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CITY OF LEEDS.

REPORT

ON THE

Health and Sanitary Administration

OF THE CITY

FOR THE YEAR 1923.

BY

J. JOHNSTONE JERVIS, M.D., D.P.H.,

Medical Officer of Health.



62495

TABLE OF CONTENTS.

NATURAL AND SOCIAL CONDITIONS.

	PAGE
AREA AND POPULATION	9
VITAL STATISTICS—	
Marriages	10
Births	11
Birth-rate in Quarters	14
Excess of Births over Deaths	14
Illegitimate Births	14
Deaths	14
Death-rate in Quarters	15
Death-rate in Wards	15
Causes of Death	18
Housing and Death	22
Deaths in Age Groups	22
Infantile Mortality	23
Comparison with Other Towns	26
CREMATION	23
HOSPITAL ACCOMMODATION	25

SANITARY CIRCUMSTANCES.

DRAINAGE AND SEWERAGE	27
SEWAGE DISPOSAL	27
SCAVENGING AND CLEANSING	27
ASHPITS AND ASHBINS	29
CLOSET ACCOMMODATION	32
PUBLIC CONVENIENCES	33
SANITARY ADMINISTRATION—	
Staff	34
Sanitary Inspection of District	34
Notices	35
Legal Proceedings	35
Underground Sleeping Rooms	35
Common Lodging Houses	35
Residential Flats	37
Canal Boats	37
Vans and Tents	38
Ice Cream—Street Vendors and Sheds	38
Cellar Dwellings	39
Offensive Trades	39
Factories and Workshops	42
Plans	42
Work of Women Inspectors	44
Outworkers	44
Rat repression	44
SMOKE—	
Factory Chimneys	46
Domestic Smoke	46

FOOD.

COWS AND COWSHEDS	50
MILK AND FOOD ANALYSIS	51
GUINEA PIG TESTS	55
TUBERCULOUS MILK FROM OUTSIDE AREAS	55
MILK AND CREAM REGULATIONS	55
FOOD AND DRUGS	56
MEAT—	
Private Slaughter-houses	57
Meat Inspection	58
Tuberculous Carcases	60

INFECTIOUS AND OTHER DISEASES.

SMALLPOX	62
MEASLES	62
WHOOPING COUGH	64
SCARLET FEVER.. .. .	65
ERYSIPELAS	66
PUERPERAL FEVER	66
ENCEPHALITIS LETHARGICA	66
ACUTE ANTERIOR POLIO-MYELITIS	67
CEREBRO-SPINAL MENINGITIS	67
DIPHTHERIA	67
ENTERIC FEVER	68
MALARIA, DYSENTRY AND TRENCH FEVER	68
OPHTHALMIA NEONATORUM	69
DIARRHŒA AND ENTERITIS	70
INFLUENZA	72
BRONCHITIS AND PNEUMONIA.. .. .	73
CANCER	75
INFECTIOUS DISEASES HOSPITAL	78
AMBULANCE WORK AND DISINFECTION	78
BACTERIOLOGICAL WORK	79
VENEREAL DISEASES	81
Statistics	81
Work of Treatment Centre	81
Institutions.. .. .	83
Supply of Salvarsan Substitutes	86
Pathological Work	86
Education and Propaganda	86
TUBERCULOSIS	86
Statistics	89
Institutional Treatment	97
Accommodation for Children	103
Central Dispensary	104
Contacts	106
Domiciliary Work	106
Care Work	106
Report by Dr. Woodcock	107

MATERNITY AND CHILD WELFARE.

STATISTICS	111
Death-rate in Quarters	115
Deaths in Age Groups	115
Neo-natal Death-rate	115
Causes of Infant Death	115
Illegitimate Death-rate	116

MATERNITY AND CHILD WELFARE—Continued.

PAGE

SUPERVISION OF MIDWIVES—

Number of Midwives	118
Inspection of Midwives	118
Advising Medical Help	119
Midwives' Emergencies	119
Puerperal Fever Cases	119
Handywomen	119
STILL-BIRTHS	119
ANTE-NATAL WORK	120
NATAL WORK	122
Illegitimate Births in Institutions	122
POST-NATAL WORK	123
Home Visiting	123
Infant Welfare Centres	124
Infant Consultations	124
Leeds Babies' Welcome Association	128
MILK DISTRIBUTION	128
THE INFANTS' HOSPITAL, WYTHAM	131
DAY NURSERIES	133
RESIDENTIAL NURSERY	133
CONVALESCENT TREATMENT FOR MOTHERS AND BABIES	134

HOUSING.

NUMBER OF HOUSES	135
HOUSING SHORTAGE	135
OVERCROWDING	135
NEW HOUSES	135
UNFIT HOUSES	136
WEST STREET UNHEALTHY AREA	136
REGENT STREET UNHEALTHY AREA	137

PROPAGANDA	140
--------------------	-----

STAFF CHANGES	141
-----------------------	-----

MINISTRY OF HEALTH TABLES	142 to 145
-----------------------------------	------------

CHARTS—

BIRTH RATE, 1890-1923	opposite page 12
DEATH RATE, 1890-1923	" " 16
INFANT MORTALITY RATE, 1890-1923	" " 112
CANCER DEATH RATE, 1891-1923	" " 76
TUBERCULOSIS DEATH RATE, 1890-1923	" " 92
SOOT AND ASH GAUGES, 1923	" " 46

PUBLIC HEALTH COMMITTEE.

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Child Welfare Committee.*

Councillor	R. H. BLACKBURN.
"	MAUD DIGHTAM.
"	GERTRUDE DENNISON (Chairman).

*Representing Education
Committee.*

Councillor	J. WORMALD.
"	H. E. CLAY.
	Mrs. HOYLAND SMITH.

Representing Leeds Day Nurseries Association :

Mrs. W. H. CLARKE.
Mrs. G. HALBOT.
Mrs. A. E. IVES.

PUBLIC HEALTH STAFF.

Medical Officer of Health and Chief Tuberculosis Officer.	J. JOHNSTONE JERVIS, M.D., D.P.H.
Assistant Medical Officer of Health ..	H. C. JENNINGS, M.B., B.S., M.R.C.S., D.P.H.
Assistant Medical Officer of Health for Maternity and Child Welfare and Medical Officer of Infants' Hospital	NORA F. SMITH, M.B., B.S., D.P.H.
Assistant Medical Officers for Maternity and Child Welfare.	MARION E. MACKENZIE, M.B., Ch.B. MAY I. T. MELDRUM, M.B., Ch.B., D.P.H. CECILIA SHISKIN, B.A., M.B., Ch.B. HARRY M. HOLT, M.B., Ch.B.
Clinical Tuberculosis Officer	H. de CARLE WOODCOCK, M.D., M.R.C.S., F.R.C.P. (Edin.), D.P.H.
Assistant Tuberculosis Officer ..	Z. P. FERNANDEZ, M.D., Ch.B.
Medical Superintendents—	
Infectious Disease Hospital (Seacroft).	A. E. PEARSON, M.R.C.S., L.R.C.P.
Killingbeck Sanatorium	W. A. TODD, M.B., Ch.B.
Gateforth Sanatorium	H. M. HOLT, M.R.C.S., L.S.A., D.P.H.
Venereal Diseases Officer	J. P. BIBBY, M.B., Ch.B., M.R.C.P.
City Bacteriologist	J. W. McLEOD, M.B., Ch.B.
Veterinary Assistant	J. A. DIXON, M.R.C.V.S.
City Analyst	B. A. BURRELL, F.I.C., F.C.S., M.R.C.S.
Chief Sanitary Inspector	H. C. JENNINGS, M.B., B.S., M.R.C.S., D.P.H.
Divisional Inspectors	M. CARTER and J. COUPE. E. STANDISH <i>vice</i> J. COUPE from October.
Removal Officer	T. W. OGILVIE. D. FERGUSON <i>vice</i> T. W. OGILVIE from October.
Principal Clerks—	
Finance	J. W. RIDSDALE.
Statistics	J. S. HOYLE.
Sanitary	A. SPARKS.
Infectious Diseases	H. O. PEAKE.

CITY OF LEEDS.

To the Chairman and Members of the Health Committee.

Gentlemen,

I have pleasure in submitting my Annual Report for the year 1923.

The year was remarkable for its very favourable vital statistics. The general death-rate 12·7, the infantile mortality rate 89, and the death-rates from the following diseases, Enteric fever 0·00, Whooping Cough 0·07, Diphtheria 0·04, Tuberculosis (all forms) 1·36, and the Respiratory diseases 2·25 were the lowest on record.

Unfortunately the birth-rate continued its descent. This may be only a passing phase which the advent of more prosperous times will correct. Let us hope so; otherwise it will seriously affect the future of the City.

With the exception of scarlet fever and measles which were prevalent at the beginning of the year the City was practically free from serious epidemic disease.

It would be true to say that probably never has the community achieved a higher standard of healthiness than it did in the year reviewed by this report. All this is very encouraging and an incentive to further effort. It at any rate proves if proof be needed that the efforts made and the money expended have not been in vain.

I have to acknowledge my indebtedness to my assistants, Dr. H. C. Jennings, Dr. Nora F. Smith, Dr. H. de Carle Woodcock and Mr. J. A. Dixon, Veterinary Inspector, for their help in compiling this report and their co-operation in the work of the department throughout the year, also to all the other members of the staff of the Public Health Department for their loyal support and good work.

May I again take this opportunity of thanking you, Mr. Chairman, and the Members of the Health Committee for your unvarying kindness and courtesy.

I am, Gentlemen,

Your obedient servant,

J. JOHNSTONE JERVIS.

*Public Health Department,
Market Buildings, Leeds,
August, 1924.*

SUMMARY, 1923.

LATITUDE 53.48° North. LONGITUDE 1.32° West.

AVERAGE HEIGHT ABOVE SEA LEVEL 250 feet.

AREA OF CITY	..	..	..	..	..	28,089 $\frac{3}{4}$ Acres.
POPULATION (Registrar-General's estimate)	..	..	..	..	..	469,900
ESTIMATED NUMBER OF HOUSES	..	..	..	..	..	114,534
RATEABLE VALUE	..	..	..	..	..	£2,913,059
SUM REPRESENTED BY A PENNY RATE	..	..	..	..	..	£11,422

						Average. 1923. 1913-22.
BIRTH RATE (births per 1,000 living)	..	..	..	..	..	18.48 20.81
MARRIAGE RATE (persons married per 1,000 living)	..	..	..	..	..	16.26 17.91
DEATH RATE (deaths per 1,000 living)	..	..	..	..	..	12.74 15.71
NATURAL INCREASE OF POPULATION (Excess of births over deaths in the year)	..	..	..	..	..	2,698 2,338
INFANT MORTALITY RATE (Deaths under 1 year per 1,000 births)	..	..	..	..	..	89 121
DEATH RATE from Pneumonia and Bronchitis	..	..	..	..	..	2.04 2.77
„ „ Cancer	..	..	..	..	..	1.22 1.17
„ „ Diarrhoea and Enteritis (under 2 years) per 1,000 births	..	..	..	..	..	13.59 21.13

				Cases.	Case- rate.	Deaths.	Death rate.
SCARLET FEVER	..	..	..	2,134	4.54	31	0.07
DIPHTHERIA	..	..	..	368	0.78	20	0.04
TYPHOID FEVER	..	..	..	9	0.02	1	0.00
MEASLES	..	..	..	5,224	11.12	50	0.11
PULMONARY TUBERCULOSIS	..	..	..	1,002	2.13	515	1.10
OTHER FORMS OF TUBERCULOSIS	..	..	..	197	0.42	122	0.26

CITY OF LEEDS.

NATURAL AND SOCIAL CONDITIONS.

Area.—28,089 $\frac{3}{4}$ acres.

Population.—The adjusted population at the Census of 1921 was 465,500, and at the middle of the year 1923 as estimated by the Registrar General it was 469,900 which is an advance of 4,400 on the census population.

The estimated population of the various wards of the City is given in the accompanying table.

The rateable value of the City was £2,913,059 and the sum represented by a penny rate was £11,422.

POPULATION IN WARDS.

WARD.	Census, April 2nd, 1911.	Census, June 19th, 1921.	Adjusted population, 1921.	Estimated population middle of 1923.
Central	14,503	12,528	12,727	12,847
North	41,968	42,423	43,096	43,503
North-East ..	36,239	36,011	36,582	36,928
New Ward* ..	..	7,814	7,938	8,013
East	34,701	35,272	35,832	36,170
South	12,562	12,817	13,020	13,144
East Hunslet† ..	33,562	35,264	35,823	36,161
West Hunslet ..	35,766	36,129	36,702	37,049
Holbeck	29,679	29,441	29,908	30,191
Mill Hill	5,856	5,286	5,370	5,421
West	20,553	22,029	22,378	22,590
North-West ..	30,570	31,531	32,031	32,334
Brunswick ..	23,219	23,930	24,310	24,540
New Wortley ..	16,714	17,773	18,055	18,226
Armley & Wortley	37,419	36,762	37,345	37,698
Bramley	23,937	23,481	23,853	24,078
Headingley ..	48,302	49,741	50,530	51,007
City	445,550	458,232	465,500	469,900

*Roundhay, Seacroft, Shadwell, and Crossgates added to Leeds, November, 1912. (1911 Census, 7,398).

†Including Middleton added to Leeds, April 1st, 1920. (1911 Census, 1,207).

VITAL STATISTICS.

Marriages.—The number of marriages registered during the year was 4,001, which is a decrease of 182 on the figure for the previous year. It should be noted that this figure includes marriages in the registration districts of Leeds, Hunslet, Holbeck, and Bramley, which themselves include other districts outside the City. For this reason it is not possible to separate the Leeds marriages from the total registered in these districts hence one cannot ascertain accurately the marriage-rate for the City. The rate (inclusive) for 1923 was 16·3 as compared with 17·2 for the previous year. The fall in the marriage rate was general all over the country and

MARRIAGE RATE.

Year.	Leeds.	England and Wales.
1913	16·4	15·7
1914	16·6	15·9
1915	20·2	19·4
1916	15·5	14·9
1917	14·2	13·8
1918	15·5	15·3
1919	21·2	19·7
1920	23·5	20·2
1921	18·7	16·9
1922	17·2	15·7
1923	16·3	15·2

* Registration districts are based on the areas of Poor Law Unions, of which there are four in Leeds, but the boundaries of the Unions do not coincide with those of the City. The whole of the Leeds Union is within the City, but only parts of the Hunslet, Holbeck and Bramley Unions. The Hunslet Union includes Templenewsam and Rothwell, Holbeck includes Churwell, and Bramley Union includes Gildersome.

was probably attributable in great measure to the continued industrial depression and the consequent unemployment as well as in a lesser degree to the shortage of houses.

Births.—The number of births registered in the City during the year was 8,991, comprising 4,568 males, and 4,423 females. Of these, 202 males and 180 females were born to parents belonging to districts outside the City, and should therefore be deducted from the total, whilst to the total must be added 39 males, and 36 females, born outside but belonging to Leeds parents giving a nett total of 8,684, made up of 4,405 males, and 4,279 females. Compared with the figures for the previous year this is a decrease of 357 males and 212 females, or a total of 569.

The birth-rate was 18·5 as compared with 19·8 for the previous year and an average of 20·3 for the previous five years, which means that 846 fewer children have been born than would have been the case had the rate remained the same as the average for the five preceding years. This is the lowest birth-rate ever recorded in the City with the exception of the war years 1917, 1918 and 1919. The decline has continued since 1920, though the actual decrease in 1923 was considerably less than that between 1920 and 1921, or between 1921 and 1922.

Taking the quinquennium 1910-1914, when the number of births registered in the City was 53,267 and the birth-rate 23·6, and comparing it with the quinquennium 1919-1923 (in which occur the post war years 1920 and 1921, both with a phenomenally high birth-rate), when the recorded births numbered 46,874 and the birth-rate 20·5 it will appear that the nett loss to the population is 6,393 lives that is if the birth-rate for the previous quinquennium had been maintained. But even that does not represent the true loss because in that time the population of the City has increased from 444,323 in 1910 to 469,900 in 1923.

I dealt with the subject of the decline of the birth-rate very fully in my last annual report so that there is no necessity for me to do more than merely refer to it here. The causes operating in 1922 have continued in the year under review. Any slight improvement in the economical situation which there might have been has not had time to reflect itself in the birth figures. I wish to reiterate what I said in my previous report that to restrict the inflow of

fresh life into a population is to interfere with healthy growth and to kill enterprise and initiative on which the whole future progress of the community depends.

Of all the large towns in England and Wales, with the exception of our neighbour Bradford, Leeds had the lowest birth-rate in 1923.

The table on page 13 shows the distribution of births in the various wards. In three of the wards, namely, North, New and

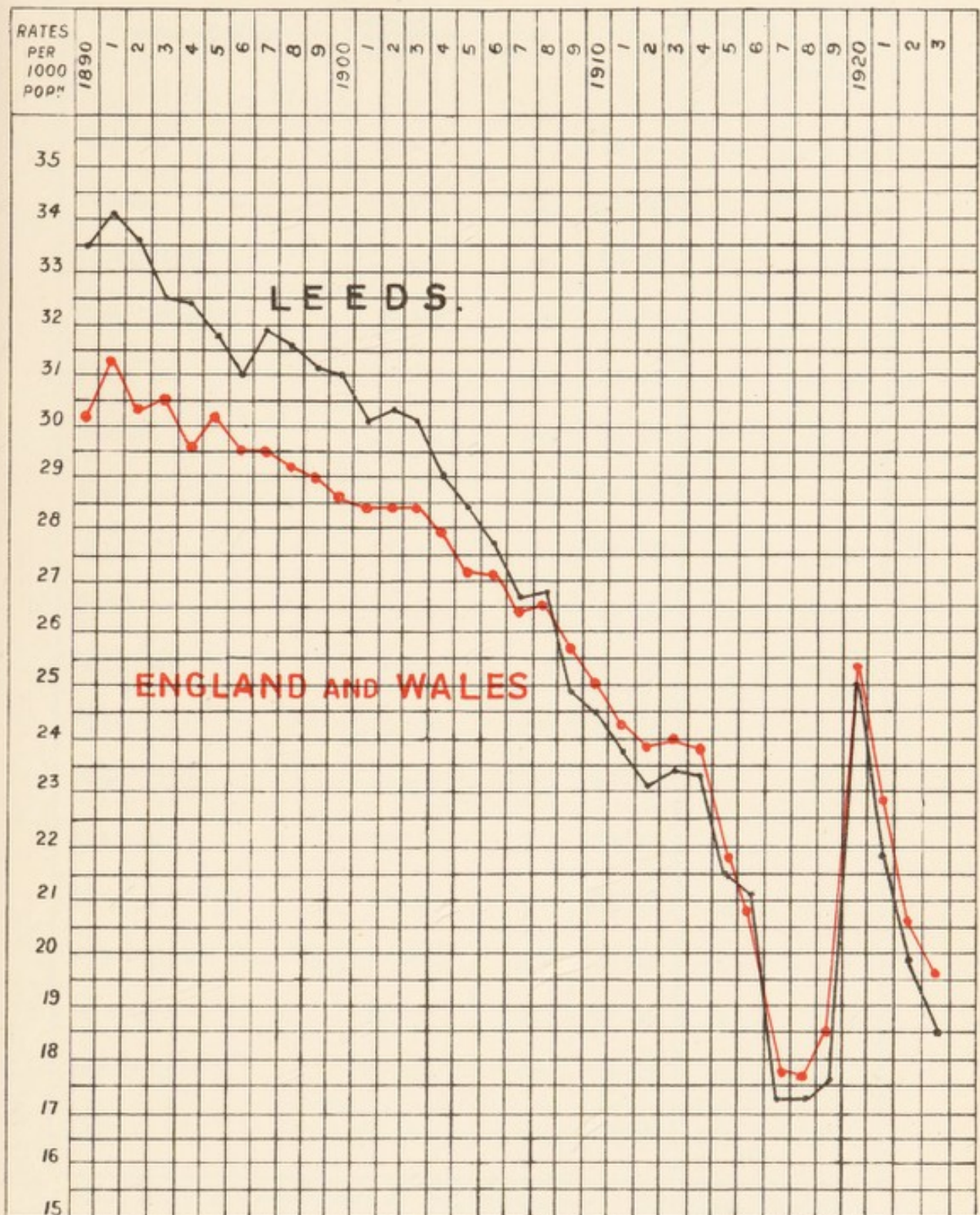
BIRTH RATE.

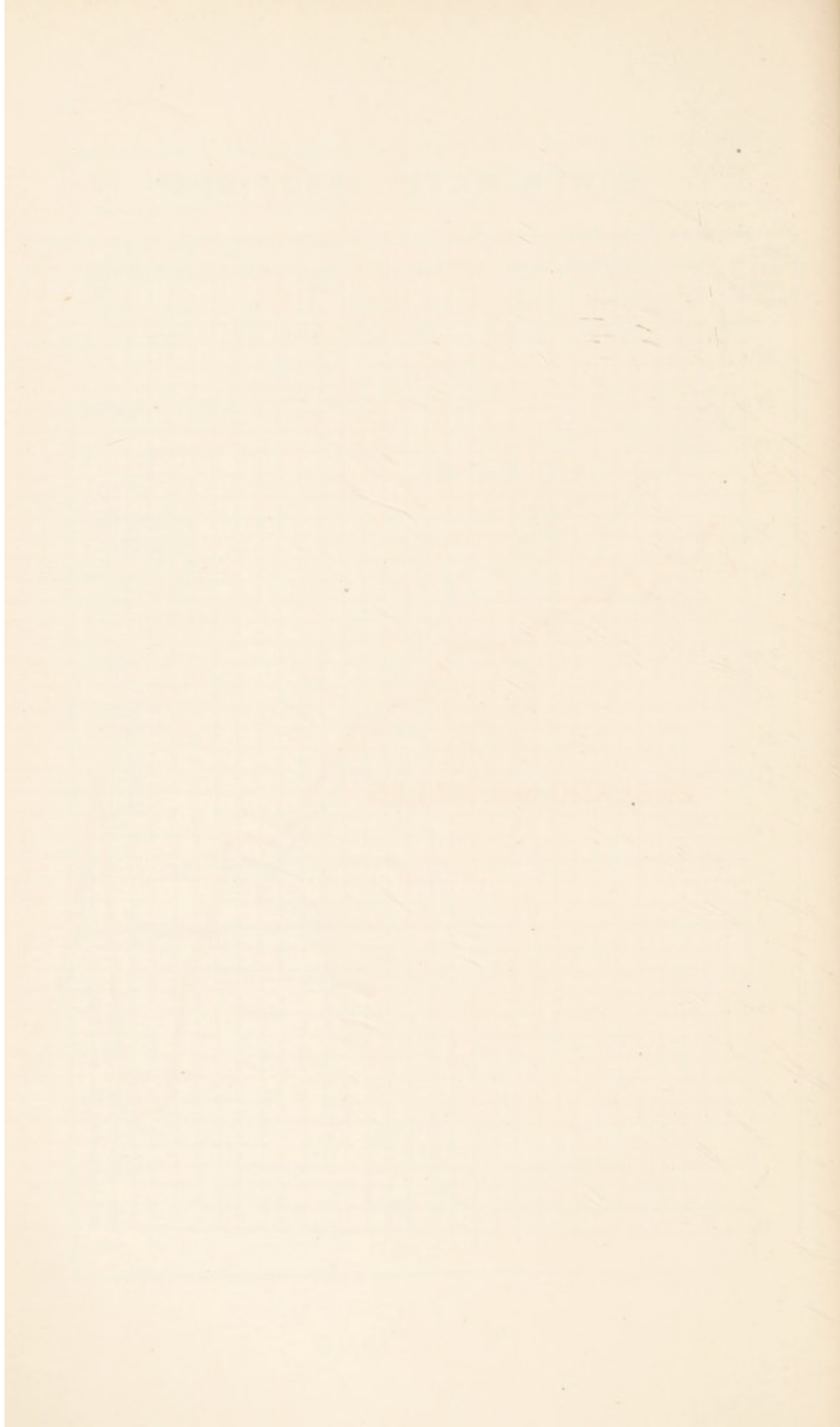
Year.	No. of births.	Birth rate, LEEDS.	England and Wales.
1890-1894	62,270	33·2	30·5
1895-1899	63,873	31·5	29·6
1900-1904	64,791	30·1	28·4
1905-1909	59,117	26·9	26·7
1910-1914	53,267	23·6	24·2
1915	9,877	21·5	21·9
1916	9,432	21·1	20·9
1917	7,566	17·3	17·8
1918	7,392	17·3	17·7
1919	7,564	17·6	18·5
1920	11,229	25·0	25·5
1921	10,144	21·8	22·4
1922	9,253	19·8	20·4
1923	8,684	18·5	19·7

BIRTH RATE IN QUARTERS.

	I.	II.	III.	IV.	Year.
1917	19·2	18·0	16·2	15·7	17·3
1918	17·4	16·8	17·8	17·1	17·3
1919	13·6	14·6	17·5	24·4	17·6
1920	30·1	25·6	23·7	20·8	25·0
1921	21·9	22·4	22·2	20·7	21·8
1922	21·2	20·7	19·5	17·9	19·8
1923	18·9	19·5	18·1	17·4	18·5

BIRTH-RATE 1890-1923.





BIRTHS AND BIRTH RATE IN WARDS.

MUNICIPAL WARD.	Estimated Population middle of 1923.	Nett births.	Birth- rate.	Illegiti- mate births.	Percentage of illegitimate births to total births.
Central	12,847	207	16·11	12	5·8
North	43,503	718	16·50	41	5·7
North-East	36,928	740	20·04	30	4·1
New Ward*	8,013	139	17·35	2	1·4
East	36,170	872	24·11	36	4·1
South	13,144	351	26·70	20	5·7
East Hunslet†	36,161	789	21·82	40	5·1
West Hunslet ..	37,049	600	16·19	24	4·0
Holbeck	30,191	575	19·05	29	5·0
Mill Hill	5,421	76	14·02	7	9·2
West	22,590	491	21·74	41	8·4
North-West	32,334	485	15·00	43	8·9
Brunswick	24,540	347	14·14	30	8·6
New Wortley ..	18,226	384	21·07	24	6·3
Armley and Wortley	37,698	576	15·28	27	4·7
Bramley	24,078	425	17·65	10	2·4
Headingley	51,007	909	17·82	22	2·4
City	469,900	8,684	18·48	438	5·0

*Roundhay, Seacroft, Shadwell, and Crossgates. †Including Middleton.

Bramley there have been slight increases which in the case of the two last mentioned, New Ward and Bramley, may be accounted for by the development of the Corporation Housing Estates. In all the other wards there was a decrease. As in other years the greatest number of births occurred in the congested districts, namely, East, South, West and New Wortley.

Details respecting notification and visitation of births are given on page 123.

Birth-rate in quarters.—With the exception of the fourth quarter which was as low as 17·4, the birth-rate for the other three quarters remained pretty much on a level.

Excess of births over deaths.—The excess of births over deaths or what is generally spoken of as the “natural increase of population” was 2,698 as compared with 2,774 for last year.

Illegitimate births.—Of the 8,684 nett births registered 8,246 (4,183 males, 4,063 females) or 95 per cent. were legitimate and 438 (222 males, 216 females) or 5 per cent. illegitimate. The ratio of illegitimate to legitimate is rather less than it was last year, namely, 1 to 19.

YEAR.	Illegitimate births.	Percentage of nett births registered.	Rate per 1,000 estimated population.
1917 ..	576	7·6%	1·31
1918 ..	528	7·1%	1·23
1919 ..	567	7·5%	1·32
1920 ..	631	5·6%	1·41
1921 ..	565	5·6%	1·21
1922 ..	511	5·5%	1·09
1923 ..	438	5·0%	0·93

Further reference is made to this on page 116.

Deaths.—The total deaths registered in the City during the year was 6,128, comprising 3,216 males and 2,912 females. After deducting the deaths of non-residents and adding the deaths of residents

living outside the City boundary at the time of death one gets a nett total of 5,986, made up of 3,084 males and 2,902 females. The gross death-rate calculated on the above figures for the year was 13.0 and the nett rate 12.7 which compared with the figures 14.1 and 13.9 for the previous year show a decrease of 1.1 and 1.2 respectively. The saving to the City was therefore 564 lives, or 8.6 per cent. on the rate for the previous year.

The death-rate, 12.7, is the lowest ever recorded in the history of the City, though it is still considerably higher than the death-rate for England and Wales which was 11.6. Of course one must expect the mortality in a large urban community like Leeds to exceed that of the country as a whole which includes large rural areas and residential towns and villages. But it is the ideal at which we should aim.

As regards the death-rate Leeds does not occupy such a favourable position amongst the other large towns in England as it might. Certainly it is not the highest but there are only four above it.

Death-rate in quarters.—The quarterly death-rates are given below and it will be noted that the rate for the third quarter was exceptionally low.

Death-rate in wards.—The wards which show the highest death-rate are in order of numerical importance West, South, East, Central and New Wortley. It is difficult to say why the loss of life in the West Ward should be higher than in any other ward.

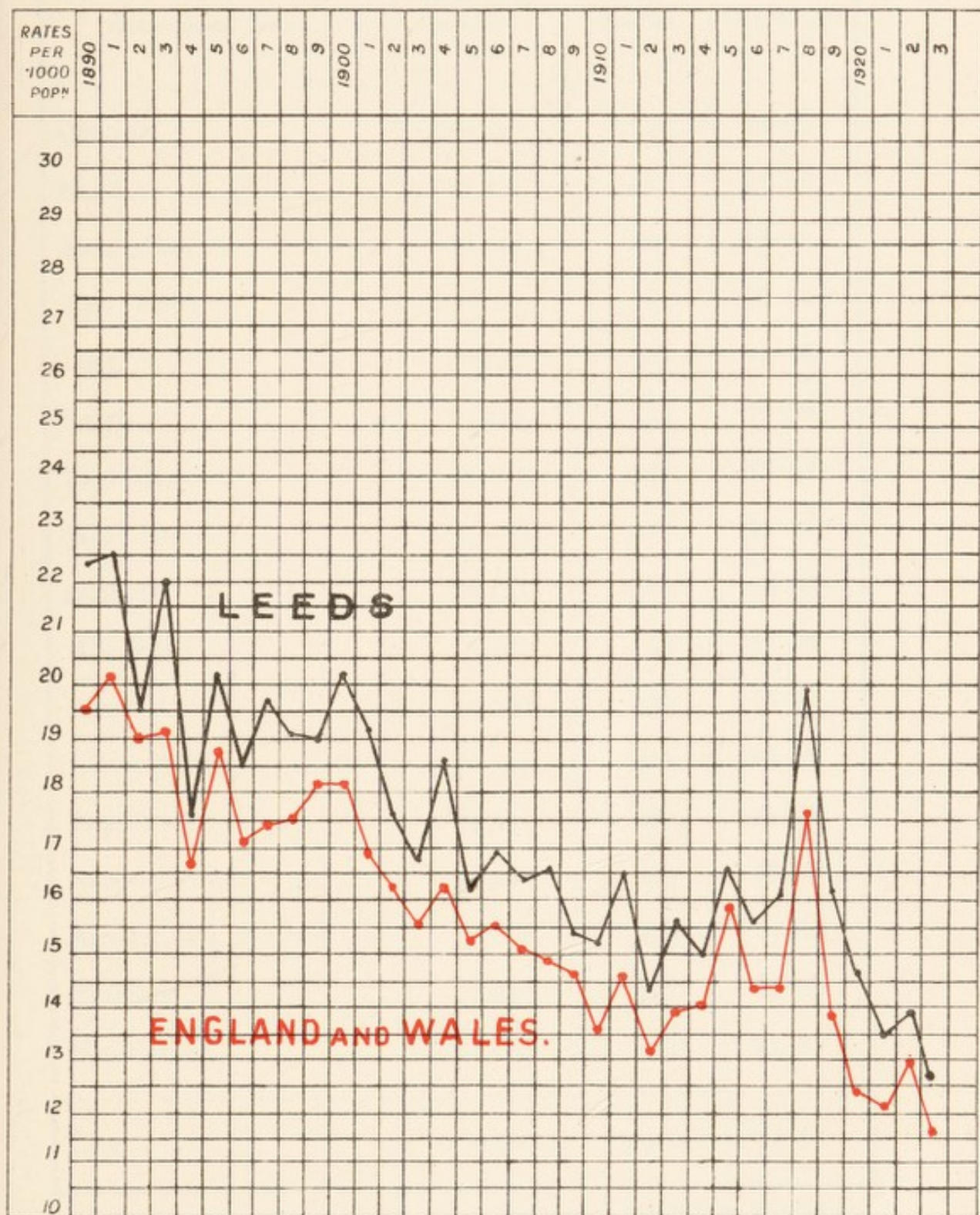
DEATH RATE IN QUARTERS.

	I.	II.	III.	IV.	Year.
1917	19.1	17.3	13.6	14.5	16.1
1918	19.7	16.0	14.3	29.8	19.9
1919	25.5	13.1	11.3	15.2	16.2
1920	20.6	13.9	11.2	13.1	14.7
1921	14.5	12.5	11.3	15.8	13.5
1922	17.5	14.6	10.6	12.9	13.9
1923	14.7	13.4	10.6	12.4	12.7

ANNUAL DEATHS AND DEATH RATE.

Year.	Population.	Nett deaths.	Death-rate LEEDS.	Death-rate England and Wales.
1901	429,383	8,204	19·2	16·9
1902	431,043	7,699	17·6	16·3
1903	432,703	7,263	16·8	15·5
1904	434,363	8,039	18·6	16·3
1905	436,023	7,047	16·2	15·3
1906	437,683	7,350	16·9	15·5
1907	439,343	7,167	16·4	15·1
1908	441,003	7,430	16·6	14·8
1909	442,663	6,806	15·4	14·6
1910	444,323	6,711	15·2	13·5
1911	445,983	7,331	16·5	14·6
1912	447,746	6,396	14·3	13·3
1913	457,295	7,237	15·6	13·8
1914	459,260	6,885	15·0	14·0
1915	459,260	7,609	16·6	15·7
1916	446,349	6,946	15·6	14·4
1917	438,254	7,052	16·1	14·4
1918	427,589	8,529	19·9	17·6
1919	430,834	6,992	16·2	13·7
1920	448,913	6,591	14·7	12·4
1921	465,500	6,285	13·5	12·1
1922	466,700	6,479	13·9	12·8
1923	469,900	5,986	12·7	11·6

DEATH RATE, 1890 - 1923.



DEATHS AND DEATH RATE IN WARDS.

MUNICIPAL WARD.	Estimated population middle of 1923.	Nett deaths.	Death-rate.
Central	12,847	193	15·02
North	43,503	487	11·19
North-East	36,928	487	13·19
New Ward*	8,013	83	10·36
East.. ..	36,170	560	15·48
South	13,144	214	16·28
East Hunslet†	36,161	451	12·47
West Hunslet	37,049	419	11·31
Holbeck	30,191	387	12·82
Mill Hill	5,421	65	11·99
West	22,590	379	16·78
North-West	32,334	421	13·02
Brunswick	24,540	280	11·41
New Wortley	18,226	253	13·88
Armley and Wortley	37,698	439	11·65
Bramley	24,078	291	12·09
Headingley.. ..	51,007	577	11·31
City.. ..	469,900	5,986	12·74

*Roundhay, Seacroft, Shadwell, and Crossgates. †Including Middleton.

This same fact has been noted in previous years and is probably accounted for by the amount of slum property existing in this particular part of the City.

Causes of death.—The principal causes of death mentioned in the table were, in order of numerical importance, heart disease, cancer, bronchitis, phthisis, pneumonia, congenital conditions and nephritis. It is noteworthy that the only diseases which had a mortality in excess of that for the previous year were diarrhoea and enteritis, appendicitis, cirrhosis of liver, erysipelas, tuberculous meningitis and accidents and diseases of pregnancy and parturition. Considered as a group affecting one system of the body, the respiratory group, including influenza but excluding phthisis, accounted for 1,179 deaths or roughly one fifth of the total. I have remarked in previous reports on the heavy toll of life which respiratory infections take. Some of these infections, notably bronchitis and pneumonia, are to a large extent preventible and if proper precautions were taken to ensure a healthy environment for the body at all times the risks to life might be greatly diminished. A stagnant atmosphere heavily charged with organic matter emanating from human bodies, such as we find in the sleeping rooms of some back-to-back houses and of through houses as well, particularly where these are overcrowded, or in badly ventilated factories and workshops, or in picture theatres, and such like places of public assembly, is a very common source of infection. One frequently hears victims of influenza or common catarrh explain their illness as having been the result of sitting or standing in a draught. Draughts are very uncomfortable things undoubtedly, but they do not kill and they are not responsible for half the illness for which they are blamed. As a matter of fact if there were more draughts and less stagnation, respiratory sickness would be greatly diminished. Where there is a draught, one may be certain that the air is moving and moving air is far more healthful than still air because it has the effect of keeping the skin of the body in action and of keeping its surface cool.

Organic heart disease claims more victims than any other single cause and the number of deaths due to it has shown little variation during the last ten years. In 1923 it accounted for no fewer than 618 deaths (or 10.3 per cent) of the total whereas the average for

PRINCIPAL CAUSES OF DEATH.

Death rate.	Diseases.	No. of deaths in 1923 (nett.)	Increase or decrease compared with 1922.	Houses.	
				Through.	Back-to-back.
0.00	Enteric Fever	1	- 6	1	..
..	Small-pox	..	..	..	..
0.11	Measles	50	- 102	6	44
0.07	Scarlet Fever	31	- 2	6	25
0.07	Whooping Cough	32	- 83	5	27
0.04	Diphtheria and Croup ..	20	- 8	5	15
0.26	Influenza	122	- 47	31	91
0.04	Erysipelas	17	+ 6	6	10
1.10	Phthisis (Pulmonary Tuberculosis)	515	- 18	137	375
0.10	Tuberculous Meningitis ..	47	+ 9	13	34
0.16	Other Tuberculous Diseases	75	- 7	18	57
1.22	Cancer, malignant disease	574	- 21	217	354
0.04	Rheumatic Fever	20	- 17	6	14
0.14	Meningitis	65	- 11	19	45
1.32	Organic Heart Disease ..	618	- 54	222	395
1.10	Bronchitis	518	- 78	177	340
0.94	Pneumonia (all forms) ..	440	- 62	130	307
0.21	Other diseases of respiratory organs	99	+ 9	38	61
0.30	Diarrhoea and Enteritis ..	142	+ 34	26	116
0.06	Appendicitis and Typhlitis	27	+ 10	16	11
0.06	Cirrhosis of Liver ..	30	+ 13	13	17
0.00	Alcoholism	2	- 3	2	..
0.44	Nephritis and Bright's Disease	206	-+	79	126
0.02	Puerperal Fever	10	- 4	4	6
0.07	Other accidents and diseases of Pregnancy and Parturition	35	+ 17	9	26
0.60	Congenital Debility and Malformation, including Premature Birth ..	284	- 55	71	213
0.39	Violent Deaths, excluding Suicide	181	- 9	58	119
0.09	Suicide	44	- 4	22	22
3.77	Other Defined Diseases ..	1,773	+ 1	651	1,119
0.02	Diseases ill-defined or unknown	8	- 1	3	5
12.74	Totals	5,986	- 493	1,991	3,974

Of the 5,986 deaths, 21 had no home.

the previous ten years works out at 639 (or 9.1 per cent) of the total. From these figures it would appear that whilst the measures introduced to improve the public health have resulted in a considerable reduction in the rate of death from other causes, they have had little or no effect on diseases effecting the heart. Heart disease is in the majority of cases due to rheumatism. It invariably follows an attack of acute rheumatism or rheumatic fever, indeed so closely are rheumatism and heart disease related that they might be included in the same group.

The origin of rheumatic fever is still obscure though there seems to be no doubt that it is a germ infection. What the nature of the germ is has not yet been definitely determined. Certain individuals have a predisposition to rheumatism and readily contract the disease, others seem to be practically immune. One attack of the disease does not protect against a second and with every recurrence the effect on the heart becomes more pronounced. The disease in its acute form chiefly effects young people and generally speaking fair people are more susceptible than dark. It often reveals itself at quite an early period in life though these early manifestations often pass unrecognised. How frequently does one hear parents complain that their children suffer from "growing pains." These so-called growing pains occur principally in the limbs and back and are undoubtedly rheumatic in origin. Their presence indicates a rheumatic tendency and ought to be accepted by parents as a warning to be careful not to expose the child to conditions which might initiate an attack of the disease. The over exposure of the limbs of young children during cold, wet weather such as one often sees in our own City, whether from inability to supply the necessary clothing or simply as a concession to fashion is simply to court disaster and to make an attack of the disease inevitable or at any rate highly probable. A hot head and cold extremities do not make for good health, rather one should aim at a cool head and warm extremities.

Once having had an attack of the disease the person should take every possible precaution to avoid a recurrence. The mere piling on of clothing is not enough. The quality of the clothing rather than the quantity is the thing which matters. But the best safeguard of all is the general health which ought to be kept as perfect as possible.

DEATHS IN AGE GROUPS (NETT), 1913-23.

Together with the percentage of the total deaths, represented by each group
(in italics).

Year.	Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total.
1913	1,469 <i>20.3%</i>	419 <i>5.8%</i>	344 <i>4.8%</i>	265 <i>3.7%</i>	292 <i>4.0%</i>	946 <i>13.1%</i>	1,684 <i>23.3%</i>	1,818 <i>25.1%</i>	7,237
1914	1,324 <i>19.2%</i>	469 <i>6.8%</i>	358 <i>5.2%</i>	269 <i>3.9%</i>	276 <i>4.0%</i>	923 <i>13.4%</i>	1,605 <i>23.3%</i>	1,661 <i>24.1%</i>	6,885
1915	1,253 <i>16.5%</i>	439 <i>5.8%</i>	389 <i>5.1%</i>	260 <i>3.4%</i>	318 <i>4.2%</i>	965 <i>12.7%</i>	1,850 <i>24.3%</i>	2,135 <i>28.0%</i>	7,609
1916	1,216 <i>17.5%</i>	391 <i>5.6%</i>	285 <i>4.1%</i>	240 <i>3.5%</i>	287 <i>4.1%</i>	885 <i>12.7%</i>	1,683 <i>24.2%</i>	1,959 <i>28.2%</i>	6,946
1917	1,023 <i>14.5%</i>	400 <i>5.7%</i>	422 <i>6.0%</i>	331 <i>4.7%</i>	302 <i>4.3%</i>	835 <i>11.8%</i>	1,734 <i>24.6%</i>	2,005 <i>28.4%</i>	7,052
1918	984 <i>11.5%</i>	474 <i>5.6%</i>	743 <i>8.7%</i>	514 <i>6.0%</i>	579 <i>6.8%</i>	1,214 <i>14.2%</i>	2,007 <i>23.5%</i>	2,014 <i>23.6%</i>	8,529
1919	899 <i>12.9%</i>	239 <i>3.3%</i>	298 <i>4.3%</i>	299 <i>4.3%</i>	344 <i>4.9%</i>	957 <i>13.7%</i>	1,780 <i>25.4%</i>	2,176 <i>31.2%</i>	6,992
1920	1,232 <i>18.7%</i>	255 <i>3.9%</i>	283 <i>4.3%</i>	283 <i>4.3%</i>	291 <i>4.4%</i>	844 <i>12.8%</i>	1,572 <i>23.9%</i>	1,831 <i>27.8%</i>	6,591
1921	997 <i>15.9%</i>	278 <i>4.4%</i>	130 <i>2.1%</i>	202 <i>3.2%</i>	297 <i>4.7%</i>	765 <i>12.2%</i>	1,562 <i>24.9%</i>	2,054 <i>32.7%</i>	6,285
1922	935 <i>14.4%</i>	283 <i>4.4%</i>	211 <i>3.3%</i>	198 <i>3.1%</i>	282 <i>4.4%</i>	766 <i>11.8%</i>	1,661 <i>25.6%</i>	2,143 <i>33.1%</i>	6,479
1923	773 <i>12.9%</i>	189 <i>3.2%</i>	153 <i>2.6%</i>	166 <i>2.8%</i>	277 <i>4.6%</i>	751 <i>12.5%</i>	1,620 <i>27.1%</i>	2,057 <i>34.4%</i>	5,986

Cancer and Phthisis are dealt with separately on pages 75 and 89 and Congenital conditions on page 115.

Nephritis or inflammation of the kidney may either follow in the wake of some other disease such as scarlet fever or may occur as a primary infection. If the former, the best method of prevention lies in the proper treatment of the primary disease under the best possible conditions, if the latter prevention may not be so easy. Many cases of nephritis however are directly attributable to carelessness or misconduct on the part of the individual. For example, excess of eating or drinking particularly the over indulgence in alcoholic liquor frequently leads to kidney disease, and there is no doubt that the number of deaths from this cause could be greatly reduced if men and women would regulate their habits by a wise discretion and be moderate in all things. In 1923 the number of deaths attributable to nephritis was 206 which is the same as for the previous year though rather less than the average for the previous ten years, which was 222.

Housing and death.—It is interesting to compare the number of deaths which took place in back-to-back houses with those in through houses. In a City like Leeds where more than 60 per cent. of the occupied houses are of the back-to-back type, it ought to be possible to arrive at some idea of the effect which housing has on health. It is necessary, however, in approaching the subject to make it quite clear that any comparison can be only very approximate and must not be taken as an exact index of the value of one type of house over another. It must also be borne in mind that there are, roughly speaking, three types of back-to-back houses, the modern—very good, the old—very bad, and a third which takes a place midway between the two. Taking the total deaths for the year 3,974 of them, (or 66·4 per cent.) lived in houses of the back-to-back type and 1991 (or 33·3 per cent.) in through houses. The remainder 21 (or 0·4 per cent.) had no fixed domicile. It has not been possible to analyse the deaths in such a way as to show how many occurred in each of the three types of back-to-back houses.

Deaths in Age groups.—In the table on page 21 the deaths have been analysed in the various age groups. A study of the table will show that the age group with the highest mortality is

that over sixty-five years, whilst that with the lowest is between two and five years. Taking the two periods of life 0—15, and 45—65 one finds that the deaths of the latter period exceeds those of the former by only 5.6 per cent. whilst 39.6 per cent. of the total deaths occurred between the ages of 25 and 65 that is to say at the period when men and women are said to reach their maximum efficiency and are most useful to the community.

Infantile mortality.—The number of deaths of children under one year numbered 773 (or 12.9 per cent.) of the total deaths. The infantile mortality rate corresponding was 89 per thousand births. This subject is dealt with in greater detail on page III.

Cremation.—The people have not yet come to appreciate the advantages of cremation. They still adhere to the old, unhygienic method of disposal of the dead by earth burial. Up and down the country, large tracts of valuable land are given over for the purpose of graveyards and cemeteries. Some of these are in densely populated districts, and others, though perhaps for the time being on the outskirts of towns and cities, must very soon be built round. Such accumulations of putrefying matter must have anything but a healthy influence, and even under the best conditions of site and drainage must constitute a danger to those living in the immediate vicinity. Contact with the natural digestive influences of the earth is a slow and crude method of dissolving human remains and not to be compared with the rapid and effective changes which accompany cremation. No matter from what standpoint you view the subject, whether of health or expediency, disposal by burning is much to be preferred to disposal by burial. It must be admitted however that from the purely sentimental and religious standpoint, cremation has not the same appeal, and herein possibly lies the explanation for its failure to obtain public favour. But viewed in the cold light of reason cremation is just as much a religious rite as is earth burial.

In these days of preventive medicine, when every effort is being put forth to protect the living from influences which might injure or destroy surely it is in the best interests of the community that the safest, the most hygienic, and the most rapid method of disposal of the dead should be the one to be universally adopted.

The following is a list showing the number of cremations of Leeds people which have taken place at the Leeds Crematorium, Lawnswood, during the last nineteen years.

CREMATIONS IN LEEDS.

Year.	No. of Leeds people cremated.	Nett total deaths in City.	Percentage of cremations on nett deaths (Leeds people cremated).
1905	7	7,047	0·10
1906	10	7,350	0·14
1907	12	7,167	0·17
1908	16	7,430	0·22
1909	9	6,806	0·13
1910	5	6,711	0·07
1911	7	7,331	0·10
1912	14	6,396	0·22
1913	7	7,237	0·10
1914	18	6,885	0·26
1915	13	7,609	0·17
1916	9	6,946	0·13
1917	10	7,052	0·14
1918	23	8,529	0·27
1919	18	6,992	0·26
1920	13	6,591	0·20
1921	9	6,285	0·14
1922	17	6,479	0·26
1923	11	5,986	0·18
Total	228	132,829	0·32

Hospital Accommodation.—As has been pointed out in previous reports, there is great need for the extension of hospital facilities in Leeds. Year after year, the public are informed that there is a list of people awaiting admission to the Leeds General Infirmary running into four figures and each year as it closes finds the position unaltered. The main cause is of course the lack of funds, but in a City of the size and importance of Leeds it should not be a difficult thing to make a provision of at least a thousand beds for all cases (exclusive of infectious diseases) instead of as at present less than seven hundred. The minimum requirement is I compute 1,200 beds.

Whilst there is this shortage of beds in the voluntary hospitals there is ample room in the Poor Law Infirmarys, and it strikes the ordinary observer at once that the simplest solution to the whole problem of hospital provision would be to throw open the doors of the Infirmarys to the sick of all classes of the community. This suggestion is not made with any intention of disparaging the voluntary hospitals. In Leeds the voluntary hospitals have done and are doing splendid work and deserve every support and encouragement. But they are not meeting the demand and unless the public supply the funds necessary to enable them to extend there will be no other way out of the difficulty, than by making use of the provision already made in the Poor Law Institutions.

Comparative Statistics of the larger English Cities, 1923.

	RATE PER 1,000 POPULATION.					DEATH RATE PER 1,000 BIRTHS.	
	Population.	Birth Rate.	Death Rate.	Phthisis. Death Rate.	Other Tuberculosis. Rate.	Deaths under One Year.	Diarrhoea and Enteritis under 2.
London	4,564,109	20·1	11·4	0·97	0·19	61	10·3
Birmingham ..	936,079	20·4	11·0	0·92	0·16	72	10·9
Liverpool ..	829,881	24·9	13·7	1·3	0·3	99	17·6
Manchester ..	752,100	20·4	13·3	1·25	0·29	88	12·2
Sheffield ..	524,200	19·5	11·5	0·86	0·17	89	12·4
Leeds	469,900	18·5	12·7	1·10	0·26	89	13·6
Bristol	385,600	19·3	11·7	0·95	0·25	62	8·3
Hull	296,900	23·3	11·4	0·95	0·25	82	35·5
Bradford ..	290,800	18·2	13·7	0·80	0·22	78	5·1
Newcastle ..	283,800	22·4	12·9	1·10	0·36	98	12·4
Nottingham ..	269,300	20·0	12·1	0·92	0·25	85	12·2

SANITARY CIRCUMSTANCES.

Drainage and Sewerage.—As in 1922 the Corporation has endeavoured to find employment for as many as possible on constructional work of various kinds, For example, several branch sewers of a total length of 1,150 yards have been completed, thus enabling the conversion of privy middens and the abolition of cesspools.

Sewage Disposal.—Good progress has been made with the work in connection with the new sewage outfall works at Knostrop, and it is confidently expected that these works will be completed in the course of another two years or so. Part of the works is already in operation and is dealing with the sewage from the Northern side of the City conveyed by the new high level sewer. This has made possible the shutting down of the small works at Killingbeck which formerly were constructed to deal with the sewage from the Roundhay district. The main sewer running through the Osmondthorpe estate has also been connected up to Knostrop so that it will now be possible to connect up the drains from the houses on that estate to the sewer and abolish the cesspools.

The sewage works at Rodley have also been extended by the addition of two new bacteria beds and further extensions are contemplated. The result of this extension should be seen in a much improved effluent and incidentally in the lessened pollution of the River Aire.

Scavenging and Cleansing.—The amount of household refuse including nightsoil collected by the Cleansing Department during the year was 173,447 tons, of which 72,120 tons were dealt with at the destructors, 101,235 tons in tips and for agricultural purposes and 92 tons sold as manure to farmers.

The collection and disposal of household refuse and the keeping clean of the public ways are amongst the most important duties which devolve upon a local authority. If done well the health

of the whole community benefits ; if badly, it suffers. That cleansing and health are closely related can readily be proved by a study of the behaviour of disease at the time when each individual householder was responsible for his own cleansing, and now, when the duty is recognised as a communal one and carried out by the Municipality. Recently the cleansing of the streets and footways has come in for a good deal of public criticism, as also have the emptying of ashpits and cleansing of street gullies. Whether the criticism is entirely justified or not is a matter of opinion and I am not going to enter into a discussion of the subject here. My object in mentioning the matter at all is to point out to the public that in the keeping of the City clean they have a very important part to play.

No matter how perfect the organisation of a cleansing department, there will come times when the pressure of work becomes so great as to interfere with efficiency. Such times, for example, as times of snow and hard frost, necessitating the diverting of men to keep the main streets and footways clear and safe for horse and pedestrian traffic, or hot dry weather, when for lack of rain, ashpits and gullies become sour and offensive and require more frequent cleansing. These have to be taken into account in any critical survey of the cleansing of any City. How can the public help? In several ways, of which the following are a few :—(a) by burning all combustible refuse and reserving ashpits and ashbins for non-combustible refuse only ; (b) by keeping ashpits and ashbins perfectly dry and refraining from putting wet decomposable garbage into them ; (c) by keeping the footways clean along the frontage of the shops or dwellings and refraining from using the street gullies for the disposal of tea leaves, dirty water, bedroom slops, etc.; (d) by disposing of disused tram tickets, cigarette containers, tobacco tins, etc., in other ways than by throwing them on the streets and pavements, and lastly by each citizen maintaining the same standard of cleanliness as he would expect to find in his neighbour.

Perhaps the two most dangerous street nuisances of our time are the "spitting man" and "the ill-trained dog." The former is one for whom every decent-minded person can have nothing but contempt. The road surfaces and pavements of the main streets of the City on a Sunday morning are a disgrace. They are not safe for little children to walk on, much less to use as a playground

and it must be borne in mind that the street is the only playground for a large section of the child population. This wanton fouling of streets and public places by spit, is in my opinion, responsible for much of the disease which attacks the throat and lungs, including pulmonary tuberculosis. Why is it always men who offend in this way? Women seem to have a much higher conception of public duty and conduct. I would suggest that the offence should be made a punishable one either by fine or imprisonment.

With regard to the "dog nuisance," here again, selfish men and women are at the root of the mischief. They take no pains to train the animals properly, indeed many of these so-called dog lovers encourage dirty habits by deliberately inducing their canine pets to deposit excreta on the pavement and road surfaces. How much disease is caused by this deliberate fouling of the streets it is impossible to say; certainly it must be considerable. The public has a right to be protected against this sort of thing, and if the only way to afford such protection is to make it a legal offence, punishable by fine or imprisonment for any owner of a dog to permit the same to foul the streets and footways, then powers should be sought for this purpose.

Ashpits and Ashbins.—The policy of the Department of requiring one bin for each house (excluding of course small cottage property where the available space permits of only one bin for two, or even more houses) has borne fruit, and this is shown by the fact that whereas in 1922, 488 metal ashbins were provided by the Corporation and the owners charged with the cost of the same, in 1923 only 339 were supplied in default.

The total number of metal bins provided in response to notices from the Department during the year was 3,512. The sunken ashpit is admittedly a most dangerous and unsatisfactory type of refuse receptacle. It cannot be properly cleansed and not being always watertight the refuse inevitably becomes sour and offensive. There are 2,423 ashpits of this type in the City. Every effort is made to induce owners of property to discard the sunken ashpit and substitute the more sanitary metal ashbin. Where persuasion fails more drastic measures are taken. The number of sunken ashpits abolished during the year was 181.

SANITARY INSPECTION OF DISTRICTS.

	NORTH.	SOUTH.	City Total.
Houses completely examined for—			
Infectious disease	1,558	1,054	2,612
Alleged nuisances	69	70	139
House to house work ..	1,343	1,045	2,388
Premises examined only as to—			
Occupants	58	43	101
Alleged nuisances	1,358	2,365	3,723
Drainage	230	281	511
Nuisances found in above or other houses—			
Dirty houses	306	69	375
Overcrowded houses	95	36	131
Dampness or dilapidation ..	2,218	2,502	4,720
Drain or closet defects ..	1,443	1,488	2,931
Defective ashpits or bins ..	2,623	2,507	5,130
Other nuisances	3,568	2,224	5,792
Outside nuisances found (gullies, etc.)	993	988	1,981
Total nuisances found ..	11,246	9,814	21,060
Additional visits paid to houses for—			
Infectious disease	1,090	2,037	3,127
Non-abated nuisances ..	5,018	4,522	9,540
To inspect work in progress	1,968	1,310	3,278
Other causes	15,349	8,263	23,612
Drains tested	2,629	2,735	5,364
Drains found defective	413	247	660

SANITARY WORKS CARRIED OUT DURING 1923.

NATURE OF WORK.	NORTH.	SOUTH.	City Total.
Houses cleansed	211	59	270
Overcrowded houses dealt with	40	25	65
Defective spouting, &c., repaired	2,391	2,327	4,718
Urinals cleansed or repaired ..	17	16	33
Sunken ashpits abolished ..	75	106	181
Privies or pail closets abolished or converted into water closets	50	52	102
Waterclosets erected	10	15	25
Houses provided with suitable ashes accommodation ..	2,389	2,336	4,725
Ashbins provided	1,908	1,604	3,512
Trough closets converted into W.C.'s	51	17	68
Closets cleansed (limewashed), etc.	213	78	291
Drainage works carried out ..	391	489	880
Cesspools filled up	2	1	3
Public or private wells abolished	..	..	..
Houses connected to water mains	14	38	52
Trough and water closets repaired	582	1,054	1,636
Other house nuisances remedied	3,396	1,883	5,279
Total houses for which above work was done	10,451	9,370	19,821
Offensive accumulations removed and stopped gullies cleansed	727	640	1,367
Pollution of streams remedied ..	1	1	2
Other non-domestic nuisances re- moved	58	33	91
Total nuisances abated	10,618	9,170	19,788

Closet Accommodation.—In connection with the conversion of troughs into modern pedestal water closets it has been the practice of the Corporation in past years to bear 50 per cent. of the actual cost of conversion, the object being to encourage property owners to get rid of the old antiquated trough and adopt the newer type. Since the War there has been a considerable falling off in the number of conversions and the Health Committee after careful consideration of the whole matter decided to increase the grant to 75 per cent. and the following circular letter was sent out to property owners and agents.

Conversion of Trough Closets.

The Health Committee has had under consideration the slow rate of progress at which the trough water closets in the city are being converted into modern pedestal water closets which most people will agree is the more sanitary and therefore the more desirable type. In order to induce owners of property to undertake the conversion of the trough closets in connection with their property the Committee has decided to increase the contribution from 50 to 75 per cent. of the actual cost of conversion as shown by the receipted accounts of the contractors. The amount in any particular case will be decided by the Health Committee who will be the final arbiters. The Committee reserve to itself the right of withdrawing or varying this offer at any time. It is therefore most important that you should take advantage of it without delay.

The attention of the public was also drawn to the matter by letters and paragraphs in the daily press. The effect was almost immediate and at the end of the year quite a number of owners had decided to take advantage of the Committee's offer and were taking active steps to have their troughs abolished.

The number of troughs converted during the year was 68 and the amount of compensation paid £192 5s. 9d. It is hoped that as a result of the increased subsidy next year's record of conversions will be much better.

In addition to the trough water closet conversions 93 privies and 9 pail closets were dealt with, 67 privies and 9 pail closets being converted into pedestal water closets, and the remainder entirely abolished. It should also be noted that 3 cesspools were abolished and 40 houses properly drained and connected to the sewers.

The general position with regard to the various types of sanitary conveniences in the City at December 31st, 1923, was as follows :—privy middens 558, pail closets 102, trough closets 9,256, and water closets approximately 92,000.

Public Conveniences.—During the War the public conveniences in many parts of the City became very dilapidated and in 1921 when a complete survey was made it was found that several of them required considerable repairs whilst others were in such a state as to require complete reconstruction. The Health Committee decided to provide three new urinals to replace three of the worst namely at Lane End Place, Holbeck; Penny Hill, Hunslet, and at the junction of Meadow Road and Dewsbury Road. The urinal at Lane End Place was demolished and replaced by a new one about 50 yards away at the junction of Hunslet Hall Road and Beeston Road. At Penny Hill and the junction of Meadow Road with Dewsbury Road the old urinals were demolished and new ones erected on the same sites.

On the completion of these the matter was again considered, this time not only in reference to existing conveniences but also to the needs of the City as a whole, for it was recognised that there were parts of the City which stood very much in need of some provision of the kind. The result was a unanimous recommendation to the Council to erect on new, or re-erect on existing sites, 16 conveniences for males and females.

The proposed sites of these are, *new*, (1) junction of Woodhouse Lane and Cookridge Street, (2) junction of Roundhay Road and North Street; (3) junction of Compton Road and Harehills Lane; (4) in Harehills Lane near York Road; (5) Killingbeck tram terminus; (6) in Cherry Row, Newtown (on open space); (7) York Road Circus; (8) junction of Low Road and Pepper Road; (9) junction of Whitehall Road and Springwell Road; (10) Lawnswood tram terminus and (11) Bramley tram sheds, Stanningley Road; *existing*,—(1) junction of Jack Lane and Nineveh Road; (2) Hunslet Lake, Moor Road, Hunslet; (3) Holbeck Moor; (4) Cross Flatts Park; and (5) East Street, near Marsh Lane. The conveniences at the junction of Woodhouse Lane and Cookridge Street; the junction of Roundhay Road and North Street; the junction of Compton Road and Harehills Lane; Killingbeck tram terminus; Lawnswood

tram terminus; and Holbeck Moor will have provision for both males and females.

In regard to female conveniences it is admitted that the existing provision in the City is very inadequate and ought to be increased without delay.

The amount involved in the construction of the sixteen conveniences is £6,500 (estimated) and an application for power to borrow this amount will be made to the Ministry of Health.

SANITARY ADMINISTRATION.

Staff.—During the past year no additions have been made to the inspectorial staff of the Department, and it is again necessary to point out that the staff is still numerically below its pre-war standard. Although the inspectorial staff includes two probationer sanitary inspectors, owing to this understaffing a very anomalous situation arises, namely, that ward inspection is carried on in two cases by probationers. If, however, the number of inspectors was such that the two probationers could act as a "flying squad" assisting in special reports, etc., the work of the Department would be greatly facilitated. At the present time should an inspector or inspectors be incapacitated by sickness there is no means of carrying on the work other than by dividing this work amongst the remaining inspectors, which procedure does not make for efficiency.

Sanitary Inspection of District.—The high standard of general inspectorial work reached in 1922 has been fully maintained and much has been done to remedy housing and drainage defects, abolish nuisances and render dilapidated property comparatively fit for human habitation.

The Increase of Rent and Mortgage Interest (Restrictions) Act, 1920, continued in force until the end of July when an amending Act was passed. The effect of the new Act is to make it obligatory upon sanitary authorities to issue a certificate stating not only the defects found in a house but also specifying the work to be done to remedy them. Since the principal Act came into operation in July, 1920, up to the end of December, 1923, 810 applications for certificates have been received and 747 certificates and 14 reports issued. During the year under review, 137 applications were received and 129 certificates and four reports issued.

Notices.—The number of preliminary notices served during the year for the abatement of nuisances and the repair of insanitary property was 9,605 and the number of statutory notices 2,641. Of the latter 2,216 were effective, and 425 were outstanding at the end of the year.

Complete details of the sanitary work are given on page 30.

Legal Proceedings.—In six cases legal proceedings were instituted for failure to carry out the requirements of the Public Health Acts whilst in several others compliance with the terms of the notices served by the department was induced by threats of legal proceedings.

Underground Sleeping Rooms.—Regulations under Section 17 (7) of the Housing, Town Planning, &c., Act, 1909, in connection with underground sleeping-rooms came into force in the city on the 7th September, 1923. By means of these it will be possible to keep a stricter supervision over owners of flats who allow rooms in basements to be used as sleeping-rooms. This practice in the past has been all too common, but without such powers as are given by these regulations, it has not been possible to do anything more than merely protest. To know that a thing is preventable but for lack of legal authority not to be able to prevent it is one of the most discouraging experiences of the Public Health Administrator.

Common Lodging Houses.—In the 29 registered common lodging-houses with a total of 1,738 beds for males and 103 for females and children, accommodation was found during the year for 463,106 male and 30,714 female lodgers.

In addition to the common lodging-houses enumerated above, there are three unregistered lodging-houses, two for men and one for women, which are under the control of the Salvation Army and the Church Army. These houses possess altogether 367 beds for men and 21 for women, and during the year 137,918 beds have been let to male lodgers, and 3,750 to female lodgers. The houses continue to be conducted in an exemplary fashion though some of them as regards lighting and ventilation leave much to be desired. The health of the members of all the houses was good there being only three cases of infectious sickness reported.

In accordance with established practice, lodgings which are to be placed on the register of approved premises for the use of

COMMON LODGING-HOUSES.

Number registered—							
Men's	27	Beds available	1,738	1	..	..	..
Women's	2	"	"	103	1	..	..
Routine visits paid	..	..	..	..	..	1,142	
Visits as to drain tests and abatements	..	..	..	..	..	82	
Visits to smallpox contacts	..	..	..	..	..	..	
Visits for infectious disease	..	..	..	..	..	3	
Drains tested 79, in 29 houses							
Defects found 9, in 5 houses							
Re-testings on completion of work 9							
Nuisances found and abated:—						FOUND.	ABATED.
Dirty closets	..	..	..	..	..	1	1
Dirty rooms	..	..	..	..	..	24	24
Dirty bedding	..	..	..	..	..	20	20
Defective or stopped drains	..	..	..	..	..	32	32
Defective roofs or eaves spouts	..	..	..	..	..	18	18
Other nuisances	..	..	..	..	..	67	67
Total	..	..	..	..	..	162	162

HOUSES LET IN LODGINGS.

						HOUSES.	ROOMS.
Registered during 1923, let as furnished rooms						11	42
Removed from Register						..	..
On register at end of 1923						77	286
Houses let in lodgings visited though not registered						590	861
Houses examined (new lodgings)						51	392
Drains tested 230, in 107 houses							
Visits for abatement of nuisances .. 929							
,, infectious disease (9 cases) 32							
,, additional inspection .. 3,559							
Nuisances—						FOUND.	ABATED.
Dirty or bad bedding	..	..	..	..	..	76	76
Dirty rooms	..	..	..	..	..	235	235
Overcrowding	..	..	..	..	..	39	39
Dirty closets	..	..	..	..	..	14	14
Other nuisances	..	..	..	..	..	308	300
Structural defects	..	..	..	..	..	375	397

students at the University have been inspected by the Public Health staff and the results reported to the University Authorities. Details of these inspections are as follows :—

New lodgings inspected during 1923, 51 houses with 131 rooms.

Houses previously examined :—inspected 135, with 391 rooms.

Drains tested :—78 in 64 houses ; two defects found in one house.

Re-testings on completion of work 2.

Total visits to these houses 239.

The extension of the Hostel system is likely to reduce the number of these lodgings in the future.

Residential Flats.—In 56 houses there are 310 flats to which 156 visits were paid. As a result of these visits 42 defects were found and remedied. The nuisances found and abated are included in the table under houses-let-in-lodgings.

Canal Boats.—The work in connection with the registration and inspection of Canal Boats has been carried on as in past years. Particulars are set out in the appended table :—

CANAL BOATS.

Registered during the year 1923	..	..	..	6
Re-registered „ „ „	..	..	..	5
Transferred to fresh owners	..	..	..	..
Struck off register (on revising register)	..	..	..	4
Remaining on register at end of year..	..	..	..	160
Visits of inspection to wharves and locks	..	..	..	672
Complete inspections of boats (264 boats)	..	..	..	710
Cases of infectious disease	..	..	..	..
Cases of overcrowding	..	..	..	..
Dirty cabins	..	..	..	..
Absence of registration certificate	..	..	..	17
Boats not marked with registered number	..	..	..	17
„ not properly ventilated	..	..	..	1
„ requiring painting or repairing	..	..	..	13

A canal boat, even the most modern and well-equipped, is not an ideal dwelling and one hopes with the development of motor

power that it will be possible to make the journeys in a shorter time and so entirely obviate the necessity of sleeping on the boat at all. For the children's sake this would be an enormous step in advance.

Vans and Tents.—Draft bye-laws which were submitted to the Ministry of Health for approval last year came into force in the City on the 22nd June, 1923. The powers granted under these bye-laws will prove invaluable in the prevention of the spread of infectious disease occurring in caravans especially at feast times.

VANS AND TENTS.

Visits to 141 vans during 1923	1,092
„ „ vans for infectious diseases (4 cases)	16
„ „ 31 tents	277
„ „ 29 camping grounds	194
Additional visits for nuisances	90
Nuisances—	
Dirty camping grounds	FOUND. ABATED.
Dirty vans and tents	4 4
Overcrowded vans	1 1
Camping grounds with no accommo- dation for van dwellers	2 2
Other nuisances on camping grounds	30 30
	54 53

Ice Cream—Street Vendors and Sheds.—Closer attention is being paid to the conditions under which ice cream is manufactured and sold. It cannot be doubted that much of the stuff which is sold as ice cream has very little food value and I think there is a distinct need for a definite standard being fixed of the composition of this increasingly popular article. Many people imagine because ice cream is frozen that it is therefore free from disease germs. That however is by no means the case and it is just as important that ice cream should be prepared and handled under hygienic conditions as any other food. The exposing of ice cream in the streets to contamination from dust and flies is very much to be deprecated and there is very great need for a higher standard of cleanliness generally amongst ice cream vendors.

ICE CREAM—STREET VENDORS AND SHEDS.

Ice cream sheds at end of 1923	77 visits 397
Number of vendors at end of 1923	114
Ice cream carts inspected	104 visits 485
Sheds unsuitable	40
Sheds repaired	10
Sheds closed	30
Other visits in respect of abatements ..	90
Nuisances—	
Sheds requiring limewashing	FOUND. ABATED.
Defective walls and floors	17 17
Defective drains	4 4
Carts not marked	4 4
Total	29 29

Cellar Dwellings.—The following table has reference to the cellar dwellings existing in the City.

CELLAR DWELLINGS.

Visits to 22 cellar dwellings	33
Visits to 29 new cellar dwellings	51
Nuisances—	
New cellar dwellings closed	FOUND. ABATED.
Other Nuisances	29 27
	3 3

Offensive Trades.—The total number of offensive trades (so-called) in the city is 69 which trades are carried on in 55 establishments.

Under "The Leeds (Public Health) Order, 1922" the trades named below have been recommended for scheduling, and it is hoped that the approval of the Ministry of Health to the proposed schedule will be received at an early date:—

Tanner and Leather Dresser.	Rag and Bone Dealer.
Fat Melter, extractor or refiner.	Fish Frier.
Glue and Size Maker.	Manure Manufacturer.
Gut Scraper.	Tallow Refiner.

3. 4. 5.—OTHER MATTERS.

Homework :—	Number of		
	Lists.	Outworkers.	
<i>List of Outworkers (S. 107) :—</i>		C.	W.
(No homeworkers on our register except amongst those engaged in making wearing apparel)*	..	..	..
Lists received twice in the year	352	482	1073
„ once in the year	57	25	41
Addresses of \ received from other Authorities ..		134	
outworkers / forwarded to other Authorities ..		14	
Notices to occupiers as to keeping or sending lists ..		587	
Prosecutions.. .. .		..	
Inspection of Homeworkers' premises		386	
<i>Homework in unwholesome premises :—</i>			
Instances		14	
Notices		14	
Prosecutions.. .. .		..	
<i>Homework in infected premises :—</i>			
Instances		3†	
Orders made (S. 110)		3	
Prosecutions (SS. 109, 110)		..	
[Infectious cases removed, disinfection carried out under ordinary powers.]			
<i>Workshops on the Register (S. 131) at the end of year :—</i>			
Ordinary (155 trades)		1,204	
Domestic (17 trades)		43	
Bakehouses on register as workshops		256	
Do. domestic		389	
Total number of workshops on Register		1,892	
<i>Matters notified to H.M. Inspectors of Factories :—</i>			
Failure to affix Abstract of the Factory and Workshop Act (S. 133)		..	
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5).	Notified by H.M. Inspector ..	86	
	Reports (of action taken) sent to H.M. Inspectors..	38	
Other		..	
<i>Underground Bakehouses (S. 101) :—</i>			
Certificates granted during the year		..	
In use at the end of 1923		27	

* Two of the above lists (containing 34 workpeople) received twice a year—home workers engaged in nut cracking. All others in wearing apparel.

† Scarlet Fever patients.

The above table is that required by the Home Office and represents work done by the male workshops inspectors and by the women inspectors.

The law in relation to offensive trades stands much in need of amendment and consolidation. At present things are in a very chaotic state. There is entire lack of uniformity between the various sanitary authorities. What one refuses another accepts, and it is possible to find one authority accommodating a trade which its neighbour will not tolerate.

The total number of visits made to offensive trades during the year was 536.

Factories and Workshops.—On pages 40 and 41 will be found a complete summary of the work done under the Factory and Workshop Act, 1901, and in a separate table a report on the inspection of bakehouses.

In connection with bakehouse control, the law is unsatisfactory, inasmuch as only a limited section of the trade is covered. Thus, whilst the baking of bread and confectionery is controlled, the law gives no power with reference to such things as pork pies, sausage rolls, etc.

Plans.—The system of recording comments made on plans submitted by the Building Surveyor which was inaugurated in March 1922, has been continued during the past year and has proved a valuable source of reference when inspecting new premises, etc. The total number of plans examined and commented upon during the year was 312.

OTHER VISITS PAID BY MALE WORKSHOPS INSPECTORS.

	Factories.	Workshops.	Workplaces.
Non-abatements	296	373	..
Drain Inspection	99	65	1
Drains tested	18	55	..
Disease enquiries	31	9	..
River pollution	..	..	..
Complaints	55	31	..
Measurement of workrooms ..	..	481	..
Other causes	303	361	19
TOTAL	802	1,375	20

BAKEHOUSES.

WARD.	OVERGROUND.			UNDERGROUND.			Total visits to all.
	Em- ployees beyond family.	Work- shop bake- houses.	Domestic bake- houses.	Em- ployees beyond family.	Work- shop bake- houses.	Domestic bake- houses.	
Central	62	in 19	..	9	in 3	..	92
North	42	.. 16	29	1	.. 1	1	175
North-East	35	.. 19	29	2	.. 1	..	337
*New Ward	12	.. 7	2	..	..	..	30
East	47	.. 23	24	..	..	..	143
South	13	.. 7	23	2	.. 1	..	122
East Hunslet	12	.. 7	40	4	.. 2	..	216
West Hunslet	38	.. 18	34	..	..	3	192
Holbeck	37	.. 12	28	..	..	..	208
Mill Hill	31	.. 11	7	..	..	..	30
West	24	.. 13	22	..	..	..	153
North-West	48	.. 15	31	11	in 5	2	267
Brunswick	42	.. 13	9	2	.. 1	..	251
New Wortley	20	.. 9	11	..	..	..	57
Armley & Wortley	22	.. 15	46	..	..	..	134
Bramley	16	.. 10	13	..	..	..	127
Headingley	84	.. 24	32	6	.. 4	3	159
Total	585	in 238	380	37	in 18	9	2,693

* Roundhay, Seacroft, Shadwell and Crossgates.

These visits made by Ward Inspectors only. This work is included in the figures given in table on page 30.

Work of Women Inspectors.—Two women sanitary inspectors are constantly engaged in visiting the homes of outworkers, in carrying out investigations into outbreaks of infectious disease in factories, workshops and schools and attending to complaints received from the factory inspectors or other sources as to sanitary defects affecting the health of the workers in factories and workshops. The following is a summary of their work.

Infectious Diseases.—The following visits were made :—

To schools (on account of 1,285 cases)	1,940
To absent pupils	113
To factories (139)	267
To workshops (14)	21
To workplaces, including restaurants (34)	57
To absent employees	20

Outworkers.—Visits paid to the homes of outworkers numbered 1,947. In addition to these, 192 visits were paid to the premises of employers of outworkers.

Factories and Workshops.—Part of the work done by the women inspectors under this heading appears on pages 40 and 41.

In addition to that appearing in the table the following visits were paid :—

Factories on receipt of complaint ..	36
Workshops (routine and on complaint)	273
Workplaces and restaurants do. ..	79
Houses on receipt of complaint ..	28
Public sanitary conveniences	170
Total	586

Nuisances found 75, abated 58.

Rat Repression.—To make any great impression on the rat population, a City the size of Leeds would require a small army of trained men to be constantly waging war on the pest, not on one front only but on all fronts in concert. At present we are only touching the fringe of the problem, killing a few here and a few there, but not sufficient to make any impression. There is, however, a certain advantage to be gained in having undoubted haunts and breeding grounds cleared and the buildings or sites made rat proof, and this can be done at comparatively little expense to the owner. It is only by constant and steady attack that the pest can be controlled.

Of all the methods of attack, poisoning is possibly the most unsatisfactory from the point of view of visible results. It may safely be assumed however that the number poisoned is far in excess of the dead rats actually found.

No special Rat Week was held in Leeds this year, but in connection with the Health and Municipal Services Exhibition held from November 13th to December 1st a fairly comprehensive collection of traps, nets, and other rat catching appliances, together with poisons of various kinds was shown. Demonstrations of methods of rat and mice extermination were given from time to time during the run of the Exhibition, and literature dealing with the subject was distributed to the public. A special rat film was shown on several occasions with the object of illustrating the best methods of dealing with the rat nuisance.

The Exhibition afforded an excellent opportunity of reaching a far greater number of persons than would otherwise have been possible. During the three weeks upwards of 20,000 persons passed through the "Health Stand" including the Mayors of several Yorkshire towns, Medical Officers of Health, Sanitary Inspectors and School Teachers from various parts of the Country.

Particulars of the work of the rats officer for the year are appended.

Complaints received	171
Premises inspected	400
Premises found to be more or less infested with rats	311
Premises cleared	251
Premises where infestation was diminished ..	32
Cases in which rat proofing was carried out ..	210
Cases in which drainage was found defective ..	42
Cases in which rat-catchers were employed ..	53
Premises with work in hand at end of year ..	24
Rats caught by ferrets, dogs, cats, traps, or killed by hand or found poisoned ..	3,050
Visits for purpose of observation, work in progress, or work done	903
Visits for other causes, such as appointments, interviews with owners and others, enquiries	295
Informal notices served	202
Notices complied with	185

SMOKE.

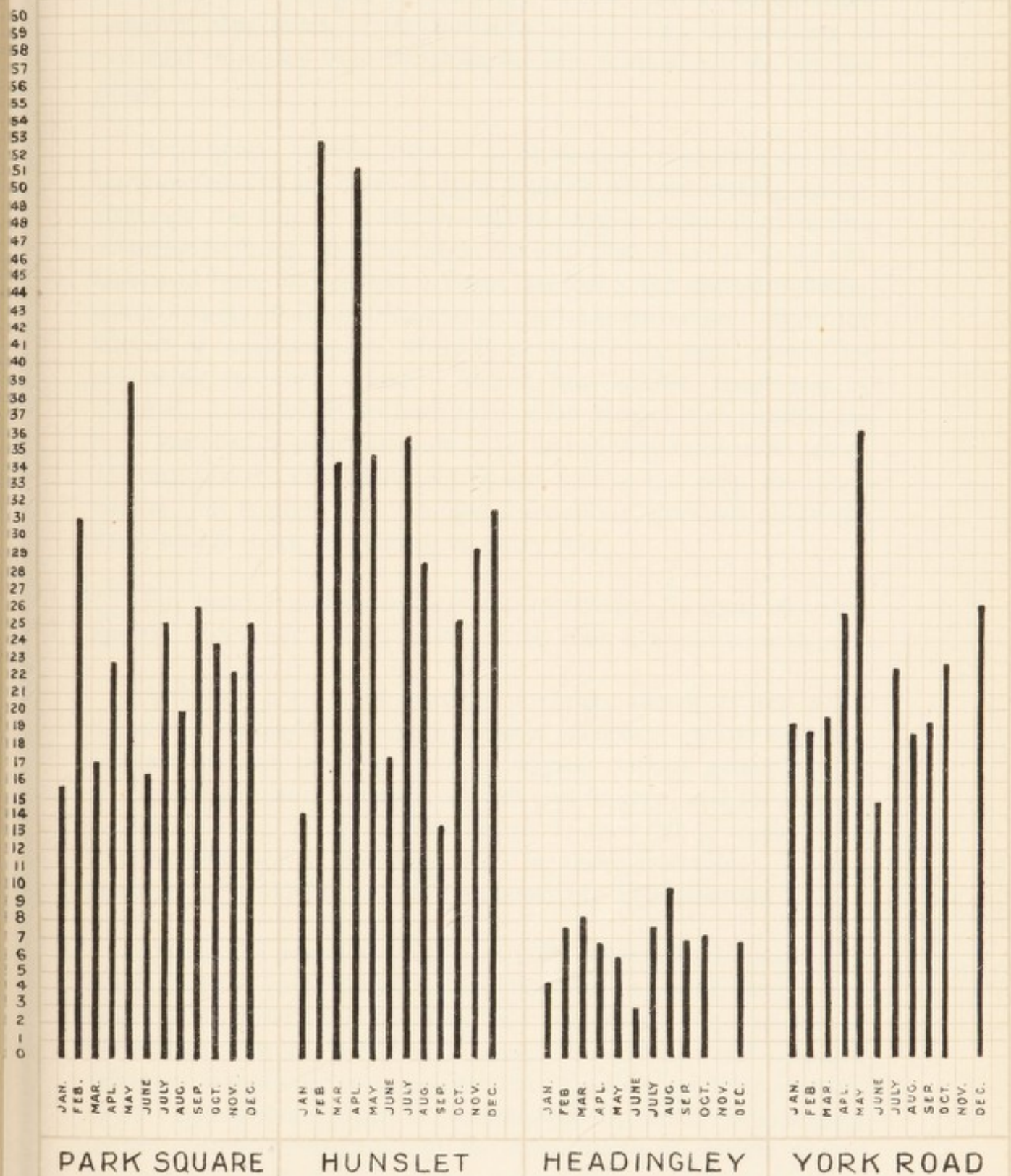
Factory Chimneys.—During the past year many chimneys that had previously given a good deal of trouble as regards smoke emission, have responded to persistent supervision, and by the adoption of more scientific methods the firemen have achieved better results and greatly curtailed the out-put of smoke.

A noticeable furnace improvement tending towards smokeless combustion has been effected in a large number of Lancashire boilers by the simple process of shortening the length of the furnace and working on a reduced grate area. The principle of working hand-fired boiler furnaces with a six or seven foot length of firegrate is not conducive to fuel economy, high steam generation, or smokeless combustion. However careful and intelligent the fireman may be he cannot always control efficiently a long firegrate and maintain at all times the conditions essential for perfect combustion. The reduced grate area has the advantage of concentrating the available draught, which permits a thicker body of fire being maintained on the grate; thus there is less tendency of starving the fire with resultant lowering of furnace temperature. It also suits the "light and often" method of firing, and the gases evolved from such light firing are more easily provided with the air necessary for complete combustion. The furnace flues in turn are not subject to the choking effect produced by the periodical sudden evolution of gas, as when a large grate is in use.

Domestic Smoke.—Smoke from house chimneys, office chimneys, etc., is generally thought to be a negligible quantity as a factor in air pollution, simply because such smoke when viewed from the street level is practically invisible owing to its lesser density and lighter colour. This impression is decidedly wrong, because if the smoke from the domestic chimney is carefully analysed, it will be seen that it consists very largely of tarry matter, which is perhaps the most baneful and destructive of all the products of coal combustion, and certainly the one most responsible for the disfiguration of buildings. It has been said that the house chimney is responsible for three fourths of the air pollution and damage from smoke (E. D. Simon and Marian Fitzgerald—*Smokeless City* 1922); but that is an estimate which I have some difficulty in accepting because if such were the case, one would not expect to find such a marked

SOOT AND ASH GAUGES. — 1923.

MONTHLY DEPOSIT IN ENGLISH TONS PER SQUARE MILE.



HEADINGLEY. IN NOVEMBER THE GAUGE WAS AT THE HEALTH EXHIBITION.

YORK ROAD. IN NOVEMBER THE GAUGE WAS ACCIDENTALLY KNOCKED OVER.

difference in aspect between the buildings of the purely residential town and that engaged in industry. There can be no question, however, that much of the nuisance arising from the burning of raw coal emanates from the domestic fire, particularly the kitchen range.

Experience proves that it is absolutely impossible to burn bituminous coal in any form of open firegrate without making smoke, although the volume of smoke emitted may be reduced by careful attention to firing. In this respect the well-grate is as bad as the old-fashioned type, except that it burns less fuel ; but undoubtedly the worst offender of all, as already stated, is the kitchen range. With the advent of smokeless fuel, there is no longer the same excuse for producing so much smoke. Almost any kitchen range can be adapted, at small cost, to burn coke or low temperature combustion fuel—supplies of which are now to be had at very reasonable prices. The advantages of burning smokeless fuel is not only that it is cleaner, but it gives a better heat for cooking, does not choke the flues, and is more economical in every way.

For heating and power, gas and electricity are most effective, and the cost is not so very much greater than it would be with coal.

After all, a clean atmosphere is cheap, almost at any price, because it means better health, greater efficiency, greater domestic comfort, cleaner buildings, and a brighter outlook generally. If all factory and works owners, stokers and firemen, and the citizens generally, would pledge themselves to do their bit to make Leeds a smokeless city, it could be done in this generation. What a triumph it would be and at comparatively little sacrifice !

During the year there has been quite a remarkable increase in the number of gas and electric fires installed in private houses and business premises, and the Gas and Electricity Departments of the Corporation are prepared to supply an even greater demand. What one would most welcome, would be the shutting down of many of the existing steam plants in factories where steam is not necessary to the process carried on and the substitution of electric power. The effect of such a step on the atmosphere would be immediate, and one hopes that wherever possible this will be done.

The work of the smoke inspectors is given in detail in the subjoined table.

	1923.	1922.
Complaints received	6	2
Furnaces inspected	3,971	4,486
Observation of chimneys (1 hour each) ..	6,007	3,853
Number of minutes dense smoke	5,394	4,614
Average duration of dense smoke per observation of one hour	0 min. 54 secs.	1 min. 12 secs.
Number of chimneys found emitting dense smoke three minutes per hour	202	275
Smoke prevention appliances adapted to furnaces	28	30
Smoke prevention appliances repaired ..	25	11
Furnaces altered or reconstructed	2	—
Firms who have adopted smokeless fuel ..	9	—
Chimneys newly erected	2	4
Furnaces in connection with new chimneys	2	4
Notices served on manufacturers	10	24
Notices served on stokers	34	44
Prosecutions	1	—
Total amount in fines	£5	—

It will be noticed that there have been very few prosecutions most of the offenders having agreed to comply with the demands of the Department without resort to legal proceedings.

FOOD.

The Milk (Special Designations) Order 1922 has failed to elicit the response anticipated. One licence was issued during the year for the sale of Certified Milk, none for Grade A, and one for Pasteurised Milk. In addition the farms belonging to the Corporation at Skelton Grange and Templenewsam were granted licenses by the Ministry of Health for the production of Grade A (Tuberculin Tested) Milk which however lapsed at the end of the year.

Notwithstanding the disappointing response to the special Designations Order there are indications that the quality of the milk produced within the City boundaries is improving. It is cleaner and more care is taken in its production and handling. In some cases, it may be said to reach Grade A standard, and it is a pity that producers of an article of this quality should not take advantage of the undoubted benefits to be gained from holding a "Grade A" licence.

There is room for improvement in the methods of handling and distribution. At the present time very little attempt is made on the part of the railway companies, the wholesale distributor and the ordinary retailer to ensure that the milk is kept free from contamination. A visit to the railway stations in the early morning when the milk is coming in from the country will convince even the greatest sceptic of the urgent need for improvement both in the matter of transport and of storage and handling. The milk is conveyed to the City in closed vans which are sometimes anything but clean, mixed up with all sorts of other goods and one can see on the platform a milk churn standing cheek by jowl with a consignment of fish or vegetables. The milk is transferred from the churns of the sender to those of the retailer in the midst of

all the other activities of a station platform. In such circumstances it is quite impossible to prevent the milk becoming contaminated. The time has come when the railway companies should be compelled to provide proper cooled vans for the carriage of milk and separate platforms for its reception on arrival. The milk platform should be reserved for milk only and should be in such a situation and of such construction as to be protected from dust and readily cleansed. As regards the wholesale distributors and retailers much greater care should be taken to see that the churns are clean and kept closed, that they are not exposed to the sun and that the hands and persons of those actually engaged in distributing the milk are clean.

Cows and Cowsheds.—The total number of farms in the City visited for purposes of inspection of cows and cowsheds was 152, and the total number of visits paid 604. At two of the farms there were no cows kept; one discontinued and six commenced the keeping of dairy cows during the year, leaving at the end of the year a total of 149 farms still in use as dairy farms in the City. The number of cows examined was 2,019 and the total examinations made 7,130. At 6,712 of the examinations (or 94 per cent.) the cows were found to be clean, and at 418 (or 6 per cent.) dirty. As regards the health of the 2,019 cows examined, 47 (or 2·3 per cent.) were found to be diseased, six (or 0·3 per cent.) having tuberculosis of the udder, nine (or 0·4 per cent.) general tuberculosis and 32 (or 1·6 per cent.) diseases other than tuberculosis. In every case where tuberculosis was diagnosed the farmer was instructed to isolate the cow from the rest of the herd, and destroy the milk.

The number of cowsheds inspected was 225 and the total number of inspections 877, whilst the number of yards visited was 146 with a total of 579 inspections. The sheds were reported clean at 748 (or 85 per cent.) visits and dirty at 129 (or 15 per cent.) whilst the yards were clean at 519 (or 90 per cent.) visits and dirty at 60 (or 10 per cent.). Eighteen (or 8 per cent.) of the sheds in use are unsatisfactory and should be abolished.

In addition to examining cows and cowsheds within the City, the Veterinary Inspector paid a total of 10 visits to cowsheds outside the City and inspected 174 cows. Of these 106 (or 61·0 per cent.) were found to be clean and 68 (or 39·0 per cent.) dirty;

17 sheds were inspected and 10 (or 59.0 per cent.) found clean, and 7 (or 41.0 per cent.) dirty; 5 (or 62.5 per cent.) of the yards were clean and 3 (or 37.5 per cent.) dirty. Of the 174 cows examined, three were found to be suffering from tuberculosis of the udder, four from tuberculosis of other organs, and two from diseases other than tuberculosis.

The dairy herds at the two farms owned by the City Council have been regularly inspected and kept under observation. In March, 15 animals were tested with tuberculin at Skelton Grange and 13 animals at Templenewsam, whilst in June one cow was retested at Templenewsam. These tuberculin testings were carried out in accordance with the instructions of the Ministry of Health, who had issued licences under the Milk (Special Designations) Order giving authority to the Corporation to use the designation "Grade A (Tuberculin Tested,)" in connection with the milk produced at these two farms. The Ministry of Health has since revoked the licences of both farms which are now producing milk of "Grade A" standard.

The following table shows the number of cowsheds and milk retailers in the City and gives a summary of the work done by the Food and Drugs Inspectors in connection with the milk supply.

Number of milk retailers in the City	..	..	452
Number of cowshed premises in the City	..	..	152
Number discontinued during year	..	..	1
Number commenced during year	..	..	6
Number in use at end of year	..	..	149
New cowsheds built	..	..	1
Cowsheds improved or reconstructed	..	..	—
New dairies built	..	..	4
Visits to milkshops	..	..	1054
Visits to cowsheds	..	..	235
Visits to Railway stations	..	..	229
Visits to farms or milkshops <i>re</i> infectious disease	..	..	31

Milk and Food Analysis.—The subjoined tables set out the number of samples of milk and other foods taken during the year and examined by the City Analyst, with information as to quality and composition and results of Court proceedings.

SAMPLES OF MILK AND CREAM SENT TO THE CITY
ANALYST FOR EXAMINATION DURING 1923.

Article.	Genuine.	Adul- terated.	Total.	Taken formally.		Taken informally.	
				Genuine.	Adul- terated.	Genuine.	Adul- terated.
Milk	538*	28	566	536	28	2	..
Skim Milk	..	2	2	..	1	..	1
Cream	4	1	5	4	1	..	..
TOTAL	542	31	573	540	30	2	1
				570		3	

*Seven other milks reported as genuine were found to be adulterated by the admission of preservatives.

The average composition of the 568 milk samples taken during the year was :—

Non-fatty solids 9·13 per cent.

Fat 3·69 „

Total Solids .. 12·82 per cent.

Of the 37 samples of milk found to be adulterated, 10 were adulterated by the addition of water, 20 by the partial abstraction of fat and seven by the addition of preservatives. The largest amount of added water found in any sample was 11 per cent.

The retailer was proceeded against but the case was dismissed on payment of costs.

The largest deficiency of fat was 43 per cent. No proceedings were taken owing to the exceptional circumstances of the case.

Of the other milk samples two were deficient in fat to the extent of 33·3 per cent. and 18·0 per cent. No action was taken in either case.

The largest amount of preservatives added was 35 grains per gallon of boric acid. Proceedings were taken and defendant fined.

SAMPLES OF FOOD OTHER THAN MILK AND CREAM, SENT TO
THE CITY ANALYST FOR EXAMINATION DURING 1923.

Article.	Genuine.	Adul- terated.	Total.	Taken formally.		Taken informally.	
				Genuine.	Adul- terated.	Genuine.	Adul- terated.
Butter	10	..	10	10	..	..	..
Margarine	3	..	3	3	..	..	..
Lard	25	..	25	25	..	..	..
Pepper	11	..	11	11	..	..	..
Dripping	1	..	1	1	..	..	..
Malt Vinegar	30	1	31	30	1	..	..
Vinegar	8	3	11	8	3	..	..
Tea	5	..	5	5	..	..	..
Cocoa	4	..	4	3	..	1	..
Baking Powder	5	..	5	5	..	..	..
Cream of Tartar	4	..	4	4	..	..	..
Beer	4	..	4	4	..	..	..
Lemon Squash	..	1	1	..	1	..	..
Lemon Syrup	..	1	1	..	1	..	..
Ginger Wine	1	..	1	1	..	..	..
Jam	3	..	3	3	..	..	..
Demarara Sugar	4	..	4	4	..	..	..
Flour	2	4	6	..	2	2	2
Boiled Bacon	1	..	1	..	..	1	..
Bismuth Lozenges	1	..	1	1	..	..	..
Human Milk	1	..	1	..	..	1	..
Raspberries & Sugar	..	1	1	..	..	..	1
White Sugar	1	..	1	..	..	1	..
Ice-cream Preservative	..	1	1	..	..	..	1
Dried Milk	1	..	1	..	..	1	..
Oatmeal	3	..	3	3	..	..	..
Ground Rice	4	..	4	4	..	..	..
Polony	..	1	1	..	1	..	..
Potted Meat	2	..	2	2	..	..	..
Flower of Sulphur	3	2	5	3	2	..	..
Lemon Cake	1	..	1	1	..	..	..
Sponge Cake	2	..	2	2	..	..	..
Rice Cake	2	1	3	2	1	..	..
Tent Wine	1	..	1	1	..	..	..
Cooked Fish	..	1	1	..	..	..	1
TOTAL	143	17	160	136	12	7	5
				148		12	

SUMMONSES ISSUED DURING 1923, UNDER THE SALE OF FOOD
AND DRUGS ACTS.

No. of Sample	Article.	Adulteration or Offence.	Fines. £ s. d.	Remarks.
32	Milk ..	11.0% added water ..	..	retailer: to pay 15/- costs. See Nos. 33, 36 and 37.
33	Do. ..	4.5% do. ..	}	farmer: to pay 15/- costs in each case.
36	Do. ..	6.0% do. ..		
37	Do. ..	3.5% do. ..		
279	Do. ..	Boric compounds, 10 grains per gall.	} 2 0 0 2 0 0	retailer. assistant.
280	Do. ..	Boric compounds, 22 grains per gall.		
294	Do. ..	Boric acid, 35 grains per gall.	} 2 0 0	retailer. assistant dismissed under Probation Act.
302	Do. ..	Boric acid, 30 grains per gall.	} 1 0 0	retailer. assistant to pay 4/6 costs.
22	Vinegar	7.5% deficient in acetic acid	}	to pay 25/6 costs in each case.
23	Do. ..	8.25% do.		
279c	Do. ..	12.5% do.		
128	Flower of Sulphur	0.35% of fixed residue in excess.	..	adjourned <i>sine die</i> for expert evidence on business methods <i>re</i> commercial sulphur.
215	Preserved Cream	0.35% of boric acid in excess.	} 5 0 0 5 0 0	retailer. manager. retailer to pay 15/6 analyst's fee. two assistants to pay 4/6 costs each.
			£22 0 0	

Guinea-Pig Tests.—During the year in addition to the samples of milk submitted to the City Analyst, 62 samples were sent to the School of Medicine for examination for the presence of the tubercle bacillus. Five (or 8·1 per cent.) were returned as positive. All of these were derived from farms outside the city boundary. The report of the Veterinary Inspector on the visits to these farms is given below.

Tuberculous Milk from Outside Areas.—During the year 62 samples of milk produced beyond the City boundary were submitted to the School of Medicine for the examination of the presence of the tubercle bacillus. Five (or 8·1 per cent.) were found to be infected and following the usual procedure, the Veterinary Inspector in concurrence with the Medical Officer of Health of the districts concerned, visited 10 farms and there inspected 174 cows. He found three cows suffering from tuberculosis of the udder, four from pulmonary tuberculosis, and two from diseases other than tuberculosis, and instructions were given to the respective owners as to the proper disposal of the milk yielded by these animals. The want of control of these animals was again brought to notice. In some instances the tuberculous cow was 50 miles from Leeds and 10 miles from the office of the Sanitary Inspector and Medical Officer of Health of the area. Neither the County Council nor the Ministry of Agriculture are concerned to see that such animals are disposed of for slaughter or what is more important are excluded from other milking herds although the local Medical Officer of Health and Sanitary Inspector in each case agreed as to the need for these animals to be followed up and kept under supervision. The remedy for such an unsatisfactory state of affairs is the re-introduction of the Tuberculosis Order of 1914, giving Local Authorities power to deal with such animals. As usual the cows and cowsheds in these rural districts were in a deplorable condition of filth, which only emphasizes the need for more energetic administration of the Dairies, Cowsheds and Milkshops Orders in these areas.

Milk and Cream Regulations.—All samples of milk and cream submitted to the Analyst were tested for the presence of preservatives. Five of the samples taken formally were found to contain boric compounds. Proceedings were taken in four of the cases. Owing to a misunderstanding the third sample of the fifth case

in the possession of the inspector was destroyed and no action could be taken. Two further samples taken formally were found to contain traces of formalin, but as formalin had been used for disinfection in the laboratory, it was obvious its presence in the sample was accidental.

One sample of preserved cream taken formally was reported to contain 0.75 per cent. of boric acid (or 0.35 per cent. in excess). Proceedings were taken in this case and defendants fined and ordered to pay costs.

Food and Drugs.—The Food and drugs inspectors paid 664 visits to shops and other premises in connection with the administration of the Sale of Food and Drugs, and Margarine Acts and took 148 formal samples and 12 informal samples, the result of the analysis of which appear in table on page 53.

Since the issue of my last report a special Committee has been appointed by the Ministry of Health to go into the whole question of the use of preservatives in food. That Committee is at present engaged in collecting evidence and it is hoped that when it issues its final report it may contain recommendations for the better care of food in course of preparation which can be adopted by the Government and issued in a form of a new Act or a short amending Act to the Food and Drugs Act of 1875.

Meat.—It is some time now since the Committee specially appointed by the Government to go into the question of the handling and transport of meat supplies issued their report, but so far nothing in the way of new legislation has appeared. Much has been said about methods of slaughter, undeniably a matter of the greatest importance, but of equal importance is the handling and protection of the carcase after slaughter. About this little of material importance has been done. Meat-carriers and meat-porters as a class are apt to be careless. Their aim is to handle as much meat as possible, in as short a time as possible, and thus increase their takings, and they pay little attention to the methods adopted or the type of individual employed. What is wanted is powers to compel all men so employed to be licensed and to conform to certain rules as to cleanliness, etc.

It would also be of undoubted advantage if all slaughtering could be done in one centre. The private slaughter-house, no matter how well conducted, is admittedly unsatisfactory and should be abolished. But it is so firmly dug in and so well protected by law that no Government seems to care to tackle it. It would make the control of these slaughter-houses easier and more effective if it were made obligatory on the part of the owners to notify the Local Authority of the day and hour at which they intend to slaughter. Without such knowledge the hands of the Inspectors are tied.

In the new Bill at present being promoted in Parliament by the Leeds Corporation there appear two clauses relating to food which give considerable extended powers of control over the manufacture, preparation, storage and transport of food. The two clauses are as follows :—

67. Any person taking or introducing or causing to be taken or introduced any fats which are unfit for the food of man into any premises in which any food for man into the composition of which fat enters is manufactured or prepared for sale or into any premises directly or indirectly connected by a passage pipe or in any other way with any such premises (except so far as such passage pipe or other connection as the case may be are required or used for sanitary or other similar purposes and not in connection with the manufacture or preparation hereinbefore mentioned) shall for each offence be liable to a penalty not exceeding five pounds unless he can prove that such fats were not taken or introduced into such premises for the purpose of being used and have not been used as an ingredient in the manufacture or preparation of any food for man.

69. (1) The Corporation may make bye-laws for promoting sanitary and cleanly conditions in the manufacture preparation storage transport or exposure for sale of any article intended to be sold for the food of man.

During the year the private slaughterhouses were reduced in number from 68 to 67. Two registered slaughterhouses were ordered by the City Council to be removed from the register, the premises no longer being used for slaughtering purposes, thus leaving 59 slaughterhouses on the register. The licensed slaughterhouses were increased from seven to eight. One renewal of licence applied

for was not granted ; One licence which had been in abeyance for a year was revived, after considerable alterations and improvements had been made to the premises, and one new slaughterhouse was erected by the licence of the City Council.

The elimination of private slaughterhouses continues to proceed very slowly. The chief hindrance is the lack of sufficient accommodation for slaughtering at the Public Abattoir. This shortage of room is particularly marked in regard to the slaughter of pigs. Such accommodation as is provided is unsatisfactory the place being small and owing to the congestion of other parts of the slaughterhouse, generally in use for the slaughter of sheep and calves.

SLAUGHTER-HOUSES IN USE.

	1914.	January, 1923.	December, 1923.
Public Abattoir	2	1	1
Private slaughter-houses (registered)	63	61	59
Do. (licensed)	10	7	8
Knackers' Yard	2	2	2

There were 8,365 visits paid to slaughter-houses and 8,050 visits to sausage and potted meat factories, markets, shops and stations.

The Health Committee are in consequence of this shortage of room obliged to admit the necessity for private slaughterhouses for wholesale pig butchers.

Leeds is a great pig breeding centre and hundreds of pigs are killed every week. Much of this slaughtering is carried on at irregular hours and it is impossible for the inspectors to be satisfied that they have seen and examined the carcasses and organs of every pig slaughtered.

The next piece of constructional work undertaken by the Corporation should be the extension and improvement of the Public Abattoir.

Besides their duties at the Public Abattoir the meat inspectors pay regular visits to the private slaughterhouses, they also have to make special visits for inspection purposes to shops, markets,

railway stations, potted meat factories, etc. The total visits paid by the inspectors during the year was to private slaughterhouses 8,365, to shops, markets, etc., 8,050.

In November foot and mouth disease broke out amongst the animals awaiting slaughter at the Public Abattoir. This necessitated the abattoir being closed, and for a time after it re-opened the inspectors had to exercise the greatest vigilance to see that no diseased animals were admitted to the premises. They also had the duty imposed upon them of seeing that all animals moved for slaughter were killed within the time allowed by the licence issued by the Board of Agriculture. This meant a very great increase to their work as they had to remain on duty until the slaughtering had been completed which sometimes was not until well on into the night.

In November the Chief Meat Inspector was ordered to attend a demonstration of the various methods of slaughtering animals for food, and on his own experience and after consideration of the considered opinions of the experts present at the demonstration and of the Committee who kept under observation the carcasses of the animals killed, he reported that from the purely humanitarian point of view as well as the utilitarian, the methods of slaughter in general practice in Leeds and elsewhere are not improved upon by the various mechanical devices recommended in certain quarters.

Practically all the unsound meat was surrendered and sent for destruction with the consent of the owner or person in possession, but in one instance an official seizure under the Public Health Acts was made. It comprised seven quarters of beef and some offal which though not diseased was dirty and unfit for sale from prolonged keeping under unsatisfactory conditions. The proper order for its destruction was obtained but on consideration of the circumstances under which the seizure was made it was not deemed advisable for proceedings to be taken.

Shellfish, particularly mussels, continue to receive constant attention with the object of excluding from the market shellfish which because of their origin are considered dangerous to the public health. During the year a report was received that illness amongst consumers was attributed to mussels. A careful examination was made of the mussels which had been imported from Holland. Samples were submitted to bacteriological investigation and were declared to be free from sewage contamination. Mussels from

the estuary of the Dee were at one time suspected of dangerous contamination and in co-operation with the Worshipful Company of Fishmongers samples were subjected to a very careful examination. They also were declared free from sewage pollution and were released for sale in the City.

Acting on the suggestion contained in the report of the Departmental Committee on Meat Inspection, the Veterinary Inspector arranged in conjunction with the Sanitary Inspectors' Association a series of demonstrations to the inspectors of our own and neighbouring Local Authorities. These demonstrations were well attended and much appreciated.

The market is patrolled by an inspector regularly every Saturday night and one inspector is on duty every Sunday morning visiting the Bank and High Street districts. Hawkers' carts, open shops and slaughter-houses are also inspected.

The work of the meat inspectors is shown in the following table :—

MEAT, ETC., DESTROYED BY CONSENT.

	1923.	1922.	1921.	1920.
Beef	121,087 lbs.	122,483 lbs.	143,503 lbs.	175,689 lbs.
Veal	4,659 ..	4,588 ..	4,572 ..	2,624 ..
Mutton	6,963 ..	6,360 ..	8,458 ..	76,264 ..
Bacon and Ham ..	214 ..	508 ..	..	1,955 ..
Pork	9,957 ..	11,238 ..	4,963 lbs.	4,106 ..
Offals	23,270 ..	32,514 ..	18,856 ..	21,457 ..
Horse Flesh	..	..	..	600 ..
Rabbits	20,095 ..	21,497 ..	194,243 lbs.	66,893 ..
Poultry	4,707 ..	5,709 ..	5,690 ..	1,608 ..
Game	476 ..	1,124 ..	797 ..	220 ..
Eggs	27,138	29,655	50,646	93,060
Cheese	..	896 lbs.	4,203 lbs.	12 lbs.
Fish	103,877 lbs.	78,189 ..	123,757 ..	129,452 ..
Shellfish	103,672 ..	77,484 ..	99,209 ..	57,057 ..
Fruit	16,174 ..	21,758 ..	11,886 ..	15,151 ..
Vegetables	114,030 ..	40,931 lbs.	27,094 lbs.	64,860 lbs.
Inedible fungi	14 ..	110 ..	..	40 ..
Edible fungi	168 ..	138 ..	1,317 ..	40 ..
Butter	..	..	382 ..	3,789 ..
Flour	..	..	..	700 ..
Yeast	3,920 ..	876 lbs.	6,709 lbs.	2,240 lbs.
Tinned Goods	5,643 ..	9,903 lbs.	9,443 lbs.	10,918 lbs.
Sundries	..	..	424 ..	280 ..

Tuberculous Carcases.—The number of carcases condemned for tuberculosis during 1923 was as follows : 110 carcases of beef and organs, 17 carcases of pork and organs.

LEEDS CITY HOSPITALS, SEACROFT.

ABSTRACT FROM REGISTERS.

YEAR 1923.	Small Pox.	Measles.	Scarlet Fever.	Diph- theria.	Typhus.	Enteric Fever.	Pneu- monia.	Inf. Diarr.	Other Diseases.	For Quarantine (Cottages).	Total.
Patients remaining in Hospitals and Isolation Cottages, on Saturday, December 30th, 1922	..	7	433 (320)	47 (96)	..	2 (3)	.. (2)	.. (2)	12 (9)	..	501 (432)
Admitted from January 1st, 1923, to December 30th, 1923	.. (1)	53 (54)	1,922 (2,353)	352 (427)	..	7 (9)	11 (9)	3 (3)	241 (192)	6 (4)	2,595 (3,052)
Total treated	.. (1)	60 (54)	2,355 (2,673)	399 (523)	..	9 (12)	11 (11)	3 (5)	253 (201)	6 (4)	3,096 (3,484)
Discharged	.. (1)	56 (42)	2,131 (2,213)	345 (448)	..	9 (7)	6 (7)	3 (3)	218 (172)	6 (4)	2,774 (2,897)
Died	..	4 (5)	25 (27)	18 (28)	..	.. (3)	5 (4)	.. (2)	23 (17)	..	75 (86)
Mortality per cent. ..	..	6.6 (10.6)	1.1 (1.2)	4.9 (5.9)	..	.. (30)	45.5 (36.4)	.. (40)	9.5 (9)	..	2.6 (2.9)
Patients remaining in Hospitals and Isolation Cottages, on Saturday, December 29th, 1923	..	.. (7)	199 (433)	36 (47)	..	.. (2)	..	..	12 (12)	..	247 (501)

NOTE.—Bracketed figures are the corresponding figures of the previous year.

INFECTIOUS AND OTHER DISEASES.

A complete summary of cases notified of all the notifiable infectious diseases will be found in the Appendix (Table II).

Smallpox.—No case of this disease occurred in the City during 1923, although several persons who had been in contact with definite cases in other areas were kept under observation during the full incubation period of the disease. None of these contacts however developed the disease. The public are reminded of the gravity of this disease and the necessity to protect themselves against it by adopting the only sure prophylactic, that is vaccination. Immunity from attack for such a long time—the last outbreak was in 1905—is apt to give rise to a false sense of security and to engender carelessness even amongst those who believe in taking precautions. True the disease is not in Leeds, but it is not far away, and it is as well to see that the defences are complete in case of sudden attack. Child vaccination has been much criticised in recent times and is out of favour with a section of the public. At the present time not more than 30 per cent. of the children of the City are protected which means that if the disease does appear it will be the children who will suffer most. In these circumstances it surely is the duty of every parent to give his child the benefit of the protection which vaccination affords.

Measles.—During the year 4,683 cases of measles and 541 cases of German measles were notified. The total number of deaths registered was 50 giving a death-rate of 0·11 per thousand of the population as compared with 152 deaths and a death-rate of 0·33 per thousand for the previous year. The majority of the notifications of this disease were received in the first quarter of the year, which were really the tail end of the 1922 epidemic. The ward which was specially opened in the Killingbeck Sanatorium for the

treatment of measles cases on November 1st, 1922, remained open in 1923 until April 16th. Altogether 136 cases received institutional treatment during this period. In 1923, 48 patients were admitted to Killingbeck Sanatorium and 50 to Seacroft Hospital.

MEASLES.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1913	..	..	108	0·23	0·29
1914	..	..	218	0·48	0·25
1915	..	..	78	0·17	0·46
1916	6,911	15·48	149	0·33	0·16
1917	5,094	11·62	277	0·63	0·31
1918	6,719	15·71	417	0·98	0·29
1919	2,605	6·05	48	0·11	0·10
1920	5,523	12·30	148	0·33	0·19
1921	240	0·52	5	0·01	0·06
1922	10,078	21·59	152	0·33	0·15
1923	5,224	11·12	50	0·11	0·14

AGES AT DEATH FROM MEASLES.

1923	0-1	1-2	2-3	3-4	4-5	5-10	10-15	Total.
No. of Deaths	9	21	11	6	1	1	1	50

Whooping Cough.—The number of deaths from this disease occurring in the City was 32 a decrease of 83 (or 72 per cent.) on the number registered during 1922. All the deaths with the exception of one were in children under five years of age. The death-rate was 0·07 as compared with 0·25 during 1922. This is another of the damaging diseases of childhood, which in company with measles accounts for much of the disease and disablement which occurs during late childhood and adolescence. More attention should be paid to those two diseases both by parents and doctors than is the case at present.

WHOOPING COUGH

Year.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1913	94	0·20	0·15
1914	141	0·31	0·22
1915	158	0·34	0·23
1916	45	0·10	0·18
1917	69	0·16	0·13
1918	130	0·30	0·30
1919	66	0·15	0·07
1920	100	0·22	0·12
1921	72	0·15	0·12
1922	115	0·25	0·17
1923	32	0·07	0·10

AGES AT DEATH FROM WHOOPING COUGH.

1923	0-1	1-2	2-3	3-4	4-5	5-10	10-15	Total.
No. of deaths	13	14	3	..	1	1	..	32

Scarlet Fever.—The epidemic of the disease which occurred during 1922 was continued in 1923, and of the 2,134 cases notified during the year, 839 were reported in the first quarter. The number of deaths registered was 31 and the death-rate 0·07 as compared with 33 deaths and the same death-rate, viz., 0·07 for the previous year. The 1922 epidemic which really started in 1921 as will be seen from the sub-joined table gradually petered out in the second quarter of 1923. The incidence of scarlet fever during 1922 and 1923 has been greater than for any two previous successive years since the disease became notifiable. For the two years, the cases notified numbered 4,856 and the average case rate was 5·18 as compared with a total of 4,427 cases and an average case rate of 5·10 for 1902 and 1903, the two successive years with the highest previous record.

SCARLET FEVER.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1913	1,311	2·82	15	0·03	0·06
1914	1,346	2·94	30	0·07	0·08
1915	1,454	3·17	30	0·07	0·07
1916	881	1·97	23	0·05	0·04
1917	543	1·24	7	0·02	0·02
1918	570	1·33	19	0·04	0·03
1919	1,340	3·11	23	0·05	0·03
1920	1,363	3·04	17	0·04	0·04
1921	1,526	3·28	14	0·03	0·03
1922	2,722	5·83	33	0·07	0·04
1923	2,134	4·54	31	0·07	0·03

CASES OF SCARLET FEVER NOTIFIED IN EACH QUARTER
SINCE 1914.

YEAR.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Year Total.	
	Heard of.	Removed to Hos-pital.	Heard of.	Removed to Hos-pital.	Heard of.	Removed to Hos-pital.	Heard of.	Removed to Hos-pital.	Heard of.	Removed to Hos-pital.
1914 ..	318	284	290	258	318	290	420	375	1,346	1,207
1915 ..	387	347	405	369	340	311	322	296	1,454	1,323
1916 ..	323	292	261	237	156	141	141	121	881	791
1917 ..	135	122	104	94	118	109	186	172	543	497
1918 ..	147	124	95	89	133	122	195	157	570	492
1919 ..	230	211	223	213	323	306	564	514	1,340	1,244
1920 ..	388	348	287	266	329	303	359	327	1,363	1,244
1921 ..	325	302	260	239	313	288	628	548	1,526	1,377
1922 ..	540	476	503	483	708	643	971	753	2,722	2,355
1923 ..	839	700	444	413	379	361	472	431	2,134	1,905

Erysipelas.—Notifications were received of 205 cases of this disease and 17 deaths were attributed to it being an increase of six over those recorded in the previous year.

Puerperal Fever.—There were 51 cases notified during the year of which 21 (or 41·2 per cent.) were in the practices of midwives, 10 (or 19·6 per cent.) in the practices of doctors and 20 (or 39·2 per cent.) in institutions. The deaths recorded were 10, equal to a rate of 0·02 per thousand of the population. Compared with last year's figures there was an increase of 16 in the number of cases notified and a decrease of 4 in the number of deaths.

It is discouraging to have to record an increase in the number of cases of this disease. The inference is that there is still a good deal of slovenly midwifery, a thing that ought not to be at this advanced stage of civilisation. I hope that the day is not far off when the disease will entirely disappear.

Encephalitis Lethargica.—Ten cases were notified during the year of which five died. In addition a Leeds child, nine months old, died in the General Infirmary not notified. The usual precautions were taken as in the case of the other infectious diseases.

Acute Anterior Polio-Myelitis.—There were only two cases of this disease notified during the year and there were no deaths.

Cerebro-Spinal Meningitis.—No cases of this disease were notified during the year and no deaths occurred.

Diphtheria.—The number of cases (368) notified during 1923 was the lowest since 1904. It is encouraging to note that the death-rate (0·04) was the lowest on record. The majority (332 or 90·2 per cent.) of the cases were treated in the City Hospital, which accounts to some extent for the low rate of the mortality. The increasing practice of giving large doses of anti-toxin, from five to eight thousand units in the early stages of the disease, is also conducive to a decreasing mortality. In addition the type of the disease has been of diminishing virulence for some years.

DIPHTHERIA AND CROUP.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1913	880	1·89	89	0·20	0·12
1914	700	1·53	59	0·13	0·16
1915	402	0·88	51	0·11	0·17
1916	423	0·95	40	0·09	0·16
1917	549	1·25	60	0·14	0·13
1918	542	1·27	47	0·11	0·14
1919	811	1·88	43	0·10	0·13
1920	885	1·97	64	0·14	0·15
1921	665	1·43	38	0·08	0·13
1922	470	1·01	28	0·06	0·11
1923	368	0·78	20	0·04	0·07

Enteric Fever.—The total number of cases notified was nine, which is the lowest on record in the City. There was one death and the death-rate was 0·00.

ENTERIC FEVER.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1913	85	0·18	19	0·04	0·04
1914	84	0·18	23	0·05	0·05
1915	106	0·23	21	0·05	0·04
1916	48	0·11	9	0·02	0·03
1917	37	0·08	7	0·02	0·03
1918	42	0·10	5	0·01	0·03
1919	33	0·08	8	0·02	0·02
1920	29	0·06	4	0·01	0·01
1921	24	0·05	2	0·00	0·02
1922	14	0·03	7	0·01	0·01
1923	9	0·02	1	0·00	0·01

CASES OF ENTERIC FEVER MONTH BY MONTH.

Jan.	Feb.	March	April	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
2	—	1	1	1	—	—	3	1	—	—	—

Malaria.—Four cases of malaria were notified as occurring in the City during the year. One man, aged 27 years, an engineers' fitter, died of the disease but the case was not notified.

Dysentery and Trench Fever.—There were no cases of either of these diseases reported during the year.

Ophthalmia Neonatorum.—The number of notifications of this disease received during the year was 82 an increase of 16 on the figure for the previous year. In addition seven cases were heard of otherwise than by notification. Of the 89 cases thus heard of 19 occurred in the practice of medical practitioners, 37 in those of midwives, and 33 in institutions. The number of cases treated at home by private doctors or as out-patients at the Leeds General Infirmary or Infant Welfare Centres was 45, whilst 44 were treated as in patients, namely 3 in the Leeds General Infirmary, 5 in the Township Infirmary, 35 in the Maternity Hospital, and 1 in a private nursing home.

In addition to the above, 67 cases of discharging eyes were reported by midwives.

As in former years the district nurses undertook the treatment of cases nursed in their own homes. The number of cases so attended was 29.

It is a matter of some regret that the number of cases of ophthalmia neonatorum still remain so high. One had hoped that with the better facilities now offered for the treatment of gonorrhœa in the female that the number would have been considerably reduced, instead of as was the case, showing an actual increase. The most disappointing feature was the increase of the number occurring in the practices of midwives. Now that each midwife is supplied with preventive drops for instillation into the eyes of the new born it was anticipated that the results would have been better. A large number of the older midwives, however, are reluctant to adopt this new method of prevention and prefer to go along in their old way. One cannot, of course, make these women fall into line, but it is a pity they do not appreciate the advantages both to themselves and the child of taking early measures to secure the eyes against infection.

I am quite unable to explain the large number of cases which have occurred in institutions from which no fewer than 40 cases were notified. The attention of the authorities of the institutions concerned has been called to the high incidence of the disease and I understand that steps have been taken to deal with the matter. Certainly the number of notifications from these sources has been fewer since the beginning of the current year.

The subjoined table gives full particulars of the results of treatment.

DAY OF ONSET FROM BIRTH.

1923.	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	10th-15th	15th-20th	20th-25th
No. of Cases	3	8	3	3	2	9	6	5	6	11	21	5	-

The above table does not include the seven cases heard of otherwise than by notification.

The result of treatment was as follows :—

Recovery apparently perfect	..	..	75
Recovery not perfect	..	..	1
Sight of both eyes affected	..	..	—
Still under treatment	..	..	2
Died	..	..	3
Result not known owing to removal	..	..	1

Diarrhœa and Enteritis.—One of the worst features of the health statistics for 1923 was the increase in the number of deaths from diarrhœa and enteritis. In 1922, the number of children under two years of age who died of this disease was 92 and the corresponding rate per thousand births 9.9. In 1923, the number had increased to 118 and the death-rate per thousand births to 13.6. The explanation of the increase is probably to be found in the fact that the milk supply of the City is still of a most unsatisfactory character. When every mother can be assured that the milk she gives to her baby is of good quality and free from disease germs, then we may with greater confidence expect to see a fall in the death-rate from this disease. Meanwhile, I would remind the public that the two great safeguards against this most fatal of all infant diseases are cleanliness inside and outside the home and a closer adherence to breast feeding.

The 118 deaths from diarrhœa and enteritis were of children aged as follows :—

Under one month	..	35	6-9 months	..	14
1-3 months	..	23	9-12 months	..	11
3-6 months	..	25	1-2 years	..	10

DIARRHŒA AND ENTERITIS DEATHS UNDER TWO YEARS FROM
1913 TO 1923, WITH RATES PER 1,000 BIRTHS.

Year.	Deaths.	Rate per 1,000 Births.	
		Leeds.	England and Wales.
1913	339	31·2	24·2
1914	287	26·9	21·1
1915	282	28·6	18·9
1916	214	22·7	13·1
1917	171	22·6	12·8
1918	146	19·8	11·7
1919	140	18·5	10·2
1920	140	12·5	8·9
1921	184	18·1	16·1
1922	92	9·9	6·6
1923	118	13·6	7·7

The incidence of diarrhœa month by month is shown in the following table.

DEATHS AND METEOROLOGICAL CONDITIONS IN EACH MONTH OF
YEAR.

1923.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Deaths	4	13	7	5	7	9	13	26	15	8	5	6	118
Barom. (inches) ..	29·92	29·34	30·00	29·67	29·81	29·99	29·90	29·71	29·77	29·67	29·55	29·78	29·76
Attached Ther.°F. ..	56·48	55·31	58·44	59·63	61·51	64·52	69·12	66·54	62·58	60·08	54·00	52·97	60·09
Dry Bulb	45·51	41·29	46·47	47·44	51·45	58·56	67·50	61·94	57·71	52·42	39·67	40·86	50·90
Wet Bulb	43·38	39·60	44·19	44·52	47·78	53·92	62·31	57·85	53·81	49·40	37·85	39·41	47·84
Humidity	84·43	86·29	83·78	79·98	76·37	73·56	74·83	76·85	76·44	80·43	84·92	87·94	80·46
Mn. of highest reading	48·31	44·86	50·93	51·96	56·40	63·93	73·25	67·63	62·43	55·94	43·00	43·71	55·20
„ lowest ..	40·11	36·64	39·46	39·32	43·20	49·11	57·82	52·94	49·68	46·14	34·54	36·18	43·76
„ daily range ..	8·20	8·22	11·47	12·64	13·20	14·82	15·43	14·69	12·75	9·80	8·46	7·53	11·44
Total rainfall (inches)	1·52	3·78	1·12	1·77	3·13	0·60	3·06	3·50	2·19	2·15	3·09	2·29	28·20

The meteorological data are compiled from returns sent us by Mr. Crowther, Curator of the Museum. They are uncorrected readings, made at 10 a.m. and 4 p.m.

Influenza.—There was a considerable drop in the number of deaths registered as being due to influenza during the year as compared with the previous year. In 1922, the number was 169 and the death-rate 0·36. In 1923, there were 122 deaths with a death-rate of 0·26; this is the lowest death-rate recorded from this disease since 1917.

INFLUENZA.

Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1913	53	0·11	0·18
1914	30	0·07	0·16
1915	102	0·22	0·29
1916	65	0·15	0·25
1917	59	0·13	0·21
1918	1,401	3·28	3·13
1919	623	1·45	1·22
1920	170	0·38	0·28
1921	164	0·35	0·24
1922	169	0·36	0·56
1923	122	0·26	0·22

AGES AT DEATH FROM INFLUENZA.

1923	0-1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total.
No. of Deaths	7	3	1	2	8	20	32	49	122

Bronchitis and Pneumonia.—The total number of deaths from these two diseases were 518 and 440, as compared with 596 and 502 respectively for the year 1922. The corresponding death-rates were bronchitis 1·10, pneumonia 0·94 for 1923 and 1·28 and 1·08 respectively for the previous year.

Acute primary and acute influenzal pneumonia are the only diseases in this group which are notifiable, and during the year there were 518 cases of the former and 127 of the latter.

I am not satisfied that all cases of primary pneumonia are notified, indeed I am quite sure that many are not, and I would remind general practitioners that if the full benefit of notification of these diseases is to be obtained, it is absolutely essential that all cases should be notified as soon as diagnosed.

BRONCHITIS.

Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1913	647	1·39	1·07
1914	539	1·18	1·09
1915	738	1·61	1·44
1916	620	1·39	1·25
1917	646	1·47	1·25
1918	653	1·53	1·23
1919	741	1·72	1·24
1920	625	1·39	1·01
1921	556	1·19	0·89
1922	596	1·28	1·07
1923	518	1·10	

AGES AT DEATH FROM BRONCHITIS.

1923.	0-1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total.
No. of Deaths	41	11	6	5	4	16	133	302	518

PNEUMONIA.

Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1913	585	1.26	1.03
1914	610	1.33	1.08
1915	725	1.58	1.36
1916	586	1.31	1.07
1917	565	1.29	1.14
1918	768	1.80	1.65
1919	560	1.30	1.06
1920	622	1.39	0.99
1921	562	1.21	0.92
1922	502	1.08	1.07
1923	440	0.94	

AGES AT DEATH FROM PNEUMONIA.

1923	0-1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total
No. of Deaths	98	54	30	17	21	54	102	64	440

Cancer.—This disease is coming to be a real menace to the population of this country. At one time it took a place comparatively low down in the list of killing diseases, now it is third or fourth in importance and is on the increase. During 1923 in the City of Leeds it was directly responsible for the deaths of 574 people (or 9·6 per cent. of the total deaths) and during the previous ten years it has killed 5,254 persons (or 7·4 per cent. of the total deaths). The table on page 76 gives some indication of the extent to which the disease has grown in the last eleven years and I have also appended a table showing the position which Leeds takes amongst the large towns of England in regard to the cancer death rate.

The cause of the disease remains obscure, and without knowledge of its causation, prevention is to a large extent impossible. The best hope of success at the present time lies in early removal of the growth, by surgical means, and no opportunity should be lost of impressing on the public the necessity of looking upon all growths, swellings, or discharges of an abnormal nature—even though they appear to be trivial—which may occur after the age of forty as of serious import and of losing no time in obtaining competent medical advice thereon. Taken early many cases of cancer can be cured whilst neglect increases the bodily suffering and renders death inevitable. The tragedy of this disease is that it carries off men and women at that period of their lives when they are of the greatest use to the community hence the importance of discovering a remedy. A popular leaflet dealing with the disease was drawn up at the request of the Health Committee and issued to the public during the year. A copy of this leaflet appears in the Appendix (page 146.)

A special Committee has also been appointed by the Health Committee to go into the whole question with the object of determining what can best be done to further the campaign against the disease in the City.

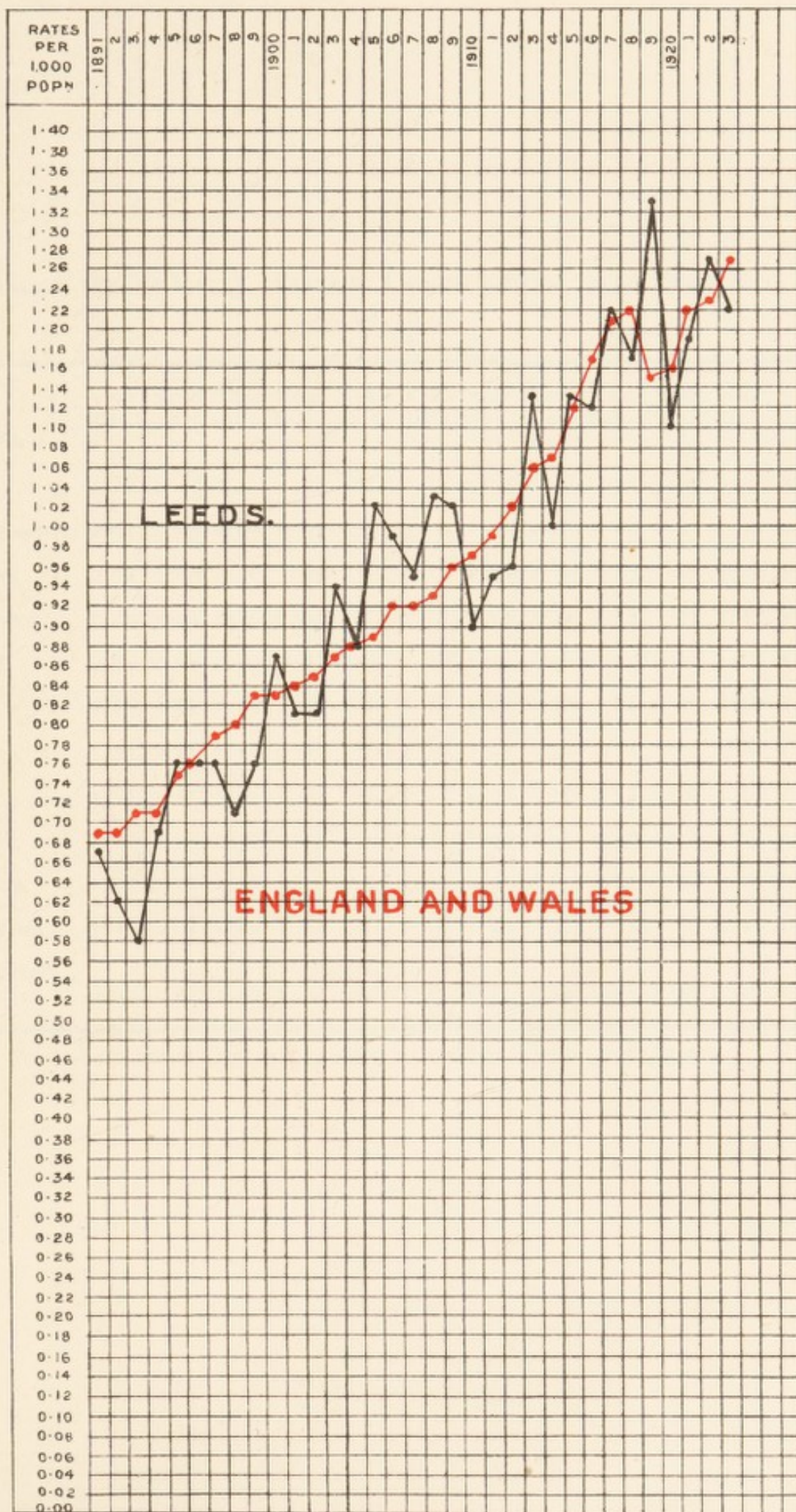
CANCER.

Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1913	525	1·13	1·06
1914	457	1·00	1·07
1915	521	1·13	1·12
1916	500	1·12	1·17
1917	535	1·22	1·21
1918	500	1·17	1·22
1919	575	1·33	1·15
1920	492	1·10	1·16
1921	554	1·19	1·22
1922	595	1·27	1·23
1923	574	1·22	

AGES AT DEATH FROM CANCER.

1923.	0-1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total.
No. of Deaths	..	..	..	4	4	56	302	208	574

CANCER DEATH RATE. — 1891 - 1923.



CANCER DEATH-RATES, ELEVEN LARGE TOWNS, ALSO ENGLAND
AND WALES.

	Year 1911.	Year 1912.	Year 1913.	Year 1914.	Year 1915.	Year 1916.	Year 1917.	Year 1918.	Year 1919.	Year 1920.	Year 1921.	Year 1922.
London ..	1.07	1.15	1.16	1.18	1.24	1.24	1.35	1.33	1.25	1.25	1.33	1.33
Birmingham..	0.91	0.95	1.05	0.92	1.04	1.06	1.06	1.03	1.09	1.11	1.10	1.16
Liverpool ..	0.94	1.02	0.99	1.05	1.01	1.11	1.08	1.10	1.03	1.07	1.10	1.06
Manchester ..	1.08	1.02	0.99	1.03	1.12	1.18	1.19	1.24	1.17	1.28	1.28	1.29
Sheffield ..	0.84	0.81	0.90	0.93	0.91	1.08	1.03	1.06	0.97	1.08	1.17	1.18
Leeds ..	0.99	1.01	1.16	1.04	1.19	1.16	1.29	1.19	1.35	1.09	1.19	1.29
Bristol ..	1.07	1.11	1.06	1.20	1.20	1.12	1.24	1.30	1.18	1.15	1.26	1.21
Hull ..	1.03	1.11	0.92	1.03	1.05	1.11	1.26	1.17	1.15	0.97	1.21	1.21
Bradford ..	1.22	1.25	1.23	1.31	1.22	1.36	1.46	1.45	1.38	1.28	1.39	1.49
Newcastle ..	0.98	0.98	0.96	1.01	0.97	1.00	0.97	0.87	1.13	0.94	1.10	1.08
Nottingham ..	1.06	1.04	1.20	1.04	1.11	1.09	1.27	1.52	1.23	1.36	1.43	1.23
England and Wales ..	0.99	1.02	1.06	1.07	1.12	1.17	1.21	1.22	1.15	1.16	1.22	1.23

The rates are calculated from figures given in the Registrar General's Annual Reports.

INFECTIOUS DISEASES HOSPITAL.

Particulars of the work of the hospital for the year are set out in the table on page 61.

AMBULANCE WORK AND DISINFECTION.

Ambulances.—In my report for 1922 I mentioned the need for the provision of a special ambulance for the removal of maternity cases. Designs for that ambulance have now been got out and the vehicle is at present in process of construction. Apart however from this special ambulance the addition of a fourth ambulance for the removal of infectious diseases and tuberculosis would be a great advantage especially in times of epidemic when the number of cases requiring removal reaches considerable proportions. Last year was a light year because of the entire absence of epidemic disease but one can never be sure when the City is going to be involved in an extensive outbreak and it is wise policy to have an extra ambulance to fall back upon in case of emergency.

The following cases were removed by the ambulances to the City Hospitals, Seacroft and Killingbeck, during 1923 :—

Smallpox	—
Scarlet Fever	1,947
Diphtheria	410
Measles	89
Typhoid Fever	14
Tuberculosis	166
Other Diseases	85
Total	2,711

In addition 32 cases of Tuberculosis were conveyed to Armley House Sanatorium. Removals of cases from Seacroft and Killingbeck Hospitals to their own homes or to other institutions numbered 30. Over and above these, 45 other journeys were made.

Disinfection.—The following work was done by the Disinfecting Staff :—

Houses disinfected	..	..	..	..	3,071
Rooms disinfected	..	..	..	..	7,641
Beds and mattresses disinfected	..	..	..	..	4,090
Articles of bed clothing disinfected	..	..	..	..	26,214
Articles of wearing apparel disinfected	..	..	..	..	41,205
Miscellaneous articles disinfected	..	..	..	..	6,872

Also 374 infected persons or contacts went, or were taken to one or other of the sanitary depots to have a disinfecting bath and disinfection of clothing carried out.

At the sanitary laundry in Stanley Road, 78,301 articles of bedding, clothing, etc., have been washed and disinfected.

Doubts have recently been cast on the efficacy of the disinfection of rooms and buildings after infectious disease and the question has been asked do the results justify the expenditure of the time and money. In my own opinion the value of disinfection lies not so much in the actual destruction of the causative germ as in the fact that it entails a thorough cleansing of the room or building. Disinfection prevents, not because it destroys but because it renders clean and thus inhibits infection.

BACTERIOLOGICAL WORK.

The following is a complete summary of the work done for the Health Department by the Department of Pathology and Bacteriology in the Leeds University Medical School, under the supervision of Professor James W. McLeod, the City Bacteriologist.

GENERAL.

NATURE OF TEST.	NUMBER OF TESTS.
Agglutination (Widal) test	13
Blood films for malaria	2
" " for diagnosis	1
" " for anaemia	2
Cerebro spinal fluid for tubercle bacilli	1
Fæces for tubercle bacilli	2
Fluid from chest for tubercle bacilli	2
Fluid from knee for organisms	1
Hair for ringworms	2
" for organisms	4
Milk for tubercle bacilli (guinea pig inoculation)	62
" for bacterial count and B. coli.	2
Mussels for organisms	1
Pus for tubercle bacilli	4
Sputum for tubercle bacilli	1,500
" for albumen	3
" for guinea pig inoculations	2
Swabs for diphtheria bacilli	1,084
Tape worm for head	1
Urine (microscopical examination)	1
" for lactose	1
" for tubercle bacilli	7
" for acetone	1
" for blood	1
" for sugar	1
Water (bacteriological examination)	48
Bacon for organisms	1
TOTAL	2,750

WORK DONE IN THE DEPARTMENT OF PATHOLOGY AND
BACTERIOLOGY OF THE UNIVERSITY OF LEEDS IN CONNECTION
WITH THE V.D. REGULATIONS.

NATURE OF TEST.	NUMBER OF TESTS.
For detection of spirochetes—	
for treatment centre	23
for practitioners	1
for institutions	4
For detection of gonococci—	
for treatment centre	393
for practitioners	27
for institutions	327
For Wassermann reaction—	
for treatment centre	2,885
for practitioners	142
for institutions	1,393
Other examinations—	
for treatment centre	142
for practitioners	..
for institutions	5
TOTAL	5,342

VENEREAL DISEASES.

There were 33 deaths certified during the year as due to syphilis. Of these 24 were children under one year of age, 12 males and 12 females; one a female between 1 and 2 years; three, one male and two females between 35 and 45 and five, three males and two females between 45 and 65.

Work of Treatment Centre.—There was a further decline in the number of new cases registered at the clinic at the Leeds General Infirmary during the year. The figures were as follows:—syphilis, males 375, females 210; gonorrhœa, males 415, females 62; other diseases not venereal, males 139, females 35. Compared with the previous year with the exception of other diseases these figures show a reduction of male syphilis, 4.1 per cent., female syphilis, 6.7 per cent., male gonorrhœa, 15.8 per cent., female gonorrhœa, 6.1 per cent. The total Leeds new cases registered during the year were syphilis—males 258, females 153; gonorrhœa—males 342, females 47; other diseases—males 103, females 46. The total attendances of all cases were 29,661 and of Leeds cases 22,156. The number of cases who ceased to attend before completion of treatment was 537 (or 8.0 per cent.) which is a higher figure than for the previous year when it was 492 (or 7.8 per cent.).

LEEDS GENERAL INFIRMARY (LOCAL TREATMENT CENTRE).

Cases on the register on January 1st, 1923	..	5,516
New cases admitted		1,236
Cases ceased to attend		537
Transferred to other centres		55
Discharged on completion of treatment		359
Cases on the register on January 1st, 1924	..	5,801

In November the clinic moved into new and more commodious premises at the Leeds General Infirmary. Up to that time the work had been carried on under very unsatisfactory conditions in small, ill-equipped rooms, badly situated and with inadequate waiting room accommodation. It says a great deal for Dr. Bibby and his staff that the work was done so well. The new premises

consist of waiting, examination and service rooms for males and females, medical consulting room, treatment cubicles, office, etc. The furnishing and equipment is of the most modern type and the general arrangement of the building is such as to enable the staff to get through the maximum number of cases with the minimum amount of fatigue to themselves or discomfort to the patients.

With the opening of these new premises it has now become possible to enlarge and make more complete the scheme for the treatment of venereal disease in the City. A report making certain suggestions towards this end was presented to the Health Committee and adopted by them in March, 1924. The following is a summary :—

“ The work of the central clinic absorbs a great share of Dr. Bibby's time, and I would suggest that it be re-arranged in such a way as to relieve him of some of the burden, which up to the present he has carried on his own shoulders. But this can only be done if additional medical help is provided. The Board of the Leeds General Infirmary have already agreed to the appointment of a female Assistant Medical Officer to help with the work of the women's side of the clinic, but owing to the lack of accommodation in the old premises, that appointment has never been made. There is now no reason why it should not be proceeded with. The agreement with the Leeds General Infirmary provides for the appointment of two Assistant Medical Officers, including the one mentioned above. The other Assistant would be a male and arrangements should be made for his appointment at once. I would suggest that the appointment in both cases be on a whole-time basis and the salary from £400 to £500 (non-resident). The male assistant would assist Dr. Bibby in dealing with the men's side of the clinic, whilst the female would devote her attention to the women's side. If it so happened that there was not sufficient work to keep the male assistant occupied for the whole of his time, it might be arranged that he should also act as House Physician to the Skin Department. The two departments, Skin and Venereal, have much in common and it would be mutually advantageous if they could work together. Under such an arrangement Dr. Bibby would have more time to devote to the details of the scheme as a whole, as well as to supervise the work at the Maternity and Hope Hospitals. I am hoping

“ to obtain the consent of the Board of Management to his
 “ appointment as consultant to the former. As regards the
 “ latter, it is my intention to withdraw the present Medical
 “ Officer, who is a member of the Maternity and Child Welfare
 “ Staff, and to ask Dr. Bibby to take over the entire supervision
 “ of this institution.

“ I do not know whether the Board of the Leeds General
 “ Infirmary would agree to Dr. Bibby, who is a member of the
 “ Staff of that institution, undertaking work outside the institu-
 “ tion itself, but for the sake of the greater efficiency of the
 “ scheme, the Board might be asked to concede this privilege.

“ I should also like, with the consent of the Health Committee,
 “ to introduce special clinics for mothers and babies attending
 “ the Infant Welfare Centres. At the present time it is found
 “ by experience that many mothers themselves infected, or whose
 “ babies are infected, cannot, for certain reasons, the chief of
 “ which is the distance between their homes and the Infirmary,
 “ attend the central clinic for treatment. If special sessions
 “ were instituted at some of the centres for the benefit of mothers
 “ and children, it might be possible for Dr. Bibby or his assistant
 “ to attend to see them and give advice as to treatment. Such
 “ an arrangement would be a most valuable adjunct to the scheme
 “ and would close up a serious gap which at present exists.

“ It might also be arranged for Dr. Bibby to act in a
 “ consulting capacity to the various Poor Law Infirmarys. This
 “ also would add to the efficiency of the scheme, because at these
 “ infirmaries there is always a considerable amount of infected
 “ material, which, because of its floating character constitutes a
 “ real danger to the community.

“ If the above suggestions were adopted, a more compre-
 “ hensive and complete scheme would result, and the V.D. officer
 “ would be in a better position to control the treatment of
 “ venereal infections in the city.

Institutions.—The in-patient days at the Leeds General Infirmary fell to 228 in 1923 from 495 in 1922. The number of patients in receipt of treatment at the Maternity Hospital also show a decrease 98 in 1923 as compared with 153 for the previous year. The new cases fell from 148 to 92 and the in-patient days from 2,142 in 1922 to 1,655 in 1923.

PERSONS TREATED AT THE GENERAL INFIRMARY, LEEDS.
(LOCAL TREATMENT CENTRE).

				Year 1922.		Year 1923.		Increase or decrease.	
				M.	F.	M.	F.	M.	F.
Syphilis ..	first cases	..	..	391	225	375	210	- 16	- 15
Soft chancre	..	..	..	..	..	..	..	..	..
Gonorrhœa	..	..	..	493	66	415	62	- 78	- 4
Other diseases	..	..	..	..	..	..	..	..	..
not Venereal	..	..	..	128	33	139	35	+ 11	+ 2
Total				1,012	324	929	307	- 83	- 17
Total attendances of all cases				32,292		29,661		- 2,631	
Aggregate No. of In-patient days				495		228		- 267	
No. of doses of Salvarsan substitutes				13,330		11,038		- 2,292	
Pathological specimens examined :—									
Spirochetes				32		30		- 2	
Gonococci				705		528		- 177	
Other organisms				82		180		+ 98	
Blood—Wassermann reaction				5,004		4,065		- 939	

LEEDS PATIENTS

	Year 1922.		Year 1923.		Increase or Decrease.	
	M.	F.	M.	F.	M.	F.
Syphilis first cases	257	161	258	153	- 1	- 8
Soft chancre	..	..	..	..	..	..
Gonorrhœa	376	48	342	47	- 34	- 1
Other diseases, not Venereal	94	23	103	46	+ 9	+ 23
Total	727	232	703	246	- 24	+ 14
Total attendances of all cases	23,380		22,156		- 1,224	
Aggregate No. of In-patient days	287		181		- 106	
No. of doses of Salvarsan sub- stitutes	9,117		7,704		- 1,413	
Pathological specimens examined :—						
Spirochetes	21		23		+ 2	
Gonococci	531		393		- 138	
Other organisms	77		142		+ 65	
Blood—Wassermann re- action	3,583		3,443		- 140	

MATERNITY HOSPITAL, 42, HYDE TERRACE.

	Cases in residence on Dec. 30th, 1922.	Cases admitted.	Cases discharged.	Cases in residence on Dec. 29th, 1923.
Syphilis	5	55	58	2
Gonorrhœa	1	30	31	..
Syphilis and Gonorrhœa	..	7	7	..
Other disease	..	..	..	..
Total	6	92	96	2

Total days in residence 1,655

No. of doses of Salvarsan substitute .. 347

Pathological specimens examined :—

Spirochetes	1
Gonococci	156
Other organisms	—
Blood—Wassermann reaction.. ..	218

HOPE HOSPITAL, 126, CHAPELTOWN ROAD.

	Cases in residence on Dec. 30th, 1922.	Cases admitted.	Cases discharged.	Cases in residence on Dec. 29th, 1923.
Syphilis	3	4	6	1
Gonorrhœa	5	23	18	10
Syphilis and Gonorrhœa	7	5	11	1
Other disease	1	2	3	..
Total	16	34	38	12

Total days in residence 5,531

No. of doses of Salvarsan substitute .. 149

Pathological specimens examined :—

Spirochetes	..
Gonococci	148
Other organisms	6
Blood—Wassermann reaction.. ..	76

The number treated in the Hope Hospital was 50 as against 58 for the previous year but the in-patient days were increased from 5,329 to 5,531 or 202 days more than in 1922. The total number of new admissions were 34 or 3 less than in the previous year.

Further particulars of the cases admitted to and treated in the Maternity and Hope Hospitals are given on page 85.

Ophthalmia neonatorum is dealt with on page 69.

Supply of Salvarsan Substitutes.—The number of medical practitioners in the area qualified to receive free supplies of salvarsan substitutes up to the end of the year was 42. The amount of salvarsan substitutes distributed to practitioners was 1,566 doses, a decrease of 572 over the figure for 1922.

Pathological Work.—The extent to which practitioners have availed themselves of the facilities for pathological examinations provided by the Council is shown on page 80.

Education and Propaganda.—The local branch of the National Council for Combating Venereal Diseases continued to carry out its duties in connection with the spread of knowledge by propaganda and in other ways during the year. It took a prominent part in the Health and Municipal Services Exhibition held in November. Several meetings were addressed by members of the Branch, and a special meeting confined to medical practitioners and students only was addressed by Colonel Harrison of the Ministry of Health. A large quantity of literature dealing with venereal disease was distributed at all the meetings.

The full Branch met once during the year and the Executive Committee five times.

TUBERCULOSIS.

In my last report I called attention to the slow progress made in the fight against this disease and asked for a special enquiry into the cause. As a result, I was instructed to prepare a report on the whole subject giving a complete survey of the work done since the inauguration of the Tuberculosis Scheme in 1913. This report was presented to the Health Committee in December, 1923. The report dealt with the historical side of the subject and traced the development of the Scheme from 1913 to 1918 when the extended Scheme

was adopted by the City Council. Figures were quoted to show that whilst there had been a reduction in the case rate there had been very little alteration in the mortality rate, the difference between the average rate for the decennium 1903—1912 (all forms) and for the decennium 1913—1922 (all forms) being 0·15 per 1,000. For pulmonary tuberculosis the advantage lay with the decennium 1903—1912 which had an average rate of 1·30 as compared with 1·34 for the decennium 1913—1922. A comparison was also drawn with the other large towns, notably Birmingham, where there had been a remarkable reduction in the tuberculosis mortality rate in the same period. The report then went on to enumerate the parts of the Scheme of 1918 which had actually materialized in the intervening period and those which were in process of materializing, and ended up by making the following recommendations :—

- (a) Increase of the medical staff and re-organisation of the work at the Central Tuberculosis Dispensary.
- (b) Better organisation of the domiciliary work.
- (c) Re-organisation of the work of the two Sanatoria at Killingbeck and Gateforth together with an extension of the accommodation at both places sufficient to meet the present needs.
- (d) More perfect co-ordination between Dispensary and Sanatoria.
- (e) Provision of facilities for dental and X ray work at Central Tuberculosis Dispensary and Sanatoria.
- (f) Erection of a new Sanatorium for women and children.

Following upon this report the Committee decided to carry into effect that part of the 1918 Scheme which recommended (a) the appointment of a Consulting Tuberculosis Officer (part time) and (b) the appointment of a Chief Clinical Tuberculosis Officer (whole time), the latter to have entire administrative responsibility as far as the clinical side of the work was concerned. Dr. H. de Carle Woodcock, the present Clinical Tuberculosis Officer, has been appointed to the former post and the latter is in process of being filled.

The Committee also decided to close the Armley House Sanatorium, the lease of which had run out, and the patients were transferred to Killingbeck at the beginning of the current year. Killingbeck Sanatorium has never carried its full complement of patients, and even with the additional 52 beds, resulting from the

closing of Armley House, is still capable of further extension. In face of the fact however that at any moment the buildings may be required for smallpox it would be unwise to consider any further increase of accommodation at this institution.

The saving effected by the closure of Armley House made it possible to continue with the scheme for the conversion of The Hollies, Weetwood, into an institution for the treatment of children in the early stages of the disease. This building is at present being put into order and it is fully anticipated will be ready to receive children at the end of September. There will be room for 40 children and the minimum period of residence proposed is from three to six months. In certain cases this period will be lengthened. Facilities will be provided for the education of the children during residence and for this purpose the assistance and advice of the local Education Authority will be sought. Cases will be selected for admission by the Tuberculosis Officers in consultation with the school Medical Officer, and, wherever the income will allow, parents will be expected to contribute towards the cost of maintenance of their children whilst in residence.

After The Hollies has been opened the total Institutional accommodation for tuberculosis in the City will be as follows :—

PULMONARY.

	Males.		Females.		Children.
Killingbeck	88	..	27	..	54
Gateforth ..	38	..	12	..	—

NON-PULMONARY.

				Children.
The Hollies	..	..	..	.. 40
Marguerite Home, Thorparch	..	..	..	.. 20
Lord Mayor Treloar's Hospital	..	..	..	.. 12

As soon as the Chief Clinical Tuberculosis Officer has been appointed, the reorganisation of the work at the Central Tuberculosis Dispensary will be proceeded with.

As regards additional sanatorium accommodation, particularly for women and children, this matter will have to be considered at an early date as it is most important that a definite decision should be arrived at with regard to the proposal to build a new sanatorium as outlined in the scheme of 1918.

I should also like to see an effort made to provide employment at remunerative rates for all tuberculous civilians capable of doing any work at all under healthy, open air conditions on lines similar to the scheme launched by the Tuberculous Ex-Service Men. Idleness has a depressing effect on mind and body and retards recovery. Meaningless work such as is sometimes set consumptives to do is equally uninspiring. What is wanted is employment suited to the individual temperament and capable of stimulating effort and sustaining interest. Such work in the case of a man with dependents has the additional advantage of providing the means of keeping the home going and the wolf from the door. To be freed from anxiety on this score alone is an invaluable aid to recovery.

I append to this section a statement by Dr. H. de Carle Woodcock on the present position of the Tuberculosis Scheme in Leeds. (Page 107.)

Statistics.—During the year, 1,002 cases of pulmonary and 197 of non-pulmonary tuberculosis were notified, making a total of 1,199 cases. Of these, 619 were males and 580 females. Compared with the previous year, this is a decrease of 178 in the number of notifications of pulmonary tuberculosis and an increase of 25 in the number of notifications of non-pulmonary tuberculosis, and compared with the average cases notified for the previous five years, an increase of 9 in pulmonary tuberculosis and a decrease of 16 in non-pulmonary tuberculosis. Of the cases notified during 1923, 953 were by medical practitioners, 18 by school medical officers, whilst 228 came from institutions. The number of cases of pulmonary tuberculosis not heard of until the time of death was 112, which is a decrease of two on the figure for the previous year, or put in another way, of the total number of deaths from pulmonary tuberculosis which occurred during the year, all but 112 (or 21·7 per cent.) had been previously notified to the Public Health Department.

After all that has been said and written with regard to the necessity of immediate notification it is very discouraging to find that the number of unnotified cases remains so high. It is a proof

that the general medical practitioners in the City either fail to appreciate the value of notification or are entirely indifferent. I am reluctant to believe the latter. If they would only realise how much of the success of the tuberculosis scheme depends on the promptitude with which knowledge of the cases reaches the Public Health office, they would, I am sure, give greater attention to this matter. I would therefore renew my appeal to all medical men and women practising in the City to co-operate with the Public Health Department in trying to make the scheme in Leeds as effective as possible.

An analysis of the notifications in age groups is given on page 91.

The total deaths from tuberculosis of all types during the year numbered 637, of which 361 were males and 276 females. Compared with the previous year, this is a decrease of 16 on the total deaths, and a decrease of 98 on the average of the previous five years. Pulmonary tuberculosis accounted for 515 (or 80.8 per cent.) of the total deaths from tuberculosis and non-pulmonary 122 (or 19.2 per cent.). The death-rate from pulmonary tuberculosis was 1.10 per thousand of the population, non-pulmonary tuberculosis 0.26, making a total rate from both forms of tuberculosis of 1.36. These rates are with one exception lower than those for the previous year, which were 1.14, 0.26 and 1.40 respectively, and also lower than the average of the previous five years, which were 1.28, 0.37 and 1.65. In a year so phenomenally healthy it is somewhat disappointing to find that the decrease of the death-rate from pulmonary tuberculosis is as small as 0.04 per thousand of the population as compared with the previous year. In this connection it is interesting to remark that the death-rate from respiratory diseases other than tuberculosis shows a much more marked reduction from 2.55 to 2.25. As a rule when the respiratory death-rate is high the death-rate from pulmonary tuberculosis is correspondingly increased, and it would naturally follow that the converse ought to be true.

An analysis of the deaths in each group is shown on page 93, and the distribution of deaths from pulmonary tuberculosis in the various wards in the City on page 94.

The following tables show the number of notifications of tuberculosis received during the year.

PULMONARY.

Ages.	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total.
Males ..	3	13	48	89	93	122	78	45	19	510
Females	2	8	78	146	136	68	32	16	6	492
Totals ..	5	21	126	235	229	190	110	61	25	1002

NON-PULMONARY.

Ages.	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total.
Males ..	2	19	52	29	5	..	2	..	..	109
Females	2	14	36	15	11	5	4	1	..	88
Totals ..	4	33	88	44	16	5	6	1	..	197

The housing conditions of 1,141 of the 1,199 cases of tuberculosis (all forms) notified, are shown in the table subtended :—

Rooms in house.	Through house.	Percentage of total throughs.	Back-to-back house.	Percentage of total back-to-back.	Percentage of total cases.
1 room	1	0.4	1	0.1	0.2
2 rooms	5	1.8	171	19.7	15.4
3 rooms	27	10.0	358	41.1	33.7
4 rooms	54	19.9	252	29.0	26.8
5 rooms	91	33.6	56	6.4	12.9
6 rooms	52	19.2	27	3.1	6.9
7 or more rooms	41	15.2	5	0.6	4.0
Total	271	100.0	870	100.0	100.0

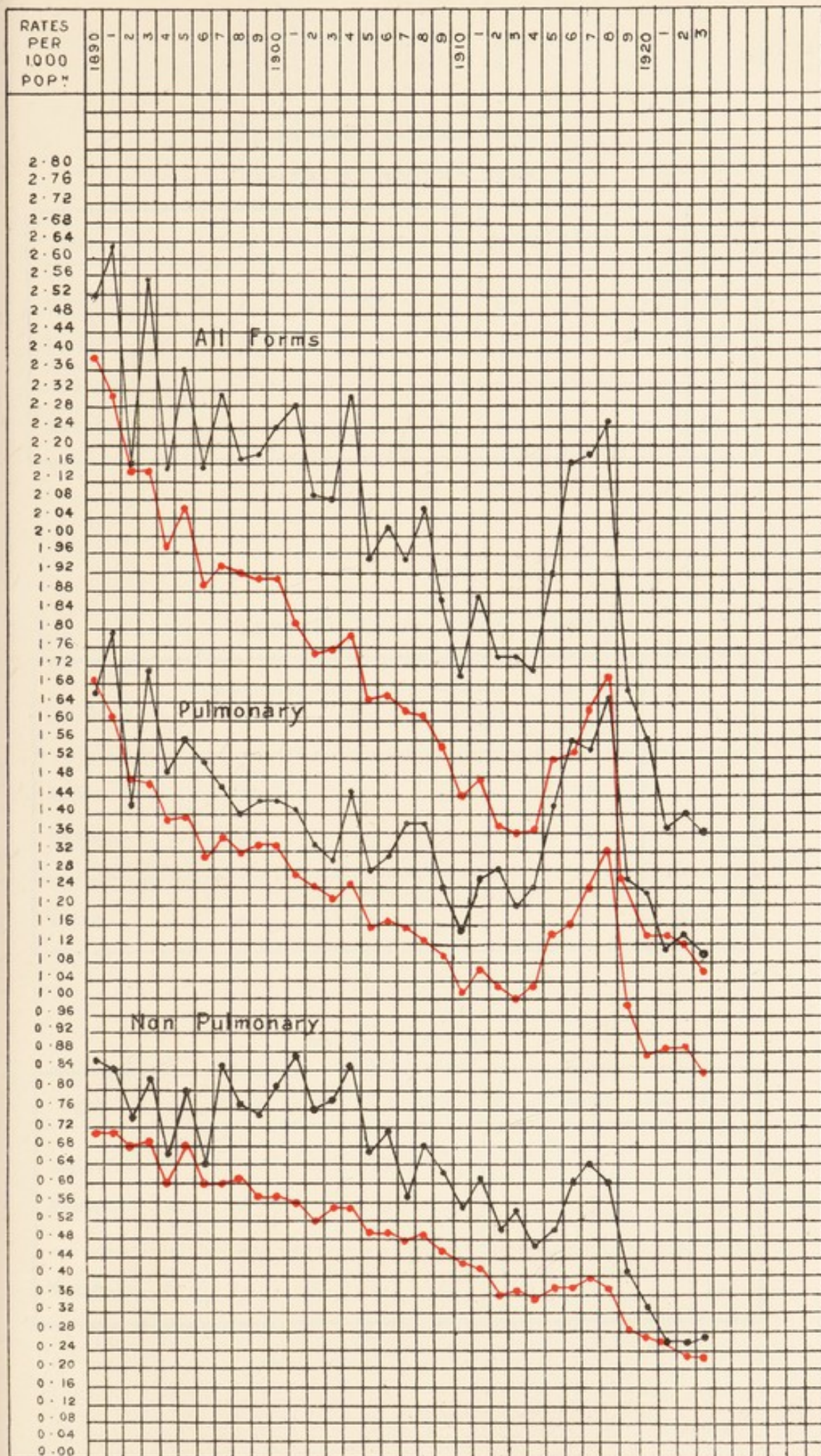
In addition to the 271 through houses and 870 back-to-back houses, there were 54 cases notified from common lodging houses, etc., and four that could not be traced, making a total of 1,199 cases of all forms of tuberculosis notified during the year.

TUBERCULOSIS.

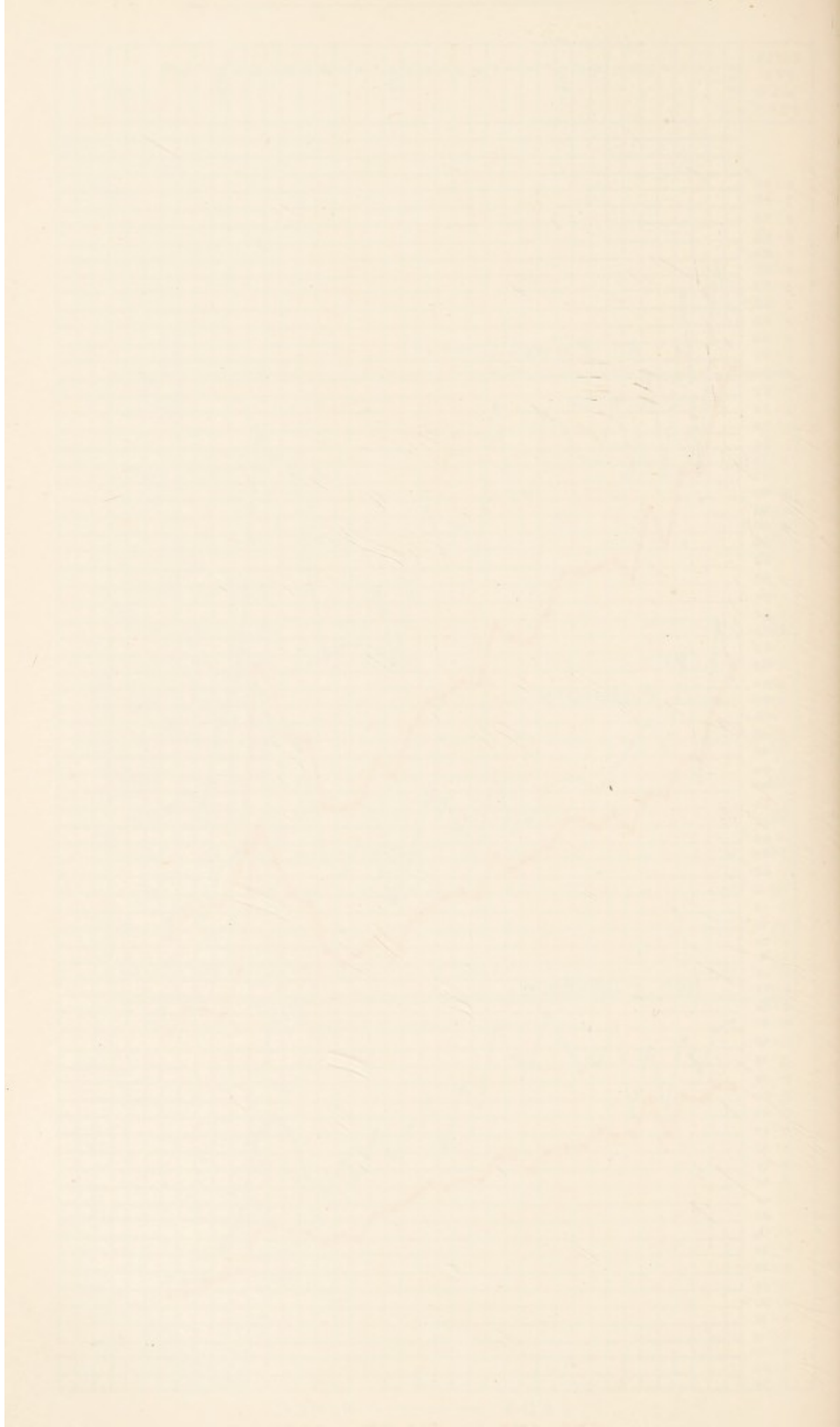
YEAR.	DEATHS.						NOTIFICATIONS.					
	Pulmonary tuberculosis.		Non-pulmonary tuberculosis.		All forms tuberculosis.		Pulmonary tuberculosis.		Non-pulmonary tuberculosis.		All forms tuberculosis.	
	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Cases.	Case-rate.	Cases.	Case-rate.	Cases.	Case-rate.
1913†	557	1·20	250	0·54	807	1·74	1,479	3·18	..	..	..	..
1914	569	1·24	213	0·47	782	1·71	1,310	2·86	307	0·67	1,617	3·53
1915	651	1·42	230	0·50	881	1·92	1,068	2·33	312	0·68	1,380	3·01
1916	695	1·56	268	0·60	963	2·16	1,029	2·31	320	0·72	1,349	3·03
1917	674	1·54	280	0·64	954	2·18	1,081	2·47	336	0·77	1,417	3·24
1918	705	1·65	257	0·60	962	2·25	1,238	2·90	241	0·56	1,479	3·46
1919	542	1·26	177	0·41	719	1·67	1,076	2·50	208	0·48	1,284	2·98
1920	552	1·23	146	0·33	698	1·56	962	2·14	209	0·47	1,171	2·61
1921	519	1·11	122	0·26	641	1·37	867	1·86	234	0·50	1,101	2·36
1922	533	1·14	120	0·26	653	1·40	824	1·77	172	0·37	996	2·14
1923	515	1·10	122	0·26	637	1·36	1,002	2·13	197	0·42	1,199	2·55

† Tuberculosis.—All forms made compulsorily notifiable in 1913.

TUBERCULOSIS DEATH RATE.— 1890 - 1923.



LEEDS ——— BLACK.
ENGLAND AND WALES — RED.



PULMONARY TUBERCULOSIS.

DEATHS AT VARIOUS AGES.

1923.	-5	5-10	10-15	15-20	20-25	25-45	45-65	65+	Total.
Males ..	14	1	4	20	21	124	91	14	289
Females	10	5	18	33	32	87	34	7	226
TOTALS	24	6	22	53	53	211	125	21	515

NON-PULMONARY TUBERCULOSIS. DEATHS.

1923.	Tubercular meningitis.	Abdomin- al.	Bones and Joints.	Other tuber- culosis.	Total.
Males ..	27	19	8	18	72
Females ..	20	17	2	11	50
Totals ..	47	36	10	29	122

AGES AT DEATH.

Ages.	-5	5-10	10-15	15-20	20-25	25-45	45-65	65+	Total.
Males ..	32	9	4	6	7	6	8	..	72
Females	20	6	2	6	5	7	4	..	50
Totals ..	52	15	6	12	12	13	12	..	122

PHTHISIS DEATHS IN WARDS.

WARD.	Deaths.	Rate per 1000 Population.	WARD.	Deaths.	Rate per 1000 Population.
Central ..	25	1·95	Mill Hill ..	5	0·92
North ..	42	0·97	West ..	36	1·59
North-East ..	52	1·41	North-West ..	35	1·08
New Ward*..	2	0·25	Brunswick ..	17	0·69
East ..	58	1·60	New Wortley	27	1·48
South ..	17	1·29	Armley and Wortley ..	23	0·61
East Hunslet†	44	1·22	Bramley ..	13	0·54
West Hunslet	33	0·89	Headingley ..	44	0·86
Holbeck ..	42	1·39	Total ..	515	1·10

*Roundhay, Seacroft, Shadwell, and Crossgates.

†Including Middleton.

The sub-joined table indicates the type of house occupied by 207 of the 637 persons who died of tuberculosis of all forms during the year :—

Rooms in house.	Through house.	Percentage of total throughs.	Back-to- back house.	Percentage of total back-to-back.	Percentage of total deaths.
1 room ..	..	..	..	..	..
2 rooms ..	..	..	37	22·2	17·9
3 rooms ..	4	10·0	67	40·1	34·3
4 rooms ..	13	32·5	44	26·3	27·5
5 rooms ..	13	32·5	12	7·2	12·1
6 rooms ..	4	10·0	7	4·2	5·3
7 or more rooms	6	15·0	..	..	2·9
Total ..	40	100·0	167	100·00	100·00

In addition to 40 through houses and 167 back-to-back houses, there were 24 deaths in which the home address was given as common lodging houses, etc.

DEATHS FROM ALL FORMS OF TUBERCULOSIS IN 1923 WITH YEAR
OF NOTIFICATION.

Year of Notification.			No. dying in 1923.	Percentage of total deaths.
1910	..	..	2	0.3
1911	..	..	2	0.3
1912	..	..	5	0.8
1913	..	..	4	0.6
1914	..	..	5	0.8
1915	..	..	12	1.9
1916	..	..	7	1.1
1917	..	..	6	0.9
1918	..	..	9	1.4
1919	..	..	11	1.7
1920	..	..	17	2.7
1921	..	..	29	4.6
1922	..	..	108	17.0
1923	..	..	231	36.3
Not notified	..		189	29.7
Total	..		637	100.0

NOTIFICATIONS AND DEATHS FROM ALL FORMS OF TUBERCULOSIS
OCCURRING IN 1923 CLASSIFIED ACCORDING TO OCCUPATION.

Occupation.	Notifications.		Deaths.	
	Number.	Percentage of total Notifications.	Number.	Percentage of total deaths.
Textile Workers ..	247	20·6	103	16·2
Leather „ ..	27	2·3	16	2·5
Metal „ ..	119	9·9	62	9·7
Coal „ ..	54	4·5	20	3·1
Stone „ ..	32	2·7	22	3·5
Wood „ ..	11	0·9	10	1·6
Other dusty Trades	30	2·5	9	1·4
Printers	16	1·3	10	1·6
Clerks, Typists, etc. ..	38	3·2	18	2·8
House Workers ..	156	13·0	92	14·4
Nurses	9	0·8	—	—
Food Trades, etc. ..	24	2·0	32	5·0
Labourers	45	3·8	31	4·9
Out-door Workers ..	53	4·4	32	5·0
Various	43	3·6	33	5·2
School Age	204	17·0	46	7·2
Infants	54	4·5	74	11·6
No Occupation ..	14	1·2	26	4·1
No Trace	23	1·9	1	0·2
Total ..	1,199	100·00	637	100·00

Institutional Treatment.—Details of the cases admitted to the three Sanatoria, Killingbeck, Gateforth and Armley House are given in the tables on pages 98, 100 and 102.

Killingbeck.—The Medical Superintendent, Dr. W. A. Todd, writes :—

“ During the year ended 29th December, 1923, the total number
“ of cases treated in the institution was 895 as compared with 733 for
“ the previous year. Of the total, 286 were Ex-Service men.

“ All types of the disease were admitted but pulmonary cases
“ predominated, there being 832 of this type. The non-pulmonary
“ cases numbered 63.

“ The number of pneumo-thorax injections was 62.

“ The conduct of the patients throughout the year was very satis-
“ factory. A certain number of patients whose physical condition
“ permitted were put to light tasks—the majority, however, were too
“ ill to undertake any work which called for sustained effort.

“ It is hoped to have an open-air schoolroom going this year for the
“ education of the children resident here.

“ To bring the Sanatorium up-to-date the following are required :—

“ (1) An X-ray outfit, which would be of value in aiding diagnosis,
“ especially of surgical cases, also for the better control of
“ pneumo-thorax treatment.

“ (2) A dental room and equipment, as the teeth of the great
“ majority of the patients require attention. Oral sepsis
“ not only retards treatment but is often at the root of much
“ of the intercurrent disease which is so common amongst
“ tuberculosis subjects.

“ (3) A small surgical theatre and plaster room, as at present
“ we have no proper facilities for dealing with surgical cases.

“ Poultry keeping on a small scale was started during the year and
“ so far has proved successful. From 130 fowls, the hospital was
“ supplied with 11,392 eggs, and in addition sufficient turkeys and geese
“ to meet the Christmas demand were reared.

“ The pigs have also proved profitable, and the amount received
“ from this source during the year was £188 3s. 1d.

“ For the first three months of the year one of the wards was given
“ over for the treatment of measles.”

Killingbeck.

PULMONARY TUBERCULOSIS FOR YEAR ENDED
29TH DECEMBER, 1923.

KILLINGBECK SANATORIUM.	Males.		Females.		Total.
	Under 15	Over 15	Under 15	Over 15	
Remaining Dec. 30th, 1922.	18	65	13	30	126
Admitted	56	386	58	206	706
Discharged	56	333	52	178	619
Died	4	42	4	23	73
Remaining Dec. 29th, 1923	14	76	15	35	140

Average length of stay, 72 days.

ANALYSIS OF CASES DISCHARGED.

KILLINGBECK SANATORIUM.	Males.		Females.		Total.
	Under 15	Over 15	Under 15	Over 15	
Disease arrested	36	87	38	36	197
„ improved	18	171	11	110	310
„ not improved	2	75	3	32	112
TOTALS	56	333	52	178	619

Restoration of working capacity—				Males.	Females.	Total.
100 per cent. approximately	..	..	..	72	31	103
80	„	„	..	74	33	107
60	„	„	..	55	57	112
40	„	„	..	25	8	33
20	„	„	..	21	17	38
10	„	„	..	11	..	11
TOTALS	..	..	..	258	146	404

NON-PULMONARY TUBERCULOSIS FOR YEAR ENDED
29TH DECEMBER, 1923.

KILLINGBECK SANATORIUM.	Males.		Females.		Total.
	Under 15	Over 15	Under 15	Over 15	
Remaining Dec. 30th, 1922	..	3	8	1	12
Admitted	10	17	14	10	51
Discharged	10	17	10	10	47
Died	..	..	..	1	1
Remaining Dec. 29th, 1923	..	3	12	..	15

Average length of stay, 110 days.

ANALYSIS OF CASES DISCHARGED.

KILLINGBECK SANATORIUM.	Males.		Females.		Total.
	Under 15	Over 15	Under 15	Over 15	
Disease arrested	2	1	4	..	7
.. improved	7	15	6	8	36
.. not improved	1	1	..	2	4
TOTALS	10	17	10	10	47

Restoration of working capacity—				Males.	Females.	Total.
100 per cent. approximately	..	..	..	1	..	1
80	..	..	..	5	4	9
60	..	..	..	4	3	7
40	..	..	..	5	..	5
20	..	..	..	1	1	2
10	..	..	..	..	..	..
TOTALS	..	..	..	16	8	24

Gateforth.

PULMONARY TUBERCULOSIS FOR YEAR ENDED 29TH DECEMBER, 1923.

GATEFORTH SANATORIUM.	Males.		Females.		Total.
	Under 15	Over 15	Under 15	Over 15	
Remaining Dec. 30th, 1922	..	34	..	11	45
Admitted	2	110	..	52	164
Discharged	2	107	..	51	160
Died	..	..	..	..	..
Remaining Dec. 29th, 1923	..	37	..	12	49

Average length of stay, 81 days.

ANALYSIS OF CASES DISCHARGED.

GATEFORTH SANATORIUM.	Males.		Females.		Total.
	Under 15	Over 15	Under 15	Over 15	
Disease arrested	..	37	..	23	60
„ improved	1	47	..	23	71
„ not improved	1	23	..	5	29
TOTALS	2	107	..	51	160

Restoration of working capacity—		Males.	Females.	Total.
100 per cent. approximately	..	37	23	60
80 „ „	..	21	15	36
60 „ „	..	27	8	35
40 „ „	..	17	4	21
20 „ „	..	5	1	6
10 „ „	..	2	0	2
TOTALS	..	109	51	160

NON-PULMONARY TUBERCULOSIS FOR YEAR ENDED
29TH DECEMBER, 1923.

GATEFORTH SANATORIUM.	Males.		Females.		Total.
	Under 15	Over 15	Under 15	Over 15	
Remaining Dec. 30th, 1922	..	1	..	1	2
Admitted	..	2	..	1	3
Discharged	..	2	..	2	4
Died	..	..	..	..	..
Remaining Dec. 29th, 1923	..	1	..	..	1

Average length of stay, 64 days.

ANALYSIS OF CASES DISCHARGED.

GATEFORTH SANATORIUM.	Males.		Females.		Total.
	Under 15	Over 15	Under 15	Over 15	
Disease arrested	..	1	..	..	1
„ improved	..	1	..	2	3
„ not improved	..	..	..	..	..
TOTALS	..	2	..	2	4

Restoration of working capacity—					Males.	Females.	Total.
100 per cent. approximately	..	..	..	..	1	..	1
80	..	..	..	..	1	2	3
60	..	..	..	..	..	..	..
40	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..
10	..	..	..	..	..	..	..
TOTALS	..	..	..	..	2	2	4

Armley.

PULMONARY TUBERCULOSIS FOR YEAR ENDED
29th DECEMBER, 1923.

ARMLEY HOUSE SANATORIUM.	Males.		Females.		Total.
	Under 15	Over 15	Under 15	Over 15	
Remaining Dec. 30th, 1922	..	..	10	25	35
Admitted	..	..	27	145	172
Discharged	..	..	26	130	156
Died	..	..	2	7	9
Remaining Dec. 29th, 1923	..	..	9	33	42

Average length of stay, 76.1 days.

ANALYSIS OF CASES DISCHARGED.

ARMLEY HOUSE SANATORIUM.	Males.		Females.		Total.
	Under 15	Over 15	Under 15	Over 15	
Disease arrested	..	..	..	..	..
„ improved	..	..	20	104	124
„ not improved	..	..	6	26	32
TOTALS	..	..	26	130	156

NON-PULMONARY TUBERCULOSIS FOR YEAR ENDED
29th DECEMBER, 1923.

ARMLEY HOUSE SANATORIUM.	Males.		Females.		Total.
	Under 15	Over 15	Under 15	Over 15	
Remaining Dec. 30th, 1922	..	..	1	1	2
Admitted	..	..	7	11	18
Discharged	..	..	5	6	11
Died	..	..	..	..	..
Remaining Dec. 29th, 1923	..	..	3	6	9

Average length of stay, 88.6 days.

ANALYSIS OF CASES DISCHARGED.

ARMLEY HOUSE SANATORIUM.	Males.		Females.		Total.
	Under 15	Over 15	Under 15	Over 15	
Disease arrested	..	..	..	..	..
„ improved	..	..	4	6	10
„ not improved	..	..	1	..	1
TOTALS	..	..	5	6	11

Garforth.—This institution has continued to be conducted on industrial colony lines. Patients of both sexes in whom the disease is in the early stages or has been arrested are sent here for recuperative exercise and training. Facilities have been provided for instruction in gardening, pig keeping, poultry keeping and joinery and each patient is expected to engage in such work as best suits his physical condition and temperament. Dr. H. Mainwaring Holt, the Medical Superintendent keeps a close supervision over the work of the patients and regulates the hours of work and the amount which each is capable of doing. Generally speaking the physical condition of those treated in Garforth improves very markedly though there are always a certain number who do not respond.

Armley House.—One hundred and thirty-four cases (or 60 per cent.) were under treatment for over three months and the remainder left or died before the three months period was completed.

During the year 34 females had pneumothorax treatment as in-patients and in addition 24 persons attended as out-patients to have the treatment repeated. For this purpose the out-patients made a total of 156 visits.

The following substances were tried in certain cases with varying success:—Colloidal Calcium, Amyl-thio-trimethoiline (pneumosan), Sodium Morrhuate and Chaulmoogra Oil.

Armley House was closed as a sanatorium at the beginning of the current year and the patients transferred to Killingbeck. Further reference to this will be found on page 87.

Accommodation for Children.—As already mentioned see page 88, arrangements have been made for opening The Hollies, Weetwood Lane, as a sanatorium school particularly for the treatment of children with early signs of tuberculosis in some part of the body, lungs excepted. A description of the building was given in my last annual report. It is anticipated that the building will be ready to receive patients about the end of September, 1924, and ought to prove a very useful adjunct to the Tuberculosis Scheme. Money and effort cannot better be expended than in saving the children.

Cases of surgical tuberculosis in children continued to be sent for treatment to institutions outside the City. During the year

30 children were treated in the beds reserved for Leeds cases in the Marguerite Home, Thorparch, and 11 cases in the Lord Mayor Treloar's Hospital, Alton, Hampshire.

Central Dispensary.—Particulars of the work of the Central Dispensary are given in the table on page 105. The total number of clinical examinations were 6,583. The number who have attended were men 1,231, women 598, and children 438, total 2,267.

In addition to the ordinary medical work of the Dispensary, a certain number of patients attend regularly to receive treatment for surgical conditions of a minor degree, the number of such during 1923 was 180 and the total attendances 2,224. The cases treated included :—

Glands and abscesses	64 cases.
Tuberculin tests	31 cases.
Wasserman tests	64 cases.
Galyl injections for tuberculosis and syphilis	18
Insulin injections for phthisis with diabetes mellitus	325
Dressings and fomentations for discharging wounds	869
Injections of chemo-therapeutic substances ..	59 cases.
Tuberculin injections	85 cases.
Plaster applications and cellulose splints for joint tuberculosis	25 cases.

In the laboratory the following tests were made :—

Urines	1,228
Blood sugar tests for diabetes	20
Urine quantitative tests for sugar	40
T. B. cultures	30

The number of pneumothorax injections was 23, of which 10 took place at the Dispensary and 13 in the homes of the patients.

During 1923 X-ray examinations were made in 346 cases, 299 being adults and 47 children.

Special reports referring to tuberculous pensioners to the number of 1,846 were issued to the Ministry of Pensions.

PATIENTS EXAMINED AT CENTRAL TUBERCULOSIS DISPENSARY FROM JANUARY 1ST TO DECEMBER 29TH, 1923.
PULMONARY TUBERCULOSIS.

	New patients.		Number bacteriologically positive.		Number clinically positive, but not T.B.		Number found not to be tuberculous.		Number recommended for Sanatoria.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Insured	..	..	379	203	77	32	187	130	115	41	226	147
Non-insured	..	..	79	233	10	25	44	159	25	49	33	147
OTHER FORMS OF TUBERCULOSIS.												
	New patients.		Glands.		Bones and joints.		Abdominal.		Others and indefinite.		Number recommended for Sanatoria.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Insured	18	14	3	5	3	3	6	3	6	3	14	9
Non-Insured	77	46	38	28	12	7	7	4	20	7	30	11

Total attendances of all cases:—Males .. 20,594
 Females .. 15,199
 Total .. 35,793

Contacts.—The number of new contact cases examined during 1923 was 450 (193 adults and 257 children under 15 years of age), and the number of old contacts re-examined 110, making a total number of 560 cases examined. The total number of examinations of contacts was 874. The result of these examinations of new cases was 181 (or 40·2 per cent.) were found to have definite signs of tuberculosis, 147 (or 32·7 per cent.) were suspicious, and 122 (or 27·1 per cent.) had no signs. Of the 181 definite cases, 147 (or 81 per cent.) were adults over 15 years of age and 34 (or 19 per cent.) children under fifteen years. Of the 110 old cases re-examined 92 (or 84 per cent.) were definitely tuberculous.

Domiciliary Work.—The Medical Officers made 445 visits to the patients homes for the purpose of consultation, re-examination, special treatment or other cause. The nurses attached to the Dispensary staff made a total of 21,091 visits, of which 3,008 were to ex-service men, 1,117 for environmental reports, 16,043 re-visits to civilians, and 923 visits to contacts.

Care Work.—The Leeds Association for the Care of the Consumptive which is the body to which has been entrusted the making of arrangements for the care and after-care of persons suffering from tuberculosis has accomplished much useful work throughout the year. The following is a summary.

Convalescent Treatment.—This is perhaps the most important branch of care work; it is certainly the one which yields the best results. It is true preventive effort and any money or effort expended on it is sure of a return. To save the threatened is better than to rescue the condemned. It is my firm conviction that if the tuberculosis problem is to be solved it will be by the agency of the "preventorium" rather than the sanatorium. Recuperative treatment was provided for in 73 cases at a net cost to the Committee of £271 3s. 9d.

Clothing and Bedding.—Clothing, bedding and beds have been supplied to 69 cases at a cost of £9 16s. 4d.

Money Grants.—The following financial assistance to tide families over periods of acute distress have been given in 34 cases and the amount thus expended was £104 os. 4d. This sum includes the cost of providing home helps and other domestic assistance in cases where the mother was the person affected.

Employment Grants.—A small sum of money £5 3s. 10d. was expended in return for the labour of certain number of persons too far disabled to undertake regular employment. The work was chiefly done in their own homes and consisted of sewing, knitting, mending, etc.

Food.—Extra nourishment chiefly in the shape of milk and eggs was supplied to a number of cases in ill-health who were suspected of being tuberculous but who showed no definite symptoms and were thus outside the scope of the ordinary nourishment grant. The cost of this extra food was £35 4s. 6d.

Appliances and Sick room Accessories.—Crutches, splints, special boots, etc., were supplied to 21 cases at a cost of £19 17s. 11d, and air cushions, water beds, hot water bottles, etc., were lent to bedridden patients in need of them.

Assisted in Other Ways.—Twenty-one other persons were assisted in one way or another.

Milk and Extra Nourishment.—The grant for the supply of milk and extra nourishment to persons suffering from tuberculosis is administered by the Care Committee on behalf of the Health Committee. The amount disbursed during the year was £733 and the number of persons assisted excluding repeats 341, (repeats 1,329). The number of milk coupons issued was 1,690.

Total Services rendered.—The total persons assisted were 559, expenditure £533 5s. od., income £554, balance in hand at end of year £20 15s. od.

Visits and interviews.—The Secretary's visits and interviews numbered 2,548.

Meeting of Committee.—The Committee has met 38 times during the year, and has considered and decided 2,101 applications.

The thanks of the Health Committee are due to the members of the Care Committee for the time and thought they give to the work.

Summary of report on the Tuberculosis Scheme by Dr. H. de Carle Woodcock, M.D., M.R.C.S., F.R.C.P.(Edin.), D.P.H.

The great wave of sanitary reform began about the end of the nineteenth century and it was about the same time that the death-rate from tuberculosis began to decline in England and Wales. It is often stated that our civilisation has purged itself of the grosser attacks of the disease independent of anything that medical science has done. This absurd statement shows that some people forget that the medical man and his work are a part of that civilisation. The death-rate has not fallen everywhere. The disease has become more virulent in some countries where a state of war existed or the effects of war were felt; it is not dying of senile decay. Moreover it shows a different face under different conditions; the problem in the town differs from that in the country; it differs also according to age, diseases of bones and joints, for instance, being chiefly found in children; it differs also as the disease is of human or bovine origin.

Modern methods of investigation, especially X-ray investigation, have shown that an enormous number of our industrial workers are subject to extensive fibrosis of the lung and pleura. Now fibrosis of the lung is scarring of the lung, the result of inflammation, a sequel of disease (such as pneumonia) or of the inhalation of some form of irritating dust, of which silica dust is the most potent for evil. We know that these dusts have the power of injuring the lung not only because they are gritty, but because some of them have a chemical action upon the delicate lung structures, which is in itself also a profound cause of injury. Once the lung is injured it is easily infected, and the tubercle bacillus is difficult to keep out; just as the germ of erysipelas is difficult to keep out of an uncared for wound on the surface of the body. This question of dust includes a consideration of the earthy dusts found in all textiles, such as carpet or cloth.

I would turn now to the work done in a city such as Leeds in dealing with the actual patient.

Overcrowding means the exposure of the individual to possible infection, and certainly always causes a reduction of vitality in the person so exposed. The exact opposite to such a condition is found in a perfectly ventilated room, or in a pure outside atmosphere. Overcrowding in houses, in workshops, in places of recreation or in public conveyances should be sternly prohibited. As an example the high tuberculosis death rate amongst barmen is due, I believe, more to their general mode of life than to any alcoholic habit, though I do not disregard the latter.

The death rate among trades, varying as it does, is receiving most earnest study by specialists. I have shouted from the housetops, and shall continue so to shout, that the workshop conditions should be controlled by the Local Health Authority.

I have lately reviewed our methods of dealing with the tuberculosis of a big city. It is a fact that any organisation which reduces the number of cases of any one form of disease reduces the number in all other forms of disease. Thus if one reduces the number of cases of measles, or of scarlet fever, or of diphtheria, there is a corresponding reduction in the number of cases of tubercle. Tuberculosis is the sequel of so many diseased conditions that it is difficult to be quite sure when a case say of measles has escaped its clutches.

Tuberculosis Dispensary.—The Tuberculosis Dispensary is the key to the situation. It has four main functions; (1) to receive and investigate the illness and cause of illness of all patients sent to it by all the other medical agencies of the city, and especially by the general medical practitioner; (2) to trace, from the cases sent in and proved to be tuberculous all other cases associated with them, and possibly also infected by them; in other words the contacts. Contacts may be (a) children suffering from a direct infection; (b) adolescents and adults suffering from a direct infection or who have shown chronic tuberculous

manifestations from childhood, or who though infected in childhood have not suffered until their general health condition has been reduced by the evils of environment and the debilitating effects of other diseases, of which the worst is apparently influenza; (3) to provide clinical treatment for actual cases. From the dispensary the patient may be (a) referred to his own doctor, to whom is given details of any treatment to be carried out at home; (b) kept under observation for further investigation; (c) sent for treatment to a special institution, sanatorium, hospital, etc.; (d) referred to the Care Committee for assistance and advice.

Patients may be roughly divided into two classes: (1) Those who are likely to be benefited by a large measure of active physical exercise with a smaller measure of regulated rest. (2) Those not fitted for vigorous physical exercise, but in need of rest and nursing.

In selecting cases for sanatorium, this has been found to be a far better classification than dividing patients into early cases and advanced. A sanatorium which opens its doors only to the most advanced cases becomes a terror to those affected by the disease. The thought that they may be sent there is unbearable. And here it may be added that very early cases do not always need treatment by rest, many do much better on judiciously graded exercise.

Surgical Cases.—Surgical cases so-called are in the main found among children, and the Dispensary sends such patients, when possible, to a special hospital. It is advisable that they should be kept away from medical cases which are often infectious and especially from adult medical cases. In Leeds they are either treated at the Dispensary, or are sent to The Marguerite Home, Thorparch, or Lord Mayor Treloar's Hospital, Alton. Sometimes they are sent to the general hospitals for operative treatment. Thirty to forty per cent. of surgical cases in children are due to bovine infection, while in pulmonary diseases almost every case is one of human infection.

Care Work.—When patients are dismissed from a sanatorium they are still under the supervision of the Tuberculosis Officer at the Dispensary. The Care Committee takes a great part in the care of these patients, and helps them in various ways according to their needs. The Leeds Committee is particularly interested in the pre-tubercular children most of whom are the children of tuberculous patients.

Employment of Dispensary Patients.—It has been part of the work of the Tuberculosis Officer to obtain, wherever possible, suitable employment for the patients, and a very careful study of this subject has been made. The belief held by the Tuberculosis Officer is that idleness shortens life and that patients, even when seriously ill, are benefited by some occupation. At Kelling the Medical Superintendent stated that even if some dying patients insisted on doing wood-carving, such was the spirit of the place that they would be allowed to do it. But the question becomes very serious when one is dealing with people who

are able to follow an occupation which will pay them wages and yet are not able to reach the average standard of work capacity. It was with the object of solving this problem that the Leeds scheme for the employment of ex-service men was floated under the direction of Mr. G. W. Allen, an ex-service man, and at one time a patient at Gateforth Sanatorium. This scheme has turned out a much greater success than anticipated. A factory known as The Factory-in-the-Field at Harehills has been established and has given employment to upwards of one hundred men. About £20,000 has been paid in wages since the commencement of the scheme and the institution has attracted the attention of the Government and received a personal visit from the Minister of Labour.

I wish to refer to the close and kindly relations existing between the Tuberculosis Department and that of the School Medical Officer. This relationship should be even closer, and it would be of great advantage if a school medical officer were on the Dispensary Medical Staff, or that a Dispensary Medical Officer for part of his time on the school medical staff.

Domiciliary Work.—The house of every patient attending the Dispensary is visited and reported upon by a nurse. The report concerns itself chiefly with the house of the patient, whether it is sanitary, whether it is clean, whether it is overcrowded. Special attention is given to the children, if there are any in the house. The financial position of the family is reported upon. If the patient be confined to the house, and especially if he be infective, measures are suggested and later, if possible, taken to protect the children, *e.g.*, the patient may be removed or other accommodation may be found for the children. The nurse sends a duplicate report to the Tuberculosis Officer and to the Medical Officer of Health. These reports are gone through in each office (Tuberculosis Dispensary and Health Department). In the Dispensary the Tuberculosis Officer meets his nurses every week and discusses the points raised by the reports. Contacts have already been referred to. This domiciliary visit by the nurse allows her to bring the contacts up for medical examination or to arrange for their examination by the general practitioner. By this means many nests of tubercle are emptied.

In concluding I must refer to the great need for an X-Ray installation at the Dispensary and at the Hospitals, and also to the great benefit we should get from the appointment of a qualified dentist to attend to the teeth of patients.

MATERNITY AND CHILD WELFARE.

Statistics.—The number (nett) of births for the year 1923 was 8,684, and the birth-rate 18·5. Of that number 773 died before attaining the age of one year which gives an infantile mortality rate of 89. This is the lowest rate ever recorded in the City's history and compares favourably with the rates recorded for the other great towns and cities of the country with the exception perhaps of London and Birmingham, both of which had phenomenally low rates. Speaking generally, the rate of infant deaths all over the country was low, due doubtlessly to the favourable weather conditions obtaining throughout the year. It is interesting to compare the year 1923 with previous years as far as the infant mortality rate is concerned. When such a comparison is made, it will be noted that there has been an almost steady decline since 1901, the rate of decrease being more pronounced since the termination of the War. As a matter of fact, the decline began about the time of the passing of the Midwives' Act of 1902 and has followed more or less closely the rate for the whole country, though considerably less marked. The effect of this decline has been the saving of 790 infant lives in 1923, which had the rate remained the same as the average for the ten years previous to 1902 would have been sacrificed. Complete particulars of the infant death rate are given in the table on page 113 as well as in the graph opposite page 112.

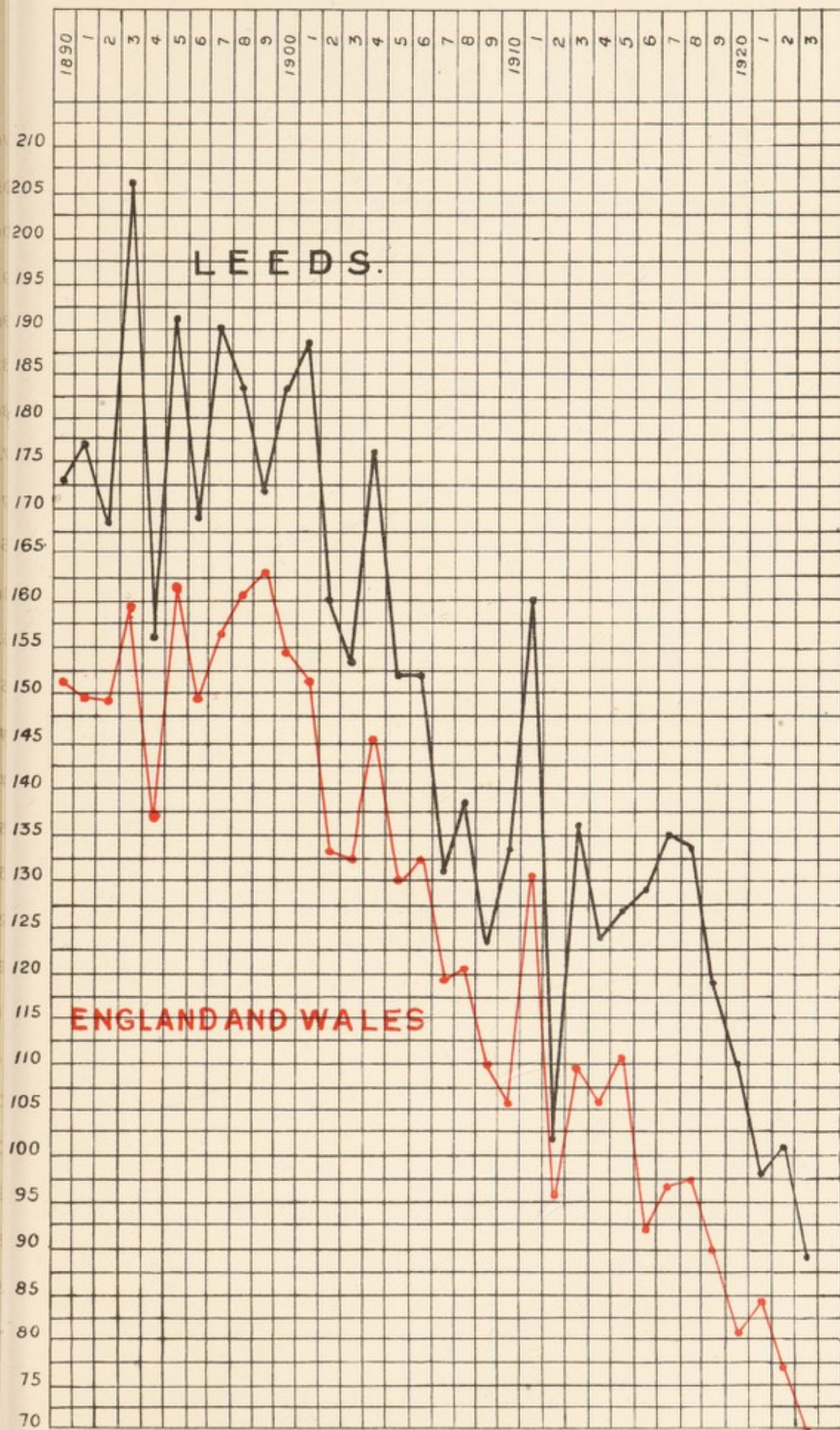
Various factors have contributed to this decline, and it is a little difficult to say which factor has had the greatest influence. In the onward march of civilization the general standard of living has improved tremendously. Water supply, drainage, street cleansing and sanitation generally have been improved and to-day the Leeds home is a safer place for a baby to be born and reared

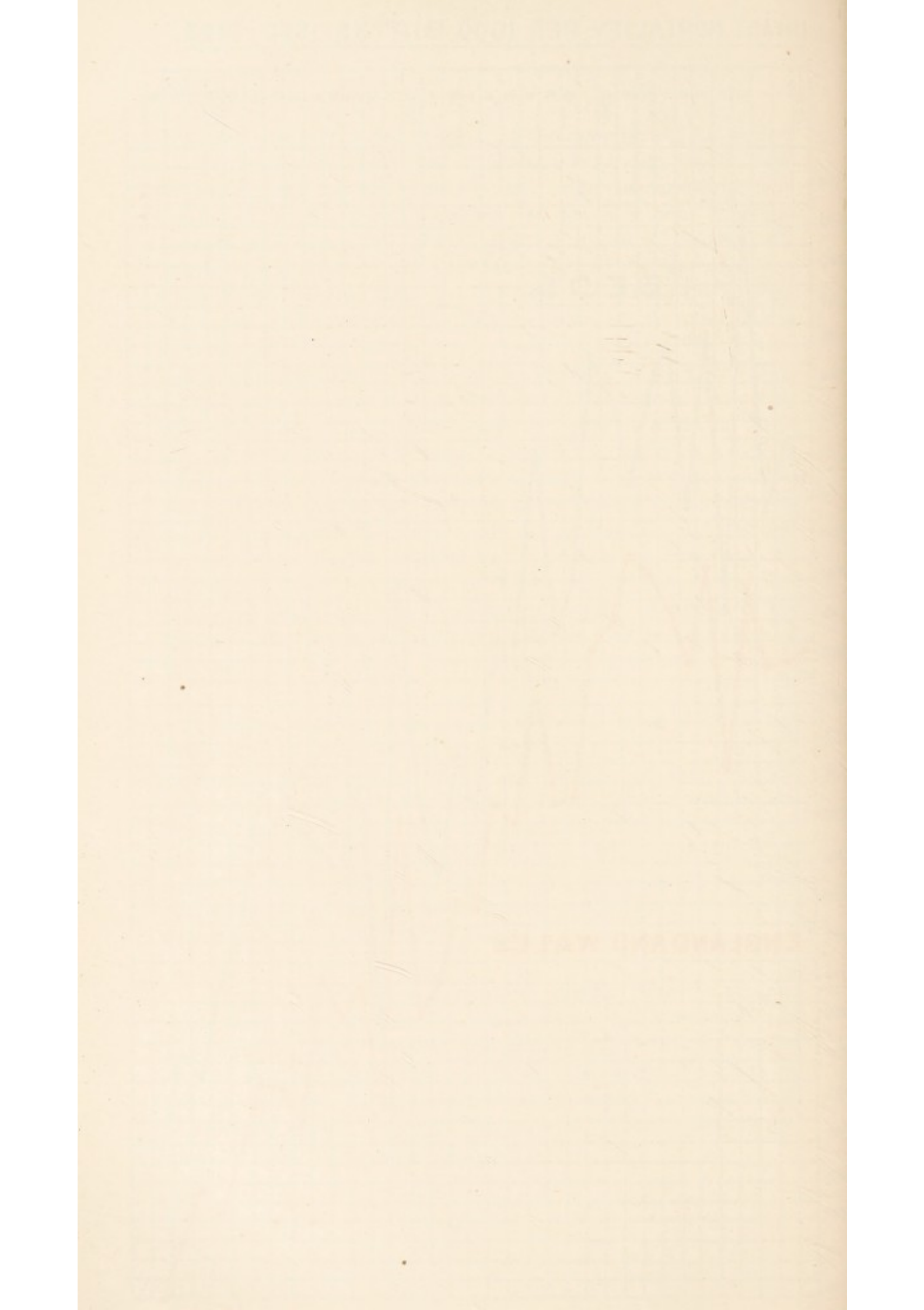
in than it was even a decade ago. In the same period, the welfare of the mother and baby has come to take a very much more important place in the public mind. The demand for safer conditions for the lying-in mother and her new born babe has brought into being two very important measures, namely, the Notification of Births Extension Act, 1915 and the Maternity and Child Welfare Act of 1918, out of which has sprung the existing Maternity and Child Welfare Scheme with all its multifarious activities on behalf of the mother and her child. The scheme was mainly educative in its conception, its object being to enlighten mothers as to the dangers to themselves and their infants, associated with pregnancy and childbirth and the ways of avoiding these, also the proper methods to adopt in the feeding and rearing of their infants. In addition to a system of fully equipped and staffed Infant Welfare Centres the scheme provided hospital accommodation for lying-in women and infants suffering from nutritional disorders as well as a complete staff of health visitors to carry out the provisions of the Notification of Births Act. The results have been most gratifying, and I should not hesitate to ascribe to the Infant Welfare movement as a whole in the City, a large share of the credit for the drop in the infant mortality rate.

The question has been asked, and is still being asked, is not this saving of infant life in some respects a mistake; is it not inadvisable to keep alive infants who because of their physical and mental condition would be better dead. The answer to each of these questions might be in the affirmative, were it not that we are faced with the insurmountable difficulty of being able definitely to decide which child is, and which is not, worth saving. In such circumstances the best way is to treat all with the object of saving as many of the really fit as possible.

Though there is every reason to be gratified with the progress made there is no occasion for complacency. We have still far to go before the infant mortality rate of the City reaches the level of that of England and Wales and there is no guarantee that the fall will continue. A spell of unfavourable weather or an outbreak of epidemic disease may give the curve an upward tendency and undo the good results achieved in 1923.

INFANT MORTALITY PER 1000 BIRTHS, 1890 - 1923.





INFANTILE MORTALITY DURING THE ELEVEN YEARS 1913-1923 AT DIFFERENT PERIODS OF
THE FIRST YEAR OF LIFE.

Year.	Births in year.	Under one week.		Under one month.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under twelve months.		Under one year.	
		Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
1913	..	304	28.0	493	45.4	283	26.1	269	24.8	218	20.1	200	18.4	1,463	135
1914	..	277	26.0	455	42.7	236	22.2	252	23.7	201	18.9	180	16.9	1,324	124
1915	..	258	26.1	413	41.8	194	19.6	242	24.5	205	20.8	199	20.1	1,253	127
1916	..	247	26.2	437	46.3	220	23.3	234	24.8	156	16.5	169	17.9	1,216	129
1917	..	179	23.6	318	42.0	185	24.4	213	28.1	159	21.0	148	19.5	1,023	135
1918	..	189	25.6	316	42.7	154	20.8	199	26.9	175	23.7	140	18.9	984	133
1919	..	230	30.4	373	49.3	147	19.4	156	20.6	125	16.5	98	13.0	899	119
1920	..	304	27.1	520	46.3	260	23.2	191	17.0	146	13.0	115	10.2	1,232	110
1921	..	249	24.5	419	41.3	184	18.1	180	17.7	116	11.4	98	9.7	997	98
1922	..	206	22.2	401	43.3	159	17.2	125	13.5	127	13.7	123	13.3	935	101
1923	..	204	23.5	363	41.8	110	12.7	125	14.4	92	10.6	83	9.6	773	89

INFANTILE MORTALITY IN WARDS AT DIFFERENT PERIODS OF THE FIRST YEAR OF LIFE,
CALENDAR YEAR, 1923.

WARD.	Births in year.	Under one week.		Under one month.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under twelve months.		Under one year.	
		Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
Central ..	207	4	19.3	9	43.5	3	14.5	4	19.3	2	9.7	2	9.7	20	9.7
North ..	718	14	19.5	26	36.2	6	8.4	9	12.5	5	7.0	7	9.7	53	7.4
North-East ..	740	16	21.6	38	51.4	10	13.5	12	16.2	3	4.1	6	8.1	69	9.3
*New Ward ..	139	5	36.0	5	36.0	2	14.4	1	7.2	...	...	1	7.2	9	6.5
East ..	872	31	35.6	42	48.2	13	14.9	15	17.2	9	10.3	12	13.8	91	10.4
South ..	351	5	14.2	14	39.9	7	19.9	9	25.6	5	14.2	5	14.2	40	11.4
†East Hunslet ..	789	25	31.7	39	49.4	14	17.7	7	8.9	14	17.7	13	16.5	87	11.0
West Hunslet ..	600	19	31.7	30	50.0	10	16.7	4	6.7	3	5.0	2	3.3	49	8.2
Holbeck ..	575	10	17.4	19	33.0	7	12.2	12	20.9	10	17.4	3	5.2	51	8.9
Mill Hill ..	76	..	..	1	13.2	1	13.2	1	13.2	..	..	..	..	3	3.9
West ..	491	14	28.5	23	46.8	5	10.2	13	26.5	8	16.3	8	16.3	57	11.6
North-West ..	485	9	18.6	19	39.2	10	20.6	10	20.6	5	10.3	7	14.4	51	10.5
Brunswick ..	347	6	17.3	16	46.1	5	14.4	3	8.6	3	8.6	2	5.8	29	8.4
New Wortley ..	384	12	31.3	17	44.3	4	10.4	6	15.6	8	20.8	5	13.0	40	10.4
Armley & Wortley ..	576	10	17.4	17	29.5	6	10.4	7	12.2	4	6.9	3	5.2	37	6.4
Bramley ..	425	11	25.9	23	54.1	1	2.4	5	11.8	1	2.4	1	2.4	31	7.3
Headingley ..	909	13	14.3	25	27.5	6	6.6	7	7.7	12	13.2	6	6.6	56	6.2
CITY ..	8,684	204	23.5	363	41.8	110	12.7	125	14.4	92	10.6	83	9.6	773	8.9

* Roundhay, Seacroft, Shadwell and Crossgates.

† Including Middleton.

Death-rate in quarters.—The infant mortality rate for the four quarters of the year is given in the accompanying table.

	I.	II.	III.	IV.	Year.
1917	121	122	152	151	135
1918	162	101	114	155	133
1919	173	102	123	96	119
1920	139	95	88	112	110
1921 . . .	108	78	101	108	98
1922	119	106	77	101	101
1923	114	74	86	82	89

Deaths in Age Groups.—Of the total (773) infant deaths 204 (or 26·4 per cent.) took place in the first week of life, 363 (or 47·0 per cent.) in the first month, 110 (or 14·2 per cent.) between one and three months, 125 (or 16·2 per cent.) between three and six months, 92 (or 11·9 per cent.) between six and nine months, and 83 (or 10·7 per cent.) between nine and twelve months.

The percentage changes in the infant death-rate per 1,000 births in 1923, as compared with the average of the previous ten years are as follows:—

Under 1 week, decrease	9·6%	3-6 months, decrease ..	35·1%
Under 1 month ..	5·2%	6-9	39·8%
1-3 months	40·7%	9-12	39·2%
Whole year decrease, 26·4%			

Neo-natal Death-rate.—The number of deaths of infants occurring in the first month of life was 363 or 38 less than for the year 1922 and the corresponding rate was 41·8 as against 43·3.

Causes of Infant Death.—The main causes contributing to the infantile death-rate were premature birth (159), diarrhoea (108), pneumonia (98), atrophy debility and marasmus (84). Of these, perhaps the most important, and certainly the cause responsible for the greatest number of deaths was premature birth. The great point about this cause is that it is pre-natal in origin and though to some extent it may be reduced by treatment of the mother before birth, it is very largely uncontrollable. Ante-natal clinics, have been opened in connection with nearly all the

infant welfare centres, with the very object of dealing with these pre-natal conditions by providing appropriate treatment for the mother during the ante-natal period. Unfortunately these clinics are not taken advantage of as they might be by expectant mothers, hence the comparative failure to reduce the ante-natal and the neo-natal death rates to the same extent as has been done in the case of the general infantile mortality rate.

Illegitimate Death-rate.—Of the total 433 illegitimate births 74 (or 16.9 per cent.) died before reaching the age of one year whilst the death-rate per thousand births was 169. This rate is an increase of 3 per thousand as compared with the 1922 figure.

DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE.

Causes of death.	Year 1922.	Year 1923.	Increase or decrease.	Percentage of total deaths under one.
Smallpox	..	..	..	..
Chickenpox	..	1	+ 1	0.1
Measles	35	9	- 26	1.2
Scarlet Fever	..	2	+ 2	0.3
Whooping Cough	47	13	- 34	1.7
Diphtheria and Croup	6	2	- 4	0.3
Influenza	7	7	— +	0.9
Erysipelas	..	1	+ 1	0.1
Tuberculous Diseases	15	23	+ 8	3.0
Meningitis	17	14	- 3	1.8
Convulsions	61	59	- 2	7.6
Laryngitis	..	1	+ 1	0.1
Bronchitis	86	41	- 45	5.3
Pneumonia (all forms)	118	98	- 20	12.7
Diarrhoea and Enteritis	82	108	+ 26	14.0
Gastritis	17	9	- 8	1.2
Syphilis	26	24	- 2	3.1
Rickets	1	1	— +	0.1
Suffocation, overlying	6	1	- 5	0.1
Injury at birth	17	22	+ 5	2.8
Atelectasis	22	25	+ 3	3.2
Congenital Malformations	51	34	- 17	4.4
Premature birth	181	159	- 22	20.6
Atrophy, Debility, and Marasmus	103	84	- 19	10.9
Other Causes	37	35	- 2	4.5
Totals	935	773	-162	100

BIRTHS AND DEATHS UNDER ONE YEAR WITH RATES.—CALENDAR YEAR 1923.

WARD.	TOTAL Births (nett).	Birthrate per 1,000 population.	No. of legitimate births.	No. of illegitimate births.	Total deaths under one year (nett).	Death rate per 1,000 births.	No. of legitimate deaths under one year.	Legitimate death rate per 1,000 legitimate births.	No. of illegitimate deaths under one year.	Illegitimate death rate per 1,000 illegitimate births.
Central ..	207	16.11	195	12	20	97	18	92	2	167
North ..	718	16.50	677	41	53	74	46	68	7	171
North-East ..	740	20.04	710	30	69	93	64	90	5	167
*New Ward ..	139	17.35	137	2	9	65	9	66	..	..
East ..	872	24.11	836	36	91	104	84	100	7	194
South ..	351	26.70	331	20	40	114	35	106	5	250
†East Hunslet ..	789	21.82	749	40	87	110	79	105	8	200
West Hunslet ..	600	16.19	576	24	49	82	44	76	5	208
Holbeck ..	575	19.05	546	29	51	89	46	84	5	172
Mill Hill ..	76	14.02	69	7	3	39	3	43	..	..
West ..	491	21.74	450	41	57	116	53	118	4	98
North-West ..	485	15.00	442	43	51	105	45	102	6	140
Brunswick ..	347	14.14	317	30	29	84	26	82	3	100
New Wortley ..	384	21.07	360	24	40	104	34	94	6	250
Armley & Wortley ..	576	15.28	549	27	37	64	36	66	1	37
Bramley ..	425	17.65	415	10	31	73	29	70	2	200
Headingley ..	909	17.82	887	22	56	62	48	54	8	364
CITY ..	8,684	18.48	8,246	438	773	89	699	85	74	169

*Roundhay, Seacroft, Shadwell and Crossgates.

†Including Middleton.

SUPERVISION OF MIDWIVES.

Number of Midwives.—The number of midwives on the register on December 31st, 1922, was 90. Thirty-nine new names were added during the year, 40 names were removed, leaving a total on the register on December 31st, 1923, of 89. Of the total, 43 were attached to institutions and twenty-six trained and five untrained took no cases during the year. The actual number who took cases during the year was 84, of whom 69 (or 82·1 per cent.) were trained and 15 (or 17·9 per cent.) untrained. The number of births attended by midwives was 4,217 (or 47·4 per cent.) of the total births registered.

The following table gives an analysis of the cases attended by midwives :—

TRAINED.			UNTRAINED.	
69 midwives.			15 midwives.	
Total cases attended . . . 3,302			Total cases attended . . . 915	
Average per midwife 48 cases.			Average per midwife 61 cases.	
No. of Cases	Practising on their own account.	Attached to institutions.	No. of Cases.	Practising on their own account.
Over 300	—	—	Over 300	—
„ 200	1	1	„ 200	—
„ 150	1	1	„ 150	—
„ 100	6	2	„ 100	4
„ 75	1	3	„ 75	1
„ 50	3	3	„ 50	4
„ 25	6	6	„ 25	2
„ 10	7	4	„ 10	2
„ 5	3	8	„ 5	—
Under 5	9	4	Under 5	2

Twenty six trained midwives (11 attached to institutions) and five not trained, took no cases during the year.

Inspection of Midwives.—The inspection of midwives' bags, books and appliances was carried out regularly during the year, the total number of such inspections made being 164. In addition to these inspections, the inspector of midwives paid 163 visits. Midwives were interviewed on 32 occasions in connection with breaches of the rules of the Central Midwives Board and other minor misdemeanours.

Advising Medical Help.—Notifications of having advised medical assistance were received in 983 cases which may be classified as follows :—

Illness during pregnancy, or abortion	30
Malpresentation	40
Delayed or obstructed labour	168
Ruptured perineum.. .. .	158
Retained membrane or placenta	36
Hæmorrhage	33
Convulsions, eclampsia	2
Puerperal rise of temperature	53
Illness of mother during puerperium	46
Illness of child	183
Infants—discharging eyes	67
Artificial feeding	39
Death of infant under ten days	17
Stillbirths	111

Midwives' Emergencies.—During the year 259 claims were made by medical practitioners in the City for attendance on emergencies of labour under Section 14 of the Midwives Act, 1918. Of these 11 were paid direct by the parent whilst the remainder, 248, were settled by the Local Authority at a total cost of £229 3s. 8d.

Puerperal Fever Cases.—Cases of puerperal fever and high temperature were investigated and where the case was infectious disinfection of the midwife's person, clothing and maternity bag was carried out under the personal supervision of the chief woman inspector. The total number of visits paid for this purpose was 92 and the total number of midwives disinfected 28.

Handywomen.—In addition to visits paid to midwives 12 visits were paid to handywomen and five of these were disinfected.

Still-births.—The total number of still-births notified was 379 (or 4·4 per cent.) of the total births notified, which is a decrease of 39 on the figure for last year which was 418 (or 4·6 per cent.)

The following table shows the comparison between live-births and still-births for the last ten years :—

BIRTHS NOTIFIED (LIVE AND STILL).

Year.	Live births notified.	Still-births notified.	Total births notified live and still.	Percentage of still-births to total births.
1914	9,738	105	9,843	1.1
1915	8,153	350	8,503	4.1
1916	7,836	394	8,230	4.8
1917	7,017	328	7,345	4.5
1918	6,892	287	7,179	4.0
1919	7,684	340	8,024	4.2
1920	10,749	461	11,210	4.1
1921	9,462	466	9,928	4.7
1922	8,658	418	9,076	4.6
1923	8,264	379	8,643	4.4

Notification of Births Act came into force 1st January, 1914

Of the 379 still-births notified, 119 (or 31.4 per cent.) were by midwives, and the remainder, 260 (or 68.6 per cent.) by medical practitioners.

Ante-natal Work.—The total number of expectant mothers attending the 13 ante-natal centres during the year was 1,031. Of these, 814 were new and attended for the first time. The total attendances at all the centres was 6,018, an increase of 233 compared with 5,785 for 1922.

The attendance at the ante-natal clinics during the year has been disappointing. As has been pointed out elsewhere the only hope of reducing the maternal mortality and limiting the wastage of infant life in the neo-natal period is by the application to the

mother of appropriate treatment during the ante-natal period. Women are slow to appreciate the value of the ante-natal clinic, and whether from shyness or indifference, fail to take advantage of it as they might.

Efforts have been made through the midwives and by other means to improve the attendance, but without avail. The midwife hesitates to send her cases because she is afraid of losing them. Her fear is groundless, because it is only those cases which require treatment of a more or less elaborate character by a skilled physician or surgeon who are recommended to go elsewhere, and then only after the whole of the facts of the case have been explained to the midwife. The general medical practitioner it is to be feared is even more indifferent, and very few indeed of them advise their cases to enrol at an ante-natal clinic. On the contrary many do

Particulars of the work of the ante-natal clinics are set out in the following table :—

EXPECTANT MOTHERS ON REGISTER.

Welcome.	No. on register at beginning of year.	Registered during year.	Live Births.		On register end of year.	Total attendance of expectant mothers.
			Full Term.	Premature.		
Ellerby Road* ..	19	96	73	5	26	579
West Street ..	19	71	58	2	23	290
Burmantofts ..	21	75	60	1	24	862
Hunslet	26	72	69	1	22	488
University ..	15	61	50	2	18	440
Woodhouse ..	7	53	36	..	20	162
Holbeck	19	108	70	1	47	494
Armley	27	68	67	2	22	691
Chapelton ..	15	61	41	..	26	293
St. Nicholas ..	21	55	49	..	19	276
Bramley	9	25	18	..	11	576
New Wortley ..	19	61	56	..	17	757
Middleton ..	..	8	..	..	8	110
Totals	217	814	647	14	283	6,018

Of the 1,031 mothers on the register 13 miscarried and 22 had still births.

*Welcome transferred to Wesleyan School, Richmond Hill, in September.

their utmost to dissuade women from attending. This attitude of antagonism is inexplicable, because every medical man must know what a great part ignorance on the part of the mother plays in enhancing the dangers of childbirth and rendering more uncertain the life of the child in the early months of life. A fresh attempt is now being made to get both medical men and midwives to interest themselves more keenly in ante-natal hygiene, and it is hoped that in consequence the attendance at the ante-natal clinics will improve.

Natal Work.—Of the total births registered in the City, 1,769 (or 19·7 per cent.) took place in institutions or nursing homes as compared with 1,819 or 19·1 per cent. in 1922.

During the year, the original agreement between the Maternity Hospital and the Corporation was terminated and a new one entered into. By this latter, thirty beds are reserved for cases of lying-in women recommended by the medical officers of the Ante-Natal Centres or the midwives practising in the City. Greater facilities will thus be afforded for dealing with difficult or complicated cases of pregnancy or labour or of cases which for one reason or another require hospital treatment.

The agreements entered into with the three Poor Law Unions, viz., Leeds, Hunslet and Bramley, have also been completed and ratified. By these agreements, eight beds are reserved in the infirmaries of these Unions for the reception of cases of lying-in women recommended by the medical officers of the Corporation. The cases intended to fill these beds are those with indifferent or bad home surroundings or those whose financial circumstances render it difficult or impossible to make the provision necessary to ensure the comfort and safety of mother and child. It is hoped that the public will take full advantage of these facilities and that the beds will be kept occupied. That much of the damage done to mother and child is due to lack of skilled attention at the time of birth as well as to bad sanitary surroundings cannot be denied. This extra hospital provision should have the effect of minimizing this damage.

Illegitimate Births in Institutions.—Of the 1,769 births which took place in institutions 340 (or 19·2 per cent.) were illegitimate. This is a decrease of 15 on the figure for last year.

An analysis of the births registered as occurring in the various lying-in institutions in the City is given in the following table :—

Institution.	No. of births.	Percentage of total registered.
Leeds Maternity Hospital	1,384	15·39
St. Faith's Home	86	0·96
Leeds Township Infirmary	87	0·97
Holbeck Township Infirmary	7	0·08
Bramley Township Infirmary	5	0·06
Hospital, H.M. Prison	1	0·01
Hope Hospital	11	0·12
Leeds General Infirmary	5	0·06
Women and Children's Hospital.. ..	12	0·13
City Hospital, Seacroft	1	0·01
Private Nursing Homes	170	1·89

Post-natal Work.—The number of births notified during the year (exclusive of still-births) was 8,264 (or 91·9 per cent.) of the total births registered.

Home Visiting.—First visits were paid by the health visitors to 8,964 infants. The number of re-visits was 38,690 which together with first visits makes a total of 47,654 visits for the year.

A complete summary of the work of the health visiting staff is appended :—

	VISITS.
Notified births including revisits ..	47,654
Ophthalmia neonatorum	200
Measles	12,265
Whooping cough	1,054
Pneumonia	1,179
Medical aid	268
Other cases	2,715
Expectant mothers	487
Ill children notified from the Leeds General Infirmary and Public Dispensary	2,485

Infant Welfare Centres.—The number of new babies admitted was 4,041 as compared with 4,309 for the previous year, a decrease of 268.

Of the total number of infants registered at the welcomes during the year 1,383 (or 34 per cent.) were under one month, and, 3,044 (or 75 per cent.) under three months.

The percentage of children born during the year who attended the centres was 47. This figure ought to be much greater as has been pointed out in previous reports; 60 per cent. would not be too high.

Two new centres were opened, one at Middleton on April 12th, and the other at Meanwood on May 30th.

Infant Consultations.—The number of infant consultations at six of the centres is three per week, at six two, and at two one. In addition clinics are held at all the centres every morning for the treatment of minor ailments, so that some of the centres are open practically during the whole of the day. Any spare time which the clinic nurses may have is devoted to the visitation of special cases which for one reason or another are unable to attend at the ordinary consultation hours.

Details of the work of the various centres will be found in the tables on pages 125, 126 and 127.

ATTENDANCES MADE AT INFANT WELFARE CENTRES DURING YEAR 1923.

WELCOME.	Consultations and meetings.				Morning treatment.				
	Expectant mothers.	Mothers.	Babies under 1 year.	Babies 1—5 years.	Expectant mothers.	Mothers.	Babies under 1 year.	Babies 1—5 years.	Callers.
Ellerby Road..	555	3,555	3,461	2,099	24	160	945	484	544
West Street ..	288	2,602	5,474	3,327	2	79	718	1,362	371
Burmantofts ..	736	3,920	4,485	3,951	126	387	1,264	735	212
Hunslet ..	435	3,553	4,554	4,388	53	480	740	700	805
University ..	362	2,088	3,183	2,572	78	256	1,657	1,331	362
Woodhouse ..	156	1,315	3,595	1,613	6	42	394	240	300
Holbeck ..	474	3,823	6,290	5,008	20	79	1,233	2,507	478
Armley ..	490	2,761	3,707	3,798	201	715	1,747	3,418	956
Chapelton ..	271	1,719	2,949	2,485	22	154	674	757	743
St. Nicholas ..	242	2,752	2,551	2,368	34	256	610	1,461	2,764
Bramley ..	273	1,632	1,720	1,941	303	982	1,721	839	329
New Wortley..	549	3,591	2,643	2,421	208	490	1,458	2,514	448
*Middleton ..	110	23	517	422	..	..	..	1	..
†Meanwood ..	..	7	640	348	..	..	..	1	..
Totals ..	4,941	33,341	45,769	36,741	1,077	4,080	13,161	16,350	8,312

*Opened April 12th, 1923. †Opened May 30th, 1923.

BABIES UNDER ONE REGISTERED DURING YEAR 1923.

WELCOME.	0-1 month.	1-3 months.	3-6 months.	6-12 months.	Total.
Ellerby Road	100	112	33	30	275
West Street ..	173	248	68	62	551
Burmantofts ..	122	202	56	41	421
Hunslet ..	164	142	35	30	371
University ..	104	106	30	23	263
Woodhouse ..	86	106	29	36	257
Holbeck ..	188	181	67	49	485
Armley ..	83	153	52	47	335
Chapelton ..	100	139	46	34	319
St. Nicholas ..	104	75	22	33	234
Bramley ..	30	62	21	23	136
New Wortley ..	97	81	14	23	215
*Middleton ..	17	26	23	21	87
†Meanwood ..	15	28	22	27	92
Totals ..	1,383	1,661	518	479	4,041

*Opened April 12th, 1923. †Opened May 30th, 1923.

BABIES OVER ONE REGISTERED DURING YEAR 1923.

WELCOME.	1-2 years.	2-3 years.	3-4 years.	4-5 years.	Total.
Ellerby Road	47	23	15	..	85
West Street ..	63	54	14	4	135
Burmantofts ..	46	29	9	2	86
Hunslet ..	43	48	22	10	123
University ..	38	34	15	2	89
Woodhouse ..	22	19	13	3	57
Holbeck ..	69	40	23	4	136
Armley ..	51	47	23	8	129
Chapelton ..	53	41	18	7	119
St. Nicholas ..	39	36	18	4	97
Bramley ..	17	13	10	2	42
New Wortley ..	31	32	13	6	82
*Middleton ..	34	41	23	3	101
†Meanwood ..	29	40	20	1	90
Totals ..	582	497	236	56	1,371

*Opened April 12th, 1923. †Opened May 30th, 1923.

HOME VISITS PAID BY CLINIC NURSES DURING YEAR 1923.

WELCOME.	Babies under 1 year.	Babies 1—5 years.	Odd Visits.	Total Visits.	Expect- ant Mothers.	Total Visits to both.
Ellerby Road ..	107	637	2	746	83	829
West Street ..	268	242	8	518	89	607
Burmantofts ..	274	209	39	522	273	795
Hunslet ..	9	7	7	23	3	26
University ..	125	281	3	409	45	454
Woodhouse ..	720	471	315	1,506	138	1,644
Holbeck ..	..	3	5	8	1	9
Armley ..	2	21	..	23	4	27
Chapeltown ..	38	22	34	94	27	121
St. Nicholas ..	3	52	1	56	3	59
Bramley ..	674	564	121	1,359	177	1,536
New Wortley ..	45	81	11	137	60	197
*Middleton ..	..	..	..	..	..	..
†Meanwood ..	..	..	..	..	..	..
Totals ..	2,265	2,590	546	5,401	903	6,304

*Opened April 12th, 1923.

†Opened May 30th, 1923.

Leeds Babies' Welcome Association.—As in former years the Leeds Babies' Welcome Association has co-operated with the Corporation in carrying out the duties in connection with the Maternity and Child Welfare Scheme. The Association plays a very important part in the scheme. On its shoulders rests the responsibility for providing and maintaining the premises in which the various maternity and infant clinics are held, the equipping of these centres, the supply of children's garments or the material and patterns for making them, the organisation of thrift clubs, sewing and cookery classes, etc. It also finds the voluntary workers to help with the work of the centres such as the registration of new babies, the entertainment of the mothers, the charting of the babies' weights and so on. All this is done without fee or reward, for it must not be forgotten that the Association is a voluntary institution entirely dependent on the generosity of the public for the funds which it requires to carry on its work.

Personally I am extremely indebted to the Association for the help it so willingly affords me in administering the Maternity and Child Welfare Scheme, and I feel that the Maternity and Child Welfare Sub-Committee would wish to express its sincere thanks for all the good work accomplished by the voluntary members of the Association during the year 1923.

Milk Distribution.—Particulars respecting the amount of dried and liquid milk supplied to necessitous mothers and babies attending the centres are given in the accompanying tables. As in previous years the scheme of distribution has been in the hands of a special milk committee composed of representatives from the Maternity and Child Welfare Committee, the Leeds Babies' Welcome Association and other outside bodies engaged in social work.

I wish to acknowledge the excellent work performed throughout the year by this Committee and to proffer the members my best thanks. The Committee met on 48 occasions and considered no less than 9,323 applications, whilst in addition they supervised generally the work of the milk staff, details of which appear in table on page 129.

WORK OF MILK STAFF.

	I. Quarter.	II. Quarter.	III. Quarter.	IV. Quarter.	Year.
Applications dealt with (new)	458	336	401	391	1,586
" " (repeat)	3,754	3,109	3,218	3,344	13,425
" " (refused)	..	..	..	..	..
No. of re-applications ..	91	75	88	139	393
*No. of external cases dealt with at the office ..	357	262	200	333	1,152
	4,660	3,782	3,907	4,207	16,556
No. of visits to Welcomes paid by the milk secretaries	148	131	132	139	550

* Persons under treatment at the Public Dispensary and the General Infirmary.

AMOUNT OF DRIED MILK DISTRIBUTED IN LBS. (YEAR 1923).

WELCOME.	Free.	Assisted.	Full Price.	TOTAL.
Ellerby Road	5,938	2,302	230	8,470
West Street	5,182	1,815	532	7,529
Burmantofts	5,055	1,822	361	7,238
Hunslet	3,967	4,236	715	8,918
University	3,599	1,453	264	5,316
Woodhouse	1,896	1,001	738	3,635
Holbeck	3,611	3,600	615	7,826
Armley	3,036	1,658	377	5,071
Chapelton	3,205	1,331	51	4,587
St. Nicholas	3,670	3,516	219	7,405
Bramley	658	493	199	1,350
New Wortley	2,438	1,679	250	4,367
External	2,113	644	..	2,757
Total	44,368	25,550	4,551	74,469

NUMBER OF RECIPIENTS (YEAR 1923).

WELCOME.	Free.	Assisted.	Full Price.	TOTAL.
Ellerby Road	266	111	27	404
West Street	287	90	55	432
Burmantofts	300	82	47	429
Hunslet	220	202	68	490
University	191	88	21	300
Woodhouse.. ..	105	55	74	234
Holbeck	210	180	66	456
Armley	180	79	50	309
Chapelton	169	69	29	267
St. Nicholas	216	134	28	378
Bramley	67	38	36	141
New Wortley	146	80	27	253
External	196	58	..	254
Total	2,553	1,266	528	4,347

COWS' MILK DISTRIBUTED—NUMBER OF RECIPIENTS.

WELCOME.	Pints (Free).	Recipients (Free).
Ellerby Road	549½	12
West Street	2,232½	19
Burmantofts	863	8
Hunslet	1,603½	11
University	1,516	19
Woodhouse.. ..	475	6
Holbeck	2,915	41
Armley	4,508½	41
Chapelton	2,662½	20
St. Nicholas	259	4
Bramley	269½	3
New Wortley	2,685½	26
External	4,423	50
Total	24,962½	260

COST OF MILK DISTRIBUTION SCHEME FOR YEAR ENDED
31st DECEMBER, 1923.

INCOME.			EXPENDITURE.		
	£	s. d.		£	s. d.
To cash received for sale of milk ..	1,835	11 11	By salaries and wages	535	13 11
			„ Cost of dried milk	5,043	3 10
			„ Cost of cows' milk	274	1 7
			„ Printing, stationery, etc. ..	64	11 6
„ balance—loss	4,099	18 9	„ Insurance and Sundries ..	17	19 10
	£5,935	10 8		£5,935	10 8

Nett cost per head to Corporation, £0 17s. 9½d.

THE INFANTS' HOSPITAL, WYTHHER.

Details of the work of the hospital are given in the appended tables.

SUMMARY OF CASES TREATED IN THE INFANTS' HOSPITAL, WYTHHER, DURING THE PERIOD JANUARY 1st—DECEMBER 31st, 1923.

	Males.	Females.	Total.
Remaining in Hospital, January 1st, 1923	14	24	38
Admitted during the year ..	93	86	179
Discharged during the year ..	71	73	144
Died during the year	14	20	34
Remaining in Hospital, December 31st, 1923	22	17	39

Mortality rate per cent. on admissions 19'0. Average stay in Hospital 68'4 days.

CLASSIFICATION OF ADMISSIONS ACCORDING TO AGE AND SEX.

Males.		Females.		Total Infants		Grand Total.
Under 1 year.	Over 1 year.	Under 1 year.	Over 1 year.	Under 1 year.	Over 1 year.	
28	65	26	60	54	125	179

ANALYSIS OF DEATHS.

Cause.	Under 1 year.		Over 1 year.		Total.
	Males.	Females	Males.	Females	
Marasmus	3	10	..	..	13
Abdominal tuberculosis ..	..	..	1	1	2
Broncho-pneumonia ..	3	1	1	1	6
Unresolved pneumonia ..	..	1	..	..	1
Bronchiectasis, etc. ..	1	..	..	1	2
Acute gastro-enteritis ..	3	3	..	..	6
Acute colitis	..	..	..	1	1
Chronic enteritis	..	..	1	..	1
Congenital heart disease	1	..	..	..	1
Laryngismus stridulus ..	..	..	..	1	1
Totals	11	15	3	5	34

ANALYSIS OF CASES TREATED DURING 1923.

Reason for admission.	Under one year.		Over one year.		Total.
	M.	F.	M.	F.	
Lobar pneumonia	..	..	1	1	2
Broncho pneumonia	3	1	2	1	7
Unresolved pneumonia, Bronchiectasis, Fibrosis of lung	..	1	6	6	13
Empyema	..	..	..	1	1
Empyema sinus	..	..	..	1	1
Suspected tuberculosis	..	1	2	2	5
Abdominal tuberculosis	..	..	5	4	9
Tuberculous glands	..	..	..	2	2
Multiple tuberculous abscesses	..	..	..	1	1
Rickets	1	..	21	18	40
Marasmus	16	17	..	3	36
Improper feeding	..	1	..	..	1
Pyloric spasm	..	1	..	..	1
Malnutrition after measles, whooping cough, diarrhoea, etc.	7	4	26	25	62
Acute gastro-enteritis	3	5	1	1	10
Chronic enteritis	2	..	2	2	6
Acute colitis	..	..	1	3	4
Intestinal toxæmia	..	..	..	3	3
Laryngismus stridulus	..	..	..	1	1
Tetany	1	..	2	..	3
Celiac disease	..	..	..	2	2
Tapeworm	..	..	1	..	1
Congenital heart disease	1	..	..	..	1
Enlarged glands	..	..	..	1	1
Eczema	1	..	..	..	1
Nil	..	..	2	1	3
Totals	35	31	72	79	217

Day Nurseries.—The one remaining day nursery in the City has continued to be well patronized by working mothers throughout the year. The number of children who have been regular attenders either for whole or half-days was 86 and the total attendances are given in the accompanying table.

Residential Nursery.—There were three children in residence on January 1st, 1923, 90 were admitted during the year and 23 were remaining on December 31st. The average length of stay was 90.6 days. The reasons for admissions were as follows:—in 55 cases, mother's illness; in seven cases, the death of the mother; in two cases desertion by mother; in four cases mothers compelled to work on account of the father's death; 25 were illegitimate.

TOTAL ATTENDANCES OF RESIDENT AND DAY CHILDREN AT THE
NURSERIES, IN AGE GROUPS FOR THE YEAR ENDED 31ST DECEMBER,
1923.

Nursery.	Whole attendances.				Half attendances.			
	Under 3 years.	3-5 years.	Over 5 years.	Total.	Under 3 years.	3-5 years.	Over 5 years.	Total.
Red House Residential Nursery ..	8,421	..	..	8,421	..	..	..	..
Cobden Place Day Nursery	5,632	1,696	34	7,362	846	175	3	1,024

Thanks are due to the Committee of ladies who devote so much time and thought to the work of this and the day nursery. The accompanying table gives details of the attendances during the year.

Convalescent Treatment for Mothers and Babies.—As in previous years convalescent treatment for mothers and babies in poor health was provided at the cost of the Corporation in various homes in the country and at the seaside.

The Leeds Children's Convalescent and Summer Holiday Fund continued to be responsible for making the arrangements.

The number of mothers and babies for whom convalescence was arranged was 81 and of mothers without babies 17, and the average period of residence at the convalescent homes was 14.9 days. The cost to the Corporation of this provision was £384 7s. 2d. or an average of £1 16s. 10½d. per case per week. The majority of the mothers were too poor to contribute anything towards their convalescence but 33 contributed sums varying from one quarter to three quarters of the total cost of treatment.

In addition the number of children sent for convalescence to the Meanwood Convalescent Home was 100 and the average stay of each child 24.6 days, the cost to the Corporation was £362 3s. 9d. or an average of £1 0s. 7d. per case per week.

HOUSING.

The housing problem is still unsolved which accounts to some extent at any rate for the difficulties we are experiencing in finding a solution to some of our health problems.

Number of Houses.—The total number of houses (structurally separate sets of premises) at the Census in June, 1921, was 111,271 of which 736 were unoccupied. New houses built since the date of the Census number 3,327 which added to the census total make a grand total of 114,598 from which must be deducted 64 houses demolished in the interval giving a nett total of 114,534 made up of approximately 36,723 through houses and 77,811 back-to-back houses.

Housing Shortage.—The number of applicants for houses on December 31st, 1923 was 9,661. A census of this number is now being taken by the Public Health Department on behalf of the Improvements Committee with the object of obtaining corrected figures. The result of this census will shortly be available.

Overcrowding.—This question is still with us and is still pressing. Owing to the shortage of houses it cannot be properly dealt with. The Census figures for 1921 show that there were at the date of the census 230 dwellings occupied by two private families, and 33 dwellings occupied by three or more families. In addition there were 30 families of ten persons, 68 families of nine persons, 197 families of eight persons, and 464 families of seven persons all occupying houses of two rooms. This is only an indication, and does not reveal the entire extent of overcrowding in the City.

There were 131 notices served by the Department for overcrowding during the year, but further action was not possible, for reasons already mentioned.

New Houses.—The total number of new houses completed and occupied during the year was 886, of which 578 were suitable for persons of the working classes and 308 were of a larger type.

Unfit Houses.—The number of houses inspected and found to be unfit for human habitation was 273 as against 296 in the previous year. The whole of the 273 have been repaired and

TABLE SHEWING THE TOTAL AMOUNT OF HOUSING WORK
DONE TO 31ST MARCH, 1924.

NAME OF ESTATE.	Sewers laid. Length in yds.	Roads formed, pitched and ashed. Length in yds.	No. of Houses for which Contracts have been signed.	No. of Houses upon which work has been com- menced.	No. of Houses completed included in previous column.
Hawksworth Wood ..	4,436	5,109	402	402	402
Wyther House	3,857	4,048	492	492	492
Meanwood	4,394	5,931	800	800	800
Crossgates	4,312	5,885	488	486	388
Middleton	3,993	5,231	697	657	597
Ivy House	Existing	Existing	46	46	46
Section 12/3 Houses ..	Do.	Do.	398	398	398
Demonstration Houses, Meanwood	—	—	6	6	6
Totals	20,992	26,204	3,329	3,287	3,129

rendered fit for occupation during the year whilst 19,821 houses which were defective in some respect or another were made sanitary. Further details of housing work are set out in the special table on page 139.

West Street Unhealthy Area.—In May of the year under review an area off West Street was represented as being unhealthy under Part I. of the Housing of the Working Classes Act, 1890. The area affected is not large, but it is old and very congested. It

consists of a network of narrow streets and shut-in courts and alleys. The houses are small, back-to-back in type and for the most part without sculleries. The area is bounded on the North by West Street and Henry Street, on the South by Wellington Street, on the East by Lisbon Street, and on the West by St. Philip Street.

Its extent is 3.96 acres, the total number of houses 270, and the population 1,131. The number of houses per acre is 68, and the number of persons per acre 286.

The infantile death-rate per 1,000 births for the six years 1917-1922 averaged 180 as against 116 for the City.

The average death-rate for the ten years 1913-1922 was 30.3 per 1,000 of the population as compared with 15.7 for the City.

The average death-rate from phthisis for the same period was 3.79 as against 1.34 for the City, and from respiratory diseases 7.66 as against 2.99.

The estimated cost of the scheme is £38,654, with a further sum of £17,550 for the alteration and construction of streets making a total of £56,204. From this total must be deducted the value of the surplus lands estimated at £22,630, giving a nett cost of £33,574. The Government's contribution to the cost will be £2,500 per annum.

When completed this will be the most important improvement scheme undertaken in Leeds since the Quarry Hill scheme of some twenty years ago.

Regent Street Unhealthy Area.—This area which consists of some very old and dilapidated property will be considerably improved by the construction of the proposed new streets leading from New York Road to Roundhay Road, and from Saint Street to Skinner Lane. This scheme will involve the demolition of approximately 146 back-to-back houses in a very congested neighbourhood, and the street alterations and thinning out of the houses should result in material improvement to the district.

The problem of slum clearance becomes more acute every year but until the demand for houses has been satisfied nothing much can be done to relieve it.

A comparative statement showing the number of new houses built during the last twenty-two years appears below, and a table showing the total amount of work done up to the 31st March, 1924, in connection with the New Housing Schemes appears on page 136.

TABLE SHEWING THE NUMBER OF HOUSES ERECTED IN LEEDS DURING THE LAST TWENTY-TWO YEARS, ENDED 31ST MARCH, 1924.

Year.					Number of Houses.
1903	..	..	..	..	2,572
1904	..	..	..	..	2 923
1905	..	..	..	..	2,442
1906	..	..	..	..	1,748
1907	..	..	..	..	1,135
1908	..	..	..	..	910
1909	..	..	..	..	836
1910	..	..	..	..	584
1911	..	..	..	..	505
1912	..	..	..	..	350
1913	..	..	..	..	220
1914	..	..	..	..	287
1915	..	..	..	..	228
1916	..	..	..	..	146
1917	..	..	..	..	51
1918	..	..	..	..	5
1919	..	..	..	..	4
1920	..	..	..	..	7
1921	..	..	..	..	196
1922	..	..	..	..	1,048
1923	..	..	..	..	1,918
1924	..	..	..	..	618
TOTAL					18 742

HOUSING, TOWN PLANNING, &c. ACTS, 1909, 1919, 1920, and THE HOUSING OF THE WORKING CLASSES ACT, 1890, Parts I. & II.

Table showing the number of houses examined by the Medical Officer of Health as part of the general survey of the town during the year ending December 31st, 1923, and the numbers represented or otherwise dealt with, pursuant to the Housing Acts, with the corresponding figures for 1921 and 1922.

	1921.	1922.	1923.
Number of new houses erected during the year :—			
(a) Total	742	1,971	886
(b) As part of a municipal housing scheme ..	713	1,804	578
1. Unfit dwelling-houses.			
Inspection—(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	17,758	13,474	10,048
(2) Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910	591	562	574
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	322	296	273
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation ..	269	266	301
2. Remedy of Defects without Service of formal Notices.			
Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	227	250	273
3. Action under Statutory Powers.			
A.—Proceedings under section 28 of the Housing, Town Planning, &c. Act, 1919 ..			
(1) Number of dwelling-houses in respect of which notices were served requiring repairs ..	..	..	..
(2) Number of dwelling-houses which were rendered fit :—			
(a) By owners	130	237	231
(b) By Local Authority in default of owners ..	..	..	..
(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close ..	..	..	1
B.—Proceedings under Public Health Acts.			
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	28,668	27,040	20,549
(2) Number of dwelling-houses in which defects were remedied :—			
(a) By owners	24,291	24,986	19,821
(b) By Local Authority in default of owners ..	..	..	..
C.—Proceedings under sections 17 and 18 of the Housing, Town Planning, &c. Act, 1909.			
(1) Number of representations made with a view to the making of Closing Orders	14	14	3
(2) Number of dwelling-houses in respect of which Closing Orders were made	1	1	3
(3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	..	..	..
(4) Number of dwelling-houses in respect of which Demolition Orders were made	..	..	..
(5) Number of dwelling-houses demolished in pursuance of Demolition Orders	4	5	..
(6) Houses represented in Unhealthy Area ..	..	..	270

PROPAGANDA.

The Committee took an important share in the Health and Municipal Services Exhibition held in the Drill Hall at Fenton Street Barracks during Health and Baby Week in the month of November. The Exhibition was designed to demonstrate the work of the various Corporation Departments in the interest of the health and welfare of the citizens. The majority of the Departments were represented by stands, on which were displayed models, maps, charts, etc., illustrating the activities of the particular department. The Health Committee's stand dealt with the various sections of health effort in the City, including general sanitation, tuberculosis, venereal diseases, maternity and child welfare, milk and food, smoke, rat and vermin destruction, hospitals, vital statistics, etc. The Exhibition was well patronised by the public who showed great interest in the exhibits and appeared eager to learn all they could concerning the preservation of health and the prevention of disease. A large number of books and leaflets on various health subjects was distributed free or at cost price, whilst special films dealing with the production of clean milk, treatment of venereal disease, destruction of rats, care of the teeth, etc., were shown frequently during the run of the exhibition. A special feature of the exhibition was a series of public lectures and demonstrations on various topics of general health interest, *e.g.*, meat, milk, smoke, venereal disease, prevention of tuberculosis, care of mother and baby, and a series of special tableaux vivants showing the various sections of a maternity and child welfare scheme. Notwithstanding the inclemency of the weather and the distraction of a General Election the attendances were very satisfactory, and the exhibition was acknowledged by all who had the opportunity of seeing it to have been well worth the trouble and expense entailed in its preparation and production.

The thanks of the Committee are due to all those members of the staff and others who gave of their time and energy to make the venture a success.

In addition to the above, 22 lectures and addresses were given by members of the staff in various parts of the City, generally in connection with the Adult Schools, Brotherhoods, and trade organisations.

I must again take the opportunity of thanking the press for its willing co-operation and help in promoting knowledge with regard to the preservation of health and the combating of disease.

STAFF CHANGES.

Ernest Standish promoted to be Divisional Sanitary Inspector in place of Divisional Inspector James Coupe deceased after 30 years' service.

Dudley Ferguson promoted to be Chief Removal Officer in place of Thomas M. Ogilvie retired after 46 years' service.

Arthur Hudson promoted to be Meat Inspector in place of Joseph Marsden retired after 26 years' service.

W. W. Padgin promoted to be Housing Inspector in place of Ernest Standish promoted.

Frank S. Kelly promoted to be Food and Drugs Inspector in place of Dudley Ferguson promoted.

APPENDIX.

I.

MINISTRY OF HEALTH TABLES.

TABLE I.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1923 AND PREVIOUS YEARS.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
		Un-corrected Number.	Nett.		Number.	Rate.	Of Non-residents registered in the District.	Of Residents not registered in the District.	Under 1 Year of Age.		At all Ages.	
			Number.	Rate.					Number.	Rate per 1,000 Net Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1913	457,295	10,947	10,877	23.4	7,231	15.6	281	287	1,469	135	7,237	15.6
1914	459,260	10,749	10,652	23.3	6,874	15.0	313	324	1,324	124	6,885	15.0
1915	459,260	9,990	9,877	21.5	7,557	16.5	298	350	1,253	127	7,609	16.6
1916	446,349	9,572	9,432	21.1	6,867	15.4	302	381	1,216	129	6,946	15.6
1917	438,254	7,738	7,566	17.3	6,962	15.9	307	397	1,023	135	7,052	16.1
1918	427,589	7,609	7,392	17.3	8,452	19.8	318	395	984	133	8,529	19.9
1919	430,834	7,837	7,564	17.6	7,099	16.5	401	294	899	119	6,992	16.2
1920	448,913	11,587	11,229	25.0	6,725	15.0	417	283	1,232	110	6,591	14.7
1921	465,500	10,427	10,144	21.8	6,424	13.8	408	269	997	98	6,285	13.5
1922	466,700	9,500	9,253	19.8	6,589	14.1	425	315	935	101	6,479	13.9
1923	469,900	8,991	8,684	18.5	6,128	13.0	451	309	773	89	5,986	12.7

Area of District in acres (land and inland water) } 28,089½

Total population at all ages at the 1921 Census 458,232

Do. adjusted for the 1921 Census 465,500

TABLE II. CASES OF INFECTIOUS DISEASES NOTIFIED TO THE SANITARY DEPARTMENT, 1923.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.						TOTAL CASES NOTIFIED IN EACH LOCALITY. (e.g. Parish or Ward) of the District.													Total Cases re-moved to Hos-pital.					
	At all Ages.	At Ages—Years.					Central.	North.	North-East.	New Ward.	East.	South.	East Hunstet.	West Hunstet.	Middleton.	Hclbeck.	Mill Hill.	West.	North-West.		Brunswick.	New Wortley.	Armley and Wortley.	Bramley.	Headingley.
		under 1.	1 and 5 years.	5 and 15 years.	15 and 25 years.	25 and 45 years.																			
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera (C) Plague (P) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Mem-branous croup)	368	3	83	205	47	25	5	..	15	57	25	10	43	13	32	28	20	13	15	18	32	3	16	7	21
Erysipelas	205	2	3	17	27	59	71	26	10	28	9	5	22	4	17	9	12	10	14	15	10	8	14	7	10
Scarlet Fever.. ..	2,134	9	429	1,282	278	129	7	..	29	164	139	33	282	83	186	173	134	37	68	165	146	80	146	62	205
Measles	4,683	299	2,219	2,049	84	30	..	2	147	595	324	57	240	98	272	495	189	42	274	319	267	160	274	307	555
German Measles	541	13	140	364	17	3	4	..	19	77	32	5	17	30	43	35	53	5	13	68	44	11	41	16	30
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	9	..	..	4	2	2	1	..	..	..	..	1	3	..	..	..	..	1	..	1	..	..	2	..	..
Relapsing fever (R) Continued fever (C)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	51	..	..	..	10	41	..	..	1	1	5	1	5	..	4	2	1	..	12	3	3	6	4	1	2
Continued High Temperature ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Meningitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Ophthalmia Neonatorum ..	82	82	..	..	..	..	..	..	2	8	3	1	6	5	5	4	6	..	18	5	1	3	5	3	6
Encephalitis Lethargica ..	10	..	4	1	1	4	..	..	..	2	..	..	..	..	1	..	1	1	2	..	1	1	..	1	..
Malaria	4	..	..	..	..	3	1	..	..	..	1	..	..	2	1	..	..	..	..	..	..	..	..	..	..
Dysentery	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trench Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pulmonary Tuberculosis ..	1,092	5	21	126	235	419	171	25	43	77	111	5	118	36	61	54	63	12	61	80	43	58	64	29	78
Other Forms of Tuberculosis ..	197	4	33	88	44	21	7	..	3	11	21	4	25	6	19	12	11	2	9	11	12	8	17	8	18
Pneumonia (Acute primary) ..	518	24	96	114	58	113	81	32	5	52	49	4	53	23	60	52	57	5	12	32	16	36	30	6	23
Do. (Acute Influenzal) ..	127	8	18	18	21	17	30	15	..	22	15	..	7	22	13	12	6	..	3	4	1	4	1	11	5
TOTALS	10,933	449	3,047	4,269	824	866	378	100	274	1,094	734	126	821	322	714	876	88	553	501	721	577	378	614	458	954
TOTALS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Isolation Hospital or Hospitals, Sanatoria, &c.:—City Fever Hospital, Seacroft and Killingbeck.

In addition to the 696 Pulmonary Tuberculosis and 46 Tuberculosis (Other Forms), removed, 187 Pulmonary Tuberculosis and 2 Tuberculosis (Other Forms), were admitted to Armley Sanatorium, and 158 Pulmonary Tuberculosis and 5 Tuberculosis (Other Forms), were admitted to Gateforth Sanatorium which is outside the City. They are included in the 1,002 and 197 notified.

TABLE III.

CAUSES OF, AND AGES AT DEATH DURING THE CALENDAR YEAR 1923.

CAUSES OF DEATH.	Nett Deaths at the subjoined ages of " Residents " whether occurring within or without the District.									Total Deaths whether of " Residents " or " Non Residents " in Institutions in the District.
	ALL AGES.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
1. Enteric Fever	1	..	..	..	..	..	1	..	..	1
2. Small-pox	..	..	..	..	..	..	..	..	..	..
3. Measles	50	9	21	18	2	..	..	..	..	32
4. Scarlet Fever	31	2	7	8	8	5	..	1	..	26
5. Whooping Cough	32	13	14	4	1	..	..	..	..	7
6. Diphtheria and Croup ..	20	2	4	8	4	..	2	..	..	20
7. Influenza	122	7	3	1	2	8	20	32	49	17
8. Erysipelas	17	1	1	..	1	2	3	7	2	11
9. Phthisis (Pulmonary Tuberculosis)	515	7	10	7	28	106	211	125	21	213
10. Tuberculous Meningitis ..	47	7	8	14	12	4	1	1	..	22
11. Other Tuberculous Diseases	75	9	5	9	9	20	12	11	..	40
12. Cancer, malignant disease ..	574	..	..	..	4	4	56	302	208	221
13. Rheumatic Fever	20	..	..	..	5	2	2	5	6	3
14. Meningitis	65	14	5	3	5	2	3	5	28	42
15. Organic Heart Disease ..	618	..	..	1	8	16	74	228	291	134
16. Bronchitis	518	41	11	6	5	4	16	133	302	24
17. Pneumonia (all forms) ..	440	98	54	30	17	21	54	102	64	125
18. Other diseases of respiratory organs	99	4	4	2	1	6	9	38	35	55
19. Diarrhoea and Enteritis ..	142	108	10	5	3	2	3	3	8	39
20. Appendicitis and Typhlitis	27	..	..	..	5	5	7	7	3	41
21. Cirrhosis of Liver	30	..	..	..	1	..	2	18	9	13
21a. Alcoholism	2	..	..	..	..	..	..	1	1	..
22. Nephritis and Bright's Disease	206	..	..	2	4	6	25	87	82	79
23. Puerperal Fever	10	..	..	..	..	1	9	..	..	11
24. Other accidents and diseases of Pregnancy and Partu- rition	35	..	..	..	..	10	25	..	..	23
25. Congenital Debility and Malformation, including Premature Birth ..	284	277	5	..	2	..	..	..	..	117
26. Violent Deaths, excluding Suicide	181	6	5	15	11	15	42	37	50	149
27. Suicide	44	..	..	..	..	2	10	27	5	6
28. Other Defined Diseases ..	1,773	168	21	20	28	35	161	449	891	585
29. Diseases ill-defined or un- known	8	..	1	..	..	1	3	1	2	1
Totals	5,983	773	189	153	166	277	751	1,620	2,057	2,057

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TABLE IV.

INFANT MORTALITY. CALENDAR YEAR 1923. NETT DEATHS FROM STATED CAUSES
AT VARIOUS AGES UNDER 1 YEAR OF AGE.

CAUSES OF DEATH.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.	Total Deaths under 1 year.
Small-pox	..	..	..	..	..	..	..	..	..	..
Chicken pox	..	..	..	..	..	..	..	..	1	1
Measles	..	..	..	..	..	..	1	2	6	9
Scarlet fever	..	..	..	..	..	..	..	2	..	2
Whooping Cough	..	..	..	..	..	3	4	2	4	13
Diphtheria and Croup	..	..	..	..	..	..	1	..	1	2
Influenza	..	..	..	..	..	1	4	2	..	7
Erysipelas	..	..	..	..	..	1	..	..	..	1
Tuberculous Meningitis	..	..	..	..	..	1	2	1	3	7
Abdominal Tuberculosis	..	..	..	..	..	1	1	3	2	7
Other Tuberculous Diseases	..	..	..	..	..	1	4	3	1	9
Meningitis (not Tuberculous)	..	..	..	..	..	2	4	5	3	14
Convulsions	14	7	5	3	29	13	3	8	6	59
Laryngitis	..	..	..	..	..	..	1	..	..	1
Bronchitis	..	1	2	..	3	10	8	13	7	41
Pneumonia (all forms)	..	6	4	1	11	9	20	27	22	98
Diarrhoea	2	10	12	11	35	23	25	14	11	108
Enteritis										
Gastritis	..	..	..	1	1	2	5	..	1	9
Syphilis	3	5	3	1	12	8	2	2	..	24
Rickets	..	..	..	..	..	..	..	..	1	1
Suffocation, overlying	1	..	..	..	1	..	..	..	..	1
Injury at birth	18	3	1	..	22	..	..	..	..	22
Atelectasis	23	..	..	1	24	..	1	..	..	25
Congenital Malformations	15	4	1	1	21	9	2	1	1	34
Premature birth	104	24	16	8	152	7	..	..	..	159
Atrophy, Debility and Marasmus	21	8	8	4	41	16	19	3	5	84
Other Causes	3	4	2	2	11	3	9	4	8	35
Totals	204	72	54	33	363	110	125	92	83	773

Copy of a special leaflet on Cancer issued to the Public during the year.

CANCER.

During 1922 ten per cent. of all the deaths in England and Wales were due to cancer. At the present time cancer is on the increase, and as so many of the deaths from this disease can be prevented if the early signs are recognised and treatment obtained, the following information is given to the public.

Cancer in the early stages gives rise to no pain whatever and often is of such a trivial nature as to escape observation. The cause of cancer has not yet been ascertained, but there seems to be some relationship between the disease and the conditions under which modern life is carried on. It is of great significance that certain primitive races are practically immune from the disease. This demonstrates that the utmost care should be taken to observe the ordinary laws of health.

(1) A sore which will not heal, a wart, or a swelling or lump occurring on the lip, tongue, or inside of the cheek, or on any other part of the body in a person over 40 years of age is very frequently due to cancer, and if not dealt with adequately without delay will prove fatal. With reference to the mouth it is advisable to prevent irritation of the tongue and cheeks caused by ill-fitting dentures and jagged, broken teeth.

(2) Cancer not infrequently attacks the digestive organs in people past middle life, and such conditions as (a) chronic indigestion, (b) difficulty in swallowing, (c) loss of weight, should receive medical attention.

(3) Bleeding from the bowels is often considered by the public to be due to "piles." This, however, is not always the case as cancer is very often the cause especially in people over 45 years of age. If medical advice is taken early, the cancer in this stage is curable by surgical methods.

(4) A swelling occurring in the breast of a woman over 40 years of age should always be looked upon with suspicion and a medical opinion obtained without delay.

(5) Irregular bleeding at the change of life, or bleeding however trivial, after the change of life should on no account be neglected and any such condition therefore should be submitted to medical investigation at once.

PUBLIC HEALTH DEPARTMENT,
LEEDS, 1923.