	Mrs. Herbert	Wednesday
Fosse Road	Mrs. Gibbs	"
Justice Street	{ Miss Went Mrs. Bouskell }	"
Uppingham Road	Mrs. Judge	"
Belgrave Hall	Mrs. Mantle	Thursday
Clarendon Park	Mrs. Roberts	"
Highcross Street	Mrs. Viccars	"
Saffron Lane	Mrs. Skillington	"

A session is held each week, and there is a doctor in attendance to give free medical advice to the mother about her child and herself in relation to the child. When any treatment is considered necessary, the mother is advised as to where she should obtain it. All cases see the doctor on their first visit, and thereafter as the health visitor considers necessary.

There are still mothers who do not appreciate the value of attending a Centre, and there are those who come in the hope of receiving some material benefit in the form of free milk, etc. But it is encouraging to find that the number of those who fall into these categories is decreasing. Further, the erroneous idea that the Centre will provide treatment, which can only be properly undertaken by the private practitioner, is gradually being displaced from the minds of the mothers, and they are being taught to assess, at its proper worth, the value of medical advice, and supervision of their children under school age.

The following medical practitioners conduct the medical consultations at the various Infant Welfare Centres each week :—Dr. Gertrude Austin, Dr. Lucy Simpson Davies, Dr. Moffatt Holmes, Dr. Maurice Millard, Dr. Catherine Mitchell and Dr. P. E. Snoad. Dr. F. Armitage who had been associated with the work since its inception, resigned upon her retirement, and her place was taken by Dr. Maurice Millard. Dr. E. Gordon Lawrie, the Assistant Tuberculosis Officer, attends at three Centres, and a member of the medical staff of the City Isolation Hospital at one Centre. The Maternity and Child Welfare Medical

Officer attends at the Infants' Milk Depot and at one other Centre each week.

One or more Health Visitors is attached to each Infant Welfare Centre, and, as far as possible, her district work is in the neighbourhood of the Centre which she attends, so as to ensure continuity of the district and clinical work.

The teaching of the various branches of Mothercraft continues at the various Centres, and the results of the instructions given for the making of useful and suitable garments are encouraging to all the workers concerned.

The series of fortnightly "talks" is maintained at all the Centres. These are given by Mrs. Reed, the Superintendent Health Visitor, and by Nurse Prior, who is attached to the Department as a part-time official in this capacity. At Highcross Street Centre, and occasionally at the other Centres, the Health Visitor gives the fortnightly "talk." The syllabus is a comprehensive one, and includes all aspects of the work of child welfare. Opportunity is given for questions and answers, and mothers are encouraged to write short essays on the subjects dealt with during the "talks." This is found to be of definite value to the mothers themselves, and serves as a guide to the future presentation of the subject matter.

The following numerical details for 1933, with the corresponding figures for the previous year in brackets, show that the amount of work is being maintained, though no statistics can ever indicate truly the clinical and educational work which is accomplished from week to week :—

Number of Sessions held	743	(748)
Number of Mothers attending	29,823	(39,215)
Number of Children attending—		
Under one year old 25,608	} 43,858	} (26,175) } (42,684)
Over one year old 18,160		
First visits of Children under one year old	1,906	(1,913)
First visits of Children over one year old	512	(510)
Number of Sessions at which a doctor was present	728	(745)
Number of children seen by a doctor ..	10,725	(11,005)

There are two Infant Welfare Centres which differ from the others in that the premises are permanently rented by the Corporation, and are open daily. These are the Infants' Milk Depot at 18 King Street, and the Consultation Centre at 119 Highcross Street.

1.—**The Infants' Milk Depot**, which was established at premises in Belgrave Gate in 1906, has been accommodated in more convenient premises at 18 King Street since March, 1931.

Mrs. Stanion continues as Manageress, and there are two assistants for the routine work in connection with the sale of milk, and the distribution of dried milk and other infant foods to the various Infant Welfare Centres.

The premises are open throughout the day, and mothers may attend at any time to have their babies weighed and to receive advice from Mrs. Stanion.

The Maternity and Child Welfare Medical Officer conducts a weekly clinic for those children attending the Milk Depot, and the rooms on the first floor are also used for three other clinic sessions each week.

The details of the work expressed numerically are as follows :—

	1933	1932
Number of children weighed	4,606	5,010
Attendances for advice only	1,190	—
Number of new cases	370	409
Number of Test Feeds carried out	168	193
Number of Infant Clinics held	46	48
Attendances at Clinics	966	941

It will be seen that the number of new cases shows the decrease which has been noticed in the general figures for the last few years, though the actual fall is now less than hitherto. Against this, the average attendance at the Clinic shows a definite increase. Many of the mothers now attached to the Milk Depot realise that it is something more than the place where they obtain their dried milk and have their babies weighed, in fact, of the 370 new cases, 82 were entirely breast fed, and 54 were breast fed for a few months, while 36 were partially breast fed.

2.—**Highcross Street Consultation Centre.** These premises comprise a three-storey house of eight rooms, five of which are actually in use each day. Two health visitors are attached to the Centre and share the work of the Centre and the home visiting to children under five years of age in the surrounding district. A health visitor is in attendance throughout the day to advise mothers and to weigh the children. Dried milk is also supplied from the Centre. Test feeds are carried out for cases belonging to the district and also for those mothers referred from other districts by the health visitors. Medical consultations are held weekly, and "talks" are given by the health

visitor at varying intervals. The window in the front of the premises affords opportunity for displaying posters, mottoes and models of babies and "toddlers," suitably clothed, and has now become a feature of interest in the district.

The details of the work, expressed numerically, are as follow :—

	1933	1932
Number of New Cases	183	185
Attendances of Children under one year old	2,655	2,386
Attendances of Children one to five years old	744	708
Advice to Mothers	265	236
Attendances for Dried Milk, etc.	1,341	1,484
Number of Test Feeds carried out	265	136
Number of Clinics held	51	52
Number of Mothers attending Clinic	1,933	1,803
Number of Medical Consultations at Clinic	874	768

It will be seen that the number of new cases is maintained, while the figures for all sections of the work show a general increase. This is very gratifying in connection with a Centre which was opened as a Voluntary Centre and did pioneer work in one of the most needy districts of the city.

A special feature of the Centre is the annual effort made by the Voluntary Workers to interest fathers, as well as mothers, in some of the branches of child welfare, and, judging by the enthusiasm displayed at these meetings, and the entries for the Fathercraft competitions, the experiment is one which should be repeated, and its scope extended.

Ante-natal Clinics.

There are three municipal clinics for the expectant mother, viz. :— The City of Leicester Maternity Home, Westcotes Drive (Friday morning and afternoon), for those women who have booked their confinement at this Home ; the Infants' Milk Depot (Tuesday morning, and Highcross Street Centre (Wednesday morning). The medical work at these clinics is carried out by the Maternity and Child Welfare Medical Officer.

The women who attend these clinics include those who come independently, or are referred by a doctor, a midwife or a health visitor. In addition, the majority of the women who have booked their confinement at the City General Hospital are referred from that hospital to the clinics for their ante-natal supervision.

Concerning those patients who come of their own accord, details of their case are sent to the person subsequently engaged to attend the confinement, and doctors and midwives are supplied with a written

medical report after the first visit of each case referred by them, and subsequently as is necessary.

The number of cases referred by midwives is increasing, and the value of a medical examination during pregnancy is becoming more appreciated by midwives, who are encouraged to attend, whenever possible, with their patients.

A scheme for "compensation to midwives" has been working for one year. This provides for the payment of a sum, not more than half-a-guinea, in respect of any patient who is sent by the midwife during the ante-natal period, to the clinic or to her own doctor and, following on medical advice thus obtained, the patient is subsequently confined in a maternity home or an institution. The number of cases to be dealt with under this scheme was not expected to be large—actually there were only two claims during the year—but the possible loss of a patient will no longer act as a deterrent to a midwife to seek medical advice during the ante-natal period.

The number of ante-natal clinic sessions held and the attendances during the year were as follow :—

	Number of Sessions.	Attendances :	
		New Cases.	Old Cases.
18 King Street	46 (48)	150 (158)	245 (229)
Highcross Street	49 (49)	117 (159)	221 (232)
Municipal Maternity Home	102 (104)	370 (313)	1047 (952)

The corresponding figures for the previous year are shown in brackets.

Municipal Maternity Home.

The Municipal Maternity Home, situated in Westcotes Drive, was opened in August, 1920. It provides accommodation for 26 beds, together with one isolation bed.

The number of confinements in the Home each year has been as follows :—

1920 (five months only)	139	1927	.. ..	445
1921	339	1928	.. ..	515
1922	345	1929	.. ..	504
1923	394	1930	.. ..	475
1924	444	1931	.. ..	349
1925	438	1932	.. ..	385
1926	455	1933	.. ..	431

Of the 431 patients admitted, 85 were residing outside the city boundary, including 11 patients on the Braunstone Estate.

The increase in the number of patients admitted, as compared with the previous year, and the number of women who have booked to

enter the Home during 1934, indicate that the demand for accommodation is slowly returning to the satisfactory level reached a few years ago. It has been noted during the year under review that many former patients have returned for a second or third confinement, and that new patients seek admission on the recommendation of women who have been in the Home.

The ante-natal clinic for women who have booked to have their confinement at the Maternity Home is held on the premises for two sessions each Friday, and the majority of the women attend regularly throughout their entire pregnancy. All defaulters and absentees are followed up by the health visitors.

A tabular statement of the work done at the Home is given in Table 17, and a financial statement in Table 20.

Training of Midwives.—The Municipal Maternity Home is an approved training school for pupil midwives, and during the year 12 general trained nurses and one untrained person were accepted for training. Six pupils were in training at the beginning of 1933, and seven pupils were still in training at the end of the year. Of the 15 pupils who sat the examination, 14 were successful in obtaining the certificate of the Central Midwives Board.

Midwifery Lectures for Pupil Midwives.—The arrangement continues whereby a combined lecture course for pupil midwives from the three recognised training schools in Leicester is held, half at the Municipal Maternity Home and half at the Leicester and Leicestershire Maternity Hospital. Income is derived from the fees of the pupils attending the course, and out of these all expenses, including lecturers' fees, have to be paid. One lecture, at the close of each course, dealing with the relationship of the midwife to the Local Supervising Authority, is given by the Medical Officer of Health.

Staff.—Dr. T. W. Allen continues as Medical Officer on call for the Home, and Miss E. Bradshaw as Matron.

Day Nursery.

The Corporation took over the work of the Leicester Day Nursery Society in July, 1920, and since February, 1923, the work has been carried on at premises in St. Martin's Lane.

Attendances.—The Day Nursery was open during the year for 248 full days and 51 half days (Saturdays). The total full attendances were 9,564, and the half-day attendances 2,143, as compared with 10,749 and 2,448 respectively for the previous year.

The function of the Day Nursery is to provide for children under five years old, whose mothers are obliged to go to work. The reasonable charge, the skilled and constant supervision, the healthy and happy environment, and the suitable diet provided, all combine to make the Day Nursery a valuable asset to the working mother. Nor need the advantages of breast-feeding be lost, as mothers are encouraged to return to the Nursery for this purpose during the dinner hour, where they are also provided with a nutritious mid-day meal for a modest sum.

The Maternity and Child Welfare Medical Officer is in constant touch with the Day Nursery concerning doubtful cases of admission and also visits the Nursery at frequent intervals.

The slight decrease in the attendance figures for the year is probably due to there being less employment amongst the mothers. Within each year, there is a marked variation in the weekly attendances, according to the amount of work available.

Teaching of Mothercraft.—As well as being of direct benefit to the mothers and children who attend, the Day Nursery also affords unique opportunity for the teaching of Mothercraft to schoolgirls. The arrangement with the Education Committee continues, and the girls attend in groups of not more than eight, one group attending in the morning and one in the afternoon, each group attending for a period of four weeks. The total attendances made by 181 schoolgirls were 1,958, drawn from the following schools :—King Richard's Road, Holy Trinity, Mantle Road, Willow Street, Elbow Lane and Narborough Road.

Staff.—Miss Alice M. Mason continues as Matron of the Day Nursery and is assisted by a staff of two sisters, a mothercraft teacher, and probationer nurses as required.

Midwives.

A list of midwives who, during 1933, notified their intention to practise within the City of Leicester, appears in Table 16. Their inspection is carried out by periodic visits to their homes by the Maternity and Child Welfare Medical Officer who is the Inspector of Midwives. In addition, special visits are paid, as required, and midwives report in person concerning any emergencies which may arise in their practice. The Health Department provides for adequate and prompt disinfection for midwives who have become liable to be a source of infection.

The supply of midwives is more than adequate for the city ; but few of them can depend entirely upon their practice as a means of livelihood, and most of them would welcome more cases.

The standard of the work varies, of necessity, with the individual midwife, and especially with regard to the ante-natal supervision. This branch of the work has been steadily increasing within recent years and presents some difficulty to the older midwives. The need and value of this work is constantly pointed out to them, and they are using the ante-natal clinics to assist them to carry out the requirements of the Central Midwives Board in this connection.

Registered Nursing and Maternity Homes.

A list of registered Nursing and Maternity Homes within the City at the end of 1933, with details as to registered accommodation, appears in Table 29.

There was one new Home registered during the year for six maternity beds. The registration of an existing Home was transferred to new premises and the number of beds increased from four to eight. The number of beds in a Home previously registered was increased from eight to eleven. Owing to unsatisfactory conduct on the part of the Matron, one Home was closed for a period, and was later re-opened under new management. The new Matron was already registered in connection with a small Home, which was automatically closed.

All registered Homes were inspected periodically during the year by the Maternity and Child Welfare Medical Officer. The accommodation and facilities vary considerably in the different registered Homes, but every effort is made to secure the best conditions possible for the patients, and an adequate and efficient nursing staff.

Assistance in Necessitous Cases.

A special Sub-Committee, of which Mrs. Cooper continues as Chairman, meets each fortnight to consider applications for help in necessitous cases of mothers or children under five years of age. Every application has to be made in writing on a form which has been specially drawn up and requires a full statement of all sources of income, together with particulars as to rent, number of dependent children, &c. This statement is frequently checked by application to the employer and the health visitor appends a report on the case. Further, a medical certificate is required concerning the condition of the person for whom help is sought. This is usually supplied at the Infant Welfare Centre or ante-natal clinic, but a certificate from

a private practitioner is accepted in cases which cannot attend a centre.

The following figures show the amount and variety of assistance given during the year :—

	1933	(1932)
Number of New Cases granted Milk ..	327	(308)
Number of Old Cases granted Milk	745	(704)
Number of gallons of Milk granted free ..	3,889	(3,710)
Number of Cases granted Dried Milk free ..	58	(49)
Number of Cases admitted to the Day Nursery at reduced rate	30	(56)
Number of Cases admitted to the Day Nursery free	—	—
Number of Cases admitted to the Maternity Home at reduced rate	8	(6)
Number of Cases admitted to the Maternity Home free	—	(3)
Number of Cases in which Doctor's fees were remitted	30	(22)
Number of Cases in which total fees for Midwives were allowed	8	(8)
Number of Cases in which part fees for Midwives were allowed	4	(5)
Number of Cases in which Dental fees were remitted	6	—
Number of Home Helps supplied	2	—
Number of Cases in which no action was taken	37	(52)

Local Government Act, 1929.

The two sections of this Act which concerned the Maternity and Child Welfare Department were the care of destitute children under five years of age, and the supervision of children under seven years old who were nursed for gain.

Up to the present, the Maternity and Child Welfare Sub-Committee has not taken over the care of the destitute children under five years of age.

As regards the working of the Infant Life Protection section of the Children Act, each health visitor is the appointed inspector of young children who are taken for gain.

During 1932, the existing law was amended, and the main alterations in the new Act which is now operating are :—That the provisions of the Act apply to all children up to the age of nine years (not seven), who are taken for gain ; that the notice to the local authority shall be sent before (and not after) the reception of the child, and before the

transfer of the child, where possible ; the type of premises and nurse-woman considered unsuitable are more defined, giving a wider basis on which to formulate refusals in certain cases. These amendments should ensure that children are not placed in unsuitable premises, with unsuitable persons, and are not lost sight of, when moved from house to house. Actually in practice, it is rare for a notice to be received from a nurse-woman before the reception of the child, and many cases are reported only after they are discovered by the health visitor. The requirements as to the removal of a child are more promptly carried out, as the nurse-woman is made aware of these when registration is granted.

Special record cards are in use for the purpose of recording particulars as to the type of nurse-woman, premises, other occupants of the house, and the provision made for and the condition of the nurse-child. A separate cot is insisted on for all infants, and the use of a fire-guard is stressed by the health visitor. The preliminary visit is paid as soon as the health visitor is aware that there is a child who comes within the provisions of the Act. In any grossly unsuitable case, the health visitor is usually able to arrange for other provision to be made for the child, without delay, otherwise her report on the unsatisfactory nature of the case is communicated to the monthly meeting of the M. and C. W. Sub-Committee. Actually, therefore, the number of cases in which registration is refused by the Committee is small. In all approved cases, monthly re-visits are paid, to ensure that a satisfactory standard is maintained for these children.

During 1933 809 visits were paid to children in the care of persons who receive them for reward. Registration was refused in one case, where it was considered that the applicant, a practising midwife, was sufficiently occupied. Legal proceedings were not necessary to obtain suitable accommodation for the child in question. At the end of the year there were 124 persons and 129 children on the Infant Life Protection Register.

TREATMENT OF CHILDREN UNDER FIVE YEARS OF AGE AT THE SCHOOL CLINICS.

Maternity and Child Welfare Dental Clinic.

By arrangement with the School Medical Service Department, dental treatment is available for expectant and nursing mothers, and for children under five years of age who are recommended by the doctors at the Infant Welfare Centres and Ante-Natal Clinics. One of the Dental Surgeons sets aside one afternoon each week for the treatment of such cases at the School Clinic.

Details of the work done during the year are set out below :—

The corresponding figures for the previous year are shown in brackets.

Number of Cases	.. .. .	176 (125)
Number of Attendances	.. .. .	363 (363)
Extractions—Permanent Teeth	.. .. .	352 (277)
Temporary Teeth	.. .. .	186 (120)
Anæsthetics—Local	.. .. .	166 (124)
Gas	.. .. .	9 (10)
Fillings	.. .. .	15 (21)
Scalings	.. .. .	9 (9)
Dentures	.. .. .	23 (21)
Prosthetic Dressings	.. .. .	83 (100)
Dressings	.. .. .	6 (14)
Consultations	.. .. .	48 (76)
Repairs	.. .. .	8 (4)
Silver Nitrate Treatment	.. .. .	— (9)
Number of Clinic Sessions held	.. .. .	45 (44)
Number of Cases under Treatment on 31st December, 1933	27	(24)

The arrangement continues between the Education and Health Committees for the treatment of children under five years old at the Orthopaedic and Light Departments provided at Richmond House in connection with the School Medical Service. In addition, the scheme includes the treatments of Skin Diseases, Eye Diseases, Defects of Vision, and disorders of the Ear, Nose and Throat. The children are recommended for treatment on special forms signed by the doctors attached to the various Infant Welfare Centres.

The following extracts are taken from the report for 1933 of the School Medical Officer :—

Artificial Sunlight Clinic.

Almost all children sent received treatment, only one case being found unsuitable. In all cases, the minimum amount of treatment is now two courses of three months each.

The total number of infants who finished their treatment during 1933 was 125. Appended are details :

Rickets : Out of a total of 80, those showing good or very good results numbered 61. Cases of one or two years' standing gave only moderate results, even with prolonged treatment.

Malnutrition : 18 cases, most of which did extremely well, especially those suffering from Marasmus.

Debility : 16 ; nearly all these cases did very well. An increase in colour, energy and appetite was generally noticed, but the increase in weight was variable.

Various : 11 cases. Those that did well in this group include children suffering from acidosis, cervical adenitis, delayed development, and T.B. abdomen. The attendances of the others was not sufficient to give results.

Abandoned Treatment.

Over 20 cases, after being examined, did not return for treatment at all, and another 20 attended so irregularly as to nullify results. Absence of the children was frequently due to the mothers becoming pregnant again.

Orthopaedic Clinic.

There were 110 children under five years admitted to the clinic as new cases during the year. Many were referred for diagnosis of some deformity, often slight, but of real concern to the parent. In 52 cases, no treatment was recommended, in 10 cases the treatment advised was remedial, while instruments were recommended for 10 cases. For the remaining 38 cases, in-patient treatment was advised.

The Orthopaedic Surgeon, Mr. Morris, remarks: "Children suffering from rickets of the surgical degree, that is to say those with deformity, are practically unknown in the City. This is definite proof of the value of the Maternity and Child Welfare work, and the application of our present knowledge of vitamins. There are, however, a few cases of Rickets of the early or medical degree."

Other Clinics.

There were 58 children treated by the Ophthalmic Surgeon, chiefly for minor degrees of squint.

There were also 22 children treated at the clinic for minor diseases of the skin, and 100 children were admitted to the Ear, Nose and Throat Clinic.

Ophthalmia Neonatorum.

The following Table, covering a period of five years, may be of interest.

Number of cases notified	Vision unimpaired	Vision impaired	Total Blindness	Death
1929 .. 85	34	—	—	1
1920 .. 32	30	1	—	1
1931 .. 15	12	2	—	1
1932 .. 20	19	—	—	1
1933 .. 18	17	—	—	1

It is gratifying to note a fall in the incidence of this disease, and that there was impairment of vision in only three cases, while in no case was the condition responsible for total blindness.

Puerperal Pyrexia and Puerperal Fever.

During the year 58 notifications were received ; 51 cases of Puerperal Pyrexia and seven cases of Puerperal Fever. These include seven cases of Pyrexia and one case of Fever in women whose homes were outside the City, and as these cases could not be followed up completely, they are not included in the following tables which set out various data of interest concerning these cases :—

	Puerperal Pyrexia.	Puerperal Fever.
Notifications	44	6
Confined at home	17	5
Confined in a Maternity Home	27	1
Treated at home	7	1
Treated at a Maternity Home	18	1
Transferred to Hospital :—		
City Isolation Hospital	11	4
City General Hospital	6	—
Royal Infirmary	2	1
Result of Treatment :		
	Puerperal Pyrexia.	Puerperal Fever.
	Recovered. Died.	Recovered. Died.
At home	7 —	1 —
In a Maternity Home	18 —	— —
In City Isolation Hospital	11 —	4 —
In City General Hospital	6 —	— —
In Royal Infirmary	1 1	— 1

The attributable causes in the 44 cases of Puerperal Pyrexia were : Breast abscess 10, difficult labour 5, complicated labour 9, stillborn child 3, abortion 1, lactation 2, phlebitis 3, bronchitis 2, pneumonia 2, pyelitis 1, influenza 1, tuberculosis 1, debility 3, cause not defined 1.

The attributable causes in the 6 cases of Puerperal Fever were : Lacerations 2, haemorrhage 1, abortion 1, cause not known 2.

Under the Notification of Puerperal Pyrexia and Puerperal Fever Regulations, a medical practitioner may seek the co-operation of the Public Health Authorities in four ways, viz., a bacteriological examination, a second medical opinion, a trained nurse, and hospital treatment. The above table shows that 21 cases were transferred to municipal hospitals, while a second opinion was sought in three cases and a bacteriological examination was carried out in one case.

Obstetric Consultants.

Concerning a second medical opinion, Memo. 156/m.c.w. of the Ministry of Health authorises the services of a consultant, and these

are now available, from a panel approved by the Local Authority, in all cases of difficulty arising ante-natally, or during the confinement or lying-in period.

During 1933 a consultant was called in for 14 cases; one was concerning a uterine tumour discovered during pregnancy, three were cases of pyrexia following delivery, and ten were cases which were complicated during or following delivery.

Maternal Mortality.

During the year there were 17 maternal deaths registered, including deaths associated with, but not strictly due to childbirth. Of these, six were due to sepsis, and eleven were due to "other accidents and diseases of pregnancy and parturition." As the gross number of live births registered was 3,532 (corrected number was 3,242, but for this purpose the gross number is the figure to be taken), this gives a maternal mortality rate of 4.83 per 1,000 live births, as compared with 5.19 in 1932, and a Puerperal Sepsis rate of 1.69 as compared with 1.04 in 1932.

The figures for England and Wales for 1933 are a maternal mortality rate of 4.42 and a Puerperal Sepsis rate of 1.79 per 1,000 live births.

Through the cordial co-operation of the various members of the medical profession concerned, it has been possible to obtain the fullest details concerning the pregnancy and confinement in all these cases. (Confidential reports, on a prescribed form, are forwarded periodically during the year to the Ministry of Health, for the use of the Maternal Mortality Investigation Committee).

In eleven women, the initial illness occurred at home, while the remaining six were in a maternity home. Of the eleven women who were taken ill at home, ten were transferred to hospital, and two were removed to hospital from maternity homes. One death took place at home unexpectedly, and four patients died in maternity homes.

The various causes of death in the 17 cases were stated as follow: Puerperal sepsis 2, septic abortion 4, haemorrhage with abortion 1, shock with abortion 1, shock following delivery 1, dilated stomach 1, nephritis with abortion 1, accidental haemorrhage 1, tuberculosis 2, pneumonia 1, diabetes 1, shock following the use of a syringe 1.

A coroner's inquest was held concerning four of the deaths and in six of the cases, death occurred in women who had not previously been pregnant.

The four cases where abortion was shown not to be of the inevitable type, and the case where death followed the use by the woman of a syringe, are regrettable. There was also one case in which the woman lost valuable time in refusing to accept hospital treatment in the early stages of her illness. Otherwise, there was no difficulty in obtaining prompt and skilled treatment for these women, many of whom were under constant medical supervision throughout their pregnancy, so that their deaths must be regarded as largely unpreventable, in the present state of our knowledge.

Birth Control Clinic.

The establishment of a Municipal Birth Control Clinic was sanctioned by the City Council in 1930, and the first session was held on 26th March, 1931. At the outset, advice was restricted to those married women attending Maternity and Child Welfare Centres who needed it on medical grounds. During 1933 the scope of the Clinic was widened to include all married women needing the advice on medical grounds. The Leicestershire County Council applied for suitable cases from their area to be admitted to the Clinic. Women have to be referred by a doctor, and there must be some medical reason for advising these cases. Owing to reasons mentioned above there has been a substantial increase in the number of women advised at the Clinic during the past year.

A weekly session is held and each patient accepted for advice is medically examined by the M. & C.W. Medical Officer, who is in charge. Patients return to the Clinic, as required, and all women who have been advised are followed up from time to time.

The following particulars refer to the year 1933 :—

	City.	County.	Total.
Number of patients who sought advice	73 (79)	14	87
Number of patients accepted for advice	69 (59)	13	82
Number of patients who were refused advice	4 (20)	1	6

(The figures in brackets refer to the previous year.)

Concerning the 82 women who were accepted for advice, the following are particulars of the medical reason for the advice :—

	City.	County.	Total.
Husband : Active Tuberculosis	2	—	2
Blind	1	—	1
Mental disease (at home)	2	—	2
Children : Mentally defective	3	—	3
Patient : Active Tuberculosis	7	3	10
Gynaecological condition	4	—	4
Complications of Pregnancy and Childbirth	16	4	20
Heart Disease	3	2	5
General Debility	15	1	16
Chronic Nephritis	3	—	3
Various other conditions	13	3	16
	69	13	82

Further, some particulars as to age and number of pregnancies in these women may be of interest and are set out in the following table :—

Number of Pregnancies.	Under 25 years.	25 to 35 years.	35 years and over	Totals.
1	—	4	2	6
2	4	9	—	13
3	1	11	—	12
4	—	1	5	6
5	—	10	2	12
6	1	6	3	10
7	—	3	5	8
8	—	—	4	4
9	—	1	2	3
10 or more	—	1	7	8
Totals	6	46	30	82

It will be seen that advice was given only to six women who had had but one pregnancy, in each case a living child, and the reason for the advice was the serious risk to the mother of a further pregnancy.

Cases in which Advice was Refused.

The number of women who were refused advice was five, as compared with twenty in the previous year. This is due probably to the fact that the scope of the Clinic is becoming more generally known, and in most cases there is some obvious medical reason why further pregnancy should be avoided. If there is any doubt, the case is deferred, pending further enquiries. Of the five women not accepted, there were no medical grounds in two cases, and three women (one

from the county) were found to be in the early stages of pregnancy, otherwise they would have been advised.

Follow-up Work.

The necessity for keeping in touch with all patients advised was emphasised in my previous report and is done by various methods from time to time.

With few exceptions, this follow-up has been possible and a periodic survey of the records is made, and enquiries instigated concerning patients who have not re-attended for some months. For the purpose of this report, the present condition of those 101 women who were accepted for advice up to the end of 1932 has been reviewed, as the inclusion of more recent cases is somewhat confusing, and is not of real value as the time is not yet sufficiently long, although the information is being collected.

Number of women who are carrying out the instructions given and have not become pregnant	.. .. .	66
Number of women who have <i>not</i> carried out the instructions given and have <i>not</i> become pregnant	.. .. .	2
Number of women who have not troubled to carry out the instructions given and have become pregnant	.. .. .	9

There were two women who were anxious to carry out the instructions given but found themselves quite unable to do so owing to lack of facilities, and they have become pregnant. There were also five women who were suitable cases, on medical grounds, but they refused even to receive instructions, and two of them have become pregnant. Three women advised have died, and in seven others the advice is no longer necessary (husband dead, or not living with patient, patient in an institution, &c.). One woman accepted for advice was found to be pregnant, and three women have left the city and have not been traced. The remaining three women wanted another child as their health improved, and therefore abandoned contraceptive methods, and have become pregnant.

Another year's working of the Clinic has served to strengthen my views as to the probable results of the advice given. It is evident that there will always be a small proportion of women who will not take any trouble to carry out instructions, although it is in their own interests to do so. But it must be admitted that to some women the instructions given are not easy to follow, due to personal inability, or to lack of facilities at home.

Further, it is known from the records of birth control clinics which have been in existence for some years that there is no one method of contraception which is absolutely "safe," and in the grouping of the above cases, the word "success" has been purposely omitted, as it would not be a fair assessment of the method taught to assume that the absence of pregnancy is due entirely to the advice given. That this is not so is indicated by the fact that pregnancy has not occurred in some women who have not carried out the instructions given.

An interesting feature of the clinic has been the number of women who have expressed a desire for another child as their general health has improved. It has been necessary in some cases to advise a woman to defer her next pregnancy for a while longer but in three instances the women have abandoned instructions and are pregnant.

Staff.

There were no additions to the staff during the year 1933.

Miss E. R. Matthews, who has been attached to the Highcross Street Centre as a Health Visitor since 1927, reported sick in October, and as it was found necessary for her to undergo a long course of treatment, Miss H. S. Beattie was appointed as a temporary Health Visitor and commenced duties on 1st January, 1934.

E. B. BERENICE HUMPHREYS.

28th April, 1934.

Report of the City Analyst

For the Year 1933.

By F. C. BULLOCK, B.Sc., F.I.C.

I beg to present the report on the analytical work conducted in the City Laboratory during 1933.

In so far as their purity affects the health of the city's population, the atmosphere, the town's water supply, the various articles of food and drugs on sale locally, bath waters and rag flocks, all come under the attention of the City Analyst.

We have a statutory obligation to examine from time to time samples of Food and Drugs. Nevertheless, in view of the fact that for every five pounds of solid and liquid food we consume, we breathe on the average 35 pounds of air, the purity of the latter appears to be equally, if not more, important.

To say whether any improvement in the purity of the air is desirable, or even possible, it is first necessary to know :—

- (a) What impurities it contains, and
- (b) What degree of freedom from impurities might reasonably be attained.

For this purpose Standard Deposit Gauges were installed about eight years ago at various points in Leicester as part of a co-operative scheme supported by many other Authorities in the country.

One gauge was placed on the Town Hall roof to provide information as to the character of atmospheric impurities in the centre of the city. Another gauge was placed at Western Park for control purposes, to see what sort of figures were given by air that was obviously not very much polluted.

Comparative figures are given in Table A.

It is assumed that country and sea air are pure, and that such fortuitous matters as they contain, such as salt particles over the sea, or vegetable particles in country air, are quite harmless. The polluting matters that characterise town air are entirely products of combustion, and almost entirely attributable ultimately to volatile products from coal, with motor engine exhausts perhaps now becoming a measurable factor.

The two types of smoke recognised—industrial and domestic—vary in relative proportion in different towns according to the local industries, type of house built, etc. Industrial smoke contains more grit but less tarry matter than domestic smoke, and is controllable by Act of Parliament. Domestic smoke contains all the sulphur of the original coal and a good deal of tarry matter. It is more objectionable than industrial smoke, and at present is not controlled.

In Leicester, the amount of black industrial smoke is small, and domestic smoke is mainly responsible for the smoke pall frequently visible over the city.

From the point of view of a clean atmosphere Leicester is unfortunate in its topography. It lies along the Soar valley in a groove between the Crown Hills on the East side and the slopes leading up to the Charnwood Forest on the west and north. Thus the smoke tends to hang unless the wind is south or north.

It is not advisable with the data available to push too far the comparison between one town and another ; but in general it may be said that with the exception of a few highly industrialised areas, the intensity of pollution is of the same order of magnitude at the centre of all large towns. We all have domestic smoke, and there is an increasing tendency to check industrial smoke, not on aesthetic or health grounds, but on the score of waste.

Although we would like to think that the Leicester atmosphere is cleaner than that of many other large towns, the results obtained give no very convincing indication that this is so. There is certainly room for improvement. Only an increased consciousness towards smoke abatement, and a greater use of gas, electricity, and smokeless fuels in place of raw coal for domestic purposes, can bring about the desired results.

As long as untreated coal remains the chief fuel in most of our houses, no reduction in the amount of atmospheric impurity now experienced is likely.

The Western Park gauge, having given fairly constant results for several years and thereby having established a set of figures for "pure" air, was transferred on the 1st April to the opposite side of the city, to Humberstone Park, where the prevailing winds would tend to carry the drift of smoke from the city.

The figures obtained were definitely higher than the corresponding average figures obtained at Western Park. Indeed, it is probable that when the wind is south-west or west, the small amount of polluting material found at Western Park is the drift from the industrial district round Birmingham, and is not of local origin.

On the same date, the Milton Street gauge was transferred to Jarvis Street in an attempt to find the probable worst spot in the town as regards atmospheric pollution.

The Town Hall figures for the year (Table B) indicate a definite reduction over previous years, probably a consequence of the long dry summer.

Drinking Water.

Rather over two thirds of the Leicester water supply, now provided for a water population of about 400,000 people, comes from the Derwent Valley, the remaining third being pumped from the three reservoirs at Thornton, Cropston and Swithland.

The Derwent supply is very soft, and of undoubtedly good bacterial quality. The local supplies are harder and, in the raw state, contain more organic material. As delivered to consumers, the water consists of a variable mixture of the above four supplies, and so varies slightly in character from time to time at any given point, and from place to place at any given time.

All the samples submitted by the Water Committee proved of good potable quality on chemical analysis, and random samples taken by Sanitary Inspectors were equally satisfactory.

An average analysis is as follows :—

<i>Parts per 100,000,</i>	
Free Ammonia	0.0005
Albuminoid Ammonia	0.0090
Oxygen consumed from Permanganate in 15 minutes at 80°F.	0.033
Total Solids	12.3
Hardness	6.5
Chloride (as chlorine)	1.2
Nitrites	Nil
Colour (Hazen)	7.0
pH.	7.5

The hardness varies between 4.5 and 15 (parts per 100,000), the average of all samples being about 7.5, an economical figure from the point of view of housewives and laundries.

Monthly samples for bacterial examination were taken direct from the three reservoirs, before and after final treatment (chlorination). In thirty-four out of thirty-six samples, as delivered to the mains *B. Coli Communis* was absent in 100 c.cs. In the other two cases the necessary adjustment of treatment was immediately made.

The average blood heat counts on Agar were : Thornton 37 per c.c., Swithland 3 per c.c., and Cropston, 7 per c.c.

Foods and Drugs.

762 milk samples were taken, of which 360 were formal. Altogether 31 were certified as "not genuine," including two repeat samples. The percentage of adulteration is therefore 3.8

248 miscellaneous foods, and 125 drugs were sampled, as set out in Tables E and F at the end of this appendix.

24 samples were reported "not genuine," including one repeat.

The percentage of adulteration of samples, other than milk, is therefore 6.1.

Butter.

16 samples were examined during the year ; none contained foreign fat or preservative. Three samples, all from one vendor, contained excess of free fatty acid, indicating old stock. One of the three also contained excess of water.

Jam.

Of the 30 samples of jam analysed, six were low in soluble solids, and one was low in fruit tissue. In every case, the microscopic appearance of the tissue was satisfactory.

Beer.

One sample contained a slight amount of sulphur dioxide in excess of the 70 parts per million allowed. Such an excess is probably a residue of chemical from a cask cleaning process.

Sago.

In two instances, seed pearl tapioca was supplied in place of sago. This irregularity was referred to in the 1931 report.

Dried Fruit.

One sample of sultanas was certified as "Dirty, unfit for human consumption." It was grossly contaminated with the larvæ and excrement of grubs. The vendors promised to destroy the supply.

Prescriptions.

The object of taking prescription samples is to test the accuracy of dispensing, and the strength of the pharmacist's stock solutions.

One sample (No. 739) was deficient of 13.7 per cent. of glycerin, and was reported unsatisfactory. Ten per cent. is considered a fair margin to allow for commercial inaccuracy.

Olive Oil.

Two samples of olive oil contained an excessive amount of free fatty acid judged by the B.P. '32 standard. Such oils are permissible for certain purposes of external application only.

French Chalk in Tablets.

One sample of soda mints contained 11.6 per cent. of talc. Talc is completely insoluble in the system and would be particularly undesirable for anyone requiring the digestive aid of soda mints. Since sixteen other samples of soda mints contained no talc, its presence would appear to be unnecessary even for manufacturing purposes. The vendor, who was also the manufacturer, promised to leave it out in future.

Enamel-ware.

The substitution of relatively toxic antimony oxide in place of tin oxide as pigment in white enamel-ware caused an examination of various brands of ware on sale locally to seem necessary.

Antimony oxide is cheaper than tin oxide, and its use as a white filler in enamels is without detriment provided the other ingredients of the enamel are incorporated properly. So long as a sufficient proportion of silica is used and fusion is carried out at a high temperature, a good insoluble glass is formed round each particle of antimony oxide, protecting it from attack by acid fruit juices, etc. These precautions, however, are not always taken, and then the antimony becomes liable to solution by foodstuffs, subsequently producing its well-known emetic action upon the consumers.

A batch of samples of enamel-ware was taken, and the various pieces treated with one per cent. solutions of citric acid and tartaric acid.

In the case of one sample (No. 63) both one per cent. citric acid and one per cent. tartaric acid dissolved out an appreciable amount of antimony. Another sample (No. 66) which also contained antimony pigment, yielded nothing of significance to the acid, being, presumably,

a better quality enamel. Two other samples (Nos. 64 and 65) in which tin oxide was the opacifying agent, suffered no appreciable attack under the above treatment.

A pie-dish, made of the same ware as No. 63, was obtained, and some rhubarb cooked therein under normal conditions. The cooked rhubarb was heavily contaminated with antimony (100 grammes of rhubarb contained 18 milligrammes of antimony oxide), and the dish was left with a rough etched surface. The vendor, a large multiple store, was communicated with, and the manager sent in representative pieces of all the brands stocked, meanwhile withholding the faulty brand from further sale.

Only this one brand proved sufficiently non-resistant to acid food-stuffs to be condemned for use in cooking. The vendor's manager had meantime repeated our tests with tartaric acid solution, and had rapidly penetrated right through the enamel getting green solutions of iron in the cold.

In an interview later, representatives of the firm who made the enamel-ware stated that they had supplied millions of pieces all over the country without complaint. Nevertheless, they reported that they were revising their methods of manufacture, and were discontinuing the use of antimony pigments.

Bath Waters.

The general remarks on this subject, and the particulars *re* our system of sampling made in the 1932 report, hold good this year.

Chlorination continues to be the bath engineer's sheet anchor for keeping the water safe, but maintaining the quantity at the optimum amount is a matter of no little difficulty.

We still aim at 0.5 p.p.m. in the open bath. Below 0.3 p.p.m. a certain number of organisms can still thrive. Above 1.0 p.p.m. the chlorine is self-evident to all bathers, and objectionable to many. A safe condition of the water is the primary consideration, but the comfort of bathers is next in importance, and excessive amounts of free chlorine are as undesirable as they are unnecessary.

The occasional complaints that one hears are not always justified. A warm condition of the water not only accentuates the effect of the chlorine, but also induces bathers to linger beyond a normal bathing period; some complaints may, therefore, arise from the water being too warm. It must also be remembered that untreated water causes soreness of the eyes, and other symptoms to some persons, particularly if they remain over-long in the water.

The percentage of samples passed as satisfactory in all respects was 54.5 against 43 in 1932—a very satisfactory improvement. Spence Street again has the worst record as regards bacterial quality, but the new plant installed during the winter should put things right during the present season.

The usual Tables of Samples taken under different categories follow this appendix.

I would conclude the report by expressing my complete satisfaction with the manner that Mr. J. L. Pinder and Mr. C. Hyde have carried out their respective duties.

F. C. BULLOCK,
City Analyst.

TABLE A.

Five Year Average for period 1928-1932.

Figures in Tons per Square Mile per Year.

Gauge	Total Solids	Tar	Sulphate (SO ₃)	Chlorine (Cl)	Ammonia (NH ₃)	Soot	Insol. Ash	Soluble Ash	Soluble Volatile
TownHall..	346	3.7	33	10.1	1.53	69.5	164	67.4	40.7
Western Pk.	96	.92	14.1	5.5	.92	13.4	27.8	34.2	20.2

TABLE B.

Atmospheric Pollution (1933).

Quantities expressed in English tons per square mile.

				Town Hall.	Jarvis St.	Humstn. Pk.
Insoluble Matter	{	Tarry matter ..	..	.37	.33	.23
		Soot .. ..	..	5.57	7.08	2.21
		Ash .. ..	..	11.03	9.21	4.05
Soluble Matter	{	Volatile Matter ..	..	2.63	2.28	1.82
		Ash .. ..	..	5.12	3.63	2.82
Sulphate as SO ₃	..	..	..	2.15	1.73	1.18
Chloride as Cl	..	..	..	1.17	.68	.54
Ammonia as NH ₃	..	..	..	.21	.26	.091
Total Solids..	..	..	..	24.7	22.6	10.93

TABLE C.
Milk Samples reported "Not Genuine."

No.	Sample.	Nature of Deficiency.	Action taken.
850c	Informal	Fat at least 6% deficient	Caution by M.O.H.
854c	"	" " " 5% "	"
888c	"	Fat 3% deficient	"
51	Formal	2% deficient S.n.F.	"
58	"	2% " "	"
778c	Informal	6% " Fat	"
14	"	3% " S.n.F.	"
24	Formal	4% " Fat	"
237c	Informal	6% " Fat	"
318	Formal	6% " "	"
251c	Informal	2.3% " S.n.F.	"
262c	"	5% " Fat	"
415	Formal	{ 3% water suspected from F.P. 9% deficient Fat	Follow-up sample O.K.
396	"	{ 3% water suspected from F.P. 1% deficient S.n.F.	"
266	Informal	9% deficient Fat	Caution by M.O.H.
454	"	4% " "	"
277c	"	15% " "	"
296c	"	16% " "	"
507c	"	29% " "	"
518c	"	3% " "	"
522c	"	1% " S.n.F.	"
536c	"	8% " Fat	"
577c	"	4% " "	"
579c	"	6% " "	"
598c	"	6% added water	Follow-up samples O.K.
703	Formal	15% deficient Fat	Caution by M.O.H.
1415c	Informal	5% " "	"
1420c	"	5% " "	"
1017	Formal	11% added water	Prosecution
1027	"	6% deficient Fat	Caution by M.O.H.
1038	"	26.6% added water	Follow-up of 1017 Prosecution. Case dismissed

4 Milks out of 762 were reported "not so clean as is desirable."

TABLE D.
Result of Bacterial Examination of Milk, 1933.

Grade	Total No. examined	Total count too high	B. Coli too numerous	Passed as satisfactory	% satisfactory, 1933	% satisfactory, 1932
"Certified"	33	7	4	25	76.0	71.5
Grade "A" (T.T.) ..	34	1	2	32	94.0	82.0
Grade "A"	197	12	19	174	88.0	87.5
Pasteurised	10	1	—	9	90.0	70.5
Sterilised	2	—	—	2	100.0	100.0
Bottled Milks ..	77	3	12	63	82.0	78.5
School Milks (Past.) ..	2	—	—	2	100.0	100.0
" " (Bottled)	10	1	4	6	60.0	81.0
Miscellaneous ..	15	2	2	11	73.0	61.5
Total ..	380	27	43	324	85.4	81.5

TABLE E.

Foods Analysed during 1933.

Sample.	No.
Cream	7
Ice Cream	14
Butter	16
Lard	14
Macaroni	1
Rice	5
Sago	4
Tapioca	4
Cereals (Branded)	4
Flour (S.R.)	6
Instant Postum	1
Wine	2
Fruit Cordial	5
Sugar	15
Rum	6
Whisky	4
Beer	11
Stout	4
Jam	30
Coffee and Chicory	14
Coffee Essence.. ..	4
Cocoa	9
Cocoa Foods	3
Tea	3
Sausage.. ..	16
Lemonade Powder	8
Dried Fruit	25
Tinned Fruit	6
Vinegar	2
Tinned Milk	6
Total	248

TABLE F.

Drugs Analysed During 1933.

Sample.	No.
Olive Oil	20
Epsom Salts	6
Glycerin	12
Aspirin Tablets	12
Soda Mint Tablets	17
Bismuth Tablets	12
Potassium Chlorate Tablets	6
Yeast Vite Tablets	3
Tinc. Amm. Quin.	6
Ol. Eucalyptus	6
Prescriptions	12
Cough and Throat Tablets	13
Enamel Vessels	5
Total	130

TABLE G.
Defective Samples other than Milk.

No.	Description.	Sample.	Nature of Adulteration.	Action Taken.
698	Butter	Informal	1.1% excess free Fatty Acid	Followed up 699
699	"	Formal	5.5% " Water	Prosecution, 10/- fine, 5/- costs
163	"		0.6% " free Fatty Acid	
	"		0.2% " " " "		No action, same vendor as 699
125	Black Currant Jam	Informal	2.5% deficient Sol. Solids	Caution. M.O.H. wrote to manufacturers
142	Apricot Jam	"	3.6% " " "	} Wrote to manufacturers
143	Strawberry "	"	1.9% " " "	
1346	Blk. Curr. "	"	14% " Fruit	Caution
144	" " "	"	4.8% " Sol. Solids	} Wrote to manufacturers
146	Rasp. & Goose. Jam	"	1.3% " " "	
1347	Raspberry Jam	"	0.7% " " "	Caution
1495	Beer	"	12/10 ⁶ excess SO ₂	Letter from M.O.H.
654	Sausage	"	330/10 ⁶ in SO ₂ not declared	Cautioned by M.O.H.
1548	Tin'd Cherries	"	Blown Tin	Genuine but unsatis- factory
45	Sago	"	100% Tapioca	M.O.H. wrote to vendor
627	"	"	100% "	Cautioned by M.O.H.
694	Sultanas	"	Dirty, "Unfit for food"	Vendors promised to destroy box
63	Enamel vessels	"	Gave up Antimony to acid food	Wrote to vendor's manager
86	"	"	"	"
510	"	"	} Antimony removed by 1% Tartaric Acid	
515	"	"		
666	Olive Oil	"	1.5% excess acid number	
605	"	"	0.9% " " "	
304	Soda Mints	"	9.6% " Talc	M.O.H. wrote to vendor
306	"	"	98% defic. Amm. Bicarb.	"
326	"	"	95% " " "	"
333	Aspirin Tabs.	"	5% excess Talc	"
726	Am. Tinct. Quin.	"	20% deficient Ammonia	Wrote to vendor who promised to take up with supplier
739	Prescription	"	13.7% " Glycerine	

TABLE H.

Fertilisers and Feeding Stuffs Analysed during 1933.

Sample.	Number.	Number Unsatisfactory.		
		Composi- tion Incorrect.	Statutory Declara- tion. Defective	Total.
Sussex Ground Oats ..	2	—	—	—
Barley Meal	1	—	—	—
Sharps	2	—	1	1
Meat Meal	1	—	1	1
Sulphate of Ammonia ..	2	—	1	1
Nitrate of Soda	2	—	—	—
Nitrate of Potash	1	—	—	—
Bone Meal	1	1	—	1
Abol Hop Manure ..	1	—	—	—
Total	13	1	3	4

TABLE I.

Rag Flocks, tested during 1933.

Sample Number.	1	2	3
Chlorine in parts per 100,000	15.6	42.0	18.2

TABLE J.

Bath Waters Examined during 1933.

Bath.	Period.	No. exam- ined.	No. satis- factory.	Unsatisfactory			% passed as satis- factory.
				Count.	Coli.	Cl ₂ excessive	
Aylestone ..	Apr.-Oct.	17	5	7	4	5	27
Spence Street ..	Apr.-Sept.	17	4	13	13	0	24
Cossington Street	May-Sept.	9	7	—	1	1	78
Bath Lane ..	Jan.-Dec.	20	13	6	6	1	65
Vestry Street ..	..	14	13	—	—	1	93
Total ..	..	77	42	26	24	8	54.5

Miscellaneous Samples Examined for Various Committees.

Health Committee.				City General Hospital.			
Soft Soap	..	..	10	Milk (Chemical)	..	..	6
Hard Soap	..	..	29	„ (Bacterial)	..	..	6
Disinfectants	..	..	11				—
Floor polishes	..	..	15				12
Preservative	..	..	1				—
Fumigator	..	..	1	Isolation Hospital.			
Rain waters	..	..	36	Milk (Chemical)	..	..	6
SO ₂ Cylinders	..	..	2	„ (Bacterial)	..	..	6
Water, Mains	..	..	13				—
„ Holt	..	..	2				12
„ Well	..	..	2				—
„ Leakage	..	..	1	City Surveyor.			
„ Miscellaneous	..	..	8	Lubricating Oil	..	..	4
			— 26	Radiator Deposits	..	..	1
Bath Waters, Bacterial	..	..	77				—
Breast Milk	..	..	25				5
Jam	..	..	1				—
Vinegar	..	..	2	Public Assistance Committee.			
			—	Milk (Chemical)	..	..	17
			236	Sanitary and Baths Committee.			
			—	Lubricating Oils	..	..	8
Water Committee.				Bath Water	..	..	2
Waters (Chemical)	..	..	51	Fertilisers	..	..	2
„ (Bacterial)	..	..	79				—
„ (Biological)	..	..	36				12
“Alflox”	..	..	2				—
Gunmetal	..	..	2	Police.			
			—	Tea (infused)	..	..	1
			170	Medicine	..	..	1
			—	Capsules	..	..	1
City Mental Hospital.							—
Milk (Chemical)	..	..	2				3
„ (Bacterial)	..	..	1				—
			—	Tramways.			
			3	Lubricating Oils	..	..	18
			—				—

Total Samples Analysed during the Year.

Food and Drugs	..	..	..	..	1140
Bacterial Milks	..	..	..	..	380
Fertilisers and Feeding Stuffs	..	..	..	..	13
Rag Flocks	..	..	..	..	3
Food Samples submitted by Public	..	..	..	..	9
Health Department Samples	..	..	..	..	236
Water Department Samples	..	..	..	..	170
Various Other Departments	..	..	..	..	82
Miscellaneous Samples	..	..	..	..	10
					—
Total	..	..	..	..	2043
					—

Report of Chief Sanitary Inspector

for the year 1933.

Staff.

The inspection staff consists of a Chief Inspector, two Inspectors engaged whole-time in meat inspection work at the Corporation Slaughterhouses at the Cattle Market, and fourteen District Sanitary Inspectors.

There was no change of staff during the year.

The clerical staff consists of a Chief Clerk (male) two shorthand typists, a telephonist and a uniformed messenger ; the services of the two latter are shared.

Five men are employed permanently for drain-testing, and disinfecting and defesting houses. From time to time additional men are employed when found necessary.

Routine sanitary inspection work was seriously interfered with during the past year in order that the surveys might be made and information obtained for a five-year's slum clearance programme. A large map, scale 1/500 of the central congested parts of the city was made by the Sanitary Inspectors from 18 Ordnance Sheets and 6 half Ordnance Sheets. It was a big undertaking, as the buildings had to be checked, but the map is proving invaluable for reference purposes in connection with the schemes proposed under the Housing Act, 1930.

As mentioned in the report of last year, additional inspectors ought to be appointed if we are to make substantial headway with the clearance of our slums.

Synopsis of Sanitary Inspection Work.

An "inspection" is the first visit made to premises.

A "re-inspection" is a visit made after notice has been given for the remedying of a defect.

	Inspections.	Re-inspections.	Total.
Re Accumulations	70	—	70
Re Animals, Poultry, Swine, &c.	44	—	44
Ashpits and Ashbins	135	68	203
Bakehouses—Factory	76	—	76
Non-Factory	59	—	59
Canal Boats	40	—	40
Cesspools	—	—	—
Closets—Water	2608	336	2944
Pails	—	—	—
Cold Stores	83	—	83
Common Lodging Houses—Day	127	—	127
Night	9	—	9
Complaints Received	2082	1497	3579
Complaints Confirmed	1812	5698	7510
Cowsheds	15	—	15
Dairies, Milkshops and Milkstores	316	—	316
Dangerous Structures	19	—	19
Drains—Smoke Tests	2202	204	2406
Chemical Tests	31	—	31
Colour Tests	103	—	103
Drains Inspected	3562	4240	7802
Entertainment Houses	35	—	35
Factories	96	—	96
Fish Frying Premises	30	—	30
Food Manufacturing Premises	471	—	471
Houses re Contagious Disease	597	—	597
Houses re Contagious Disease			
Enquiry	298	—	298
Houses re Disinfection	267	—	267
Housing Acts—Houses	718	3280	3998
Special Visits	—	—	—
Other Buildings	38	—	38
Houses Let in Lodgings—Day ..	13	—	13
Night	—	—	—
Hotel and Restaurant Kitchens	20	—	20
Ice Cream Premises	26	—	26
Markets—Cattle	4	—	4
Retail Meat	368	—	368
Fish and Fruit	453	—	453
Wholesale Fish and Fruit	964	—	964
Wholesale Meat	162	—	162
Wholesale Tripe	5	—	5
Meeting with Owner or Tradesman	2602	—	2602
Merchandise Marks Act	560	—	560
Agricultural Produce (Grading			
and Marking) Act	414	—	414
Offensive Trade Premises	203	—	203
Other Foodshops	68	—	68
Outworkers	—	—	—
Piggeries	2	—	2
Shops—Meat	1505	—	1505
Fish	198	—	198
Fruit	244	—	244
Slaughterhouses—Corporation	806	—	806
Private	5779	—	5779
Schools	58	—	58
Smoke Observations	112	—	112
Special Visits re Smoke	116	—	116
Special Visits	3449	—	3449
Sewers, &c.	7	—	7
Street Gullies	—	—	—
Carried forward	34081	15323	49404

	Brought forward	Inspections.	Re-Inspections,	Total.
Streets or Back Roads	..	34081	15323	49404
Tips	23	—	23
Urinal—Public	3	—	3
Private	—	—	—
Van Dwellings	67	—	67
Wells	—	—	—
Workshops and Workplaces (excluding Bakehouses)	196	—	196
Yards and Courts	252	—	252
Grand Totals	..	34622	15323	49945

Notices—Served	—Informal	..	..	..	1268
	—Formal	..	..	..	51
Complied with	—Informal	..	..	..	825
	—Formal	..	..	..	31
Samples—Food and Drug Acts	..	..	..	..	1141
Water	.. .. .	..	..	..	106
Bacteriological	.. .. .	..	..	..	365
Milk for T.B.	.. .. .	..	..	..	171
Rag Flocks Act	.. .. .	..	..	..	3
Fertiliser and Feeding Stuffs Act	.. .. .	..	..	..	13

CANAL BOATS.

The whole of the “available” boats on the register, viz. : 51 are “Narrow” boats. Forty boats were inspected during the year ; these were occupied by 67 males, 12 females, 13 children over five years and 5 under five years.

The condition of the boats was clean and satisfactory.

DISINFECTION.

The total number of articles of clothing, bedding, &c., disinfected by steam during the year was 1,233. The number of houses or parts of houses disinfected was 1,836.

The above figures include clothing, bedding, &c., from 73 houses which were found to be in a verminous condition.

DRAINS.

Voluntary Cleansing of Stopped Drains by Health Department.

One hundred and ten drains were attended to and of these 71 were unstopped immediately. In the remaining 39 cases the owners' attention had to be called to them.

ADMINISTRATION OF FACTORY AND WORKSHOPS ACT, 1901.

In connection with Factories, Workshops, Workplaces and
Home Work.

1.—Inspection of Factories, Workshops and Workplaces.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
Factories	96	26	—
Workshops	196	—	—
Total	292	26	—

2.—Defects found in Factories, Workshops and Workplaces.

Particulars. (1)	Number of Defects.		Number of Prosecutions. (4)
	Found. (2)	Remedied. (3)	
Nuisances under the Public Health Act :—			
Want of Cleanliness ..	13	13	—
Want of Ventilation ..	—	—	—
Overcrowding	—	—	—
Other Nuisances	6	6	—
Sanitary Accommodation Insufficient	7	6	—
Offences under the Factory and Workshops Act ..	—	—	—
Total	26	25	—

3.—Home Work.

The number of lists received from employers was as follows :—

	Twice in the year		Once in the year	
	Lists.	Outworkers.	Lists.	Outworkers
Wearing Apparel (making)	40	394	13	73

4.—Other Matters.

CLASS (1).

Matters notified to H.M. Inspector of Factories :—

Failure to affix Abstract of the Factory and Workshops Acts (S. 133, 1901)	..	..	..	..	..	None	
Action taken in matters referred by H.M. Inspector as remediable under The Public Health Acts, but not under the Factory and Workshops Acts (S. 5, 1901)	}	Notified by	H.M. Inspector	22	}	Reports (of action taken) sent to H.M. Inspector	21
Underground Bakehouses (S. 101) in use at the end of the year							1

Improvements to Houses.						No. of Houses.
Separate internal water supply in place of taps in common yards	..	..	..	..	..	221
Additional water closets	..	..	..	..	..	228
Houses formerly with common yards and common sanitary conveniences, which have now been provided with separate yards, separate sanitary conveniences, internal sinks, taps, &c.	..	..	..	..	..	51

(Housing Act, 1930).—Completion of Removals from Nos. 1, 2 and 3 Clearance Areas (Green Street-Sandacre Street Areas) to Tailby Estate.

No. of families re-housed.	No. of persons re-housed.	No. of new houses used for re-housing.
15	24	15

Destruction of Vermin before removal to New Houses.

As every house in the Clearance Areas was infested with vermin—the bed bug in particular—a great effort was made by the department to prevent the infesting of the new houses.

The new houses have been inspected regularly re cleanliness and vermin.

Number inspected.	Number dirty.	Number where vermin were found.
59	1	1

Assistance given to Families.

The Leicester Charity Organisation Society gave valuable help to families who were in need.

Families supplied with beds or bedding	2
Families given financial assistance towards removal expenses	2

FOOD SUPPLIES.

Supervision of.

TABLE A.
Summary of Foodstuffs condemned.

	Tons.	Cwts.	Qrs.	Lbs.
Meat	100	1	3	17
Fish	17	6	1	23
Fruit	—	18	3	2
Vegetables	19	11	3	11
Rabbits .. ..	..	..	..	1764
Preserved Foods (Tinned Goods)	..	..	..	11951
Poultry .. ..	..	..	..	70
Eggs .. ..	..	..	..	1132
Hares .. ..	..	..	..	112
Game .. ..	..	..	..	2

There was a marked increase in the amount of meat condemned during the year. Taking an average of the three previous years the increase this year is 20 per cent. The exceptionally dry summer resulting in a scarcity of grass may account for this. A large number of sheep dealt with in the autumn months were badly emaciated and the wastage from unsoundness during the extremely hot periods was considerable.

TABLE B.

Total weights of British and Imported Meat and Offal rejected, at various premises.

		Tons.		Cwts.		Qrs.		Lbs.									
British Meat		75	5	3	20												
Imported Meat		1	8	2	18												
British Offal		22	16	1	15												
Imported Offal		—	10	3	20												
Total Weight		100	1	3	17												
		British Meat.				Imported Meat.				British Offal.				Imported Offal.			
		Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.
Shops .. .. .	..	—	5	—	17	—	—	—	13	—	—	—	—	—	—	—	—
Private Slaughterhouses ..	..	9	16	3	4	—	—	—	—	3	18	1	12	—	—	—	—
Cattle Market .. .. .	..	62	9	1	21	—	—	—	—	18	16	2	15	—	—	—	—
Cold Stores .. .. .	..	2	8	2	4	—	14	3	11	—	—	3	16	—	—	3	16
Retail Market .. .. .	..	—	6	—	2	—	—	2	19	—	—	—	19	—	—	—	—
Wholesale Market (Imported) .. .. .	..	—	—	—	—	—	14	—	3	—	—	—	—	—	10	—	4
Railway Stations .. .. .	..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals .. .. .	..	75	5	3	20	1	8	2	18	22	16	1	15	—	10	3	20

TABLE C.
Total weights of Carcases, Parts of Carcases, and Offal, rejected for all diseases.

	Carcass.				Parts of Carcase.				Offal.				Total.			
	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.
Tuberculosis ..	22	3	2	6	20	15	1	24	9	10	-	17	52	9	-	19
Other defined Diseases ..	25	3	0	4	8	12	2	4	13	17	-	18	47	12	2	26
Totals ..	47	6	2	10	29	8	0	0	23	7	1	7	100	1	3	17

TABLE D.
Total number of Carcases found affected, for various diseases.

Carcases affected with Tuberculosis.	Carcases affected with other defined diseases.	Total number of Carcases affected. (All diseases)
2961	4791	7752

Number of healthy Carcases examined not available.

TABLE E.
Number of Carcases showing evidence of Tuberculosis and number of entire Carcases rejected.

	Beasts.	Calves.	Pigs.	Total.
Number of Carcases affected ..	659	3	2299	2961
Number of entire Carcases rejected ..	81	3	48	132

TABLE F.
Total number of Carcases rejected for Tuberculosis and other defined diseases.

Disease.	Bulls.	Cows.	Heifers.	Bullocks.	Calves.	Sheep.	Lambs.	Pigs.	Total of all Carcases.
Tuberculosis ..	2	62	8	9	3	-	-	48	132
Other defined diseases ..	-	55	4	12	25	282	109	75	562
Totals ..	2	117	12	21	28	282	109	123	694

TABLE G.
Total number of all Carcases, parts of Carcases, and Offal, rejected for all diseases.

Disease.	Carcases.	Parts of Carcases.	Offals of Carcase.	Total number affected.
Tuberculosis ..	132	2518	311	2961
Other defined diseases ..	562	744	3485	4791
Totals ..	694	3262	3796	7752

TABLE H.
Total number of Carcases, parts of Carcases and Offal condemned in :—

	Carcases.	Parts of Carcases.	Offals of Carcase.	Total number affected.
Corporation Slaughterhouses (including Co-operative Society Slaughterhouse at Cattle Market) ..	508	2634	3088	6230
Private Slaughterhouses ..	182	326	614	1122
Shops, Markets and other Premises ..	4	302	94	400
Totals ..	694	3262	3796	7752

TABLE I.
Tabulated List of other defined Diseases and their incidence in Carcasses rejected.

Disease.	Cows.	Heifers.	Bullocks.	Calves.	Sheep.	Lambs.	Pigs.	Total.
Actinomycosis ..	1	-	-	-	-	-	-	1
Dropsy ..	20	2	3	4	212	40	5	286
Fever—Acute ..	1	-	-	3	7	1	3	15
Joint Ill ..	-	-	-	1	-	-	-	1
Pneumonia ..	-	1	2	3	-	-	2	8
Decomposition ..	-	-	1	-	4	1	3	9
Emaciation ..	-	-	-	-	4	6	-	10
Asphyxia ..	-	-	-	-	12	11	-	23
Dead Animals ..	1	-	1	3	34	31	22	92
Immaturity ..	-	-	-	5	9	9	-	14
Bruising—Extensive ..	2	-	-	-	7	9	1	19
Gangrene ..	-	-	-	-	1	1	-	2
Septic Metritis ..	5	-	-	-	-	-	-	5
Septicæmia ..	-	-	2	1	-	-	1	4
Pyæmia ..	-	-	-	2	-	-	-	2
Septic Mammitis ..	3	-	-	-	-	-	-	3
Johnes' Disease ..	22	-	2	1	-	-	-	25
Jaundice ..	-	-	-	1	-	-	5	6
Swine Erysipelas ..	-	-	-	-	-	-	11	11
Acute Enteritis ..	-	-	-	1	-	-	7	8
Foot & Mouth Disease ..	-	-	-	-	-	-	2	2
Electrocuted ..	-	-	1	-	-	-	-	1
Uræmia ..	-	1	-	-	-	-	1	2
Leucocythæmia ..	-	-	-	-	1	-	-	1
Total ..	55	4	12	25	282	109	75	562

SAMPLING.

Food and Drugs (Adulteration) Act.

NUMBER OF SAMPLES TAKEN FOR CHEMICAL ANALYSIS.

1929	1930	1931	1932	1933
1552	1519	1338	1470	1140

Number of Samples taken under Fertilisers and Feeding Stuffs Act, 1926 13
 Number of Samples taken under Rag Flock Act, 1911 .. 3

Milk (Special Designations) Order, 1923.

NUMBER OF SAMPLES TAKEN FOR BACTERIOLOGICAL EXAMINATION.

1929	1930	1931	1932	1933
376	264	253	352	365

EXAMINATION OF MILK FOR PRESENCE OF TUBERCLE BACILLI.

Milk and Dairies (Consolidation) Act, 1915.

(This Act came into operation on 1st September, 1925.)

Number of Samples of Milk taken for microscopical and biological examination for Tubercle Bacilli—

Year.	1930	1931	1932	1933
Number taken	86	120	122	171
Percentage containing Tubercle Bacilli ..	4.7	10.83	9.8	.58

	Number of Samples taken.	Number reported containing Tubercle Bacilli.	Number reported negative.	Number unsatisfactory although negative as regards Tubercle Bacilli.
Cowkeepers with registered premises within City boundaries ..	1	—	1	—
Cowkeepers with premises outside City boundaries ..	170	1	154	15
Totals ..	171	1	155	15

City Herds.

The one sample of milk produced inside the City was reported as negative.

The two samples taken from individual cows during 1932—to be reported upon this year—contained Tubercle Bacilli.

County Herds.

Of the 170 samples of milk taken from cowkeepers with premises outside the City boundary, the one sample reported to contain Tubercle Bacilli in spleen and inguinal glands was referred to the County Authority for action.

The post-mortem examinations of the remaining 15 guinea pigs inoculated with the milk, for which unsatisfactory reports were received, are all as follow :—

“Guinea pigs died from causes other than T.B.” Samples were repeated and reported negative.

SLAUGHTERHOUSES.

Particulars of all Slaughterhouses in the City.

Registered Private Slaughterhouses	40
Licensed Private Slaughterhouses (includes one Knacker's Yard)	2
Corporation Slaughterhouses situated at Cattle Market and let off as Private Slaughterhouses	18
	—
Total Slaughterhouses	60
	—

SMOKE ABATEMENT.

Action taken re smoke nuisances :—

Observations taken of chimney stacks	112
Chimneys reported for causing nuisance	5
Cautions by Inspectors	1
Interviews of Engineers or Stokers by Inspectors	1
Informal Notices or Letters sent	3
Chimneys reported to Health Committee	1
Prosecutions	1

LEGAL PROCEEDINGS.

Public Health (Smoke Abatement) Act, 1926	1
Public Health Acts. For the abatement of nuisances	2
Food and Drugs (Adulteration) Act, 1928	2
Milk and Dairies Order, 1926	1
Bye-laws with respect to Slaughterhouses	1
Housing Act, 1930	1
Appeals (Housing Act, 1930)	3

WORK CARRIED OUT IN DEFAULT OF OWNERS.

Ashbins supplied to dwelling-houses in default, and cost of same recovered from owners	5
--	---

LEGAL PROCEEDINGS.

Acts, Bye-laws or Regulations under which proceedings were instituted.	Default or Offence.	Result.	Fines. £ s. d.	Costs. £ s. d.
Food & Drugs (Adulteration) Act, 1928	Inaccurately dispensing prescription. Deficiency of 70 per cent. required Pot. Iod.	Conviction	5 0 0	—
Ditto	Selling adulterated butter. Excess of 5.5 per cent. water and 0.6 per cent. free fatty acid	Conviction	10 0	4 0
Bye-laws with respect to Slaughterhouses	Slaughtering on unlicensed premises and failure to use mechanical killer	Conviction	1 0 0	—
Public Health Act	Non-compliance with sanitary notice	Case withdrawn	—	—
Ditto	Keeping pigeons so as to be a nuisance	Order of court to abate nuisance within 28 days and pay costs ..	—	4 0
Public Health (Smoke Abatement) Act, 1926	Excessive smoke emitted from factory chimney	Conviction	2 0 0	—
Housing Act, 1930	Failing to give information under Housing Act	Conviction	10 0	—
Milk and Dairies Order, 1926	Filling bottle with milk on unregistered premises	Conviction	2 0 0	—
Total			11 0 0	0 8 0

F. G. McHUGH, M.R.San.I., M.S.I.A., Chief Sanitary Inspector.

Reports of the V.D. Medical Officers

1. Report on Male V.D. Clinic for Year 1933

By C. HAMILTON WILKIE, M.B., B.Sc., Ch.B.

General.

The Leicester Royal Infirmary Male Venereal Treatment Centre consists of both in-patient and out-patient departments. This is the one centre for the City of Leicester and for Leicestershire.

Throughout the year under review the centre has been working at full pressure, although, as will be seen from the detailed figures below, the number of new cases has been less than for the previous year.

The system of Case Recording instituted in 1931 still continues to be highly satisfactory. The various statistics given below were easily and accurately obtained.

Special attention has been given to the following up of defaulters and to Venereal Disease Propaganda.

There has been no relaxation during the year in following up those who default ; the method of so doing is described under its appropriate heading later in this report.

During December I gave in Leicester two public lectures on V.D., accompanied by lantern slides, one to a male audience and the other to a female audience. On both occasions the halls were packed. So successful were these lectures that arrangements have been made to repeat similar lectures in the City and also to have lectures extended to the principal towns of Leicestershire. I am of the opinion that such lectures can do much towards preventing venereal disease, or if not preventing at least encouraging those infected to come at once for treatment.

Colonel Harrison, the V.D. Specialist of the Ministry of Health, paid one official visit to the V.D. Department.

During the year I was officially appointed as Consulting Venereologist to the City General Hospital. Regular official visits to the Hospital have since been made.

The following tables give details concerning the numbers for the year and any remarks fall under their proper headings.

Old Cases.

TABLE I.

Number of Male Cases on 1st January, 1933 under treatment or observation. (City and County).

Venereal.			Conditions other than Venereal.	Total.
Syphilis.	Soft Chancre.	Gonorrhœa.		
177	—	170	8	355

Returned Defaulters.

TABLE II.

Number of Male Cases removed from register during any previous year, which returned during 1933 for treatment or observation of the same infection.

Syphilis.		Soft Chancre.		Gonorrhœa.		Totals.		Grand Total.
T.	C.	T.	C.	T.	C.	T.	C.	
6	2	—	—	1	—	7	2	9

T City of Leicester.

C County of Leicester.

New Cases.

TABLE III.

Number of Male Cases dealt with for the first time during the year under review (exclusive of cases transferred in from other treatment centres).

	Venereal.						Conditions other than Venereal.		Totals.		Grand Totals
	Syphilis.		Soft Chancre.		Gonorrhœa		T.	C.	T.	C.	
	T.	C.	T.	C.	T.	C.					
Syphilis, Primary											
sero-negative ..	3	1	—	—	—	—	—	—	3	1	4
primary											
sero-positive ..	1	5	—	—	—	—	—	—	1	5	6
secondary ..	3	2	—	—	—	—	—	—	3	2	5
latent in first year of infection ..	—	—	—	—	—	—	—	—	—	—	—
all later stages ..	31	12	—	—	—	—	—	—	31	12	43
Congenital ..	5	6	—	—	—	—	—	—	5	6	11
Soft Chancre ..	—	—	—	1	—	—	—	—	—	1	1
Gonorrhœa, first year of infection ..	—	—	—	—	148	60	—	—	148	60	208
later ..	—	—	—	—	1	1	—	—	1	1	2
Conditions other than Venereal ..	—	—	—	—	—	—	160	67	160	67	227
Totals ..	43	26	—	1	149	61	160	67	352	154	507

NEW CITY CASES ATTENDING MALE VENEREAL DISEASES DEPARTMENT, ROYAL INFIRMARY, 1918-1933

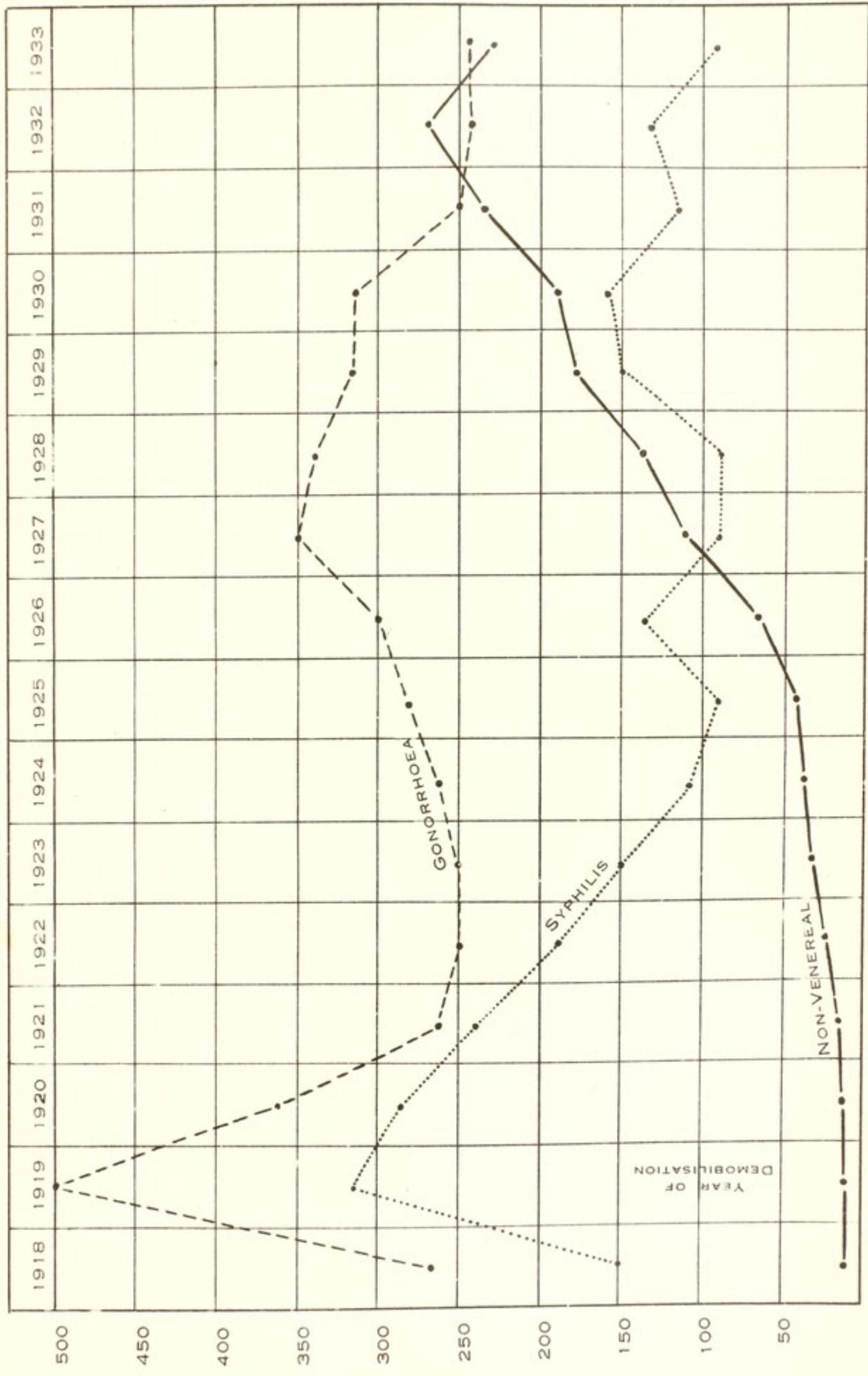


TABLE IV.

Number of Male Cases dealt with for the first time in 1933 known to have received treatment at other Centres for the same infection.

Syphilis.		Soft Chancre.		Gonorrhœa.		Totals.		Grand Total.
T.	C.	T.	C.	T.	C.	T.	C.	
11	3	—	—	30	8	41	11	52

TABLE V.

Age incidence of Male New Cases 1933.
(Inclusive of "transfers in" and "returned defaulters.")

-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-70	Total
22	37	130	123	82	49	44	34	20	10	17	568

TABLE VI.

Numbers and percentages of Male New Cases, single, married or widowed.

	Number.	Percentage.
Single	269	47.3
Married	255	44.9
Married (but living apart).. .. .	10	1.7
Widowers	12	2.1
School children	22	4.0

TABLE VII.

Analysis of Occupations of New Male Cases.

Occupations.	No.	Occupations.	No.
Transport Workers	33	Unemployed	3
Boot and Shoe Workers	72	Miners	17
Labourers	82	Farm Hands, Dairymen	22
Engineers and Electricians	56	School Children	22
Building Trade	50	Printing Trades	8
Shop Hands and Salesmen	44	The Services	15
Hosiery	48	Unknown Occupations	—
Travellers	37	Miscellaneous	37
Office Workers.. .. .	22		
		Total	568

TABLE VIII.

New County Cases.

This table shows the number from various areas in the County.

Area.	No.
Coalville	22
Loughborough	32
Melton Mowbray	16
Market Harborough	5
Lutterworth	3
Hinckley	27
Oakham	3
Just beyond boundary of City of Leicester	60
Total	168

TABLE IX.

Showing Male New Cases under 15 years (Congenital Syphilitics only)

Sent from :—	Totals.		Grand Totals.
	T.	C.	
Eye Department (Leicester Royal Inf'y)	3	5	8
*Female V.D. Dept. (Leicester Royal Inf'y)	—	—	—
Parents attending V.D. Clinic	—	—	—
(Attending V.D. Clinic) Brothers or Sisters	1	—	1
School Medical Officers	—	—	—
School Dentists	—	—	—
Private Practitioners	—	—	—
Outpatient Dept. Leicester Royal (Inf'y)	1	1	2
Totals	5	6	11

Defaulters and transfers which numbered four are not included.

* Congenital Male Children under 5 years of age are treated in the Female V.D. Department until they reach the age of 5 years, when they are transferred to the Male V.D. Department.

Cured Cases.

TABLE X.

Number of Cases discharged after completion of treatment and final tests of cure.

Venereal.			Condition other than Venereal.	Totals.
Syphilis.	Soft Chancre.	Gonorrhœa.		
20	1	144	227	392

All apparently cured syphilitic patients must remain under observation for two years after cessation of treatment before being dismissed as cured. I am strongly in favour of cured syphilitic patients reporting for a blood test once a year for at least five years after being proclaimed cured.

Defaulters.

TABLE XI.

Number of Cases which ceased to attend before completion of treatment and were on first attendance suffering from :—

	Syphilis.	Gonorrhœa.
Syphilis (primary)	5	—
„ (secondary)	2	—
„ (latent in first year)	—	—
„ (all later stages)	15	—
„ (Congenital)	2	—
Gonorrhœa (first year)	—	28
„ (later)	—	—
Totals	24	28

Only two male cases of primary syphilis and one male case of secondary syphilis defaulted from the above list before completion of one course of anti-syphilitic treatment.

TABLE XII.

Number of Cases which ceased to attend after completion of treatment but before final tests of cure.

Syphilis.	Gonorrhœa.	Total.
9	42	51

Defaulters shown in Table XII are not considered the same danger to others as shown in Table XI, as in many cases they are either cured or have reached a non-infective state.

It is the rule at this V.D. Centre that all new cases who suffer from venereal disease are informed that they will be written to in the event of their defaulting from treatment or observation. If the patient objected to this an entry would be made that no letter has to be sent out to him. So far no objection has been given.

The form of the letter written to a defaulter consists of a typewritten note, non-committal in character, requesting the patient to call at his earliest convenience. This note is signed by the Senior V.D. Officer. Should the defaulter ignore this first letter, a second one is sent pointing out the dangers to himself and others.

This method of writing to defaulters has done much to reduce the number of defaulters during the year under review.

Transfers Out.

TABLE XIII.

Cases transferred to other Centres or to Institutions or to Private Practitioners.

Syphilis.		Gonorrhœa.		Totals.		Grand Total.
T.	C.	T.	C.	T.	C.	
12	7	50	7	62	14	76

Cases on Open Records at End of Year 1933.

TABLE XIV.

Syphilis.	Gonorrhœa.	Conditions other than Venereal.	Total.
200	148	8	356

Number of Attendances.

TABLE XV.

Number of attendances for :	Syphilis.		Gonorrhœa		Conditions other than Venereal.		Totals.		Grand Totals
	T.	C.	T.	C.	T.	C.	T.	C.	
Individual (a) attention of the Medical Officer ..	2644	1225	2445	948	337	130	5426	2303	7729
Intermediate (b) treatment, e.g. irrigations	19	—	8071	547	95	38	8185	585	8770
Totals ..	2663	1225	10516	1495	432	168	13611	2888	16499

In-Patients.

TABLE XVI.

	Syphilis.		Gonorrhœa		Conditions other than Venereal		Totals.		Grand Total.
	T.	C.	T.	C.	T.	C.	T.	C.	
Total number of patients admitted	6	7	19	20	3	1	28	28	56
Aggregate number of in-patient days	157	118	624	524	14	11	795	653	1448

For males the average stay in hospital per patient was 25.9 days.

Pathological Work.

The bacteriological and serological work for diagnosis and for the tests of cure of V.D., which is necessarily considerable, has been carried out by Dr. Mackarell and his Staff in the laboratory of the Royal Infirmary. The Kahn flocculation test for syphilis has this year been done in addition to the Wassermann test. The work done in this department is of inestimable value to the V.D. Department.

Microscopical		Serum Tests		
for Spirochaetes.	for Gonococci.	Wassermann.	Kahn.	for Gonorrhœa.
40	2181	1180	412	—

Treatment.

There have been few advances in the treatment of gonorrhœa and syphilis during the past year.

As anti-syphilitic drugs, Salvarsan and its substitutes, and Bismuth are still the main drugs in use. Mercury is favoured by some. A routine course of treatment for uncomplicated primary and secondary cases of syphilis has been in force throughout the last two years. While one cannot always follow a uniform course, I feel that, provided there are no contra-indications, this greatly adds to the standard of our work. Careful recording of cases will eventually provide valuable statistics. This course, in which "914" preparations along with Bismuth are given, is as follows :—

Routine Course A.

Week.	"914"	Bi.	
1	0.45 gm.	0.24 gm.	
2	0.6	0.24	
3	0.6	0.24	
4	—	0.24	
5	0.6	0.24	
6	0.6	0.24	
7	—	0.24	
8	0.6 or 0.75	0.24	
9	0.6 or 0.75	0.24	
10	—	0.24	K1 Mixt.
11	—	0.24	K1 Mixt.
12	—	0.24	K1 Mixt.
13	0.75	0.24	
14	0.75	0.24	
15	0.75	0.24	
	—	—	
Total	6.6 gms.	3.6 gms.	

16 W.R. and detailed Clinical Examination.

17-21 4 weeks Hutchinson's Pills.

21-25 4 weeks no treatment.

Repeat Course.

We continue to have excellent results from intramuscular administration of liver extract in the treatment of arsenical dermatitis. So marked has been the recovery after treatment that I increased the later doses of "914" in Course A from 0.6 gm. to 0.75 gm. as I considered the risk of intolerance less, and the therapeutic effect much better.

It will be observed that we are dividing our new primary syphilitic cases into "sero-negative" and "sero-positive" cases (see Table III). This division is important when grading cases for treatment.

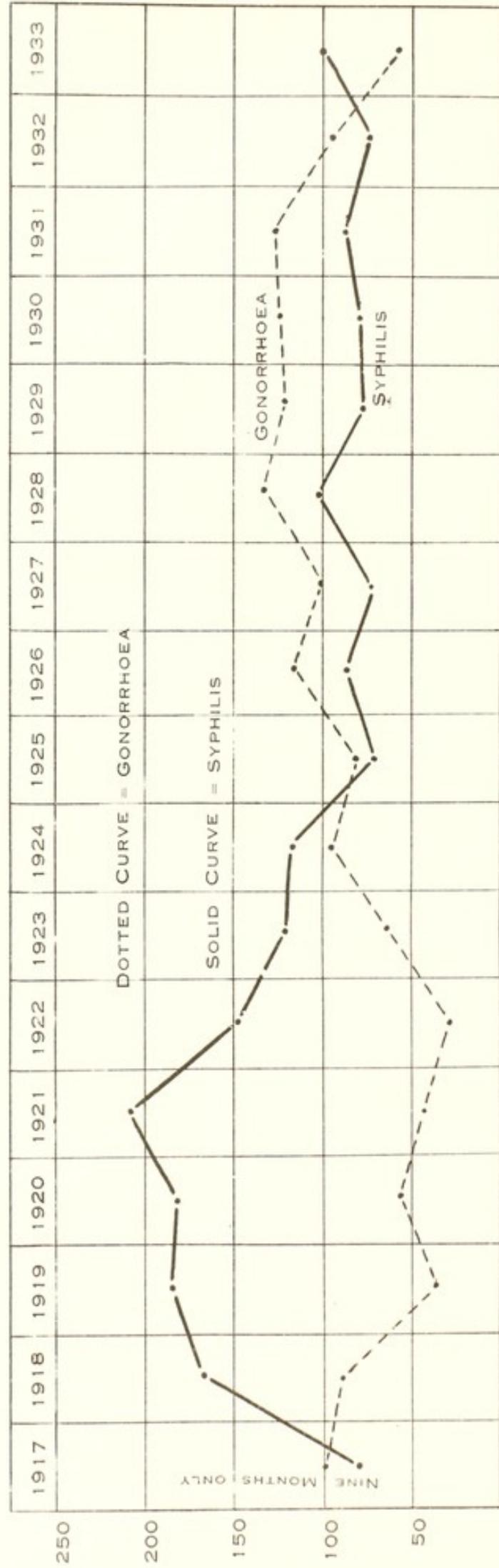
In the treatment of cases of syphilis of the nervous system, intravenous injections of Tryparsemide have been continued. Malarial treatment has also been employed in one case with promising results.

C. HAMILTON WILKIE,

(Medical Officer of Male Venereal Disease Department).

GRAPH VI

NEW CITY CASES ATTENDING FEMALE VENEREAL DISEASES DEPARTMENT, ROYAL INFIRMARY
1917-1933



The curves for Venereal Diseases in Females are very different from those in Males. The number shown as new cases is only the number coming forward for treatment, and not the number actually occurring, of which we have no official record. The apparent increase since 1925 can partly be accounted for by a difference in classification.

2. Report on the Female Clinics for Venereal Disease for Leicester and Leicestershire for the year 1933

By BESSIE W. SYMINGTON, M.D., B.S. (Lond.).

New Patients.

368 new patients have presented themselves for examination. (356 cases at the Royal Infirmary. 12 cases at St. Mary's Home.)

268 patients who had not completed their treatment on January 1st, 1933, continued to attend at the Royal Infirmary, and 58 at St. Mary's.

This makes a total of cases dealt with in the several departments of 690.

These figures cover all cases diagnosed and treated in the four Female Clinics, viz., those at the Royal Infirmary and one at St. Mary's Home, and includes the children's half hour, which is specially kept for the treatment of Congenital Syphilis.

An analysis of new cases is as follows : This is exclusive of the cases who had not finished their course on January 1st, 1933.

City Cases.

Syphilis	94
Gonorrhoea	144
	— 238

County Cases.

Syphilis	59
Gonorrhoea	59
	— 118

Total	356
	—

After continuous examination the following cases were diagnosed as not suffering from venereal disease :—

	City.	County.
Syphilis	24	12
Gonorrhoea	61	22

41 of the infected cases, first seen at the Royal Infirmary, were passed for treatment at the Clinic at St. Mary's Home.

Of the new cases of

Syphilis :

- 1 showed primary sore before infection of the blood.
- 4 showed sores with infection.
- 54 showed later symptoms.
- 18 were congenitally infected.

Gonorrhoea :

- 130 were seen probably in the first year.
- 3 in later stages.

Non-venereal cases were chiefly babies of mothers infected in pregnancy, children of infected mothers, wives of infected husbands, and cases of disease of the genital organs which have been passed on to the other departments of the Infirmary.

Out-Patient Female Attendances.

The attendance rate of patients has very slightly increased. Visits paid to the Royal Infirmary have numbered 10,332. Those to St. Mary's Home 1,463. This makes a total of 11,795.

At the Royal Infirmary visits numbered 6,734 to Medical Officers, 3,598 for intermediate treatment.

At St. Mary's Out-Patient department visits numbered 1,107 to the Medical Officer, 356 for intermediate treatment.

City Patients attendances numbered as follows: To Royal Infirmary 7,497 (Syphilis 2,856, Gonorrhoea 4,641), to St. Mary's Home Clinic 1,066. This makes a total of attendances of City Patients 7,563.

County Patients attendances were: to Royal Infirmary 2,835 (Syphilis 1,528, Gonorrhoea 1,307), to St. Mary's Home Clinic 397. This makes a total of attendances of County Patients 3,232.

A definite attempt this year has been made for patients to attend for medical examination less often, compared to the number of intermediate treatments in the ward.

This has resulted in an increase in the number of intermediate treatments given by 206, but a decrease of medical examinations by 183.

Treatment.

Routine methods of treatment for both syphilis and gonorrhoea have varied very little this year.

Syphilis.—This is still treated by the intravenous and the intramuscular method of giving compounds of arsenic and bismuth, aided by giving drugs by the mouth and sometimes by inunction. A three months' course of treatment is aimed at, but the individual woman varies so much in her power to absorb and stand the drugs that the number and kind of drug given to each one has to be considered carefully. The chief drugs given have been Stabilarsan, Neokharsivan, Metarsenobillon, Sulphastab, Bisoxyl, Quinostab and Novostab.

The total number of patients treated with arsenical compounds has been 807. 800 at the Royal Infirmary (523 City Patients, 277 County Patients) and 7 at St. Mary's Home (5 City Patients, 2 County Patients).

The number of doses of arsenic or bismuth compounds given at all treatment centres—male and female—were 2,611 arsenical, 3,473 bismuth.

In the Female Department of the Royal Infirmary the number of injections have been :—

Arsenical compounds : City, 1,126, County 530, Total 1,656.

Bismuth compounds, 7 other compounds : City 960, County 473, Total 1,433.

Tryparsemide, not included in these numbers : City 101, County 76, Total 177.

At St. Mary's Clinic 60 injections were given, numbers being as follows :—

City cases : Arsenical compounds 30, Bismuth compounds 12, Total 42.

County cases : Arsenical compounds 12, Bismuth compounds 8, Total 20.

This makes a total given at all female departments to the City and County 3,326.

Acquired Syphilis.

On analysing the early cases of syphilis only five have presented themselves for treatment in the early infectious stages, and all are being well treated and have not defaulted.

This is a very great improvement on the figures of 1929 and 1930, when 20 to 30 infectious cases were diagnosed and no definite cause for the epidemic could be found.

This year all female cases in the early stages have been offered a bed in the ward and all have accepted. This has insured that no

woman coming to the Clinic suffering from infectious syphilis, could pass on the disease.

Of the later cases of syphilis 54 have been diagnosed and 9 defaulted before the first course of treatment was finished.

Congenital Syphilis.

Time and care has been taken over these cases and the family history of the syphilitic woman is always enquired into.

Each one is encouraged to bring her children up for examination, and for the children requiring treatment, a short time at the commencement at one of the evening clinics has been set aside.

The boys over 6 or 7 years of age are sent to the male clinic, the mother is told the nature of the disease and a card given to her to pass on to her husband directing him to come up for examination.

No congenital syphilitic patient is discharged until puberty, each one is advised to attend at intervals for examination.

Thirty-three new cases have been treated in the children's, male and female clinics this year.

It is difficult to state the exact number of female attendances as frequently boys over six or seven are brought to the female clinics by their mothers.

Many of the children are sent from the Ophthalmic Department of the Royal Infirmary to which they have been sent by private doctors.

Only six have been traced from the School Medical Inspections. There is practically no co-operation with these departments of the City or County, and for this there is a great need.

Treatment of Ante-natal Syphilis.

This is given, as it has been in previous years. Treatment by injection and medicine is begun as early as possible in pregnancy and continued to the end.

This care results in the birth of a healthy child and true presentation of congenital syphilis is carried out.

All women who have had anti-syphilitic treatment are urged to present themselves for a further course should they again become pregnant and the response to this appeal is encouraging.

Most of the pregnant women have been sent from the Maternity and Child Welfare Medical Officer who states that in every case the woman has submitted herself for treatment when advised to do so.

Treatment of Gonorrhoea in women is still a very difficult problem.

Pathological investigation is much more involved and is much less frequently positive than in the male. This leaves the diagnosis more difficult and the periods of observation longer.

The ideal method of treatment in the female is to keep her in bed, to give light diet with fluids, to use local disinfection as frequently as can be borne and in that way the germ is destroyed and complications prevented.

Treatment of the young newly-married woman is a serious question, and the beds in the ward are used for this class of case whenever room permits, but not nearly enough undergo this form of treatment.

At St. Mary's Home, there is more opportunity to treat the young unmarried girl in this way.

In the Clinics and Treatment rooms, infected women and girls are dressed frequently and each one is watched for some months after treatment has been stopped, before she is considered cured.

Ante-natal Treatment.

In my opinion symptoms of gonorrhoea during pregnancy result in anaemic and weakly babies in the first years of life, as well as the danger of acute ophthalmia during the first week.

Pregnant women suffering from suspicious discharge have been advised to come regularly for disinfection and observation, and to continue until the symptoms have disappeared or until confinement.

The women who have not had sufficient treatment have been admitted for confinement when necessary, but if the signs of inflammation have abated, they are sent back to their own private doctor or midwife.

In-Patient Department.

Patients admitted have been chiefly those suffering from the complications of venereal disease.

Admissions made : 114 at the Royal Infirmary, 25 at St. Mary's Home.

Maternity Ward.

Twelve confinements have taken place and in each case the baby has been apparently healthy, but all are under observation.

In every case the mother is advised to take her child to the nearest Child Welfare centre so that a connecting link is established.

Ophthalmic Neonatorum.

Eight cases have been admitted during the year and each has been placed under the care of the Honorary Ophthalmic Surgeon for direction of treatment.

The mothers of these babies have all been examined and all are under treatment. A card is sent to the father of the child advising him to go to the Male Clinic and each has attended. Every case has made a good recovery.

The number of cases of ophthalmic neonatorum notified for 1933 from the City is 15, and from the County 15. Total 30.

Looking at the fact that only eight have been passed on to the cots in the Venereal Ward for treatment, it shows that 22 have been treated elsewhere.

This shows that the 44 parents of these 22 cases have escaped treatment in the V.D. Department. These should be on the list of new cases.

Some of the parents have no doubt been treated by private doctors, but no proof exists. In my opinion it shows that the Act of Notification of Ophthalmic Neonatorum is not being made good use of.

Valvo Vaginitis.

Gonorrhoeal infection of female children is persistent and difficult to cure.

Five cases have been admitted to the ward where treatment is undertaken and must be of long duration.

The parents of these children have all been told the nature of the infection and advised to be examined, and everyone has complied.

The School Medical Officers sent two cases. There is a bad break in the chain of co-operation here.

Amongst cases admitted were :—

Operation cases due to complications of gonorrhoea as : salpingectomy, colostomy, appendicitis, curettage, abscess of Bartholine's gland, etc.

Cases not needing operation as : salpingitis—these cases need long rest and treatment—severe rheumatism, etc.

Cases of syphilis were : Secondary infectious cases, two cases of dermatitis and two of jaundice, one case of severe keratitis of the eyes was admitted, and five cases of miscarriage.

Pregnant women suffering from both or either disease are frequently admitted to give them a good chance of rest and frequent disinfection for a time. These cases are either admitted subsequently for confinement, or passed on to their own doctors or midwives if considered free of infection.

At St. Mary's Clinic very few syphilitic patients are treated.

It is used chiefly for treatment of gonorrhoea in the more superior class of out-patient who cannot pay for good treatment and who otherwise would not attend.

St. Mary's Home is particularly useful in providing Hostel accommodation for the young unmarried girl.

These girls are infectious, require treatment and in many cases are out of work.

Here they are treated, put to bed if necessary, and fed up. The convalescent ones do the domestic work of the wards and day room and later are allowed to go out to find work, and help is given to each one by the Wantage Sisters who give their services and also by an out-worker who receives a small sum.

Cases discharged after completion of cure, who have undergone good treatment and show no signs of infection, number 81, and this year no case has returned after having been discharged as cured.

Twenty-seven patients have been passed on to other Clinics for continuation of treatment.

Follow-up Work.

This is a very important item but is difficult because of the privacy necessary.

A patient who discontinues attendance is liable to be a danger to others and afterwards a serious expense on the community owing to the later results of untreated venereal disease.

The comparatively small number treated at St. Mary's Home makes it possible for this to be done adequately.

Girls come up year after year after being medically discharged, in a friendly way, and are always welcomed. They respond to letters sent, and this year only four defaulters are on the books.

At the Royal Infirmary this work is much more difficult. Letters are sent to defaulters and are responded to sometimes.

Child Welfare Work is another channel along which defaulters are induced to return to complete treatment.

But the main and frequently the only way, is the establishing of a friendly interest between those working in the Clinics and wards, and the patient will then return again and again for friendly advice and help.

BESSIE W. SYMINGTON, M.D., B.S. (Lond.)

(Medical Officer of Female Venereal Clinics).

APPENDIX VIII.

STATISTICAL TABLES.

TABLE 1.
MUNICIPAL WARDS. VITAL STATISTICS, 1933.

WARD. (1)	*No. of Inhabited Houses, Jan., 1934. (2)	Estimated Population, Jan., 1934. (3)	No. of Persons per "structurally separate Dwelling." Census, 1931. (4)	Births (corrected). (5)	Deaths. (6)	Deaths under 1 year. (7)
1. St. Martin's ..	456	1,541	3.38	18	26	2
2. Newton ..	2,041	7,327	3.59	103	104	11
3. St. Margaret's ..	2,791	10,466	3.75	134	149	15
4. Wyggeston ..	3,241	13,126	4.05	245	204	25
5. Latimer ..	3,974	16,214	4.08	222	219	14
6. Charnwood ..	1,953	7,382	3.78	106	107	10
7. Wycliffe ..	2,594	9,287	3.58	98	159	5
8. De Montfort ..	1,583	5,810	3.67	62	94	4
9. The Castle ..	3,042	11,042	3.63	135	174	15
10. Westcotes ..	7,934	28,404	3.58	373	298	24
11. The Abbey ..	5,804	22,520	3.88	283	254	20
12. Belgrave ..	5,295	20,756	3.92	255	230	21
13. West Humberstone ..	5,753	22,839	3.97	301	274	23
14. Spinney Hill ..	7,710	28,835	3.74	383	302	25
15. Knighton ..	5,719	22,533	3.94	191	254	5
16. Aylestone ..	5,548	22,858	4.12	321	235	23

* Figures supplied by City Treasurer.

TABLE 2.
MUNICIPAL WARDS. VITAL STATISTICS, 1933.

WARD.	Birth-rate.	Death-rate.	Infant Mortality.	Zymotic rate.	Phthisis rate.	Average Phthisis Rate, Years 1912-21.	Average Phthisis Rate, Years 1922-31.
1. St. Martin's ..	11.7	16.9	111	—	1.95	1.34	1.08
2. Newton ..	14.1	14.2	107	1.23	1.36	1.77	1.47
3. St. Margaret's ..	12.8	14.2	112	0.96	1.62	1.87	1.46
4. Wyggeston ..	18.7	15.5	102	1.14	1.52	1.77	2.06
5. Latimer ..	13.7	13.5	63	1.11	0.99	1.55	1.35
6. Charnwood ..	14.4	14.5	94	0.81	0.95	1.46	1.26
7. Wycliffe ..	10.6	17.1	51	0.86	1.51	1.19	0.91
8. De Montfort ..	10.7	16.2	65	1.03	2.07	0.76	0.63
9. The Castle ..	12.2	15.8	111	0.63	1.45	1.11	1.31
10. Westcotes ..	13.1	10.5	64	0.99	0.70	0.99	0.92
11. The Abbey ..	12.6	11.3	71	1.66	1.24	1.22	1.05
12. Belgrave ..	12.3	11.1	82	0.67	1.34	1.11	0.94
13. West Humberstone ..	13.2	12.0	76	0.96	1.09	1.52	1.04
14. Spinney Hill ..	13.3	10.5	65	0.90	0.62	0.92	0.85
15. Knighton ..	8.5	11.3	26	0.80	0.44	0.60	0.55
16. Aylestone ..	14.0	10.3	72	0.35	0.09	0.87	0.85

TABLE 3.
Deaths in each Ward, classified for Age and Cause, 1933.

WARD. (1)	0 to 1 year. (2)	1 to 5 (3)	5 to 60. (4)	Over 60 years. (5)	Total all ages. (6)	Influenza. (7)	Measles. (8)	Scarlet Fever. (9)	Whooping Cough. (10)	Diphtheria. (11)	Typhoid Fever. (12)	Other Zymotics. (13)	Total (14)	Diarrhea. (15)	Phtisis. (16)	Respiratory Diseases. (17)	Developmental Diseases. (18)	Cancer. (19)	Total. (20)
1. St. Martin's	..	2	6	17	26	..	..	..	..	..	..	..	..	1	3	3	15	4	26
2. Newton	..	11	33	56	104	4	..	..	4	..	..	1	9	1	10	18	53	13	104
3. St. Margaret's	..	15	50	79	149	4	2	..	1	..	..	3	10	1	17	29	78	14	149
4. Wyggeston	..	25	64	103	204	11	3	..	1	..	..	..	15	6	20	37	106	20	204
5. Latimer	..	14	10	87	219	17	..	..	..	1	..	..	18	1	16	44	115	25	219
6. Charnwood	..	10	6	29	62	5	1	..	..	..	..	..	6	3	7	19	57	15	107
7. Wycliffe	5	4	49	101	6	..	..	2	..	..	..	8	1	14	18	108	10	159
8. De Montfort	..	4	2	25	63	4	..	..	..	1	..	1	6	..	12	16	47	13	94
9. The Castle	..	15	7	54	98	3	1	..	..	..	..	3	7	2	16	24	102	23	174
10. Westcotes	..	24	9	104	161	23	3	..	..	2	..	..	28	..	20	42	176	32	298
11. The Abbey	..	20	3	97	134	22	..	..	..	..	..	2	24	7	28	30	132	33	254
12. Belgrave	..	21	10	81	118	8	3	..	1	1	..	1	14	3	28	24	129	32	230
13. West Humberstone	..	23	12	110	129	15	2	1	..	4	..	..	22	2	25	50	141	34	274
14. Spinney Hill	..	25	13	96	168	16	1	..	3	2	..	4	26	2	18	40	173	43	302
15. Knighton	..	5	3	74	172	17	..	..	..	..	..	1	18	..	10	36	156	34	254
16. Aylestone	..	23	13	86	113	4	1	..	1	..	..	2	8	4	25	36	140	22	235
Infirmary	31	21	203	94	10	..	..	..	1	..	3	14	10	2	35	232	56	349
City General Hospital	..	46	30	168	285	9	8	..	..	..	..	3	20	13	66	90	286	54	529
City Mental Hospital	22	45	5	..	..	..	..	..	..	5	..	2	13	42	5	67
Isolation Hospital	8	21	67	1	..	4	1	6	10	..	7	28	2	54	2	10	1	97

Deaths in Institutions have been subtracted from the Wards in which the Institutions are situated; and (except in some cases in the Workhouse where the home address is unobtainable) have been distributed to the Wards to which they belong. Deaths of persons transferred from the Workhouse to the City General Hospital, however, have not been distributed, as the home addresses of such persons are not obtainable.

TABLE 4.
(As required by Ministry of Health).

TUBERCULOSIS.

NOTIFICATIONS ON FORM A.

No. of Primary Notifications.

Age Periods.	Pulmonary.		Non-Pulmonary.	
	Males.	Females.	Males.	Females.
0—1	1	1	1	2
1—5	—	2	10	6
5—10	1	1	7	8
10—15	4	5	9	3
15—20	21	32	—	6
20—25	28	34	1	1
25—35	37	52	4	2
35—45	33	22	2	2
45—55	41	25	1	1
55—65	25	6	1	—
65 and upwards ..	12	5	—	—
Total Primary Notifi- cations	203	185	36	31
Total Notifications on Form A.	218	197	37	31

The total number of fresh cases notified during 1933 on Forms A. and B., excluding cases previously notified, was :—

Pulmonary	438
Non-Pulmonary	74
Total	512

TABLE 4a.

TUBERCULOSIS CASES.

Supplemental Return.

Age Periods.	Pulmonary.		Non-Pulmonary.	
	Males.	Females.	Males.	Females.
0—1	1	—	—	1
1—5	—	—	4	4
5—10	—	—	2	—
10—15	2	2	1	2
15—20	1	3	1	1
20—25	3	6	1	—
25—35	13	10	1	2
35—45	5	7	—	1
45—55	6	1	—	—
55—65	6	—	—	1
65 and upwards ..	2	1	1	—
Total Cases ..	39	30	11	12

TABLE 5.

Showing Number of Deaths from Tubercular Diseases
in Leicester in past years.

Year.	Phthisis.		Other Tuberculous Diseases.		Total Tuberculous Deaths.	
	Deaths.	Rate per 100,000 Population.	Deaths.	Rate per 100,000 Population.	Deaths.	Rate per 100,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1903	266	123	111	51	377	175
1904	353	163	96	44	449	207
1905	288	132	87	40	375	171
1906	339	154	71	32	410	187
1907	275	124	99	44	374	169
1908	287	128	104	46	391	175
1909	290	129	82	36	372	166
1910	281	124	77	34	358	158
1911	288	126	66	28	354	155
1912	284	123	89	38	373	162
1913	301	130	82	35	383	165
1914	273	117	88	37	361	155
1915	325	143	76	33	401	177
1916	306	135	67	29	373	165
1917	343	157	78	35	421	193
1918	316	145	82	37	398	182
1919	264	111	62	26	326	138
1920	255	107	72	30	327	138
1921	278	116	73	30	351	147
1922	294	123	67	28	361	151
1923	285	119	36	15	321	135
1924	287	120	62	25	349	146
1925	305	127	59	24	364	152
1926	282	118	43	17	325	136
1927	283	118	63	26	346	144
1928	265	110	42	17	307	128
1929	266	110	53	21	319	132
1930	227	94	44	18	271	112
1931	262	108	49	20	311	129
1932	240	100	33	14	273	113
1933	269	111	32	14	301	125

TABLE 6.

Age and Sex Distribution of Deaths from Phthisis in 1933.

Age Period.	Males.	Females.	Total.
0—1	2	..	2
2—4	1	3	4
5—9 .. ..	..	1	1
10—14	2	4	6
15—19	7	16	23
20—24	14	24	38
25—34	30	26	56
35—44	29	16	45
45—54	37	14	51
55—64	20	6	26
65 and upwards ..	13	4	17
All ages ..	155	114	269

Occupations of Persons Dying from Phthisis in 1933.

	M.	F.		M.	F.
SHOE TRADE :					
Finishers	8	..	Army Pensioners .. ..	..	..
Clickers	9	..	Boxmakers	1	..
Riveters	2	..	Porters	2	..
Pressmen	2	..	Licensed Victuallers ..	4	..
Machinists	10	6	Shop Assistants	7	3
Various	9	5	Warehousemen	4	..
Total in Shoes ..	40	11	Various	43	5
*Hosiery Trades ..	12	19	Occupations not stated		
Labourers	21	..	(includes Married		
Clerks	3	1	Women, Widows,		
Tailoring Trade ..	3	..	Children and Per-		
Vanmen	1	..	sons of no occupa-		
Soldiers .. ..	..	..	tion)	9	74
Engineers	4	..	Grand Total ..	155	114
Painters	1	..			
Dressmakers .. ..	..	1			

* A large number of *married* women are engaged in the Hosiery Trade, but these are not included, for in the case of deaths of married women and widows, only the husband's occupation is registered.

TABLE 7.
Showing the number of Cases notified of the principal Notifiable Diseases for the
Fourteen Years, 1920-1933.

DISEASE.	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Smallpox ..	0	0	0	0	5	72	0	6	90	320	1192	1353	183	0
Scarlet Fever ..	946	714	619	576	335	774	477	620	1971	517	423	404	463	432
Diphtheria ..	471	324	168	142	429	350	366	309	461	253	198	115	76	338
Enteric Fever..	15	27	9	6	5	4	3	3	6	2	5	3	1	1
Erysipelas ..	127	84	101	87	96	126	110	132	141	158	99	108	90	150
Puerperal Fever ..	18	21	12	7	11	7	22	9	10	11	12	8	13	9
Puerperal Pyrexia ..	..	..	..	..	..	..	21	34	45	25	50	32	48	52
Phthisis ..	572	497	566	692	725	606	650	700	668	657	582	511	442	438
Other Forms of Tubercle ..	59	105	43	71	65	77	77	80	117	77	66	61	69	74
Ophthalmia ..	101	87	66	53	28	37	36	38	24	35	32	14	20	18
Cerebro-Spinal Fever ..	7	4	0	3	2	2	4	4	4	8	11	16	13	6
Poliomyelitis ..	4	2	1	1	12	..	81	8	8	4	3	..	2	4
Measles ..	(Notification discontinued.)													
Encephalitis Lethargica ..	9	10	6	12	22	26	14	9	7	4	3	7	2	0
Pneumonia ..	131	138	177	209	247	239	143	236	239	364	202	216	236	347
Chickenpox ..	..	..	..	..	..	639	..	..	..	..	..	..	..	..
Totals ..	2460	2013	1768	1859	1982	2959	2004	2188	3791	2435	2878	2848	1658	1869

TABLE 8.

Showing the number of Deaths from Zymotic (or Germ) Diseases in the Fourteen Years 1920-1933.

DISEASE.	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Smallpox	0	0	0	0	0	0	0	0	0	0	1	1	0	0
Measles	83	7	48	21	0	43	8	18	1	17	5	14	10	17
Scarlet Fever	2	1	7	2	4	10	5	3	4	2	2	0	2	1
Diphtheria	41	28	20	9	35	34	37	11	17	13	7	6	5	11
Whooping Cough	23	33	25	31	18	69	21	29	7	56	8	9	16	13
Enteric Fever	3	2	3	2	1	1	0	1	0	0	1	1	0	0
(Diarrhœa	21	30	16	38	62	57	40	22	50	27	33	40	28	34
{ Enteritis	48	67	42	22	19	10	5	2	0	0	0	0	0	—
Erysipelas	0	5	1	2	8	10	9	5	0	0	0	3	4	9
Influenza	15	47	80	31	39	55	15	54	18	214	27	39	100	159
Puerperal Fever	8	6	5	3	3	7	11	2	7	3	8	2	5	5
Cerebro-Spinal Fever	6	3	3	0	0	3	5	2	0	4	4	9	7	2
Poliomyelitis	0	1	1	0	0	0	7	2	0	0	1	0	1	0
Encephalitis Lethargica	6	5	4	4	7	10	9	7	3	12	8	7	9	4
Pneumonia	225	207	224	210	218	245	168	208	187	284	206	238	244	229
Totals	481	442	479	375	409	554	340	366	294	632	311	369	431	484

N.B.—In calculating the Zymotic rate since 1923, all the above deaths have been included except pneumonia. Particulars of deaths from Tuberculosis are given in Tables 5 and 6.

TABLE 9.—Vital Statistics of whole District during 1933 and previous years. City of Leicester.

YEAR. (1)	Population estimated to middle of each year, revised in light of 1921 and 1931 Census. (2)	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NET DEATHS BELONGING TO THE DISTRICT.			
		Un-corrected Number. (3)	Net.		Number. (6)	Rate. (7)	Of Non-residents registered in the District. (8)	Of Residents registered in the District. (9)	Under 1 Year of Age.		At all Ages.	
			Number. (4)	Rate. (5)					Number. (10)	Rate per 1000 Net Births. (11)		Number. (12)	Rate (13)
1918	217,537	3286	3246	14.92	3981	18.30	277	179	351	108.1	3883	17.84
1919	235,847	3811	3774	15.99	3098	13.13	241	226	370	98.0	3083	13.06
1920	236,873	5934	5905	24.91	2535	10.69	173	512	528	89.4	2874	12.13
1921	237,900	5074	5097	21.42	2527	10.62	182	532	438	85.9	2877	12.09
1922	238,240	4729	4646	19.50	2675	11.22	181	544	408	87.8	3038	12.71
1923	238,580	4647	4593	19.25	2396	10.04	182	560	386	84.0	2774	11.63
1924	238,920	4466	4380	18.33	2511	10.50	218	638	346	77.4	2931	12.27
1925	239,260	4316	4197	17.54	2709	11.32	212	637	368	87.6	3134	13.10
1926	239,600	4268	4119	17.19	2542	10.60	214	649	319	77.4	2977	12.42
1927	239,940	4124	3965	16.53	2657	11.07	273	660	298	75.1	3044	12.69
1928	240,280	4216	3988	16.60	2395	9.96	268	621	282	70.7	2748	11.44
1929	240,620	4044	3747	15.57	2946	12.24	277	748	301	80.3	3417	14.20
1930	240,960	4171	3872	16.07	2345	9.73	204	603	216	55.7	2744	11.39
1931	241,300	3950	3684	15.28	2673	11.09	342	653	235	63.7	2984	12.38
1932	240,800	3846	3583	14.88	2686	11.15	349	685	251	70.0	3022	12.55
1933	241,500	3532	3242	13.42	2750	11.39	356	689	242	74.65	3082	12.77
Number of inhabited houses, January, 1934		..		65,438	Area of District in acres (exclusive of area covered by water) ..		..		..		8,582	
Average number of persons per house, Census, 1931		..		3.79	Area of District in acres (exclusive of area covered by water) ..		..		..		8,582	

NOTE.—This Table has been filled in, in accordance with the instructions given on the form supplied by the Ministry of Health.

TABLE 10.
LEICESTER BOROUGH.

Showing estimated Population, Marriage-rates, Birth-rates, and Death-rates (General and Zymotic) per 1000 living during the last 41 years, 1892-1933.

Year. (1)	Estimated Population. (2)	Marriage Rate. (3)	Birth Rate. (4)	Death Rate. (5)	Zymotic (Death) Rate. (6)	Infant Mortality. (7)
1892	180,550	16.7	32.2	18.0	2.5	197.7
1893	183,900	15.8	32.6	19.7	3.5	220.4
1894	187,250	16.7	32.0	14.5	1.9	161.9.
1895	190,600	16.4	31.2	17.4	3.0	206.6
1896	194,100	17.5	32.0	16.8	2.9	185.7
1897	197,600	16.7	31.6	17.9	1.9	206.0
1898	201,250	17.7	30.5	17.2	3.4	191.1
1899	204,900	17.5	30.6	18.1	3.4	196.0
1900	208,600	17.3	29.7	17.8	3.6	174.1
1901	212,498	17.1	29.0	15.7	2.3	178.0
1902	213,974	16.3	29.5	14.8	1.5	153.3
1903	215,461	16.5	27.9	14.2	1.4	161.3
1904	216,958	17.0	27.5	15.0	2.0	161.1
1905	218,464	17.2	26.9	14.0	1.6	146.5
1906	219,980	16.1	26.6	15.1	2.4	166.2
1907	221,508	16.6	24.9	13.4	.9	130.1
1908	223,046	16.0	25.4	13.9	1.6	129.7
1909	224,595	15.7	24.1	14.0	1.3	126.6
1910	226,154	17.1	23.7	12.4	.7	126.3
1911	227,634	16.6	22.9	13.4	1.4	130.0
1912	229,294	16.3	22.5	13.5	.9	109.0
1913	230,970	16.4	22.8	13.3	.7	119.3
1914	232,664	16.7	22.1	14.1	1.1	119.9
1915	232,664	24.1	20.8	14.9	.5	122.8
1916	225,907	18.3	20.7	13.6	.8	104.8
1917	217,537	16.6	16.9	13.5	.7	105.0
1918	217,537	18.6	14.9	17.8	.5	108.1
1919	236,059	21.3	15.3	13.0	.3	98.0
1920	236,874	23.5	24.9	12.1	.8	89.4
1921	237,900	20.0	21.4	12.0	.5	85.9
1922	238,240	19.4	19.5	12.7	.5	87.8
1923	238,580	18.3	19.2	11.6	.4	84.0
1924	238,920	17.7	18.3	12.3	.7	79.0
1925	239,260	17.9	17.5	13.1	1.3	87.6
1926	239,600	17.1	17.2	12.4	.7	77.4
1927	239,940	18.0	16.5	12.7	.5	75.1
1928	240,280	19.4	16.6	11.4	.2	70.7
1929	240,620	19.5	15.6	14.2	1.3	80.3
1930	240,960	18.3	16.1	11.4	.4	55.7
1931	241,300	18.1	15.3	12.4	.5	63.7
1932	240,800	17.6	14.9	12.5	.8	70.0
1933	241,500	17.7	13.4	12.8	1.0	74.6

The above figures have been revised in the light of the census figures of the different census years. The population for the year 1920 having been considerably over-estimated has necessitated important corrections in that year.

TABLE 11. City of Leicester.

INFANT MORTALITY DURING THE YEAR 1933.

Net Deaths from stated Causes at various Ages under 1 year of Age.

CAUSE OF DEATH.	Under 1 Week	1 to 2 Weeks	2 to 3 Weeks	3 to 4 Weeks	Total under 1 Month	1 to 3 Months	3 to 6 Months	6 to 9 Months	9 to 12 Months	Total Deaths under 1 Year
All Causes Certified.	74	16	8	4	102	35	31	41	33	242
Smallpox	-	-	-	-	-	-	-	-	-	-
Chicken-pox	-	-	-	-	-	-	-	-	-	-
Measles	-	-	-	-	-	1	-	1	5	7
Spina bifida	2	-	-	1	3	-	1	-	-	4
Whooping-cough	-	-	-	-	-	-	-	3	2	5
Diphtheria and Croup	-	1	-	-	1	-	-	-	-	1
Erysipelas	-	-	-	-	-	-	2	-	-	2
{ Tuberculous Meningitis	-	-	-	-	-	-	-	-	-	-
{ Abdominal Tuberculosis	-	-	-	-	-	-	-	-	1	1
{ Other Tuberculous Diseases	-	-	-	-	-	-	-	2	1	3
Meningitis (<i>not Tuberculous</i>)	1	-	-	-	1	-	1	-	1	3
Convulsions	6	2	2	-	10	2	1	2	1	16
Laryngitis	-	-	-	-	-	-	-	-	-	-
Bronchitis	-	-	1	-	1	3	3	5	3	15
Pneumonia (all forms)	1	-	1	-	2	9	7	17	12	47
{ Diarrhœa	-	-	1	-	1	3	6	4	5	19
{ Enteritis	-	-	-	-	-	3	2	2	-	7
Colitis	-	-	-	-	-	-	-	-	-	-
Gastritis	-	-	-	-	-	-	-	-	-	-
Syphilis	-	-	-	-	-	-	-	-	-	-
Rickets	-	-	-	-	-	-	-	-	-	-
Suffocation (overlying)	1	1	-	-	2	1	-	-	-	3
Injury at Birth	1	-	-	-	1	-	-	-	-	1
Atelectasis	1	1	-	-	2	-	-	-	-	2
{ Congenital Malformations	1	-	-	-	1	1	1	-	-	3
{ Premature Birth	39	7	2	2	50	4	-	-	-	54
{ Atrophy, Debility and Marasmus	5	2	1	-	8	4	2	-	-	14
Other Causes	16	2	-	1	19	4	5	5	2	35

Net Births in the Year (legitimate, 3,078.
illegitimate, 164.

Net Deaths in the Year of (legitimate infants, 228
illegitimate infants, 14.

TABLE 12.

VENEREAL DISEASE.

Statement showing the services rendered at the Treatment Centre during the year 1933, classified according to the areas in which the patients resided. (Males and Females.)

SUMMARY OF QUARTERLY RETURNS MADE BY ROYAL INFIRMARY.

	Leicester.	Leicester-shire.	Total.
Number of cases from each area dealt with during the year <i>for the first time</i> and found to be suffering from :—			
Syphilis	118	68	186
Gonorrhœa	281	111	392
Conditions other than Venereal	239	107	346
Total	638	286	924
Number of Reviewed Attendances			
.. .. . In-Patients admitted	20,470	5,437	25,907
.. .. . Injections given	99	71	170
.. .. . Pathological Examinations	4,357	2,235	6,592
.. .. .	5,251	1,888	7,139

TABLE 13.
 VENEREAL DISEASE CLINICS AT ROYAL INFIRMARY.
 NEW CASES AND RENEWED ATTENDANCES. (City Cases only.)

YEAR.	NEW PATIENTS.				RENEWED ATTENDANCES.				
	MALES.		FEMALES.		MALES.		FEMALES.		
	SYPH.	GON.	NOT V.D.	SYPH.	GON.	SYPH.	GON.	SYPH.	GON.
1923..	111	198	Records not complete	123	66	3465	4859	2948	2279
1924..	93	166	Records not complete	119	98	3595	5528	2516	2364
1925..	66	202	Records not complete	72	84	3446	7228	2245	2143
1926..	99	291	Records not complete	90	118	3123	8323	2143	2428
1927..	70	275	Records not complete	75	102	3164	9761	2557	2591
1928..	71	246	Records not complete	104	136	2946	10420	2970	3619
1929..	125	266	Records not complete	80	126	3321	10085	2529	4372
1930..	134	232	Records not complete	83	129	4125	9778	2639	3863
1931..	78	175	Records not complete	69	86	3324	10269	2555	3928
1932..	80	204	Records not complete	73	94	2427	11088	2506	4773
1933..	59	181	Records not complete	59	100	2534	10248	2698	4376

The above figures are summarised from the quarterly returns and are not the same as the figures given in the V.D. Officers' returns which have been corrected in the light of final diagnosis. They are only given here in order that a comparison with previous years may be made.

TABLE 14.
CANCER STATISTICS, 1903-33.

Year.	Total Cancer Deaths.	Cancer Deaths— per cent. of Total Deaths.	Cancer Death- rate per 100,000 Population.
1903	192	6.2	89
1904	213	6.5	98
1905	180	5.8	82
1906	168	5.0	76
1907	199	6.6	89
1908	214	6.8	95
1909	195	6.1	86
1910	200	7.1	88
1911	236	7.7	103
1912	225	7.2	98
1913	252	8.1	109
1914	269	8.1	115
1915	219	6.4	94
1916	228	7.3	100
1917	255	8.6	117
1918	309	7.9*	132
1919	249	8.0	108
1920	257	8.9	104
1921	307	10.6	129
1922	276	9.0	116
1923	274	9.8	114
1924	281	9.5	116
1925	318	10.1	131
1926	395	13.2	163
1927	324	10.6	132
1928	349	12.7	142
1929	357	10.4	145
1930	372	13.5	151
1931	357	11.9	148
1932	356	11.8	148
1933	367	11.9	152

*In 1918 the total deaths from all causes were very high so that the per cent. figure was proportionately lower.

TABLE 15. DEATHS FROM CANCER, 1933.

Classified according to Age, Sex and Organ Affected.

Organ Affected.	Under 40 years.		40-60 years.		Over 60 years.		All Ages.	
	M.	F.	M.	F.	M.	F.	M.	F.
Lip	-	-	-	1	2	-	2	1
Tongue	-	-	-	1	6	-	6	1
Jaw	1	-	-	-	1	-	2	-
Mouth	-	-	1	-	2	1	3	1
Larynx	-	-	1	-	8	-	9	-
Oesophagus ..	-	-	2	-	8	1	10	1
Stomach	1	2	11	7	17	25	29	34
Intestines ..	2	-	1	2	6	8	9	10
Colon	-	1	1	3	16	18	17	22
Rectum	1	1	4	3	16	6	21	10
Liver	-	-	6	6	15	7	21	13
Pancreas	-	-	-	3	6	3	6	6
Spleen	-	-	-	-	-	1	-	1
Lungs	1	1	4	2	-	4	5	7
Kidney	1	1	-	-	-	1	1	2
Bladder	-	-	2	1	2	7	4	8
Prostate	-	-	-	-	2	-	2	-
Testicle	-	-	1	-	-	-	1	-
Ovary	-	-	-	3	-	1	-	4
Uterus	-	1	-	10	-	13	-	24
Breast	-	3	-	16	-	16	-	35
Bones	-	-	1	-	1	2	2	2
Other Forms or not specified	1	1	9	6	14	4	24	11
Total	8	11	44	64	122	118	174	193

TABLE 16.

MIDWIVES PRACTISING IN LEICESTER, 1933.

REG. NO.	NAME.	ADDRESS.
32386	Adcock, Hannah	56, Clarendon Park Road.
84965	Arnold, Nora	58, Fosse Road Central.
42983	Bamber, Mabel E.	12, Portman Street.
82087	Barton, Hilda May	Stoneygate Nursing Home, Stoney- gate Road.
50757	Beamish, Constance E.	5, St. James' Road.
87311	Beedham, Elizabeth	Maternity Hospital, Causeway Lane.
2760	Blyth, Eliza	13, Fairfield Street.
55200	Bradshaw, Edith	Maternity Home, Westcotes Drive.
84355	Brooks, Doris Irene	22, Gwencole Crescent.
85815	Bucknell, Doris Muriel	Maternity Hospital, Causeway Lane.
82884	Bullock, Ethel A.	Stoneygate Nursing Home, Stoneygate Road.
57274	Camacho, Marie Stella	649, Aylestone Road.
73803	Carr, Beatrice Ellen	106, Kedleston Road.
67186	Carroll, Elizabeth	Tweedbank, Bolsover Street.
31591	Chandler, Sarah K. T.	16, Lincoln Street.
73062	Clarke, V. E.	4, Canon Street.
42330	Cook, Lily Elizabeth	100, Evington Road.
72390	Copson, Rose Lilian	517, Saffron Lane.
69905	Cox, Mary Josephine	58, Fosse Road Central.
26697	Davies, Amelia M.	39, Scraftoft Lane.
36754	Dawkins, Jemima	58, Fosse Road Central.
80786	Dennis, Ethel	375, Humberstone Road.
66243	Dodson, Sarah E.	35, Windley Road.
71229	Earl, Ivy Bell	7, Nook Street.
50887	East, Florrie	11, New Bridge Street.
68879	Eden, Lily	5, Thoresby Street.
83685	Elliott, Marion Frances	85, Narborough Road.
43711	Else, Charlotte	Maternity Hospital, Causeway Lane.
67246	Eyre, Blanche G.	14, Lincoln Street.
77108	Fearn, Edna D.	13, Perseverance Road, Birstall.
30974	Gawthorne, Fanny	45, Aylestone Road.
73282	Germain, Ivy Rita	Maternity Home, Westcotes Drive.
66815	Goodall, Olive	Sundial Nursing Home, Aylestone Rd.
15683	Gray, Jean	Maternity Hospital, Causeway Lane.
82304	Green, Doris B.	35, Windley Road.
85977	Hague, Maud	56, Clarendon Park Road.
87976	Hanahoe, Mary	56, Clarendon Park Road.
60388	Harding, Laura	2, Lorne Road.
75166	Haynes, Nellie E.	19, The Newarke.
26452	Heggs, Mary Louisa	Maternity Hospital, Causeway Lane.
37583	Hicks, Louisa S. A.	58, Bassett Street.
55864	Holyoak, Elsie E.	187, Sheridan Street.
71043	Hopkins, Margaret Lucy	39, Hallam Crescent East.
27110	Hosking, C. A.	50, London Road, Coalville.
85708	Howard, Margaret Alice	52, Kerrysdale Avenue.
5223	Howsam, M.	90, Sylvan Street.
25486	Hunt, Annie Amelia	166, Charnwood Street.
70351	Hurd, Hilda Mary	34, Diseworth Street.

TABLE 16—continued.

REG. NO.	NAME.	ADDRESS.
41739	Ingham, Adelaide	58, Loughborough Road.
66160	Japlin, Annie	Jesmond Dene, Narborough Road.
83156	Jordan, Beatrice Helen	1, Ashwell Street.
80631	Kilty, Annie	Sundial Nursing Home, Aylestone Rd.
86863	King, Helen	Maternity Hospital, Causeway Lane.
73398	Kingswell, Doris E.	Maternity Home, Westcotes Drive.
77418	Kirk, Veronica	75, Aylestone Road.
11389	Laughton, Annie	236, Clarendon Park Road.
51258	Ledger, Sarah E. M.	205, Birstall Street.
86928	Mahon, Sara A.	Maternity Hospital, Causeway Lane.
76493	Mansfield, Edna	380, Fosse Road South.
41332	Martin, Lilian M. C.	301, Clarendon Park Road.
44502	Mason, Mabel	56, Clarendon Park Road.
49841	McCaull, Jean	85, Narborough Road.
82510	Murphy, Margaret J.	Maternity Hospital, Causeway Lane.
30688	Noon, Lucy A.	68, Uppingham Road.
87727	O'Flaherty	Maternity Hospital, Causeway Lane.
67428	Pateman, Clara	20, Warwick Street.
43317	Payne, Lilian Emily	7, Gipsy Road.
66629	Peel, Lilian May	27, Strathmore Avenue.
36784	Pilsworth, Maria	54, Blackbird Road.
49911	Potter, Frances A.	85, Narborough Road.
24652	Reeve, Clara	22, Vicarage Lane.
77256	Rimmington, May	1, Hunter Road.
69226	Ritchie, Ethel A. R.	Sundial Nursing Home, Aylestone Rd.
74783	Roberts, Dorothy C. F.	44, West Street.
32775	Robus, Ada	Myrtledene, St. Ives Road.
67995	Shelbourn, Esther W.	68, Uppingham Road.
80504	Shercliff, Gwendolen Ivy	75, Hopefield Road.
28446	Simister, Edith A. K.	36, Wood Hill.
69730	Smith, Edith E.	9, Laurel Road.
79163	Smith, Emily	69, Henley Road.
49218	Smith, Gertie	141, Catherine Street.
75428	Smith, Lillie C. M.	Maternity Hospital, Causeway Lane.
55034	Smith, Mary A.	32, Narborough Road.
58618	Starmer, E.	Osterley, Glenfield Rd. Extension.
84832	Sturgess, Patricia	250, Humberstone Lane, Thurmaston.
76097	Tite, Winifred Anne	Maternity Home, Westcotes Drive.
33774	Wakeling, Ada	27, Melton Road.
82026	Wilson, Grace M.	5, Thoresby Street.
82040	Young, Violet D.	58, Fosse Road Central.

TABLE 17.

MUNICIPAL MATERNITY HOME,
WESTCOTES DRIVE.

Return relating to Maternity Homes maintained or subsidised by
the Council, as required by the Ministry of Health, for Year 1933.

Form M.C.W. 96a.

1. Name and Address of Institution :—		
Municipal Maternity Home, Westcotes Drive, Leicester.		
2. Number of beds in the Institution	.. .. .	25
3. Number of cases admitted during the year	.. .. .	431
4. Average duration of stay	.. .. .	14.11 days
5. Number of cases delivered by—		
(a) Midwives	.. .. .	310
(b) Doctors	.. .. .	89
6. Number of cases in which medical assistance was sought by a midwife	.. .. .	150
7. Number of cases notified as—		
(a) Puerperal fever	.. .. .	—
(b) Puerperal pyrexia	.. .. .	17
8. Number of cases of pemphigus neonatorum	.. .. .	—
9. Number of infants not entirely breast-fed while in the Institution	.. .. .	12
10. (a) Number of cases notified as ophthalmia neonatorum	.. .. .	3
(b) Result of treatment in each case. All went home under care of own doctor. Improved on discharge	.. .. .	—
11. (a) Number of maternal deaths	.. .. .	1
(b) Cause of death in each case. Ante-partum and post-partum haemorrhage. Toxaemia of pregnancy. Nephritis	.. .. .	—
12. (a) Number of foetal deaths—		
(i) Stillborn	.. .. .	14
(ii) Within 10 days of birth	.. .. .	12
(b) Cause of death in each case and results of post-mortem examination (if obtainable)—		
Prematurity	.. .. .	6
Ante-partum haemorrhage and prematurity	.. .. .	1
General feebleness and prematurity	.. .. .	1
Minor convulsions	.. .. .	1
Prematurity and convulsions	.. .. .	1
Cerebral irritation	.. .. .	1
Intercranial haemorrhage following forceps delivery	.. .. .	1

TABLE 18.

City of Leicester.

ISOLATION HOSPITAL AND SANATORIUM.

Income and Expenditure for the two years ending
31st March, 1934.

EXPENDITURE.	Year 1932-33.	Year 1933-34.
	£	£
Salaries and Wages (<i>see also below</i>)	9980	9760
Superannuation : Corporation's Contributions and Additional Allowances	434	448
National and Workmen's Compensation Insurance Provisions	274	275
Drugs, Medical Appliances, &c.	6587	6972
Orthopaedic Treatment	1218	1462
Fuel, Light, Water and Power	4209	3914
Furniture, Bedding and Linen	466	713
Crockery and Hardware	126	93
Uniforms and Dresses	227	175
Cleaning Materials	238	224
Laundry (including Wages)	473	519
Structural Renewals, Repairs and Painting (including Wages)	2797	2856
Grounds, &c. (including Wages)	1439	1327
Transport (including Wages)	761	603
Printing, Stationery, Postage and Telephone	192	227
Rates and Insurance	1095	1065
Miscellaneous	242	95
Sanatorium School—Salaries, &c.	229	371
Occupational Treatment—Wages, Materials, &c.	530	435
X-ray and Light Treatment Supplies	352	474
Loan Charges :—		
Interest	1347	1192
Repayment of Debt	1691	1742
Total Expenditure	£34,907	£35,314
Less Sale of Produce (including supplies from Garden, &c., to Institution) and Miscellaneous Income	1419	1774
Net Expenditure for Maintenance	£33,488	£33,540
Net Expenditure per Patient Day	9s. 4d.	7s. 1d.
Income for Maintenance of Patients (including Con- tributions by Patients and Relatives in respect of "Home Place" Sanatorium	989	874
Net Cost (including Loan Charges)	£32,499	£32,666
Number of Patient Days	71,565	94,181

ALFRED RILEY,
City Treasurer.

28th June, 1934.

TABLE 19.

City of Leicester.

CITY GENERAL HOSPITAL.

Income and Expenditure for the two years ending
31st March, 1934.

	EXPENDITURE.		
	Year 1932-33 £	Year 1933-34 £	
Salaries and Wages :—			
Medical Staff	1718	2330	
Nursing Staff	5962	6358	
Other Staff	6949	7334	
Corporation's Contributions to Superannuation Fund under Act of 1922	403	466	
Superannuation Allowances under Act of 1896	353	360	
National Insurance	339	393	
Provisions :—			
Staff	3658	3557	
Patients	6141	6415	
Clothing :—			
Staff	150	177	
Patients	536	181	
Drugs and Medical Appliances	2185	2829	
Fuel, Light and Water	4673	3955	
Laundry :—Wages and Materials	1235	1287	
Furniture and Fixtures	372	779	
Hardware and Crockery	313	305	
Bedding and Linen	528	401	
Cleaning Materials	370	309	
Disinfectants	31	38	
Education and Training Sundries	99	78	
Buildings, Plant and Machinery :—			
Additions and Alterations	1225	1084	
Renewals and Repairs	3284	3192	
Painting and Decorating	539	528	
Maintenance of Grounds	911	881	
Removal of Patients	313	327	
Travelling Expenses and other Transport	555	337	
Printing and Stationery	319	268	
Telephone	120	107	
Sundries	226	210	
Rates	1869	2040	
Insurance : Fire, &c.	132	105	
Disposal of Sewage	123	127	
Farm and Garden	361	341	
Loan Charges :—			
Interest	1022	1013	
Repayment of Debt	3468	3357	
Orthopaedic School :—			
Salaries	184	214	
Books, etc.	16	17	
	Total Expenditure	50682	51700
Less Miscellaneous Income	244	216	
Net Expenditure for Maintenance	£50438	£51484	
Net Expenditure per Patient Day	s. d. 7 2	s. d. 7 3	
	INCOME.		
Income for Maintenance :—	£	£	
Mental Deficiency Committee	189	251	
Education Committee	248	839	
Other Local Authorities	1507	3213	
Relatives, Patients (Ministry of Pensions for Treatment of Ex- Servicemen) and Saturday Hospital Fund.	3011	2745	
	£4955	£7048	
Net Cost (including Loan Charges)	£45483	£44436	
Number of Patient Days	140,831	142,219	

28th June, 1934.

ALFRED RILEY,
City Treasurer.

TABLE 20.

City of Leicester.

MATERNITY HOME, WESTCOTES DRIVE.

Income and Expenditure for the Two Years ending
31st March, 1934.

EXPENDITURE.	Year 1932-33.	Year 1933-34.
	£	£
Salaries including Medical Fees (<i>see also below</i>) ..	841	878
Superannuation : Corporation's Contributions ..	57	60
Insurance (National, Workmen's Compensation and Guarantee)	19	21
Uniforms and Dresses	37	49
Provisions	769	841
Drugs and Medical Requisites	148	162
Fuel, Light and Water	538	493
Laundry (Wages and Materials)	237	250
Furniture	15	32
Bedding and Linen	22	53
Crockery and Hardware	13	26
Cleaning Materials	34	30
Lecture Fees, &c.	105	101
Repairs, Painting, &c.	96	208
Garden and Grounds	180	206
Rates	235	236
Insurance (Fire, etc.)	28	24
Printing, Stationery, Telephone and Sundries ..	83	96
Loan Charges :—		
Interest	395	345
Repayment of Debt	588	605
Total Expenditure	£4440	£4716
INCOME.		
Maternity Fees	1828	2130
Medical Fees	127	164
Training Fees	162	135
Contribution by Ministry of Health in aid of Training of Midwives	185	190
Rent of Garages, &c.	142	150
Produce supplied by Garden to Institution ..	32	39
Total Income	£2476	£2808
Net Cost (including Loan Charges)	£1964	£1908

ALFRED RILEY,
City Treasurer.

28th June, 1934.

TABLE 21.

City of Leicester.

DAY NURSERY.

Income and Expenditure for the Two Years ending
31st March, 1934.

EXPENDITURE.	Year 1932-33.	Year 1933-34.
	£	£
Salaries	684	691
Superannuation : Corporation's Contributions ..	32	31
Insurance	24	24
Rent and Rates	354	352
Furniture and Equipment	79	214
Repairs, Painting, &c.	59	79
Fuel, Light, Water and Cleaning	228	207
Provisions	524	540
Drugs and Medical Requisites	3	3
Laundry	85	95
Uniforms and Clothing	89	79
Printing, Stationery, Postage and Telephone ..	11	9
Lecture Fees	31	21
Sundries	31	18
	£2234	£2363
INCOME.		
Maintenance Charges	676	785
Contribution from Education Committee in respect of Mothercraft :—		
Tuition	150	150
Meals for School Girls	83	41
Meals for Mothers	9	27
Sale of Old Furniture	—	4
	£918	£1007
Net Cost	£1316	£1356

ALFRED RILEY,
City Treasurer.

28th June, 1934.

TABLE 22.

City of Leicester.

INFANTS' MILK DEPOT.

Income and Expenditure for the Two Years ending
31st March, 1934.

EXPENDITURE.	Year 1932-33.	Year 1933-34.
	£	£
Salaries and Wages	523	521
Superannuation : Corporation's Contributions ..	24	24
Purchase of Milk, &c.	1354	1328
Medical Requisites, &c.	26	38
Rent, Rates, Taxes and Insurance	144	143
Fuel, Light and Water	45	47
Telephone	9	9
Printing, Stationery and Sundries	39	27
Total Expenditure	£2164	£2137
INCOME.		
Sale of Milk, Virol, &c.	1625	1615
Maternity and Child Welfare Account :—		
Proportion of Salary of Manageress	150	150
Proportion of Rent	50	50
Total Income	£1825	£1815
Net Deficiency	£339	£322

28th June, 1934.

ALFRED RILEY,
City Treasurer.

TABLE 23.

City of Leicester.

HOME PLACE SANATORIUM, HOLT.Income and Expenditure for the Two Years ending
31st March, 1934.

EXPENDITURE.	Year 1932-33.	Year 1933-34.
	£	£
Salaries and Wages (<i>see also below</i>), &c.	655	673
Superannuation : Corporation's Contributions	18	17
Insurance (National and Workmen's Compensation)	24	24
Rates and Land Tax	98	83
Fuel, Light and Water	195	186
Provisions	859	865
Medical Requisites	4	10
Laundry	32	28
Buildings, &c.—Repairs and Painting	133	89
Upkeep of Grounds, &c. (including Wages)	376	441
Travelling Expenses and Transport	87	346
Furniture and Bedding	58	5
Purchase of Pigs, &c.	55	65
Insurance	13	14
Miscellaneous	82	124
Total Expenditure	£2689	£2970
INCOME.		
Sale of Pigs and Turkeys	31	27
Garden Produce supplied to Institutions	132	136
Donation	25	..
Sundries	2	..
Ministry of Pensions for Treatment of Tuberculous Ex-Service Men . . . . .	..	42
Note : Contributions from Patients credited to Isolation Hospital and Sanatorium		
Total Income	£190	£205
Net Cost	£2499	£2765

ALFRED RILEY,
City Treasurer.

28th June, 1934.

TABLE 24.

Monthly Rainfall and mean Temperature during 1933,
as recorded at the City Mental Hospital.

Figures supplied by Dr. J. Francis Dixon.

MONTH.	Rainfall in inches.	Mean Temperature Fahr.
January	1.39	36.45
February	2.17	39.03
March	2.37	45.61
April	1.27	48.41
May	1.23	55.85
June.. .. .	3.07	60.38
July	1.53	65.80
August	0.88	64.96
September	1.88	57.83
October	3.20	48.83
November	1.66	40.85
December	0.41	32.61
Total rainfall in 1933	21.06 inches.	
No. of days on which rain fell (.01 inches or more)	161	
Rainfall in previous years.		
	Inches of rain.	No. of days on which rain fell
1932	26.87	168
1931	26.76	177
1930	31.44	200
1929	25.52	260
1928	26.41	210
1927	32.59	210
1926	26.78	186
1925	23.06	175
1924	28.49	198
1923	25.03	201
1922	29.23	187
1921	19.03	136
1920	25.10	192
1919	30.98	191
1918	24.52	190

TABLE 25.
Showing Births, Vaccinations and Smallpox in Leicester, 1838-1933.

Year	Births	Vaccinations Regist'd Public and Pvt.	Small- pox Deaths	Small- pox Cases	Year	Births	Vaccina- tions Regist'd Public and Pvt.	Exemptions Granted	Small- pox Deaths	Small- pox Cases
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1838	1815	Not known	11	..	1886	4863	1122	..	..	1
1839	2024	..	50	..	1887	4695	471	..	..	10
1840	1967	..	56	..	1888	4814	314	..	..	22
1841	1972	..	31	..	1889	4796	172	..	..	..
1842	1942	..	..	..	1890	4699	131	..	..	..
1843	2035	..	..	..	1891	4790	92	..	..	..
1844	2087	..	9	..	1892	5816	133	..	6	38
1845	2197	..	164	..	1893	6006	249	..	15	320
1846	2213	..	12	..	1894	5995	133	..	..	8
1847	2005	..	1	..	1895	5962	75	..	..	4
1848	2003	..	31	..	1896	6212	86	..	..	..
1849	2171	1613	66	..	1897	6252	81	..	..	..
1850	2239	1240	5	..	1898	6152	92	..	..	..
1851	2437	1292	2	..	1899	6273	156	167	..	..
1852	2387	1637	52	..	1900	6207	343	598	..	..
1853	2283	1843	11	..	1901	6169	357	500	..	4
1854	2467	2275	..	..	1902	6313	1237	1500	5	18
1855	2301	1771	..	..	1903	6018	2487	1029	21	406
1856	2402	1771	1	..	1904	5981	1232	1044	4	307
1857	2441	1880	17	..	1905	5888	987	1112	..	5
1858	2276	2026	53	..	1906	5865	1073	1080	..	1
1859	2518	1447	3	..	1907	5534	1093	1256	..	..
1860	2567	1766	2	..	1908	5680	659	2401	..	..
1861	2540	1614	1	..	1909	5431	660	2367	..	..
1862	2723	1388	..	..	1910	5380	564	2335	..	..
1863	2937	1608	5	..	1911	5222	475	2964	..	..
1864	3114	1916	104	..	1912	5182	447	3173	..	..
1865	3226	1183	10	..	1913	5278	436	3391	..	1
1866	3412	1641	3	..	1914	5144	293	3438	..	..
1867	3496	1544	2	..	1915	4851	192	3812	..	..
1868	3588	3379	1	..	1916	4684	222	3931	..	..
1869	3760	3560	..	..	1917	3688	193	3287	..	..
1870	3799	3103	..	..	1918	3246	146	2724	..	..
1871	3982	3230	12	Not k'wn	1919	3774	154	2954	..	..
1872	4162	4456	346	"	1920	5905	201	5364	..	..
1873	4447	3692	2	"	1921	5097	234	4662	..	..
1874	4374	3764	..	"	1922	4646	173	4286	..	..
1875	4270	3527	1	1	1923	4593	284	4109	..	..
1876	4781	3426	..	..	1924	4380	260	4062	..	5
1877	4753	3653	6	12	1925	4197	283	3908	..	72
1878	4779	3372	1	8	1926	4119	234	3710	..	..
1879	4697	3146	..	..	1927	3965	172	3684	..	7
1880	4860	2886	..	1	1928	3988	192	3712	..	90
1881	4712	3417	2	6	1929	3747	192	3517	..	320
1882	4857	3106	5	29	1930	3872	186	3825	1	1192
1883	4825	1958	3	12	1931	3684	165	3595	1	1353
1884	4851	1763	..	6	1932	3583	118	3496	..	183
1885	4683	1842	..	8	1933	3242	103	3203	..	..

The figures in this table prior to the year 1890 are taken from the Fourth Report of the Royal Commission on Vaccination, App. 3, Tables 5, 6 and 51.

In 1863-64, owing to the Smallpox epidemic which prevailed, there were 4,320 additional public vaccinations performed by the Medical Officers to the Guardians. These were chiefly vaccinations of children omitted in previous years. They are not included in the figures for the two years in question.

TABLE 26.

Vital Statistics* of 38 Large Towns (excluding London and residential towns round London) with populations of over 100,000, 1933.

TOWN.	Population for 1933.	Birth Rate.	Death Rate.	Infant Mortality.	Diphtheria Death Rate.
Birkenhead	151,060	16.4	13.6	100	0.10
Birmingham	1,011,500	15.0	11.2	66	0.03
Blackburn	121,400	12.0	14.4	71	0.04
Bolton	177,000	12.0	14.1	78	0.03
Bradford	295,100	13.2	14.7	80	0.05
Brighton	146,700	12.6	14.5	47	0.01
Bristol	410,870	13.7	12.0	55	0.05
Cardiff	222,000	15.5	13.6	77	0.09
Coventry	182,800	13.6	10.0	64	0.06
Derby	142,000	13.7	12.1	64	0.06
Gateshead	124,320	18.1	13.3	76	0.02
Huddersfield	114,000	11.4	15.0	49	0.43
Hull	319,900	17.9	13.1	77	0.28
Leeds	485,000	13.7	13.6	81	0.18
Liverpool	859,200	19.7	14.5	98	0.20
Manchester	758,140	14.7	13.6	75	0.11
Middlesbrough	139,500	19.1	13.3	91	0.04
Newcastle-on-Tyne	286,500	16.4	12.7	76	0.03
Nottingham	126,100	14.0	12.8	63	0.06
Nottingham	283,030	15.8	13.4	85	0.02
Oldham	136,700	12.2	15.0	72	0.07
Plymouth	206,200	15.7	13.2	58	0.09
Portsmouth	251,200	15.4	12.4	53	0.04
Preston	117,800	14.6	13.4	88	0.01
Rhondda	139,500	15.9	13.6	92	0.14
St. Helens	107,600	18.0	14.0	116	0.07
Salford	217,000	15.2	13.9	80	0.11
Sheffield	511,820	14.0	12.0	63	0.04
South Shields	114,100	17.2	13.7	93	0.04
Southampton	177,600	16.2	12.0	58	0.05
Southend-on-Sea	132,374	10.8	12.5	42	0.05
Stockport	127,000	12.2	13.8	83	0.12
Stoke-on-Trent	275,100	16.2	13.0	89	0.03
Sunderland	187,400	19.8	13.5	89	0.02
Swansea	165,500	16.0	13.1	75	0.05
Walsall	105,400	17.9	12.2	89	0.02
Wolverhampton	140,060	14.7	11.2	79	0.03
Average	—	15.1	13.1	75	0.08
†LEICESTER	241,500	13.4	12.8	75	0.05

*Provisional figures only. From Registrar-General's Quarterly Return No. 341.

†These differ slightly from the corresponding figures calculated locally and used in the rest of this report.

TABLE 27.

HOUSING CONDITIONS

For year ended 31st December, 1933.

GENERAL STATISTICS.

Area (acres)	8,582
Population (Estimated) Mid-Year, 1933	241,500
Number of structurally separate dwellings occupied (Census 1931)	60,719
Number of families or separate occupiers (Census 1931)	63,944
Rateable Value, 1st November, 1933	£1,649,980
Sum represented by a penny rate (for 1932-33)	£6,409

HOUSING.

Number of new houses erected during the year :—

(a) Total	1,147
(b) With State assistance under the Housing Acts :	
(i) By the Local Authority	62
(ii) By other bodies or persons	none

1.—Unfit Dwelling Houses—Inspection.

(1) (a) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	7,629
(1) (b) Number of inspections made for the purpose	10,909
(2) (a) Number of dwelling houses which were inspected and recorded under the Housing Consolidated Regulations, 1925	718
(2) (b) Number of inspections made for the purpose	3,280
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	72
(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-heading) found to be not in all respects reasonably fit for human habitation	646

2.—Remedy of Defects without Service of Formal Notices.

Number of defective dwelling houses rendered fit in consequence of informal action by Local Authority or their officers	1,019
---	-------

3.—Action under Statutory Powers.

A—Proceedings under Section 17 of the Housing Act, 1930 :

(1) Number of dwelling houses in respect of which Notices were served requiring repairs	10
(2) Number of dwelling houses which were rendered fit after service of formal notices :	
(a) By owners	5
(b) By Local Authority in default of owners	none
(3) Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	none

B—*Proceedings under Public Health Acts :*

(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied ..	1,804
(2) Number of dwelling houses in which defects were remedied after service of formal notices :	
(a) By owners	29
(b) By Local Authority in default of owners ..	none

C—*Proceedings under Section 19 of the Housing Act, 1930 :*

(1) Number of representations made with a view to the making of Closing or Demolition Orders	72
(2) Number of dwelling houses in respect of which Closing Orders were made	1
(3) Number of dwelling houses in respect of which Closing Orders were determined, the dwelling houses having been rendered fit.. .. .	none
(4) Number of dwelling houses in respect of which Demolition Orders were made	67
(5) Number of dwelling houses demolished in pursuance of Demolition Orders	25
(6) Number of dwelling houses demolished under Housing Act, 1925, S. 11	none
(7) Number of dwelling houses demolished under local Act.. .. .	none

TABLE 28.

MEASLES AND WHOOPING COUGH DEATHS AND MORTALITY per 1,000 BIRTHS.

Quinquennial Period.	Births.	Measles Deaths.	Mortality per 1,000 Births.	Whooping Cough Deaths.	Mortality per 1,000 Births.
1902-6 ..	30,065	312	10.3	354	11.1
1907-11 ..	27,247	420	15.4	191	7.0
1912-16 ..	25,139	437	17.3	190	7.5
1917-21 ..	21,710	248	11.4	134	6.1
1922-26 ..	21,935	120	5.5	164	7.4
1927-31 ..	19,256	55	2.8	109	5.6
1932-33 ..	6,825	27	4.0	29	4.3

TABLE 29.

LIST OF REGISTERED NURSING HOMES
(INCLUDING MATERNITY HOMES.)

ADDRESS.	NO. OF BEDS.
9 Mere Road	1
13 Beckingham Road	5
Central Nursing Home, 33 Severn Street	6
40 Farnham Street	2
229 Melton Road	7
56 Clarendon Park Road	9
32 Narborough Road	2
66 Uppingham Road	4
2 Melbourne Street	2
"Coneston," Thoresby Street	2
38 Cromford Street	1
Maternity Hospital, Causeway Lane	26
58 Loughborough Road.. .. .	6
348 Aylestone Road	11
Sundial Nursing Home, Aylestone Road	12
22 Vicarage Lane	3
337 Fosse Road North	11
85 Narborough Road	11
306 Aylestone Road	2
58 Fosse Road Central	3
3 Danes Hill Road	8
Stoneygate Nursing Home, Stoneygate Road	6

TABLE 30.
DIPHTHERIA IN LEICESTER.

Cases notified and details registered during each quarter during years
1924-33. (From Registrar General's Quarterly Report).

Year.	Quarter.	Cases.	Deaths.	Case Mortality %
1924	First	57	7	12.3
	Second	36	5	13.8
	Third	76	7	9.2
	Fourth	252	14	5.5
1925	First	152	11	7.2
	Second	76	8	10.5
	Third	38	4	10.5
	Fourth	81	9	11.1
1926	First	94	18	19.1
	Second	92	12	13.0
	Third	82	4	4.8
	Fourth	99	4	4.4
1927	First	73	7	9.5
	Second	42	0	—
	Third	61	2	3.2
	Fourth	136	2	1.4
1928	First	134	5	3.7
	Second	84	7	8.3
	Third	138	6	4.3
	Fourth	107	2	1.8
1929	First	56	2	3.5
	Second	42	5	11.9
	Third	48	2	4.1
	Fourth	107	4	3.7
1930	First	74	3	4.0
	Second	35	1	2.8
	Third	45	1	2.2
	Fourth	44	2	4.5
1931	First	50	6	12.0
	Second	14	3	21.3
	Third	24	1	4.1
	Fourth	27	0	—
1932	First	19	2	10.5
	Second	9	2	22.2
	Third	13	2	15.3
	Fourth	35	1	2.8
1933	First	39	3	7.7
	Second	62	2	3.3
	Third	88	2	2.3
	Fourth	150	6	4.0

TABLE 31.

Deaths during 1933 of Persons belonging to City of Leicester as classified by the Medical Officer of Health according to Disease, Sex and Age-period.

*CAUSES OF DEATH.	Sex.	All Ages.	0—	1—	2—	5—	15—	25—	45—	65—	75—
ALL CAUSES	M	1556	141	32	20	35	47	164	431	357	329
	F	1527	101	25	39	32	70	153	364	308	435
1. Enteric fever	M	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—
2. Smallpox	M	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—
3. Measles	M	10	5	2	2	1	—	—	—	—	—
	F	7	2	2	3	—	—	—	—	—	—
4. Scarlet fever	M	—	—	—	—	—	—	—	—	—	—
	F	1	—	—	1	—	—	—	—	—	—
5. Whooping cough	M	5	2	2	1	—	—	—	—	—	—
	F	8	3	2	3	—	—	—	—	—	—
6. Diphtheria	M	6	1	2	1	2	—	—	—	—	—
	F	5	—	1	2	2	—	—	—	—	—
7. Influenza	M	72	1	3	—	—	1	12	28	14	13
	F	87	1	—	1	1	3	9	17	25	30
8. Encephalitis lethargica	M	1	—	—	—	—	—	—	1	—	—
	F	3	—	—	1	—	—	—	1	—	1
9. Meningococcal meningitis	M	14	2	2	—	6	1	2	1	—	—
	F	9	1	—	—	2	—	2	2	1	1
10. Tuberculosis of respiratory system	M	155	2	—	1	2	21	59	57	12	1
	F	114	—	2	1	5	40	42	20	4	—
11. Other tuberculous diseases	M	17	—	2	5	5	1	1	2	1	—
	F	15	2	—	5	3	2	2	1	—	—
12. Cancer malignant disease	M	176	—	1	—	1	—	10	67	71	26
	F	194	—	—	1	—	—	17	80	55	41
13. Rheumatic fever	M	4	—	—	—	3	1	—	—	—	—
	F	3	—	—	—	1	2	—	—	—	—
14. Diabetes	M	17	—	—	—	—	—	2	2	7	6
	F	19	—	—	—	—	1	—	5	9	4
15. Cerebral hæmor- rhage, &c.	M	112	—	—	—	—	1	3	30	47	31
	F	129	—	—	—	1	—	3	34	41	50
16. Heart disease	M	220	—	—	—	4	4	11	67	73	61
	F	245	—	—	—	5	6	25	62	65	82
17. Arterio-sclerosis ..	M	34	—	—	—	—	—	—	6	9	19
	F	18	—	—	—	—	—	—	6	5	7

TABLE 31—continued.

CAUSES OF DEATH.	Sex.	All Ages.	0—	1—	2—	5—	15—	25—	45—	65—	75—
18. Bronchitis ..	M	103	8	2	—	—	—	3	23	26	27
	F	130	6	3	2	—	1	4	25	33	60
19. Pneumonia (all forms) ..	M	140	29	9	6	1	—	16	40	19	20
	F	89	18	11	6	2	2	4	15	16	15
20. Other respiratory diseases ..	M	3	—	—	—	—	—	—	1	—	2
	F	1	—	—	—	—	—	—	1	—	—
21. Ulcer of stomach or duodenum ..	M	12	—	—	—	—	—	3	5	2	2
	F	4	—	—	—	—	—	2	1	1	—
22. Diarrhoea, &c. ..	M	21	18	1	—	—	—	—	1	—	1
	F	13	8	1	2	—	—	—	2	—	—
23. Appendicitis and typhlitis ..	M	6	—	—	—	2	1	1	2	—	—
	F	7	—	—	—	1	2	—	2	2	—
24. Cirrhosis of liver	M	7	—	—	—	—	—	—	4	3	—
	F	2	—	—	—	—	—	1	1	—	—
25. Acute and chronic nephritis ..	M	46	1	—	—	1	2	4	14	14	10
	F	49	—	—	—	1	1	4	17	13	13
26. Puerperal sepsis ..	F	5	—	—	—	—	1	3	1	—	—
27. Other accidents & diseases of pregnancy and parturition ..	F	11	—	—	—	—	2	9	—	—	—
28. Congenital debility and malformation, premature birth	M	55	55	—	—	—	—	—	—	—	—
	F	42	42	—	—	—	—	—	—	—	—
29. Suicide ..	M	23	—	—	—	—	1	7	12	3	—
	F	14	—	—	—	—	1	3	9	—	1
30. Other deaths from violence ..	M	47	2	1	3	1	7	9	13	7	4
	F	24	2	—	4	3	3	3	5	2	2
31. Other defined diseases ..	M	250	15	5	1	6	6	21	55	49	92
	F	279	16	3	7	5	3	20	57	36	132
32. Causes ill-defined or unknown ..	M	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—

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